"No Restrictions"

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**MONASH UNIVERSITY**
THESIS ACCEPTED IN SATISFACTION OF THE
REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

ON..... 8 March 2005.....

.....[redacted].....

Sec. Research Graduate School Committee

## *ADDENDUM*

P2, 5th line from the bottom: replace "phenomenon" with "perception".

P48: Definition of *subjective factor analysis*: "*Subjective factor analysis* means researchers describe and explain factors through personal observation and experience. During the process of factor analysis, a broad range of domains and related evidence are consulted and collected to support personal interpretation."

P78, line11: replace "proved" by "demonstrated".

P100: add at the end of last sentence: "...were not explicitly informed of this role (as researcher partner)."

P105: add a sentence before "To avoid offending any individuals": "It was quite difficult to make a choice among these volunteers because of their enthusiasm."

P118 and P194: add a note: "the word stage used in stage 1 (week 9~11), stage 2 (week 12~14) and stage 3 (week 15~17) refers to the stage of participants' experience with the MI-based curriculum."

P118: add a note: "the word stage used in six stages discussed from p118 to 124 refers to stages in the data analysis."

P124: add a definition of mapping: "Mapping means searching for patterns and connections within data."

P141: add a note: "the word stage used in four stages proposed by Lazear (1999b) refers to instructional stages."

P160, 7th line from the bottom: add a note: "logic in use originally from Kaplan (1963) was quoted by Bailey (1996:36)."

P175, 5th line from the bottom: replace "rationale" with "reasons".

P210, 5th line of the last paragraph: replace "always" with "often".

P222, 3rd line of paragraph 2: replace "proved" with "was demonstrated".

P250. 4th line of the 1st quotation: replace "imply" with "infer".

P273 and P278: add a note: "two different periods" means **the time** before and after the MI intervention.

*ERRATA*

P2, 10th line from the bottom: "have led" for "lead".

P6, 4th line from the bottom: add the word "based" after "was wrong".

P33, 5th line from the top: replace "primarily" with "primary".

P38, 1st line of paragraph 2: "first" for "firstly".

P56, line 8: "New City School" for "New City school".

P66, line7: "intelligence and domain are different" for "intelligence and domain is different".

P68, line10: change "research traditions: ...and so on" to "research traditions, such as..."

P71, line 13: "nurturing" for "flourishing".

P79, 4th line of paragraph 2: "becomes weakened" for "becomes weaken".

P83, line 4: change "find more richer and varied opportunities" to "find richer and more varied opportunities".

P89, paragraph 1: change "(Allwright and Bailey, 2002; Bailey and Nunan, 2000)" to "(Allwright and Bailey, 1991; Bailey and Nunan, 1996)".

P111, last line: delete the word "become".

P113, 5th line of paragraph 3: change "a class...that were willing" to "a class...that was willing".

P116, line 20: "concepts standing for phenomena" for "concepts stand for phenomena".

P118, line 8: delete the period "." after challenging.

P125, line11: change "neutral" to "neural".

P125, line 15: delete the word called.

P127, line 2: put a comma "," after Bailey.

P127, 3rd line from the bottom: "intervention did influence..." for "intervention was did influence..."

P133, line 2: change "had been" to "was".

P176, lines 7-8: "willingness to communicate" for "willingness to communication".

P195, 11th line from the bottom: delete "caused by".

P233, line 4: "According to the results of the analyses" for " According to the analysis results".

P233, 1st line below the second diary excerpt: replace "loudely" with "loudly".

P250, 1st line of paragraph 3: delete about before thirty-four students.

P277, line 2: "strategies" for "trategies".

# Teaching and Learning EFL through Multiple Intelligences: Voices from a University Classroom

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**Submitted in fulfilment of the requirements of**
**The degree of Doctor of Philosophy**
**Faculty of Education, Monash University**
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# ABSTRACT

The common impression that Chinese university students have a low English proficiency in Taiwan's technological and vocational education (TVE) system has been a long-standing problem. A report by the Language Training and Testing Center, Taipei, Taiwan (2001) also confirmed this state of affairs. This study started with the two questions my students in the system asked me frequently "Can I learn?" and "How should I learn?" which led to my choice of Multiple Intelligences theory as a potential solution. The purpose of this study was to explore and understand how and why a group of students in the system felt and went about English learning in their previous study, and during a standardized university EFL course using multiple intelligences strategies. In addition, my teaching through multiple intelligences and my learning as a teacher-researcher was explored to gain a more complete picture of the application of Multiple Intelligences (MI) theory.

The study involved teacher-initiated classroom research and it was conducted in a university English as a Foreign Language (EFL) classroom with fifty-one student participants. An interpretive qualitative approach was used to explore the issues under investigation. EFL learners' perspectives of their English learning, particularly referring to affective experiences and strategy use, in their previous EFL study and during the MI-based intervention, were generated through the use of their learning diaries and interviews. Moreover, after the MI-based intervention, two questionnaires were given to gather their feedback to the MI-based course. My perspectives as their EFL teacher, documented in a teaching diary were also included for understanding and reflection. All information was collected and compared to interpret and evaluate the impact of the MI-based intervention and relevant factors, such as the language teacher's communication style, on student participants' English learning.

A comparison of the information between the two different periods (in their previous EFL study and during the MI-based intervention) and the triangulation of all data sources (learner diaries, interviews, questionnaires and a teaching diary) showed that most student participants' affective experiences and strategy use had been improved

during the MI-based intervention. The findings indicated that the role of a language teacher and the peer support had been significant factors, in addition to multiple intelligences strategies, in helping EFL learners of the study gradually overcome emotional insecurity, and then develop their strategies to learn and use English confidently and effectively. The results explained that there are no prescriptions and no absolute answers for the application of MI theory, but reflective teaching does help to enrich course development and match activities with students' needs. The findings suggested the importance of providing professional learning opportunities for in-service EFL teachers, and the necessity of setting up suitable programs for developing EFL learners' learning potential.

# DECLARATION

This thesis contains no material which has been submitted for examination in any other course or accepted for the award of any other degree or diploma in any university, and to the best of my knowledge and belief, neither does it contain material previously published or written by another person except where due reference is made in the text.

Signature: [redacted]

Date: 21, Oct, 2004

The research project on which this thesis is based received approval from Monash University's Standing Committee on Ethics in Research on Humans, Reference Number 2002/196.

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The dynamic support generously given to me by my parents deserves my thanks than can ever express. Without their love and long-standing sacrifices, I would not be here today. To my dear parents, I say, "I love you!" Finally, I thank my dear husband, Yu-Fu Chen, and my lovely son, Chris, for they have been my greatest source of strength. Because of their love and support, the completion of this thesis has been possible.

Since this study has been under the grant of two scholarships, MGS (Monash Graduate Scholarship) and FIPRS (Faculty International Postgraduate Research Scholarship), I want to express my sincere gratitude to Monash Graduate School and Faculty of Education. I do appreciate their trust in and support for this study from the bottom of my heart!

# ABBREVIATIONS

| | |
|---|---|
| **AMI** | Adult Multiple Intelligences |
| **AMTB** | Attitude and Motivation Test Battery |
| **CAFL** | Center of Applied Foreign Languages |
| **CD** | Compact Disc |
| **CLA** | Communicative Language Ability |
| **CLL** | Community Language Learning |
| **CLT** | Communicative Language Teaching |
| **EFL** | English as a Foreign Language |
| **EIL** | English as an International Language |
| **ESL** | English as a Second Language |
| **ESOL** | English for Speakers of Other Languages |
| **EQ** | Emotional Quotient |
| **FL** | Foreign Language |
| **GE** | General Education |
| **GEPT** | General English Proficiency Test |
| **IQ** | Intelligence Quotient |
| **JCEE** | Joint College Entrance Exam |
| **KTV** | Karaoke Television |
| **L1** | First Language |
| **LD** | Learning Disabled |
| **LTTC** | Language Training and Testing Center |
| **MI** | Multiple Intelligences |
| **MUST** | Ming-Hsin University of Science and Technology |
| **MLAT** | Modern Language Aptitude Test |
| **PIFS** | Practical Intelligence for School |
| **SBI** | Strategies-based Instruction |
| **SECs** | Stimulus Evaluation Checks |
| **SL** | Second Language |
| **SLA** | Second Language Acquisition |
| **SUMIT** | Schools using Multiple Intelligences Theory |
| **TESOL** | Teaching English to Speakers of Other Languages |
| **TOEFL** | Test of English as a Foreign Language |
| **TPR** | Total Physical Response |
| **TVE** | Technological and Vocational Education |
| **UK** | The United Kingdom |
| **USA** | The United States of America |
| **ZPD** | Zone of Proximal Development |

# Chapter 1

## *Introduction*

### 1.0 Background

English is increasingly being recognized internationally as a key bridge across many borders in communication for economic, social and technological purposes, so the worldwide demand for learning English as an international language have been growing (McKay, 2002). For people in Taiwan[1], internationalization means that good English abilities have become one of the most important criteria in applying for preferred universities, getting better jobs, providing quality services and getting more opportunities to cooperate with overseas companies and so forth.

In fact, the thirst of people in Taiwan for improving their English abilities is obvious in several aspects. Firstly, English has been the only foreign language[2] taught in all junior and senior high schools for a long time. In all public exams, such as the Joint College Entrance Exam (JCEE), English is always one of the most important subjects to decide if students will be allowed to enter well-known senior high schools and national universities or not. Moreover, since September of 2001, English language education has been officially introduced from at least the fifth grade of primary school. Further plans are to bring the starting years to the third or the first grade for all primary schools throughout Taiwan within a few years (Katchen, 2002; Liou, 2002). Nevertheless, many parents want their children to be the best and send them to English-only or bilingual kindergartens before studying in primary schools. During high school years, hiring private English tutors and having extra English lessons in cram schools are also very common among students. In universities, 'Freshman English'[3] is the compulsory course for all students of different majors. Recently, many universities have set up new departments of applied English or applied foreign languages to prepare students for the needs of job markets by offering practical

[1] Taiwan is located in the southeast of China and has a population over 21 million people. The official language is Mandarin Chinese (Katchen, 2002). Moreover, several dialects, such as Minnan and Hakka, are widely spoken by local people (Cornberg, 2000).

[2] In Taiwan, English has been learned as a foreign language (EFL) because people have few immediate opportunities to use the language within the environment.

[3] The learning years of compulsory English courses in tertiary levels vary with the policies of different universities.

English courses (Katchen, 2002). In addition to school students, people of different fields, such as secretaries, engineers, managers, businessmen and even taxi drivers are taking extra English courses after work to improve or empower their English abilities. Some government officials in Taiwan have even proposed that English should be one of the official languages because of the demands of internationalization (Katchen, 2002).

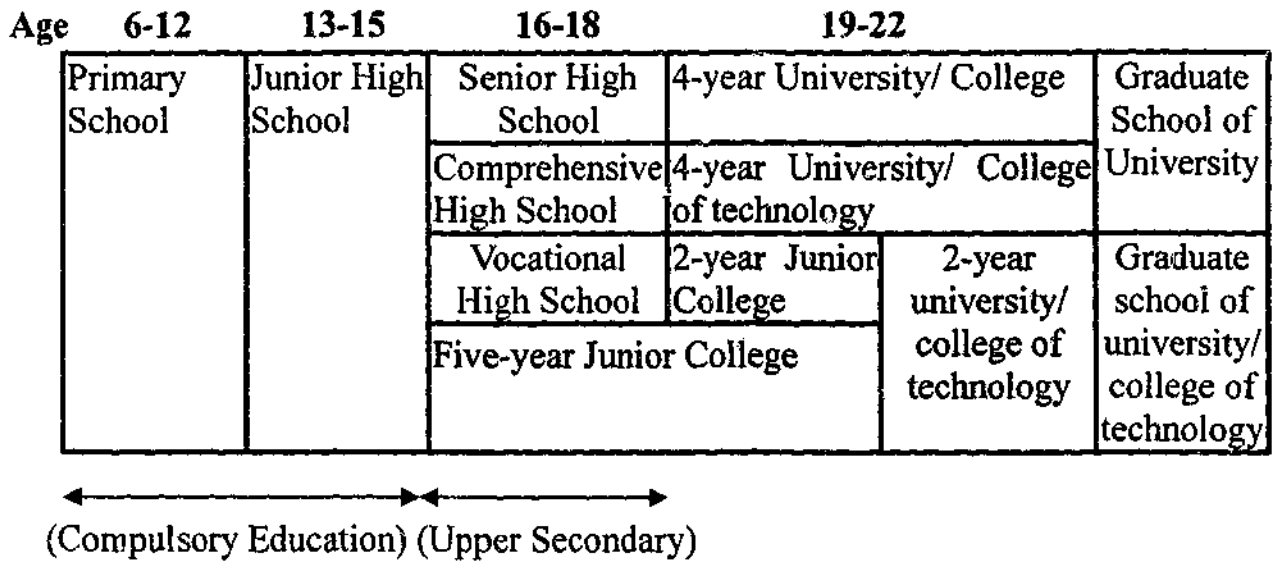
Apparently, the importance of English has made English learning in Taiwan an island-wide activity and therefore cram schools have become a big business. These private language organizations cater to English learners of different groups, from kindergarten beginners, primary and high school students, tertiary and post-graduate students to professional workers. It seems that everyone who finds English useful in Taiwan is learning English and busily preparing for different public or official English tests to demonstrate English proficiency, and increase their personal competitiveness in job markets.

The English learning goals in Taiwan have been oriented to develop communicative competence in language learners with the introduction of a communicative approach in early 1990s (Chen, 2002); however, grammar-translation strategies, drill practices and standardized paper-and-pencil tests are still widely employed in English as Foreign Language (EFL) classrooms (Chao, 1999; Chen, 2002; Chia et al., 1999; Warden and Lin, 2000). After at least six years hard study in high schools, many students at university-level still perform poorly in English. Experience, observation and knowledge lead me to believe that many university EFL learners in Taiwan are like laborious decoders when learning English. It seems that their learning attitudes and study skills have been deeply influenced by the local contextual factors, such as the textbook driven teaching approaches, studying English as a subject, limited class time, and the tradition of measuring grammatical competence (Warden and Lin, 2000). Moreover, the common phenomenon is that the average English proficiency of university non-English major students from the technological and vocational education (TVE) system is lower than those from universities of the general education (GE) system.

In Taiwan, the formal education system separates into two tracks in the

upper-secondary schools: General education (GE) and technological and vocational education (TVE). The GE mainly consists of three-year senior (or comprehensive[4]) high school and four-year university/college learning. The TVE system is quite complicated because of three different options. It can be (1) three-year vocational (or comprehensive) high school and four-year university/college of technology, (2) three-year vocational (or comprehensive) high school, two-year junior college and two-year university/college of technology, and (3) five-year junior college and two-year university/college of technology (Lee, 2000 and 2002). Figure 1.1 shows the details of the current formal educational system in Taiwan.

**Figure1.1.** Taiwan's Formal Educational System (adapted from Lee, 2002: 4).




A recent report by the Language Training and Testing Center (LTTC), Taipei, Taiwan (2001) has shown that the average language proficiency of university/college students (freshmen) in the technological and vocational education (TVE) system (the highlighted area in Figure 1.1) is surprisingly low because only 15.8 % among the randomly selected EFL learners from different universities/colleges of the system passed the basic level[5]. The result has confirmed the common impression of students'

[4] Comprehensive high schools offer both programs for general education and vocational preparation (Lee, 2002).

[5] Equal with the standards set for General English Proficiency Test (GEPT, see http://www.lttc.ntu.edu.tw ), the basic level (between 60-90 points) here means that students have basic English abilities in listening (understanding simple English sentences, dialogues and stories), speaking (using simple English to do self-introduction and have conversation with others), reading (understanding the content of simple English dialogues, stories and letters) and writing (writing simple English sentences and paragraphs).The test conducted in the study contains two parts: listening comprehension (20 items/ 100 points) and integrated comprehension (40 items/100 points). More details are available in *A Report on the English Proficiency of University/College Freshmen in the TVE system* by the Language Training and Testing Center (2001).

low English proficiency in Taiwan's TVE system. Since the college graduates from the system have been and will be the important human resources in the development, reinforcement and advancement of Taiwan's industry, economy and technology (Lee, 2000; Liou, 2000), a very critical issue for English teachers to explore should be how to help these students improve their English abilities, satisfy the practical needs of future requirements, and become more competitive in international markets.

## 1.1 Questions and Problems

The common questions that my university students in the technological and vocational education (TVE) system ask me when taking an EFL course are, "Can I learn?" and "How should I learn?" The two questions have reflected how university EFL learners in the system seem to feel helpless when facing English learning, and many of them do not know how to learn English effectively. Having been a full-time English teacher in the TVE system for eight years, I have been discovering that most of my university students, who were graduates from vocational high schools, two-year or five-year college of technology, are science or business majors with good knowledge and skills in their professional fields. However, poor English abilities are seriously disadvantaging them during their academic and professional studies and even for future job searches. Recently, the phenomenon was recognized and discussed by a few local EFL educators/researchers (Chung and Young, 1996 a and b; Hong, 1996; Lin, 1996; Lin and Warden, 1998). They interpreted the possible reasons as a shortage of resource allocation, the limitations of traditional teaching and assessment methods, negative affective factors and inappropriate learning strategies. This recognition of the problems, such as 'learning difficulties' and 'low English proficiency' associated with students in the technological and vocational education (TVE) system should be a matter of urgent concern and responsibility of English teachers to look for suitable solution strategies.

## 1.2 Rationale for Using Multiple Intelligences

In 1994, I started to teach English in Ming-Hsin University of Science and Technology[6], one of the universities belonging to Taiwan's technological and

[6] The name of the university used to be Ming-Hsin Institute of Technology; however, its name was

vocational education (TVE) system. The problems that students in the system had met became obvious to me. I was a novice teacher at that time and appeared helpless in introducing and trialing the newest learning theories and methodologies that I had been taught in graduate school when faced with large class sizes and poorly motivated learners. I used to ask my colleagues (experienced EFL teachers) for help. Their suggestions could be categorized into three types. Firstly, I was recommended to be a 'considerate' English teacher. Teachers in the system should take students' low English proficiency for granted because they were not English major students. The advice was to let them all pass and everyone would be happy. Secondly, I was told to retain the traditional ways with occasional variations. Students were used to grammar teaching and drill practices which had been employed extensively in their high school study; however, for building a pleasant learning atmosphere, university language teachers in the system should arrange time to let students see a movie, sing English songs or play games. The best timing was right after the exam, before holidays or at the end of a semester. If teachers did that, students would like the class. Thirdly, I was reminded by some teachers of the significance of pushing students to study harder. Many students were regarded as capable but lazy, so teachers should give them more assignments and tests to keep them busy to master the content of textbooks. These ideas, unfortunately, did not solve my students' problems, because students still kept asking the same questions, "Can I learn?" and "How should I learn?"

I had been grappling with the teaching conundrum mentioned above for a while; thus, seeking and developing possible solutions became my teaching goal. During the process of exploration, I was reminded that 'there is no best method' in my language teaching profession due to the complexity of different teaching contexts and the diversity of learners (see details of this issue in Chapter 2). In order to untangle students' learning difficulties based on the two common questions they asked, I actively read many books and articles about educational innovations in order to gather insights. I hoped I could find some comprehensive theories, frameworks or strategies that could help my EFL students and matching the local culture. During my journey

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changed to Ming-Hsin University of Science and Technology around September 2002 because of a promotion by Taiwan's Ministry of Education for it to be a well-rounded university. In order to reflect the current situation, I use the new name in the study although my research was conducted a few months before the change.

for new ideas and solutions, Howard Gardner's books *Frames of Mind* (1983) and *Multiple Intelligences: the Theory in Practice* (1993a) just came out in time and provided me with some preliminary answers to my questions and those of my students.

### 1.2.1 Personal Experiences, Beliefs and Interests

Respect for individual differences and an emphasis on developing a whole person were the very points of Multiple Intelligences (MI) theory that attracted my attention. I liked the basic concepts of MI theory because they conformed to my experiences, beliefs and interests in 'individualized instruction' with 'variety' and 'self-directed learners' with 'personal strengths'. I agreed that language teachers should provide students with various activities/ tasks involving the application of multiple intelligences to help students experience learning the target language in meaningful ways (Christison, 1996 a and b). Therefore, I thought the theory could be an appropriate foundation to broaden and enrich my teaching repertoire, and to benefit the design and implementation of various assessment tasks. When EFL learners in the TVE system were taught and assessed through multiple intelligences, I believed their affective and cognitive needs could be satisfied because their differences (strengths) were taken into consideration. They might thereby build up self-confidence and find that English learning could be pleasant and meaningful. Gradually, they might discover and develop their own ways to improve or empower their English abilities and then solve their "Can I learn?" and "How should I learn?" questions.

### 1.2.2 A More Complete Picture of the Human Mind

As I re-examined the various teaching approaches and methods that I had been informed about and demonstrated in my previous course TESOL Methodology, I recognized that these approaches or methods had been suitable for some but not for others because they probably responded to part of the mind without taking the whole picture. The situation was similar to the story about three blind men touching different parts of an elephant and being asked to describe what the elephant really looked like. None of their answers was wrong on their subjective experiences, but the focus zone should be expanded to see the whole to cover all possible ideas from each unique individual. In fact, I found many language teaching approaches and methods lie within the MI scaffolding. Examples are as follows. Total Physical Response focuses

on the application of bodily-kinesthetic intelligence; Suggestopedia emphasizes the usage of musical intelligence; the Silent Way takes intrapersonal intelligence as the learning key; and the communicative approach centers on the practice of interpersonal intelligence among others (a brief review of influential foreign/second language teaching approaches and methods is in Chapter 2). Since these approaches and methods are compatible with MI theory (part of the framework), their relevant teaching techniques and strategies can also be included in the repertoire of an MI-based course under proper design.

Because MI theory provides us with a more complete picture of the human mind, I believed an application of MI theory into my EFL course might enrich my teaching plans with variety as well as help me approach the needs of different students effectively.

### 1.2.3 Compatibility with the Traditional Chinese View of Education

I found that Gardner's ideas, such as respecting individual differences and developing multiple intelligences, are in tune with the educational tradition of ancient Chinese society. Under the influence of the Chinese philosopher Confucius, the meaning of 'education', the combination of two Chinese characters *jiao* 教 (giving knowledge) and *yu* 育(cultivating person), clearly represents the ultimate goal of education in traditional Chinese culture which is helping students develop various capacities. In other words, Chinese people used to value quality education and consider that a well-rounded person should be good at etiquette, poetry, music, archery, horsemanship, drawing, calligraphy and numbers (Gardner, 1999). Until now, Chinese teachers are still encouraged to vary their ways to approach students with different talents (*yingcai shijiao)* and to help each student become a whole person (Cortazzi and Jin, 2001; Hu, 2002). Therefore, I felt that Gardner's MI theory could be applied in Taiwan's context, where the Confucian philosophy of education has been valued by society. In addition, the application of MI theory might restore awareness and appreciation of traditional culture among local people, instead of blindly following western testing models such as IQ and standardized tests.

### 1.2.4 The Promotion of Educational Reform in Taiwan

In response to the needs of a changing society, Taiwan's education reform has advanced since the early 1990s (Yang, 2001). In September 1994, the Premier approved the establishment of a cabinet-level Council on Education Reform and then invited Dr. Lee Yuan-Tze, Nobel Laureate in Chemistry, as the chairman to lead the reform committee. There were about thirty-one professional members on the committee and they were assigned different tasks for restructuring Taiwan's educational system to meet the new demands of the coming century (Yang, 2001). Two years later, the Council published the *General Consultation Report for Educational Reform*. In order to implement these proposals, a Commission for Promoting Educational Reform was set up in 1997 by Executive Yuan to monitor the progress of implementing these reform proposals. After that, *Twelve Education Reform Mandates* were proposed in 1998 with a special budget of around US$ 5 billion to achieve these goals in the following five years (Yang, 2001).

Recently, the trend in educational reform in Taiwan can be observed at all levels, from kindergarten to primary schools, to high schools and to universities. The key issues following the trend all emphasize the significance of individual and social needs (Yang, 2001). For example, flexible and integrated curriculum has been promoted to satisfy students' needs, achieve social goals, and to cultivate competent citizens with international views (Yang, 2001). In particular, the central ideas of MI theory, such as respecting individual differences, teaching students with various activities/tasks, and providing multiple forms of assessment, have been recommended by university principals, professors, teacher educators and even the Minister of Education as a useful model for education reform in Taiwan (Chang, 2000; Cheng, 2000; Chou, 2003; Tsai, 1993; Wu, 2001).

In order to strengthen international competitiveness, several national policies about higher education were legislated and put into practice, such as pursuing excellence in higher education and its development (Yang, 2001). Therefore, university teachers were encouraged by the Ministry of Education and National Science Council to implement curriculum innovation to improve the quality of higher education. Because of the support from the external context and my personal interests, I was encouraged to initiate some changes, such as introducing multiple intelligences into my classroom,

to satisfy students' needs and promote the effectiveness of their EFL learning.

Based on the belief that good ideas with theoretical bases still need to be trialed constantly in a real context, over the four years since 1998, I had piloted several teachings using multiple intelligences and I had generated some MI-inspired instructional and assessment activities/tasks for local students (Chao, 1999, 2000a and b, 2001a and b). During the process of preparation and implementation, I had been learning how to be a creative EFL teacher with the help of multiple intelligences.

## 1.3 Rationale for Conducting Teacher-initiated Classroom Research[7]

The four-year teaching experiences with MI theory were rewarding; however, I felt the 'facts' of my application and the 'effects' of using an MI approach in the EFL language classroom on my learners were still unclear to me. Encouraged by recent literature as to the significance of being a reflective teacher through teacher-initiated classroom research (Allwright and Bailey, 2002; Burns and Hood, 1995; Field, 1997; Jansen and Liddicoat, 1998; Nunan, 1989b and 2001; Richards and Lockhart, 1999; Wallace, 1998), I was reminded that it was necessary to conduct thorough research to examine how and why the application of MI theory might work or not, to ascertain learners' perspectives and experiences, and explore my teaching. In addition to being an experienced and creative practitioner, I was aware of the importance of being an exploratory teacher-researcher to gain a profound understanding of my learners and my own teaching. In other words, if I definitely wanted to help learners achieve effective learning in the long term, and improve my classroom practice, I needed to be a teacher-researcher of my classroom and develop reflective practices (Bartlett, 1990; Richards and Lockhart, 1999). I believed that this kind of exploration and recognition could provide me with valuable information regarding future course design, effective instruction and assessment and so on, which should be beneficial to my professional awareness, renewal and development (Allwright and Bailey, 2002; Richards and Lockhart, 1999).

[7] The term, 'classroom research', is used in the study to present a teacher-initiated research for assessing the effects of an MI-based intervention on solving practical learning problems of classroom EFL learners in the TVE system (see Chapter 5 for more details about the research design).

Thus, the idea of conducting classroom research to systematically investigate the impact of an MI-based EFL course on university EFL learners in Taiwan's technological and vocational education (TVE) system was shaping in my mind and then put into practice in the current study.

## 1.4 Research Aims

The classroom research in general aimed at helping me understand my EFL learners and their learning through their voices, and interpret their learning experiences, perspectives and behaviors in their previous EFL study and during the MI-based intervention. Moreover, I wanted to explore and understand the nature of my beliefs, thoughts and feelings as an EFL teacher throughout the MI-based classroom practice to increase my awareness within the teaching profession. Recognition of these perspectives from students and me, their language teacher, could give a whole picture of my teaching with the intervention of multiple intelligences strategies and help me decide whether students' questions "Can I learn?" (Emotional insecurity) and "How should I learn?" (A shortage of learning strategies) were addressed or not and why. The research aimed specifically to:

1. Explore my own EFL teaching and identify what I have learned as a teacher-researcher.

2. Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system
   (a) felt about their previous English learning (before attending an MI-based EFL course) and their reasons for these affective experiences; and
   (b) went about their previous English learning (before attending an MI-based EFL course) and the reasons for their ways of learning.

3. Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system
   (a) feel about their English learning during the MI-based intervention and their reasons for these affective experiences; and
   (b) go about their English learning during the MI-based intervention and the reasons for their ways of learning.

## 1.5 School Context in the Research

The classroom research was conducted in Ming-Hsin University of Science and Technology (MUST), HsinChu, Taiwan, with the support and a permission letter from

the president of this university. As a teacher-researcher, I have been a full-time EFL lecturer at this university for eight years. Being very close to the HsinChu Science Park (Taiwan's Silicon Valley) and the HsinChu Industrial area, the university not only offers a broad program in science, commerce and technology for local residents at a high-level vocational education, but also plays an important role in training professional practitioners for the needs of the developing economy in different respective fields around the northern areas of Taiwan. Since the university belongs to the system of technological and vocational education (TVE), unlike the general academic one, it has various programs to satisfy the needs of different people. There are fourteen departments, six programs and more than 10,000 students registered in day and night schools of the university.

Like all other universities in Taiwan, English has been considered as an important and compulsory foreign language for students to acquire. In MUST, students of all departments, programs and schools need to take at least one-semester of compulsory English before graduation. All English courses in MUST are offered by the Center of Applied Foreign Languages (CAFL), in the Division of General Education. Right now, there are twenty-four full-time EFL lecturers and more than four part-time lecturers in the center. All of them have at least a doctorate or a master's degree in TESOL, language education, English linguistics or literature and have been certified by Taiwan's Ministry of Education. Generally speaking, all courses provided by the center have their own standardized syllabuses, which have been designed by the curriculum development committee. The members of the committee are responsible for choosing textbooks, arranging course schedules, deciding syllabuses and selecting evaluation tools. Most selected textbooks are imported from USA or UK. Once the textbook has been decided, teachers get a package of relevant teaching materials for usage provided by the publisher, such as a teacher's manual, tapes/CDs and tests. Evaluation tools for midterm and final exams are paper-and-pencil oriented, and can be created by center teachers or prepared by the publisher. Regular classroom quizzes are often conducted by EFL teachers to push students to study harder, and the most popular quiz format is vocabulary dictation test. For example, the teacher says a 'word' in Chinese and students write down 'its corresponding word' in English, similar to a Chinese-to-English or English-to-Chinese translation practice.

## 1.6 Significance of the Research

Recently, many educational researchers and teachers have eagerly embraced the value of teaching and learning through multiple intelligences (Collins, 1998), and there has been much anecdotal evidence to support Multiple Intelligences (MI) theory in practice (Gardner, 1999); however, few formal studies have been undertaken (Collins, 1998; Gardner, 1999). Gardner (1997) has stated that the application of MI theory cannot be limited to the how-to stage. Implementation, exploration and examination in the real world are important for teachers and researchers to recognize how and why the theory works or cannot work in different contexts.

According to current literature in EFL education, the informed and scholarly study of the application of MI theory in a non-English speaking school context is almost non-existent. Therefore, the present classroom research can fill the gap between theory and practice, and help me and other language teachers understand how and why an application of MI theory may or may not support learning in an EFL classroom. Relevant implications and suggestions drawn from the research findings can be used for future improvement and application of MI theory in EFL contexts. Moreover, the results may contribute to the design and implementation of suitable teaching and assessment strategies for developing effective university EFL courses in Taiwan's TVE system and other contexts experiencing similar problems. In addition, some insights as to how to be an effective EFL teacher can be generated through the exploratory process of being a reflective teacher-researcher, while also shedding light on the development of EFL teacher education programs in Taiwan.

## 1.7 Thesis Overview

The introductory chapter sets the stage for understanding the background to Taiwan's EFL (English as a Foreign Language) learning and teaching, and, in particular, points out the problems and questions encountered by university students in the technological and vocational education (TVE) system. Following this are the reasons for using Multiple Intelligences as a potential solution and for conducting a teacher-initiated classroom research. Then, the research context is described and the significance of the current research is stated.

Chapter 2 of the thesis begins with an introduction to the two traditions in second language acquisition (SLA) studies: learning processes and learner differences. How the two traditions have been supported and influenced by different teaching approaches and methods is first described. A brief review of foreign/second language teaching approaches and methods follows with a critical analysis to present how the foreign/second language teaching profession has been influenced by theoretical disciplines such as psychology, education and linguistics. Moreover, the important changes of these approaches and methods are pointed out to explain why contemporary language teaching has been directed to place a great emphasis on the concepts of developing communicative competence, learner-centered instruction, the awareness of 'no best method', the openness to accepting new theoretical insights from other fields, and the importance of reflective teaching. This chapter ends with reflections on the development and changes in foreign/second language teaching, and on the current trends about how to be an effective EFL teacher. As a result of these reflections, I decided to implement MI theory in this classroom research study.

In Chapter 3, the different views on the nature of intelligence are firstly explored through psychometric perspectives and then through three influential theories, Piaget's personal development theory (1952 and 1976), Vygotsky's socio-cultural theory (1962 and 1978) and Sternberg's triarchic theory (1985, 1986 and 1996). Recognition of these perspectives on intelligence can give us a background to understanding the formation of Multiple Intelligences theory. A brief summary of MI theory is provided. Following this is a review and discussion of recent educational implications and applications of MI theory. Finally, the common questions and criticisms of Multiple Intelligences are explained in terms of Gardner's perspectives to clarify some issues related to the theory.

Chapter 4 first discusses the four implications of MI theory for EFL/ESL teaching and learning: a multi-sensory view of language; the recognition of individual differences; the significance of providing intelligence-friendly learning environments (opportunities); and the development of language learning strategies. After that, the applicability of MI theory to adult EFL learners and its appropriateness to non-English speaking contexts are justified. This is followed by a review of recent literature on the use of MI theory in EFL/ESL education. Comments about the application of MI

theory in EFL/ESL education from language educators are included as well. Furthermore, the purpose of using MI theory as a potential solution strategy in the present study is briefly discussed.

In Chapter 5, I give a detailed description and interpretation of the current research design. At first, my conceptual framework of the research is clarified with reasons. Then, the research aims for further investigation and understanding are proposed. I argue the values and purposes of using an interpretive qualitative approach in the teacher-initiated classroom research. Important issues of validity and reliability of research findings are discussed and taken into consideration with concrete strategies. After that, I describe the procedure for choosing student participants, the protection of human ethics issues and the background information of the participants under investigation. Following this is the explanation of contents, purposes and administration of all research tools used in the study, and an illustration of the data generation processes. In the section on data analysis, the two main approaches for qualitative data analysis, induction and deduction, are discussed first. Then, the analytic procedures for different data sources (e.g. questionnaires and learning diaries) are explained with examples. Lastly, a brief introduction to the models and theories used for analytic deduction in the study is provided.

Chapter 6 provides a description, interpretation of, and reflection on how the MI-based intervention was designed by me and then employed in a standardized university EFL course *Practical English Training*. This chapter begins with an introduction to the teaching context. After that, details are given of the main components of the intervention: an MI workshop, MI-informed activities/tasks and MI-inspired authentic assessment tasks. The integration of a lesson within the course *Practical English Training* and these MI-informed instructional and assessment activities/tasks is described with examples. All of the information is intended to give an overview of my plans and actions when applying the MI-based intervention in my EFL classroom. The chapter continues with an exploration and explanation of my EFL teaching practices during the MI-based intervention. Mainly drawn from the information documented in my teaching diary, my thought processes of problem-solving and decision-making during the intervention are presented and discussed. Furthermore, my reflections on my abilities in the course management, on

my role as an EFL language teacher, and on my students' learning during the intervention are included. Finally, I give a preliminary evaluation of the EFL course with the MI-based intervention through my personal perspectives.

Chapter 7 is an exploration, description and discussion of learners' voices articulating their affective experiences (affective orientation, involvement, receptivity or defensiveness) while learning or using English both in their previous EFL study and during the MI-based intervention. The intention of this chapter is in response to one of the common questions "Can I learn?" by examining if the MI-based intervention can address this question. All findings are drawn from fifty-one student participants' diary entries and the interview information from twelve volunteer students. The chapter starts with a brief discussion of the significance of affect in foreign/second language learning and the possible contribution of MI theory to affect. Then, I explain which factors (affective themes, such as classmates and English tests) have been found to influence participants' affective experiences (the features of affect, such as personal coping potential and self-image) during their learning processes and how this happened, in the two different periods. Furthermore, I discuss why these affective experiences have enhanced or frustrated EFL learners' attention and effort devoted to their English learning. A comparison between the findings of affective experiences in their previous EFL learning and during the MI-based intervention is conducted for understanding. Based on the comparative results, participants' affective experiences with the MI-based intervention or other factors are interpreted and discussed.

Chapter 8 starts with a brief discussion of the importance of language learning strategies for effective foreign/second language learning based on recent literature. My rationale for introducing MI theory in the EFL course to address the question "How should I learn?" is also clarified. After that, I explore and present learners' voices of their use of language learning strategies and related reasons, in their previous EFL learning and during the MI-based intervention. In this chapter, participants' self reports in learning diaries and interviews are the data sources for understanding and examination. All reported strategies are first identified and then analyzed through two models: Oxford's taxonomy of language learning strategies (Oxford, 1990) and Armstrong's summary of Multiple Intelligences (Armstrong, 2000). Oxford's framework is used to interpret the type (category) of each identified

strategy and Armstrong's summary is employed to pinpoint the intelligences mainly involved in each strategy. The focus of this chapter is the employment of major strategies that have been reported by more than half of the group members. At first, I describe the factors that have influenced participant's use (choice) of in-class and out-of-class strategies both in their previous EFL learning and during the MI-based intervention. Then, I explain the reasons causing their reluctance or willingness to use different learning strategies. After a comparison of all major strategies and relevant reasons between their previous EFL learning and during the MI-based intervention, the impact of MI-based intervention or other factors on participants are discussed through three aspects for understanding. They are learners' attitudes to the use of language learning strategy, learners' beliefs about the use of language learning strategy, and learners' employment of language learning strategies. In addition, two issues about Chinese learners, passivity and rote learning, are discussed based on the findings in the study.

The focus of Chapter 9 is the results from two questionnaires, *Evaluation of the MI-based Intervention* and *A Feedback Questionnaire on the MI-informed Activities/Tasks.* All participants' responses to the two questionnaires, either in quantitative or in qualitative forms, are organized into tables for understanding and discussion. The findings in this chapter are also important sources to evaluate the effectiveness of the MI-based intervention on EFL participants' affective experiences, strategy use and learning outcomes. Moreover, learners' perspectives and reasons as to whether these MI-informed activities/tasks were enjoyable (or less enjoyable) and helpful (or less helpful) during their EFL learning are summarized and discussed.

The final chapter summarizes what I have found and learned from exploring the impact of a university EFL course with the MI-based intervention on a group of university EFL learners in Taiwan's TVE system, through the teacher-initiated classroom research. Learners' perspectives from different data sources and my beliefs, thoughts and reflections documented in my teaching diary all become valuable sources to help me understand the reality and then facilitate a renewed reflection on my teaching practice using MI strategies. Based on the findings of the research, two main conclusions about these EFL learners' affective experiences and strategy use are drawn. A discussion of my awareness and growth through the study is included. Then,

I generate pedagogical implications for language teachers, and discuss the limitations of this study. This chapter ends with recommendations for different educational parties in Taiwan.

# Chapter 2

## *Review and Reflections: Foreign/Second Language Teaching*

### 2.0 Introduction

It was not until the 20th century that the studies of foreign/second language acquisition[1] became an independent field of scholarly investigation (Rodgers, 2001). Basically, the studies in the field can be characterized by two different traditions (Ellis, 1991; Larsen-Freeman, 1993). One tradition focuses on how learners learn the target language and the other on how language learners differ.

The former explores the learning process by which learners build up their linguistic knowledge. Earlier study in this tradition is taken from behavioral psychology and structural linguistics. Language is a formal and rule-governed system and language learning is described as a process of habit formation through practice and reinforcement. Later, being influenced by Chomsky's innatist theory, language is considered as part of the mind (Chomsky, 1957, 1965 and 1968), and language learning is a process of setting parameters from the actual sentences the learner encounters (Chomsky, 1986; Cook, 1988). Learners are seen to play an active role in forming or testing their hypotheses to induce the target language rules based on the environments to which they are exposed. Furthermore, following the morpheme studies, Krashen (1982) claimed there is a natural order of foreign/second language acquisition because of the processing complexity of different structures. That is, linguistic factors become the significant determinants for foreign/second language learning. The current perspectives, however, have evolved to see language learning as a process of learning to communicate, which involves social, cognitive, linguistic and individual variables (Brown, 2000; Rivers, 1996; Savignon, 1983; Scarcella and Oxford, 1992). It is apparent that the focus of language learning has been gradually switched from forms to functions. The nature of the language learning process is no longer one of mechanical practice but an active participation for authentic

[1] Foreign/second language acquisition (generally called SLA, second language acquisition) is a field where researchers have been interested in exploring the processes by which a foreign or second language is learned, and the factors that influence language learners. These investigations are often expected to provide useful information for language teaching (Larsen-Freeman, 1993).

communication.

As for the 'learner-centered'[2] tradition, it can be traced back to the 1970s (Altman, 1980; Richards, 2002). Many new terms like 'personalized', 'humanized' and 'individualized' had started to appear at that time in educational principles, teaching techniques, approaches and methods, which marked an increasing recognition of the significant roles that language learners play in the process of learning (Moskowitz, 1978; Stevick, 1980 and 1990; Tudor, 1996). During the 1980s and 1990s, many investigations had been conducted on how learners differ and the influence of personal factors on foreign/second language learning. Some examples are a study of attitudes and motivation (Gardner, 1985; Oxford and Shearin, 1994), language learning strategies (Cohen, 1998; Naiman et al., 1978; O'Malley and Chamot, 1990; Oxford, 1990; Rubin, 1975; Wenden and Rubin, 1987), language aptitude (Carroll, 1981), perceptual learning styles (Reid, 1987) and cognitive style research (Hansen, 1984; Willing, 1988). All these studies have had profound effects on the foreign/second language curricula, instruction and assessment. However, the current knowledge of individual differences in foreign/second language learning is still inconclusive because of its complexity. Further continuing investigations are still needed (Ehrman et al., 2003).

Generally speaking, the two traditions have influenced and been supported by different teaching approaches and methods within the past 50 years. The current trends in foreign/second language teaching are more communicatively-oriented and concerned with individual differences (Nunan, 1999; Pica, 2000; Ramírez, 1995; Scarcella and Oxford, 1992; Tudor, 1996). Since the 1990s, innovations in foreign/second language education have aroused considerable attention (Bailey, 1992; Ellis, 1997; Hall and Hewings, 2001; Jacobs and Farrell, 2001; Markee, 1997). In order to satisfy various needs and achieve different goals, many new instructional perspectives have been proposed such as Cooperative Learning (Johnson et al., 1994; Kagan, 1992; Kessler, 1992), Content-Based Instruction (Brinton et al., 1989; Brinton and Master, 1997), Task-Based language teaching (Nunan, 1989a and 1991b; Willis, 1996), Whole Language (Rigg, 1991) and Learning Strategies Instruction (Oxford,

[2] The term 'learner-centered' here refers to devoting greater attention to the needs, interests, characteristics and expectations of learners and to diversity among learners.

1990). All these movements have somehow confirmed the trends and presented the crossovers of other disciplines into the foreign/second language (FL/SL) teaching field. Multiple Intelligences theory (Gardner, 1983, 1993a and 1999), a learner-centered philosophy, also joins the innovations.

In this chapter, several influential foreign/second language teaching approaches and methods are reviewed with a critical analysis to give a general understanding of the development of the foreign/second language teaching profession. After that, reflections on these changes and trends in foreign/second language teaching are included to explain the background for using multiple intelligences theory as a potential solution and the motivation for conducting a teacher-initiated classroom research to understand the effects of my application of the theory.

## 2.1 The Development of Foreign/Second Language Teaching Approaches and Methods[3]

For many centuries, the goal of the foreign/second language teaching profession has been characterized by a search for ideal ways of teaching language (Kelly, 1976). It has been believed that adoption of an effective teaching method will bring dramatic improvements in language learning. As a result, many innovations have been conducted to develop more effective and theoretically sound language teaching methods. Over the past 100 years, foreign/second language teaching has gone through many changes in its approaches and methods, from Grammar Translation to the Direct Method, to Audiolingualism, to Cognitive Code, to humanistic methods, to comprehension-based methods, to communicative language teaching and so on (Celce-Murcia, 1991a; Hadley, 1993; Knight, 2001; Larsen-Freeman, 2001; Pica, 2000; Richard-Amato, 1996; Richards and Rodgers, 2001). These innovations in foreign/second language teaching approaches and methods throughout history have reflected recognition of changes in the goals of language study, and the theories of language and of language learning, which are often responses to paradigm shifts in linguistics and psychology (Brown, 2000; Jacobs and Farrell, 2001). A brief review of the important changes of these influential approaches and methods will demonstrate

[3] The term 'method', as 'approach in action', is defined to illustrate the practical application (design and procedure) of theoretically beliefs and assumptions (approach) about the nature of language and of language learning (Richards and Rodgers, 2001:18-35).

how contemporary foreign/second language teaching has been directed to place a greater emphasis on the concepts of learner-centeredness and the development of communicative competence. Moreover, it may help us understand why foreign/second language teachers are currently encouraged to actively explore effective principles or techniques for their own classroom teaching through constant self-refection and classroom research rather than passively following one 'right' method (Allwright and Bailey, 2002; Holliday, 1997; Richards and Lockhart, 1999). Consequently, the foreign/second language teaching profession has gradually become more open to accepting new theoretical insights from other disciplines, such as those inspired by Multiple Intelligences theory, for the purpose of improvement or empowerment of target language teaching and learning skills in different contexts.

### 2.1.1 The Grammar-Translation Method

The Grammar-Translation Method was originally used to teach Latin. Five hundred years ago, Latin was the most important foreign language in education, commerce, religion and government. With political changes in Europe in the 16th century, the status of Latin had gradually declined. Instead of being a living language for communication, it became a subject in the school curriculum. When the functions of Latin changed, the study of Latin was switched to focus on the analysis and memorization of grammar points, translation practices and even rhetoric, which later were extended to be a model for foreign language study, as other modern languages entered the curriculum of European schools in the 18th century. The model led to what became known as the Grammar-Translation Method. The method had dominated foreign/second language teaching from the 1840s to the 1940s in Europe and America, and it has continued to be widely practiced with modified forms in many countries around the world today (Richards and Rodgers, 2001).

With no or little emphasis on helping learners develop oral skills, the Grammar-Translation Method, congruent with the view of mental-discipline theory, was primarily used to train the powers of the mind as well as benefit intellectual development by reading literary texts with the assistance of extensive analysis of the target language grammar, and of translation exercises (Hadley, 1993). Generally speaking, memorization of bilingual vocabulary lists, the deductive learning of grammatical rules, and accurate translation from the target language into the mother

tongue, are the principal activities in the Grammar-Translation classroom. The method is completely teacher-centered and teachers could use their native tongue as the medium during the instruction for directions and explanations (Hadley, 1993; Knight, 2001).

### 2.1.2 The Direct Method

In the late 19th century, with the increasing demands for acquiring oral proficiency in modern foreign languages for practical purposes, and the gradual disagreement with the Grammar-Translation Method because of its failure to help learners use the foreign language they had been studying, the beliefs that learning foreign languages should be like the way children learn their first language in a natural context became known as the Direct Method (Richards and Rodgers, 2001). Several educators in Europe such as Gouin, Sauveur and Berlitz were involved in the Direct Method movement, but Berlitz became the most well-known one and the Direct Method was in turn popularized as the Berlitz Method (Knight, 2001).

Advocators of the Direct Method claimed that language could be learned through frequent and large amount of target language input with appropriate actions and realia when the mother tongue was avoided. During the process of implementing the Direct Method, students are encouraged to acquire rules of grammar inductively through imitating, repeating, speaking and reading the structured dialogues. The teacher is thought to be the model for the learner to imitate, and a native-like proficiency in the target language is expected from learners (Celce-Murcia, 1991a).

Although Berlitz language schools are still thriving all over the world, the method has been proved to be successful only when learners are in small classes taught by native speakers. Because of the high price for this instruction, it has been criticized as not suitable for public school education with the constraints of budget, classroom size and teacher background (Brown, 1994). Furthermore, its over-emphasis on using mime or demonstrations to teach all vocabulary items without using the mother tongue has been criticized as unrealistic because some words can be easily acquired through translation of the native tongue without excessive use of important class time (Richards and Rodgers, 2001). Nevertheless, the notion of the Direct Method has opened the debate over how foreign/second language should be taught, and introduced

the most active period in the history of the "methods era" from the 1950s to the 1980s (Richards and Rodgers, 2001: 14-16).

### 2.1.3 The Audiolingual Method

In the first half of the 20th century, the Direct Method did not find its place in the United States as it did in Europe since not many people traveled abroad and few foreign language teachers could use the target language well enough to use the direct method in class. Therefore, reading comprehension became the only language skill emphasized around 1930 in the United States (Brown, 1994; Celce-Murcia, 1991a). When World War II broke out, the urgent need for Americans to be orally proficient in other languages led to the development of intensive aural-oral skills courses. These courses were first known as the 'Army Method' and later as the Audiolingual Method in the 1950s (Knight, 2001).

Basically, the Audiolingual Method (or Audiolingualism) took much from the Direct Method but it added some features from structural linguistics and behavioral psychology (Richards and Rodgers, 2001). Influenced by the view proposed by the structural linguists of the 1940s and 1950s, proponents of Audiolingualism maintained that language is speech, which is a highly structured system governed by elements, including phonemes, morphemes, words, structures and sentence types. Learning language is therefore assumed to involve mastering these elements of the language and the rules by which these elements are combined (Richards and Rodgers, 2001).

The other important link underlying the Audiolingual Method is behaviorist psychology. The learning model of Behaviorism (Skinner, 1957) saw language as a behavioral skill where learners receive a stimulus (imitate a drill), respond (practice by providing correct utterances) and get responses (teacher gives feedback for reinforcement). That is, like all learning, language learning is seen as a process of habit formation through practice and reinforcement in the target rule-governed linguistic system (Lightbown and Spada, 1999). In the audio-lingual classroom, drills, repetition and substitution exercises are heavily used. Teachers are regarded as the models of the target language, the judges of learners' output and the managers of all activities. As for students, they are like passive skill-learning organisms that keep responding to stimulus-response conditioning (Knight, 2001).

The Audiolingual Method enjoyed years of popularity especially in the earlier 1960s, but its effectiveness was under attack by the end of the 1960s because of its failure to fulfill the goal of authentic communication. Students could not translate the drills from the classroom to real world application and the boredom with the repetitive drills made some of them lose interest in learning (Brown, 2000).

### 2.1.4 The Cognitive Code Approach

The decline of Audiolingualism resulted from the emergence of Chomsky's theory of transformational grammar (Chomsky, 1957, 1965 and 1968), which had revolutionized American linguistics and switched linguists' and psychologists' attention from surface forms to the 'deep structure' of language with his emphasis on the innate properties people process when using or learning a language. Chomsky (1968) rejected the structuralist approach to describe language and argued that habit formation cannot account for the creative use of language. He proposed that the fundamental properties of language come from innate aspects of the mind and from how humans deal with experience through language. Thus, sentences are not learned by imitation and repetition but generated from the learner's underlying knowledge of grammar rules (Richards and Rodgers, 2001). Since the 1960s, the Cognitive Code Approach, interpreted as a "modified, up-to-date grammar translation theory" (Carroll, 1965: 282), had been advocated, based on Chomsky's transformational grammar. Instead of simply habit formation, language learning was considered as a process, which involves the learner's active participation in the mental process of using and learning language, particularly in the learning of grammar rules.

Moreover, the Cognitive Code Approach was influenced by the learning views from cognitive psychologist David Ausubel (Brown, 2000). Ausubel (1968) emphasized the importance of meaningful learning and insisted that learning is not a process of passive acceptance (mechanical imitation) but a process of meaningful participation. In other words, new information cannot be effectively integrated into the cognitive structure and retained for future linguistic performance, if it is not meaningful or related to the existing system. His viewpoint has reminded teachers that meaningful teaching can help learners trigger their personal mental processes to achieve effective learning.

Carroll (1965) was the first to describe a cognitive theory of language learning, but no particular theorist can be identified in the literature as the main supporter of the Cognitive Code Approach (Stern, 1996). According to Chastain's descriptions (1976), the basic assumption underlying the Cognitive Code Approach was that meaningful learning and conscious knowledge of grammar are both important for language acquisition.

Generally speaking, the Cognitive Code Approach was principally a response to the weaknesses of the Audiolingual Method in the light of changes in theories of Linguistics and Psychology. It has not led to any particular teaching method, but the cognitive orientation to teaching has undoubtedly drawn teachers' attention to the issue about creativity and meaning in language learning, which influenced later trends in language teaching (Stern, 1996).

### 2.1.5 Humanistic[4] Methods

With the paradigm shift, the quest for alternatives to language teaching had taken several directions since the earlier 1970s (Richards and Rodgers, 2001). One of the directions was the emergence of humanistic methods, which were largely informed by learning theory and partly influenced by the movements in psychotherapy (Hadley, 1993). Reacting to the general lack of individual or affective consideration in either Audiolingualism or Cognitive Code, these humanistic methods argued the importance of the effective development of learners in language learning. They saw each learner as a whole person and believed the language classroom was more than a place for knowledge transfer. Although these methods have not become widely popular, they are worthy of our attention as they try to approach language learning from perspectives other than the linguistic (Stevick, 1990). These humanistic methods include the Silent Way (Gattegno, 1972 and 1976), Community Language Learning (Curran, 1972 and 1976) and Suggestopedia (Lozanov, 1978). They are briefly discussed in the following sections.

[4] The term 'humanistic' refers to a greater emphasis on learners' personal concerns and affective involvements in the process of language learning. The key issues, such as how to deal with the emotional reactions and motivation of learners, and how to provide a learning environment that may reduce anxiety and tension, are what concern the proponents of the humanistic methods (Scovel, 1991; Stevick, 1990; Tudor, 1996). Stevick (1990:23-24) listed five main principles in humanistic thinking. They are feeling, social relation, responsibility, intellect and self-actualization.

#### 2.1.5.1 The Silent Way

The Silent Way was proposed by Caleb Gattegno (1972 and 1976) with the basic tenet that the mind is an active agent capable of constructing its own criteria for learning, and the teacher should help students take more responsibility for their learning by means of discovery and creation. Instead of imitation and drills, Silent Way teachers keep silent much of the time and students are allowed to learn from trial and error and then are able to make their own corrections. The Silent Way is famous for its unique teaching materials such as Cuisenaire rods (colored wooden rods of different lengths), Fidel charts (color-coded pronunciation charts) and vocabulary charts. Teachers use rods and charts to elicit students' responses and students are expected to make their own generalizations from the language presented to them and then self-assess their own output.

The Silent Way has been criticized as providing insufficient opportunities for learners to work with authentic speech in the earlier phases of instruction, which may hinder the development of functional proficiency in the target language (Hadley, 1993). Also, the teaching manuals and materials are not always available for general language teachers (Richards and Rodgers, 1986). Nevertheless, the philosophy behind the method, focusing on the learner's independence, autonomy and responsibility, has aroused teachers' notice to learners' problem-solving and self-study abilities, which are one of the key factors in achieving successful language learning (Brookes and Grundy, 1988; Broady and Kenning, 1996; Dickinson, 1994).

#### 2.1.5.2 Community Language Learning

Community Language Learning (CLL) was developed by Charles Curran (1972 and 1976) in the 1970s founded on psychological counseling techniques. CLL emphasizes the significance of the affective domain in promoting cognitive learning, contrasted with the Western cultural view that the intellectual and factual processes alone are considered as the main goal of learning. Moreover, CLL rejects the behavioral view in which learners are passive and their participation is limited, like 'animal learning' and argues each learner needs to be understood and helped in the process of fulfilling personal values and goals. This can be best done in a community with others attempting to achieve the same goal. In order to help language learners experience *Whole-person Learning,* humanistic techniques are used in CLL (Richards and

Rodgers, 2001; Stevick, 1990). In the CLL classroom, students are like 'clients' seated in a circle with the teacher, as a 'knower' or 'counselor' on the outside of the circle. The common procedure is for students to determine the theme of each lesson and generate their conversation. When one of the students wishes to share something with the group and says it in their native tongue (e.g. Chinese), the teacher provides a translation back into the target language (e.g. English). The student then repeats the teacher's translation and continues the conversation. If possible, the conversation is taped for later discussion or analysis. The job of the CLL teacher is to create a supportive atmosphere within the classroom as well as foster trusting relations and positive interactions among learners in exchanging information and sharing feelings, which is believed to solve the affective crisis in language learning (Knight, 2001).

Criticism of CLL is frequently directed at its learning content. Since the content is determined by the participants in the class, some important information such as survival skills or target language culture might be ignored. Besides, it seems unrealistic to popularize CLL in language classrooms because it is difficult to get qualified teachers with counseling training and proficiencies in both the target language and students' native tongue, for prompt translation every day. Another problem is the lack of a pre-set syllabus. Some students may feel uncomfortable when grammatical structures and lexical items are not introduced in sequence in a foreign/second language learning context (Hadley, 1993; Richards and Rodgers, 2001).

**2.1.5.3 Suggestopedia**

Suggestopedia was introduced by Georgi Lozanov (1978), a psychotherapist and physician with the belief that a relaxed but focused mental state may facilitate memorization and recall. Since in Lozanov's view, anxiety is considered as the main hindrance severely limiting language learning potential, relaxation techniques and concentration are introduced to the Suggestopedia classroom to assist learners in tapping subconscious resources and retaining large amounts of vocabulary and structures (Hadley, 1993:117).

The main features of Suggestopedia are the decoration and arrangement of the classroom (e.g. living room setting and soft lights), the use of music (e.g. baroque music) and dramatic reading techniques by the teacher. Learners are expected to be as

childlike as possible and to have a relaxed physical state for effective learning (Brown, 1994). Generally speaking, what Suggestopedia has implied for the language teacher is the significance of providing the right learning environment, such as a non-threatening atmosphere for effective learning; however, the concerns of how to choose suitable music, how to read dialogues in a dramatic way and how to get a comfortable learning context as Lozanov described, in our typical classrooms have always hindered language teachers' willingness to try this method (Richards and Rodgers, 2001).

### 2.1.6 Comprehension-based Teaching

During the 1970s and the earlier 1980s, language teaching was also influenced by the results of first language acquisition studies. Comprehension-based teaching, considered as the modern adaptation of the Direct Method, was developed at that time based on the assumptions that foreign/second language learning is very similar to first language acquisition. The distinctive examples are Total Physical Response and the Natural Approach (Celce-Murcia, 1991a; Hadley, 1993).

#### 2.1.6.1 Total Physical Response

Total Physical Response (TPR) is a language teaching method developed by James Asher (1977). The obvious feature of TPR is the linking of language learning with the learners' kinesthetic-sensory system. In fact, Asher was not the first person to propose the idea because several psychological models of learning in the earlier part of the 20th century had argued that understanding and retention could be rapidly achieved through physical movement (Palmer and Palmer, 1959). TPR is thus considered an extension of these earlier 'learning through actions' proposals.

Mainly drawing on the insights from first language acquisition, TPR strongly claims that listening comprehension should be developed before active oral participation and could be enhanced through the association with motor activity (Knight, 2001). In a typical TPR classroom, the teacher is expected to direct students with commands, and students are encouraged to listen and act upon the given instructions. During the process of learning, output is not required if learners are not ready, TPR is thereby believed to reduce learners' stress (Richards and Rodgers, 2001).

The limitations of TPR are that it is only effective for learners in beginning levels (Brown, 1994) and that the sentence structures (e.g. imperative mood is heavily used) utilized in TPR cannot really satisfy real-world learners' needs (Richards and Rodgers, 1986). In spite of these drawbacks, many language teachers have been happy to borrow TPR techniques and use them with low-level classes as a warm-up before moving learners to communicative language teaching (Brown, 1994).

#### 2.1.6.2 The Natural Approach

The Natural Approach was proposed by Tracy Terrell (1977, 1982), an experienced Spanish teacher in California. He elaborated on the rationale of the Natural Approach by drawing on Stephen Krashen's theory of second language acquisition, originally called Monitor Model (Krashen, 1982). Five hypotheses are involved in the theory and are summarized below.

1. *The acquisition-learning hypothesis.* Adult foreign/second language learners have two ways to develop their target language: acquisition and learning. Acquisition refers to the unconscious process of constructing the system of target language, which parallels first language (L1) development; however, learning means conscious attention to language forms and rules. For Krashen, only 'acquired' language is available for natural language use and learning cannot become acquisition.
2. *The monitor hypothesis.* The acquired system can help the development of target language fluency, but the learned system is only used as a monitor or editor to correct output based on what has been acquired. Therefore, the language teacher should create conditions for acquisition rather than learning.
3. *The natural order hypothesis.* Like children acquiring their L1, Krashen claimed that foreign /second language learners acquire the rules of the target language in a predictable natural order.
4. *The input hypothesis.* Learners acquire the target language by being exposed to comprehensive input. If the input is just above learner's current level of competence in the target language, then both comprehension and acquisition happen.
5. *The affective filter hypothesis.* The affective filter is considered as an imaginary barrier, which may prevent learners from acquiring language. Anxiety, low

motivation and fear are examples of the negative emotional barriers. When the learner is upset, the filter is up (blocking input). On the contrary, the filter will be down, as the learner is motivated.

(Summarized from Lightbown and Spada, 1999:38-40)

In addition, Krashen and Terrell (1983) defined three stages for the Natural Approach. The first stage is the silent period, which is for developing learners' listening comprehension. The second is the early-production stage. Learners are encouraged to try the target language without focusing on forms. The last is the speech-emergent phase. Learners have opportunities to use the target language for communication such as role-play or group problem solving. According to the five hypotheses and the three stages, the Natural Approach implied for language teachers that learners should benefit from comprehensive input (e.g. extensive reading), delayed production, relaxed learning environment, and meaningful communication activities.

Krashen's assumptions have been criticized as intuitive views in which the hypotheses fail to be supported or tested by empirical research (Ellis, 1990; McLaughlin, 1987). However, the Natural Approach, as the first approach to language learning based on a theory of foreign/second language acquisition, has had a great influence on foreign/second language teaching practice (Brown, 2000). Moreover, it has acted as a spur to stimulate subsequent debate and thinking among researchers and teachers on issues like what foreign/second language learning process is, and what factors constitute its development (Lightbown and Spada, 1999).

### 2.1.7 Communicative Language Teaching

Communicative Language Teaching (CLT), marking the main paradigm shift in the 20th century, could be originally traced to the changes in the British language teaching tradition in the late 1960s. Several British linguists were not satisfied with the "code-based approaches"[5] to language teaching at that time, and saw the need to focus on social contexts and communicative proficiency rather than only on the mastery of grammatical structures. Moreover, the changing educational realities in Europe, such as helping adults learn the main languages of the European Common Market for

[5] They are audiolingualism and the grammar translation method (Tudor, 1996:7).

communication, reflected the urgent needs for developing alternative methods of language teaching. These reasons had pushed the initial appearance of CLT in the earlier 1970s, and the Council of Europe, a regional organization for cultural and educational cooperation, played an important role to promote the innovative work (Richards and Rodgers, 2001). CLT was afterward developed by the writings of many scholars in Britain such as Wilkins, Widdowson, Brumfit, Candlin and Johnson, and in the USA by such as Savignon (Richards and Rodgers, 2001). Over the past 20 years, CLT has been implemented in many ESL countries (e.g. USA and Britain) and has been the mainstream teaching approach (Beale, 2002; Li, 1998; Sato and Kleinsasser, 1999).

The earlier movement of CLT was the reconceptualization of the teaching syllabus in notional-functional concepts (Wilkins, 1976), but its scope has been expanded to encompass a wide range of principles for developing learners' communicative competence (Brown, 1994). The concept of communicative competence, first introduced by Hymes in the 1960s, has become the theoretical foundation of CLT. In fact, Chomsky (1965) had already proposed a distinction between 'competence' and 'performance'. The former refers to what the speaker knows and the latter what the speaker does, both from linguistic perspectives. Reacting to the narrow definition of Chomsky's characterization of the linguistic competence of the ideal native speaker, Hymes (1972) proposed 'communicative competence' to emphasize that the social factors, in addition to grammatical knowledge, should be taken into consideration for language learners to carry out meaningful interaction. Furthermore, Halliday's functional account of language (1975)[6], considered to complement Hymes's view of communicative competence (Savignon, 1983), was influential in the development of CLT. Some proponents of CLT used his theory to explain the goal of FL/SL learning "as acquiring the linguistics means to perform different kinds of function" (Richards and Rodgers, 1986: 71).

The well-known framework of communicative competence was proposed by Canale and Swain (1980) and refined by Canale (1983). They claimed that communicative

[6] The seven basic functions of language were proposed by Halliday (1975:11-17) to explain the performance of children's first language learning. They are instrumental, regulatory, interactional, personal, heuristic, imaginative and representational function.

competence involves at least four areas of knowledge and abilities for language use (verbal communication). These include *grammatical* (a knowledge of the linguistic system of the target language), *sociolinguistic* (the abilities to communicate appropriately in different social contexts), *discourse* (the abilities to communicate purposefully in different genres, and to use coherence and cohesion) and *strategic competence* (the abilities to use various strategies to get communication done).

Recently, Canale and Swain's model has undergone several modifications (Brown, 2000). For example, Bachman proposed a theoretical framework of communicative language ability (CLA) based on the newer views on communicative competence (Bachman, 1990). In his CLA model, three components were included: language competence (knowledge of language), strategic competence, and psychophysiological mechanisms (Bachman, 1990). The language competence comprises organizational and pragmatic competence. Bachman put original grammatical [7] and discourse (textual)[8] competence under one node, called *organizational competence,* to cover all rules and systems related to the forms of language. As for the sociolinguistic competence in Canale and Swain's model, it was broken into two categories under the *pragmatic competence*, named illocutionary [9] and sociolinguistic [10] competence respectively. According to Bachman's model, strategic competence serves as "the mental capacity for implementing the components of language competence in contextualised language use" (Bachman, 1990:84). The psychophysiological mechanisms refer to the "neurological and psychological processes involved in the actual execution of language as a physical phenomenon" (Bachman, 1990:84).

Generally speaking, for proponents of CLT, language is the interdependence between form (grammatical and structural features) and meaning (categories of functional and communicative meaning) (Brown, 1994; Littlewood, 1981; Richards and Rodgers, 2001). They believed that language learning, a process of developing expression,

[7] It includes vocabulary, morphology, syntax, phonology and graphology (Bachman, 1990).
[8] It refers to cohesion and rhetorical organization (Bachman, 1990).
[9] The illocutionary competence, "the knowledge of the pragmatic conventions for performing acceptable language functions" (Bachman, 1990:90), consists of abilities to manipulate functions (purposes) of a language, such as ideational, manipulative, heuristic and imaginative functions (see Bachman, 1990:92-94 for details).
[10] The sociolinguistic competence, "the knowledge of sociolinguistic conventions for performing language functions appropriately in a given context", includes the sensitivities to variety/dialect, register, naturalness, and cultural references and figures of speech (Bachman 1990:90 and 94-98).

interpretation and negotiation of meaning, can be supported and promoted, when learners are involved in the activities, including real communicative events and meaningful use of the target language (Richards and Rodgers, 2001; Savignon, 1983).

Although the procedure or techniques on how to apply and implement CLT can be varied, all versions of CLT take the position that meaning is of primarily importance, and teaching should focus on communicative functions instead of simply centering on the abilities to manipulate structural patterns (Brown, 1994; Nunan 1991b; Widdowson, 1990). Consequently, rather than mere accuracy or fluency, the goal of CLT is to help learners develop their communicative competence, and the desired outcome is learners who can use the target language to communicate effectively in real situations (Celce-Murcia, 1991b). Richards (2002) has summarized six key principles to characterize CLT:

- The goal of language learning is communicative competence.
- Learners learn a language through using it to communicate.
- Authentic and meaningful communication should be the goal of classroom activities.
- Fluency and accuracy are both important dimensions of communication.
- Communication involves the integration of different language skills.
- Learning is a gradual process that involves trial and errors.

(Richards, 2002:144)

Currently, the principles of CLT have been broadly accepted and are used in foreign/second language classrooms (Bax, 2003; Beale, 2002; Sato and Kleinsasser, 1999). In EFL contexts, CLT has been encouraged and promoted by many ministries of education with the popular assumption that it will be much better than other approaches or methods in developing language learners' proficiency (Bax, 2003; Li, 1998; Savignon, 2002). However, the problems or difficulties of implementing CLT in EFL contexts have been indicated by many recent studies (Anderson, 1993; Burnaby and Sun, 1989; Chau and Chung, 1987; Ellis, 1994; Li, 1998; Sano et al., 1984). The results reveal that CLT demands cannot match what EFL situations allow. The main problems are that the differences, such as purposes for learning English, learning environments, and the availability of authentic English materials for EFL contexts

have been ignored.

Nevertheless, the lasting impact of CLT on language learning and teaching has continued. In addition to the publication of many course books based on CLT principles, several current teaching approaches and methods, such as cooperative language learning, content-based teaching and task-based teaching, have been developed to satisfy different needs as well as reflect the diverse practices of a communicative approach (Richards and Rodgers, 2001). These revised versions of CLT have presented the flexibility and openness of CLT for future application. However, in order to avoid socio-cultural conflicts or 'cultural imperialism' (Alptekin, 1990; Ellis, 1996; Hu, 2002), careful consideration and analysis of contextual factors[11], and active involvement of the local teacher's judgment, experience and creativity are important for integrating CLT philosophy into the FL/SL classrooms appropriately and effectively (Harmer, 2003b; Kramsch and Sullivan, 1996).

## 2.2 Reflections

From the historical review, we find that the foreign/second language teaching profession has responded in approach and method to theoretical disciplines such as linguistics and psychology. New methods and approaches have been adopted as a result of the weakness of the old, but are still being influenced by the ideas of the past. With the rise and fall of various approaches and methods by the 1990s, language teachers have discovered that the quality of language teaching cannot be assured by a magic method or approach. There seems to be no absolute teaching method or approach that has been successfully applied at any time, at any place and in any circumstances (Brown, 2002; Kumaravadivelu, 1994; Nunan, 1991a; Prabhu, 1990). Instead of sticking to prescriptions defined by a particular approach or method, teachers need to make sense of their profession through constant reflection, examination and change (Gebhard and Oprandy, 1999; Kumaravadivelu, 1994; Richards, 2002; Richards and Lockhart, 1999).

[11] The contextual factors refer to the context where teaching and learning happens, such as the cultural context, political context and institutional context. Because the traditions, objectives, beliefs, assumptions and approaches of language teaching and learning vary in different contexts, understanding and respect are important before implementing any new change or application (Ellis, 1996; Hu, 2002; Richards and Rodgers, 2001).

Nevertheless, we still need to appreciate the wealth of experiences and knowledge that have been accumulated and constructed from the process of exploring the factors in language learning, as well as searching for the best teaching method. These definitely provide language teachers with rich sources to think about and to develop their teaching repertoires in the future (Larsen-Freeman, 2001).

The current education trends for language teachers have stressed the importance of being creative teachers (Larsen-Freeman, 2001; Richards, 2002) and reflective practitioners (Gebhard and Oprandy, 1999; Richards and Lockhart, 1999). Language teachers have been informed in their professional practice that knowledge is actively constructed and not passively received. On account of the obvious shift in teacher cognition in language teaching, language teachers, having been required to acquire up-to-date knowledge of language and language learning, are now also encouraged to absorb new information from other fields or disciplines to empower their techniques and build up their personal repertoires for achieving different needs and goals in their social or cultural contexts (Larsen-Freeman, 2001). In other words, the roles of language teachers have been changed from those of passive practitioners to active creators (Richards, 2002). Nevertheless, teachers are also reminded that an extensive knowledge base, subjective experiences and creative practice are insufficient as the basis for professional development; more self-inquiry, self-awareness and critical refection are needed for achieving effective teaching (Allwright and Bailey, 2002; Richards and Lockhard, 1999; Williams and Burden, 2001). Moreover, these trends have also shown the need to see learners as individuals and to take account of their cognitive and affective elements in learning. Language teachers are thus encouraged to consider the "nature and will of learners"[12] in all aspects of their language teaching (planning, teaching and evaluation). Individual differences and self-directed learning become the central issues for language teachers when developing a learner-centered course design (Richards, 2002; Tudor, 1996).

Having been a university English as a Foreign Language (EFL) teacher in Taiwan for

[12] According to Richards's suggestions (2002:150), the "nature and will of learners" should be reflected by recognizing learners' prior knowledge, needs, goals, wishes, learning styles, learning preferences, learners' views of teaching and the nature of classroom tasks.

eight years, I am deeply impressed by the pros and cons of all these influential approaches and methods. Taking the lessons and insights from the past, I have started to reflect on my teaching through close observations and extensive readings. As I realized that foreign language learning is a very complex process and that learners with different personalities and preferences have different needs, I began to look for a multiplicity of ways to respond to the challenge in my teaching profession. As a result of my personal experiences, beliefs and interests, the application of Multiple Intelligences (MI) theory seemed to be appropriate (Chao, 1999, 2000 b and 2001a). However, further examination of my practice, with learners' perspectives and personal critical reflection, is necessary to understand how and why an application of MI theory can support learning in an EFL classroom, or not, as well as to gain a deeper understanding of my own teaching, for professional development.

In the next chapter, different views on the nature of intelligence will be firstly discussed to present how these perspectives have influenced the formation of the Multiple Intelligences (MI) theory. Then, a brief summary of MI theory will be provided. Following this will be a review and discussion of recent educational implications and applications of MI theory. Finally, the common questions and criticisms of Multiple Intelligences will be explained in terms of Gardner's perspectives to clarify some issues related to the theory.

# Chapter 3

## *Notions of Intelligence: From Psychometric Views to Multiple Intelligences Theory*

### 3.0 Introduction

Throughout the 20th century, psychologists redoubled their efforts and tried different approaches to investigate the nature of human intelligence and generate interpretations of it. Like other studies in psychology such as those on the development of learning theories, the views of human intelligence have been highly influential in general education (Costa, 2000; Mayer, 2000; Sternberg and Williams, 1998) as well as on foreign/second language (FL/SL) education (Brown, 2000; Christison, 1998b and 1999; Lightbown and Spada, 1999; Williams and Burden, 2001). Since the earlier decades of the 20th century, intelligence, associated with the scores in Intelligence Quotient (IQ) tests, has been used as a factor intended to predict school success in many western societies (Gardner, 1993a). Drawing on this perspective of intelligence, in some systems and countries, many schools use selection procedures to decide who needs to go to special classes for extra help. The chosen students, considered as less smart, usually feel frustrated during their school years (Armstrong, 1987). In addition, under the influence of this fixed view of intelligence, people were believed to have a measurable amount of language learning ability. For example, the Modern Language Aptitude Test (MLAT) was developed in the 1950s; however, like IQ tests, the aptitude test has been criticized because of limitations in its views and treatment of learners (Williams and Burden, 2001). Moreover, in order to identify the relationship between FL/SL abilities and IQ scores, several studies were conducted and the results suggested that:

> While intelligence, especially as measured by verbal IQ tests, may be a strong factor when it comes to learning which involves language analysis and rule learning, intelligence may play a less important role in classrooms where the instruction focuses more on communication and interaction.
>
> (Lightbown and Spada, 1999:52-53)

The findings mentioned above have implied for language learners that intelligence, as indicated by IQ tests, can rarely predict the development of communicative competence in target language learning.

Opposing this psychometric[1] view of intelligence, Howard Gardner (1983) argued that intelligence tests only cover linguistic and logical intelligences while other important types of intelligence have been ignored. He proposed the theory of Multiple Intelligences (1983) to describe human intelligence as having multiple dimensions that must be appreciated and developed in education. Recently, educational reform has been inclined to recognize and nurture individual differences (Costa, 2000; Jacobs and Farrell, 2001), so Gardner's learner-centered philosophy has become very popular among teachers, educators and administrators for its practical application. According to the special issues of *English Journal*, 1995, Volume 84(8), and *Educational Leadership*, 1997, Volume 55(1), many teachers have started to use MI as a framework to re-evaluate their curriculum design and provide more learning opportunities for students (see also Christison, 1996 a and b, 1998 a and b, 1999).

In this chapter, the different views on the nature of intelligence are firstly discussed to help us understand how these perspectives have influenced the formation of MI theory; secondly, a brief summary of MI theory, and a review of relevant educational implications and applications of the theory are provided. Finally, questions and criticisms about MI theory are presented and explained.

## 3.1 Views on the Nature of Intelligence

The nature of intelligence is first explored from a psychometric approach. Following this, three influential perspectives that have been proposed respectively by Piaget, Vygotsky and Sternberg are discussed.

### 3.1.1 Psychometric Perspectives on Intelligence

The psychometric concepts of intelligence can be traced back to the work of Francis Galton in the late 19th century. He was one of the earliest psychometricians and one of the founding fathers of the Eugenics movement who were committed to the improvement of the human race by genetic engineering. From his observations and experiments, Galton concluded that intelligence is an inherited general mental ability

[1] The psychometric approach "seeks to define and quantify dimensions of intelligence, primarily through the collection of data on individual differences and through the construction of reliable and valid mental tests" (McInerney and McInerney, 2002:61).

and could be directly measured. He believed that an intelligent person would have better sensory-discrimination capacities; thereby the first intelligence test he invented was to measure items such as reaction time, keenness of vision and hearing, etc. (Brody, 2000; Gardner, 1999; Vialle and Perry, 1995).

The critical point for the development of intelligence testing and measurement came in the work of Alfred Binet and Théophile Simon (Binet and Simon, 1916; Gardner, 1993a and 1999; Vialle and Perry, 1995). In the earlier 20th century, having been approached by the French government to identify children with intellectual disability in school and provide them with extra help, the French psychologists Binet, Simon and a group of colleagues invented intelligence tests based on the premise that intelligence was a group of diverse abilities that prepared children to perform better or worse in school. The purpose of such tests was to measure intellectual competence[2] at work, which was believed to predict success or failure for school children (Gardner, 1993a and 1999; Vialle and Perry, 1995).

The Binet-Simon Battery was individually administered, and included a series of activities and questions chosen to reflect everyday knowledge and levels of abilities at particular ages (Perkins, 1998). Comprehension, vocabulary knowledge, logical reasoning, differences and similarities, and memory for meaningful materials were examples of the test content (Vialle and Perry, 1995). Furthermore, Binet and his colleagues developed the concept of mental age to explain the relationship between a person's mental capacities as performed on the intelligence test, compared to his or her chronological age. Years later, the name of IQ (Intelligence Quotient), a measure devised to give an early indicator of how smart someone is, was created by the German psychologist Wilhelm Stern. He divided one's mental age with one's chronological age and then multiplied by 100 to indicate each measurement of IQ score[3]. The idea of intelligence tests or later IQ tests was developed out of such processes (Gardner, 1999). Despite the numerical description of Binet-Simon

[2] Gardner explained that "competence is a term to use after a person has had the opportunities to be trained or to practice a skill" but intelligence only refers to "the potential to think and act" (Kirschenbaum, 1990).

[3] This method of defining IQ became no longer acceptable after the development of inferential statistics (Aiken, 2000). A more appropriate definition is Deviation IQ, which depends on "the normal distribution of intellectual performance at a particular age level and sometimes for a particular gender group" (Chan, 2001:85).

intelligence tests, Binet did not hold a single view of intelligence and he made no claims about the origins of intelligence. Instead, he asserted that intellectual competences include diverse qualities, which are remediable (Kornhaber and Gardner, 1993).

Almost at the same time, a different psychometric perspective on the nature of intelligence emerged in the earlier 20th century. Spearman, a well-known American statistician and psychologist, used analytical techniques to measure intelligence in short-answer tests (Krechevsky and Seidel, 1998). He proposed 'g' the general factor as a single intelligence, underlying all intellectual performance, to specify the abstract reasoning power each person may have to deal with a wide variety of tasks and situations, which is in contrast to Binet's "bundle-of-abilities conception of intelligence" (Perkins, 1998:70-71). Although debate about the single-skill or multiple-abilities view of intelligence among psychologists has existed for a long time since the appearance of Spearman's single view of a general intelligence, most psychometricians support the unitary perspective (Gardner, 1999).

When the Binet-Simon intelligence tests were introduced to the United States, they became as popular as they had been in France. In particular, after Stanford psychologist Lewis Terman and Harvard professor Robert Yerkes adapted the original version to a paper-and-pencil one for easy group administration, known as the Stanford-Binet, IQ tests or scholastic tests[4] have become useful and convenient tools in many western societies for selecting people in academic and vocational areas, particularly in the USA (Gardner, 1999).

Like Galton, Terman believed in the inheritability of intelligence and supported the Eugenic movement. Thus, the widely used Stanford-Binet also reflected his beliefs. According to the differences in IQ scores gained by particular cultural groups, Terman and his followers concluded that some races were 'inferior' in intelligence to others (Vialle and Perry, 1995). Their claims have not only caused racial furors but also generated unceasing debates (Gould, 1981; Herrnstein and Murray, 1994), especially in the USA.

[4] They refer to another form of intelligence test that correlate highly with scores in standard psychometric instruments.

Generally speaking, the commonsense view of intelligence has been affected and shaped by IQ tests and their associated beliefs (Christison, 1996 b and 1998 a; Mayer, 2000). Intelligence, a personal mental power linked with abilities tests or achievement tests, is always considered as an indicator to explain if some people can learn better or faster than others (Sternberg, 2000b). It also becomes the common factor to explicate various kinds of problem-solving abilities (Krechevsky and Seidel, 1998). Even though the impact of using the psychometric approach to intelligence has been global, controversy still exists around what the nature of intelligence is and what IQ tests actually measure. Questions like those regarding the singularity (Eysenck and Kamin, 1981; Jensen, 1969; Spearman, 1927) or the plurality (Guilford, 1967; Thurstone, 1938) of human intelligence have been explored and argued by many psychologists. Issues like the inheritability of intelligence and the inherent bias in intelligence tests have also been raised and criticized more recently (Gardner, 1983 and 1999; Gould, 1981).

### 3.1.2 Other Perspectives on Intelligence

Except for the psychometric way of examining intelligence mentioned above, three important cognitive theories have played key roles for educators or researchers to identify the nature of human intelligence or intellectual capacities. They are the concepts of personal development from Piaget (1952 and 1976), the socio-cultural theory of Vygotsky (1962 and 1978), and the triarchic theory of human intelligence by Sternberg (1985 and 1996). These are briefly discussed before introducing Gardner's Multiple Intelligences theory.

#### 3.1.2.1 Piaget's personal development theory

For Jean Piaget, intelligence is not simply the issue of whether one gets a correct answer in a standardized IQ test or not. He believed "the line of reasoning the child invokes" when tackling items on an intelligence test is more important for us to understand and to interpret their intelligence (Gardner, 1983:17).

Piaget assumed that "human intelligence is a biological adaptation of a complex organism to a complex environment" (Chen and Siegler, 2000:95). Like Spearman, Piaget kept the notion of a single and general intelligence. Different from Spearman, he affirmed that intelligence progresses through a sequence of distinctive stages (Chen

and Siegler, 2000; Piaget, 1976). According to Piaget's developmentally based view of intelligence, he saw intelligence as essentially a process of maturation, within which genetics and personal experience interact. The developing intelligence is constantly seeking *equilibration*, which is accomplished by balancing processes of *assimilation*[5] and *accommodation*[6] (Aiken, 2000; Piaget, 1952 and 1976).

Because Piaget believed that certain intellectual abilities are possible only when one has reached a given stage of development, he tried to define universal cognitive principles to determine the intellectual functioning at given stages of life. He claimed that normal individuals matured intellectually from infancy to adulthood through a series of progressive stages at specific ages: the sensorimotor stage (birth-2 years), the preoperational stage (2-7 years), the concrete operational stage (7-12 years) and the formal operational stage (12 years-adulthood) (Piaget, 1976). Moreover, Piaget (1952 and 1976) stated that intellectual potential could be predicted or understood through observing how human beings (children) acquire and use knowledge at given stages and then comparing that data to what most people (children) are able to do at that age (Bigge and Shermis, 1992; Chen and Siegler, 2000). Piaget argued that we learn by constructing understandings. His theory led to the learning theory called 'constructivism', and his model is interpreted as personal constructivism (McInerney and McInerney, 2002).

Although Piaget's assumptions on the development of personal intellectual abilities (intelligence) have indicated the significance of discovery learning on education (Williams and Burden, 2001), and have had a noticeable impact on the meaning and assessment of intelligence and cognitive development (Chen and Siegler, 2000; Fry 1984), many researchers have recently pointed out problems with his theory. Firstly, Piaget's emphasis upon individual development caused him to overlook the significance of the social environment for learning (Williams and Burden, 2001). In addition, the developmental stages Piaget described cannot be generalized to different individuals and cultures (Bidell and Fischer, 1992; Gardner, 1983; Rogoff and

[5] Assimilation consists of fitting new information to pre-existing cognitive structures.
[6] Accommodation is the modification of these cognitive structures as a direct result of personal experiences.

Chavajay, 1995; Sutherland, 1992). Lastly, the tasks[7] he employed are not adequate because many valued human intellectual capacities have been ignored (Gardner, 1983; Rogoff and Chavajay, 1995).

### 3.1.2.2 Vygotsky's socio-cultural theory

Unlike the notion that intelligence is the measured score of a standardized IQ test designed by psychometricians, and the view that intelligence is a solitary exploration by each individual of the environment suggested by Piaget, Lev Vygotsky particularly focused on the development of the mind (intelligence or intellectual abilities) that takes place in the course of socio-cultural experiences (Vygotsky, 1978).

According to Vygotsky's socio-cultural theory (also referred to as social constructivist theory, 1962 and 1978), he suggested that all children are born with a wide range of intellectual capacities, which are socially based in origin. These could be transformed to high-level psychological functions of human cognition, in the context of education and socialization, especially through the use of cultural inventions such as tools[8] and social structures[9]. For Vygotsky, intelligence is therefore a function of activity that is culturally shaped by the collaboration between children and their social environments. During the process of intellectual growth, *mediators*[10], *scaffolded instruction*[11], and continuing and appropriate social interaction are considered to play key roles to help each individual's intelligence effectively operate in the *zone of proximal development*[12] (ZPD) (Vygotsky, 1978).

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[7] In cognitive-developmental tradition, the primary tasks are related to reasoning skills (Gardner, 1983).
[8] The tools include symbols, languages and concepts, etc. Musical notations, accounting techniques, mnemonic skills, reading and writing are examples. They are mainly created by human beings to improve and extend their natural abilities. For Vygotsky, they are also used to change mental functions (Grigorenko, 1998:202).
[9] The social structures "are presented by family, social, political and religious groups and organizations" (McInerney and McInerney, 2002:45).
[10] It refers to important persons that can provide socially organized instruction in the child's learning. Teacher, parents and capable peers are examples (Williams and Burden, 2001:40).
[11] This kind of instruction provides students with guidance and assistance in the zone of proximal development, which allow them to progress from a novice to a higher level easily (Wood et al., 1976). As the learner's performance improves, the guidance or assistance will be gradually moved, just as the scaffolding of a building is taken away as the walls are strong enough to stand alone (Bodrova and Leong, 1996).
[12] The term refers to the distance between the current developmental level of a learner as determined by independent problem solving and the level of potential development as determined through problem solving under the guidance or assistance of parents, teachers or competent peers (Vygotsky, 1978).

Vygotsky's socio-cultural views on the development of mind have contributed a great deal to education; from his views, approaches to teaching and learning have developed, such as the application of mental tools (Grigorenko, 1998), mediating learning (McInerney and McInerney, 2002), and guided and assisted discovery (Blanck, 1990). Also, his views have influenced later studies on the notion of human intelligence (Gardner, 1983 and 1993a; Sternberg, 1985; Lave, 1988). Many current socio-cultural perspectives on intelligence (Chen and Siegler, 2000) and on language learning (Lantolf, 2000) have been founded on his theory.

**3.1.2.3 Sternberg's triarchic theory**

Since the 1980s, the concept of multiple forms of intelligence, which addresses the issue of human differences, has dominated the cognitive field. In addition to Gardner's MI theory, the triarchic theory proposed by Robert Sternberg (1985, 1986 and 1996), a Yale psychologist, is also an influential one (Teele, 2000).

Because many findings had shown that IQ tests provide poor predictions in important human abilities, such as creativity and the practical application of information (Gardner, 1993b and 1995b), Sternberg defined a contextualist view of intelligence, different from the psychometric tradition, as a "purposive selection and shaping of and adaptation to real-world environments relevant to one's life" (Sternberg, 1984:12).

Moreover, influenced by the notion that the mind is an information-processing organ, Sternberg suggested that intelligence, comprised of a number of cognitive abilities, is used to process information and solve problems in different contexts of one's life. In order to find the essential intellectual capacities, or 'successful intelligence', which are important for individuals to deal with in every day life or to achieve goals, Sternberg (1984, 1985 and 1996) tried to look at the mental processes involved in responding to the items of standardized intelligence tests, to understand the actual mental steps people used to define difficulties or solve problems, and then to figure out possible solutions to help them (Gardner, 1999). After several studies (Sternberg, 1982; Sternberg et al., 1981), he proposed that human intelligence is composed of three main elements and the theory has been called a triarchic theory (Sternberg, 1985, 1986, 1996 and 1998). The three elements, which refer to different aspects of intellectual behavior, and govern the daily intellectual behavior in his theory, are

*componential intelligence* (analytical abilities), *experiential intelligence* (creative abilities) and *contextual intelligence* (practical abilities).

*Componential intelligence* includes three major sets of components: metacomponent[13], performance components[14] and knowledge acquisition components[15]. They all are linked to an individual's capacity to acquire knowledge, to think, plan and monitor their own cognitive processes, and decide what is to be done. As for *experiential intelligence*, it refers to how each individual uses insight, imagination and creativity to deal with new problems, and how quickly these formulated original solutions or novel inventions can become routine processes to solve later related problems. *Contextual intelligence* means how well people use adaptation abilities in their context to optimize successful opportunities (Sternberg, 1985, 1986 and 1996).

Sternberg claimed that the three intelligences mentioned above together, called successful intelligence, could provide a good basis for flourishing every day living (Sternberg, 1996). In addition, he argued that infusing the notion of successful intelligence into classroom learning and teaching approaches, would lead to students' learning potential being expanded and school achievement being enhanced (Sternberg, 1997 and 1998; Sternberg et al., 1998).

Sternberg remarked that school achievement tests or ability tests, associated with traditional intelligence tests, value memory and analytical abilities but ignore creative and practical domains. Thus, only a fraction of students are rewarded in the closed educational system (Sternberg, 1997). For the purpose of achieving efficient teaching and learning, he encouraged teachers to teach and assess their students in "All Four Ways" (Sternberg, 1997:21) -- teaching and assessing for memory, and for analytical, creative and practical thinking through a balanced approach (Sternberg, 1998). The advantages he mentioned are: first, each student has more opportunities to learn and understand the teaching material; second, when teaching and assessment are varied, students will find at least some part of the instruction or assessment to be compatible

[13] These are the cognitive skills or strategies employed in planning, monitoring and decision-making.
[14] These are basic operations involved in the execution of a task, such as inferential thinking and drawing comparisons.
[15] These are the processes to gain new knowledge, such as relating the new information to what is already known.

with their preferred ways of learning, which may "both capitalize on strengths and correct their weaknesses" (Sternberg et al., 1998:667); third, teaching jobs become easier and more manageable when all students' needs are met (Sternberg, 1997).

Although Sternberg and Gardner (the author of MI theory) both reject the conventional concept of intelligence as a unitary ability, their research directions are different. Sternberg does not deal with the particular contents with which intelligence functions. Instead, he pays more attention to the mental processes, and assumes there are three general operating elements in the mind, which can process all kinds of information, materials or problems people encounter (Davidson and Downing, 2000; Gardner, 1999). Moreover, he devised new measures for the three aspects of intelligence, which are criticized as resembling "too closely... the kinds of linguistic and logical items that have traditionally dominated intelligence testing" (Gardner, 1999:101). Unlike Sternberg, Gardner is interested in the particular contents that each intelligence operates, which is a vertical rather than a horizontal view on the organization of mental faculties (Gardner, 1999). He takes a symbol system approach to interpret human intelligence, and believes intelligences are best measured through the particular semiotic or symbolic system (e.g. dance or music) favored by individual cultures and settings rather than solely on patterns of paper-and-pencil test scores (Aiken, 2000; Davidson and Downing, 2000).

Since Sternberg's view of intelligence is primarily process-oriented and Gardner's is contents-focused, Sylwester (1998: 60) suggested that "one could think of Gardner's forms of intelligence as nouns and Sternberg's as verbs. Perhaps intelligence is the marvelous blend that we call a sentence".

## 3.2 A Brief Review of Multiple Intelligences Theory

After a survey of theories of human cognition from different perspectives such as neurology, biology, sociology, anthropology, arts, humanities and psychology, Howard Gardner, the Harvard professor and psychologist, was dissatisfied with the traditional definition of intelligence, which only captures a small portion of human capacities that are valued in the real world. He criticized the fact that educators and psychologists spend much time measuring students through IQ or standardized tests

without really helping and educating them. After years of exploration and evidence collection, he convincingly argued for expanding the domains of intelligence to cover the wide range of capacities people have (Gardner, 1987). In 1983, his book *Frames of Mind: The Theory of Multiple Intelligences* was published and has caused a major paradigm shift in the thinking about what constitutes intelligence. Later on, the publication of two books, *Multiple Intelligences: The Theory in Practice* (1993a) and *Intelligence Reframed: Multiple Intelligences for the 21st Century* (1999) have not only provided further explanation and clarification of the MI theory, but also proposed general guidance for applications of the MI theory to education and the wider world (Armstrong, 2000; Campbell et al., 1999; Lazear, 1999a and b; Martin, 2001).

### 3.2.1 What is Intelligence?

Based on years of observations, investigations and findings from cognitive science, neuroscience and cross-cultural research, Gardner was moved to disagree with the concept that intelligence is a single and genetically determined capacity that can be quantified as a number by answering a set of decontextualised items on standardized IQ tests. He concluded that psychometric views of intelligence fail to explain large areas of human endeavor, especially after formal schooling (Armstrong, 1999; Walters and Gardner, 1995). According to him, there are many, not just one, different and semi-autonomous intellectual capacities that result in various ways of knowing, understanding and learning about our world. Therefore, it is important to acknowledge and cultivate all varieties and combinations of human intelligences in different cultural backgrounds (Gardner, 1987). As Gardner stated:

> It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all of the combinations of intelligences. We are all so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world.
>
> (Gardner, 1993a: 12)

The earlier definition of intelligence in *Frames of Mind* is "the ability to solve problems or to create products that is valued within one or more cultural settings" (Gardner, 1983: x). A more refined definition is offered in *Intelligence Reframed*, where Gardner conceptualized "an intelligence as a bio-psychological potential to process information that can be activated in a cultural setting to solve problems or

create products that are of value in a culture" (Gardner, 1999: 33-34). Since "intelligences arise from the combination of a person's genetic heritage and life conditions in a given culture and area" (Gardner, 1999:45), Gardner insisted that each person is unique with different intellectual profiles, and suggested intelligences should be activated and fostered if opportunities in the particular cultures or in the surrounding environments are available (Gardner, 1993a and 1999).

In sum, the nature and realization of intelligence, according to Gardner's views (1993a), should be pluralistic, distributive, educable, culture dependent, and involving both internal (personal uniqueness) and external (contextualization) factors, which are totally in contrast to the conventional single and static perspectives on intelligence. Thus, Gardner (1999) has proposed that there are eight intelligences, namely, linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, intrapersonal, interpersonal, and naturalist intelligence. The process he used to identify and confirm these intelligences are discussed in the following section, and the intelligences themselves are described in the subsequent section.

### 3.2.2 Gardner's Criteria for Distinguishing an Intelligence

In order to determine a list of human intelligences as well as give a sound theoretical basis for his theory, Gardner and his colleagues consulted evidence from several different resources. During the process of selecting and identifying possible intelligences among the candidate faculties, a set of criteria was used (Gardner, 1983). Different from the *objective factor analysis*[16] employed by psychometricians to deal with the concept of intelligence, Gardner called his process of identification a *subjective factor analysis*[17]. The criteria proposed by Gardner for this process were intended to recognize the scope of human potential beyond the limits of IQ scores (Gardner, 1987:87). These included eight factors grouped under four disciplines: biological sciences, logical analysis, developmental psychology and traditional psychological research. Gardner asserted that only those candidate intelligences that satisfy all or a majority of the criteria qualify as intelligences (Gardner, 1983). The

[16] This refers to a mathematical operation performed on scores of intelligence tests (Gardner, 1987).

[17] Instead of using the statistical techniques for analyzing and correlating the outcomes of intelligence tests that are suggested by objective factor analysis, subjective factor analysis is an approach Gardner employed to describe and explain human intellectual abilities in terms of consulting a broad range of domains that human beings have developed as well as collecting a variety of related evidence (Kornhaber and Gardner, 1993).

identified criteria are presented below (Gardner, 1983 and 1999).

#### 3.2.2.1 Biological sciences

*Criterion 1: Can this candidate intelligence be isolated by brain damage?*

Brain studies have confirmed that it is possible to lose a particular faculty in the brain while leaving all the others unaffected, or to retain a faculty while others are lost. For example, a person with a brain injury in the right temporal lobe may have the musical intelligence damaged, but she/he may still be able to speak, read, dance and express feelings without influencing the functions of other intelligences. Taking the evidence from brain damage studies, Gardner argued that an intelligence should be pinpointed in particular area(s) of the brain (Armstrong, 2000; Gardner, 1983 and 1999).

*Criterion 2: Does this candidate intelligence show an evolutionary history?*

Gardner suggested that each intelligence should be indicated in the evolutionary origins of human beings and even be present in other species (Gardner, 1983 and 1999). For example, bodily-kinesthetic intelligence can be traced back to the evidence of early tool use as well as through the dances performed by bees to communicate the locations of pollen sources (Vialle and Perry, 1995). Moreover, the perceived values of an intelligence may nave been influenced by historical factors in different contexts. Some have been more important in earlier times than they are today. The naturalist intelligence, for example, has become more important today with the growing need for experts to preserve endangered ecosystems (Armstrong, 2000).

#### 3.2.2.2 Logical analysis

*Criterion 3: Does this candidate intelligence manifest itself by an identifiable core operation or a set of core operations?*

Each intelligence, according to Gardner, has a particular core operation or set of central abilities to make the intelligence function. For instance, in naturalist intelligence, the core operations may be the ability to recognize and classify numerous species, and the sensitivity to phonemic discrimination and pragmatic usage are part of the core processing mechanisms in linguistic intelligence (Gardner, 1983 and 1999; Armstrong, 2000).

*Criterion 4: Has this candidate intelligence been encoded in a symbol system?*

Gardner points out that each intelligence has its own unique symbol system(s), which have been created by human beings to capture and communicate their understandings of the world (Gardner, 1983 and 1999). The four worldwide symbol systems in language (phonetic languages), picturing (ideographic languages and icons), mathematics (numerical systems) and music (musical notation) that play significant roles for human survival and productivity are examples (Gardner, 1983). Others are the social cues (e.g. body languages) of interpersonal intelligence used among different people for communication, and the computer languages (e.g. C+ and Java) of logical-mathematical intelligence for program writing (Armstrong, 2000; Silver et al., 2000).

#### 3.2.2.3 Developmental psychology

*Criterion 5: Does this candidate intelligence include the existence of exceptional populations?*

Gardner suggested that intelligences should be singled out in certain individuals with unusual or extraordinary abilities (Gardner, 1983 and 1999). In the case of the idiot savant like Raymond in the movie Rain Man (based on a true story), he had amazing calculating abilities (superior logical-mathematical intelligence) but he had difficulties in expressing himself (linguistic intelligence) and getting along with others (interpersonal intelligence) (Armstrong, 2000). As for prodigies, they may be outstanding in a specific intelligence, say a violin genius, but remain average in other areas (Gardner, 1983; Vialle and Perry, 1995).

*Criterion 6: Does this candidate intelligence have an identifiable developmental history and lead to high end-states of expert performances?*

Gardner said that each intelligence-based activity triggered in different cultural contexts has its development route from novice to expert – its time of arising, peaking and gradual decline during one's lifetime (Gardner, 1983 and 1999). For example, the development of musical intelligence seems to peak earlier in childhood but logical-mathematical intelligence may peak later (Armstrong, 2000; Gardner, 1983). Moreover, Gardner mentioned that we can find socially valued experts in each intelligence. The Chinese Poet Li Po (linguistic intelligence), British musical opera singer Sarah Brightman (musical intelligence) and American movie director George Lucas (spatial intelligence) are famous people with high end-states of a particular

intelligence in different cultural settings.

#### 3.2.2.4 Traditional psychological research

*Criterion 7: Can this candidate intelligence get support from experimental psychological tasks?*

Gardner believed that we can witness intelligences working separately when observing psychological experiments. That is, if certain psychological tasks interfere with each other, they are likely to have different intelligences involved; however, if enhancement or transfer happens between the tasks, they are likely to come from the same intelligences (Gardner, 1983 and 1999). For instance, individuals have specific skills to solve spatial problems (spatial intelligence) but they fail to transfer the skill to another area such as solving arithmetic problems (logical-mathematical intelligence). In addition, individuals in the studies of cognitive abilities may have a good memory for words (linguistic intelligence) but not for remembering numerical information (logical-mathematical intelligence). In other words, those experimental tasks found independent from each other support the existence of different intelligences (Armstrong, 2000; Vialle and Perry, 1995).

*Criterion 8: Can this candidate intelligence be supported by psychometric findings?*

Although Gardner does not support the use of standardized tests, he argued that we can still find a wide range of existing psychometric tests available to measure different abilities and support the MI theory (Gardner, 1983). In the Wechsler Adult Intelligence Scale-Revised (Wechsler, 1981), for instance, certain abilities related to linguistic, logical-mathematical, spatial and bodily-kinesthetic intelligence are included in its sub-tests. As for the Coopersmith Self-Esteem Inventories, parts of interpersonal and intrapersonal intelligences are tested as well (Armstrong, 2000).

### 3.2.3 The Eight Intelligences

According to the eight basic criteria, Gardner identified seven intelligences first (Gardner, 1983) and added an eighth recently[18] (Gardner, 1999). The list may be expanded; however, the main point for the MI theory is the pluralistic view of

[18] The ninth existential intelligence has been proposed and considered recently, but it is not "perfect-fit" in terms of Gardner's criteria (Armstrong, 2000:128). More evidences and clarifications are needed for the intelligence to be included in the MI theory (Gardner, 1999:53-77). Thus, the existential intelligence is not discussed here.

intelligence rather than the exact number of intelligences (Gardner, 1983 and 1993a). Furthermore, Gardner claimed that all normal persons possess each of the eight intelligences to some extent, but differ in their relative strengths and weaknesses (Gardner, 1993a; Walters and Gardner, 1995). The eight intelligences can be completely realized in the processes of learning, solving problems and creating products in real situations (Christison, 1998b; Gardner, 1993a). Moreover, each of them can be developed, enhanced and amplified to an adequate level of competence throughout the lifetime when positive educational or environmental circumstances exist (Armstrong, 2000; Haley, 2001). Therefore, intelligence is no longer a fixed number provided by intelligence tests but a functional concept in real life that can be triggered through a range of opportunities (Gardner, 1999). Although these intelligences, distinct in terms of their existence in the brain, are independent of one another, they are always performed in real world activities in a blended or highly personal way (Armstrong, 2000; Gardner, 1993a). A brief description of Gardner's eight intelligences follows (Armstrong, 2000; Checkley, 1997; Gardner, 1983 and 1999).

#### 3.2.3.1 Linguistic intelligence

Linguistic intelligence manifests itself as the capacity to manipulate language effectively both orally or in writing to achieve various purposes such as debate, persuasion, instruction and explanations. It also allows one to use language to remember information or do self-reflection. Poets, writers, lawyers and journalists are examples of people who exhibit a high degree of linguistic intelligence.

#### 3.2.3.2 Logical-Mathematical intelligence

Logical-Mathematical intelligence refers to the ability to use numbers, quantities and operations accurately and skillfully. In addition, it includes the sensitivity to understand and analyze abstract patterns, principles and relationships. Mathematicians and scientists are examples of people particularly strong in this intelligence.

#### 3.2.3.3 Spatial intelligence

Spatial intelligence is the ability to recognize and use patterns in space. It involves the sensitivity to color, shape, line, form, object, space and the relationships among them and includes the capacity to perceive, think, transfer or represent the visual-spatial

world through internal mental images. However, Gardner (1999) notes that spatial intelligence, the ability to manipulate and create mental images, is also formed in blind children because it is not limited to visual domains. Pilots, architects, sailors, hunters and painters are examples of people with strength in spatial intelligence.

#### 3.2.3.4 Bodily-Kinesthetic intelligence

Bodily-Kinesthetic intelligence is the capability to use one's whole body or parts of one's body to express ideas and feelings, to solve problems and create products. Dancers, actors, athletes, surgeons, craft workers and sculptors are the most evident examples.

#### 3.2.3.5 Musical Intelligence

Musical intelligence includes the sensitivity to recognize rhythm, pitch, melody and tone as well as the capacity to appreciate, create or perform musical patterns. Composers, musicians, instrument players and singers are people demonstrating excellent musical intelligence.

#### 3.2.3.6 Intrapersonal intelligence

Intrapersonal intelligence refers to the ability to clearly understand the inner working of oneself, such as moods, ideas, desires, intentions, nature and motivations, and then to use such knowledge for directing or planning one's life or future. Psychologists and philosophers use the intelligence well.

#### 3.2.3.7 Interpersonal intelligence

Interpersonal intelligence includes the sensitivity to observe and understand other people's inner thoughts and outward performance. Moreover, it is the ability to get along with others well and effectively communicate with people, verbally and nonverbally. Social workers, salespersons, teachers and politicians all are skilled in the interpersonal area.

#### 3.2.3.8 Naturalist intelligence

Naturalist intelligence is the most recent intelligence validated by Gardner (1999). It is the ability to recognize, appreciate, identify and classify varieties among living things (e.g. plants and animals) as well as other features of the external world (e.g.

natural objects and human-made systems). Farmers, botanists, gardeners and zookeepers are people particularly strong in this intelligence. They have the abilities or talents to analyze natural situations, learn from living things or work in natural settings.

Basically, the eight intelligences discussed above can be grouped into four categories (Gardner, 1999). The first two, linguistic and logical-mathematical, are school intelligences. They have been valued in traditional educational systems for a long time. As for the spatial, bodily-kinesthetic and musical intelligences, they are particularly appreciated in the arts. Those connected to the personal are the interpersonal and intrapersonal intelligences, which are quite important for modern people to strive, compete, cooperate and collaborate in society. Finally, the naturalist intelligence is the only intelligence connected to the environment but an important one to develop especially since ecological problems have become worse today. Gardner (1999) noted that all eight intelligences are inherently value-free and they can be used for good or bad purposes. Furthermore, the eight intelligences have their own developmental sequences (Gardner, 1993a), can be directed to different aesthetic ends (Gardner, 1993a) and expressed in the diverse domains of human creativity (Gardner, 1999).

## 3.3 Educational Implications and Applications of MI Theory

After distinguishing the eight intelligences and recognizing their theoretical foundations, two essential claims are made by Gardner to emphasize the value of the MI theory. The first is "the theory is an account of human cognition in its fullness" (1999:44) and the second is "we each have a unique blend of intelligences" (1999:45). The two claims advise us that there should be many ways to be smart and that human potential could be expanded when individual differences are taken into account (Armstrong, 2000; Kagan and Kagan, 1998). The individual differences from MI points of view are not like these stressed in the psychometric approach. Through the psychometric approach, many intelligence tests and related statistical methods for analyzing data are developed to examine the individual differences in cognitive abilities. Their main purpose is to use the scores to judge who is intelligent and who has problems, to seek related causes and then set up special programs for remedial education (Kornharber and Gardner, 1993). The result could be that students not

gifted in linguistic or logical-mathematical intelligences are at risk of being labeled as Learning Disabled (LD) learners, and the abilities they possess have never had a chance to be approached or displayed in the classroom or school. On the contrary, when educators take individual differences into consideration through MI perspectives, their attention will shift from 'how to help LD learners' to 'how to create opportunities for differential learning' (Armstrong, 1988). Education is most effective if the school focus is on learners' growth rather than their deficiencies (Gardner, 1987, 1993a and 1999). The further implications and applications of MI theory for education are explored in the following discussion.

Based on the experience of Gardner and other MI proponents, the implications and applications of MI theory for practical use in classroom and school (education) could be divided into several categories: teacher's perceptions of students; students' concepts of themselves and others; alternatives in traditional curriculum development, instruction and assessment; and the design of educational environments (Armstrong, 1999 and 2000; Blythe and Gardner, 1990; Campbell et al., 1999; Gardner, 1993a and 1999; Kagan and Kagan, 1998; Lazear, 1994, 1999a and b).

### 3.3.1 Looking at Students Differently

For a long time, teachers have thought about their students using questions like 'Are they smart?' and 'How smart are they?' These questions are often answered by standardized or intelligence tests with scores (numbers). However, Gardner's MI theory shifts teachers' attention to "the many ways there are to be smart" (Armstrong, 1999:3). The appropriate question a teacher should think about students is 'How are they smart?' In other words, teachers are reminded to recognize, appreciate and nurture diverse students who possess unique cognitive profiles, which function in personal ways. When trying to put such knowledge into practice, teachers are advised to know their students well by means of sharpening observation skills and learning about unfamiliar intelligences. Afterwards, they can create enriched learning opportunities for students. It is believed that student potential will be activated and fostered when teacher bias, created by the exclusive use of a language-logic 'lens', has been eliminated (Armstrong, 1987,1999 and 2000; Blythe and Gardner, 1990; Campbell et al., 1999; Lazear, 1999a and b).

Based on his classroom teaching experience, Armstrong (2000) suggested that teachers should recognize, identify and develop their personal multiple intelligences before applying the theory to students. An MI Inventory for Adults (Armstrong, 2000:13-16) may be used for initial identification of personal strengths and weaknesses. Then, teachers' understanding of the eight intelligences and their connections to real life experiences can be improved through extensive reading and practice in related fields (Armstrong, 1999). Moreover, Hoerr, the principal of New City school in St. Louis Missouri, mentioned that group study, discussion and reflection with colleagues about the MI theory and its related applications would be very stimulating and rewarding for teachers to develop personal multiple intelligences, understand students' interests and needs, and implement the theory properly in the future (Hoerr, 1998). Gardner (1999) also proposed several steps for school educators to understand multiple intelligences and use the concept in their classes effectively. First, they need to learn more about MI theory, and its practices illustrated in documents, books, videos or CD-ROMs. Next, study groups and visiting MI-based institutions can provide educators with invaluable insights because of constant interactions with the real world. After that, they are encouraged to attend conferences that feature MI ideas and join a network of MI-based schools. Finally, they can plan and implement their projects in terms of ideas generated by experienced MI experts. Courageous experiments and periodical reflections are believed to bring rapid progress (Gardner, 1999).

### 3.3.2 Helping Students Understand and Accept Self and Others

MI theory provides us with a more holistic natural profile of human potential, beyond the logical and verbal abilities measured by standardized tests. Students are thus encouraged to discover and appreciate their own unique patterns of intelligences through various learning activities, strategies and opportunities. When they are empowered to learn new information or solve problems through personal strengths, in addition to self-image and self-efficacy levels being enhanced, their weak areas are developed as well (Sweet, 1998). Furthermore, they will respect others' gifts and feel more prepared to work well with others (Armstrong, 1999; Kagan and Kagan, 1998; Lazear, 1994; White et al., 1992). As Gardner said:

> If we can mobilize the spectrum of human abilities, not only will people feel better about themselves and more competent; it is even possible that they will also feel more engaged and better able to join the rest of the world community in working for the broader good.
>
> (Gardner, 1993a: 12)

An 'educating for intelligences' program has been implemented in several schools such as the Key School and Clara Barton K-8 School in the United States (Campbell et al., 1999). The effects have been apparent because these projects actually help students understand multiple intelligences, identify and enhance their intellectual strengths, and reflect on future applications (Campbell et al., 1999). With a similar goal, the Practical Intelligence for School (PIFS) project, the collaboration between Harvard Project Zero and Yale University, is carried out to help students learn about their own intellectual profiles, know how to use their interests and strengths to do school work, and take responsibility for their own learning/education (Gardner, 1993a).

In the case of facilitating students' recognition and development of multiple intelligences in the classroom/school context, Chapman's book (1993) *If the Shoe Fits...: How to Develop Multiple Intelligences in the Classroom* offers hundreds of tools, techniques, structures and strategies for application. In addition, Armstrong supplied teachers with many good ideas in *Multiple Intelligences in the Classroom* (2000) to inform learners about the theory of multiple intelligences and find bridging techniques to improve learning. Furthermore, in Lazear's book *Eight Ways of Knowing* (1999a), he proposed a four-stage model for teachers to teach for intelligence: awaken intelligence, amplify intelligence, teach for/with intelligence and transfer intelligence. Accompanied by an introduction to each of the eight intelligences, rich exercises, practices, lessons and strategies in different stages are presented for students to work with. Students are encouraged to be empowered by these activities, and function more effectively and independently for future learning.

### 3.3.3 Broadening Curriculum to Satisfy Interests and Needs of Different Learners

The implementation and presentation of traditional curriculum, which follow the lecture-practice-evaluation routine and only emphasize language and logic skills, cannot fit the diverse needs, talents and interests of a wide range of students (Gardner,

1993a; Goodlad, 1984). Based on the premises that "a school is responsible for helping all students discover and develop their talents or strengths" (Campbell, 1997:14), and that the multi-faceted minds of students need to be nurtured for enhancing learning (White et al., 1992), it is suggested the school curriculum be delivered through a range of intelligences, and be organized in terms of adapting different MI-based formats[19] (Campbell et al., 1999). It is believed that teaching and learning become more meaningful and efficient when teachers have a repertoire of diverse MI-based teaching and assessment strategies, and the abilities (e.g. finding or creating an appropriate model) to design lessons or units that integrate these strategies with the content (Armstrong, 2000; Campbell et al.,1999). Several distinctive models are listed, which have been used in curriculum development applying multiple intelligences concepts. They are MI-based lessons design[20] (Campbell, 1997; Campbell et al., 1999; Gardner, 1999), a project-based approach[21] (Campbell, 1994; Campbell et al., 1999; Gardner, 1993a; Katz and Chard, 1989; White et al., 1992), an eight-learning-centers model[22] (Campbell, 1992; Campbell et al., 1999; Gardner, 1999), an apprenticeship approach[23] (Armstrong, 2000; Campbell et al., 1999; Gardner, 1993a), developmentally-based curriculum design[24] (Armstrong, 2000;

[19] These MI-based formats provide some experiences on how to translate the learning/teaching materials from one intelligence to another, how to tailor the curriculum to activate students' intelligences that draw on their inner gifts, and how to connect the lesson plans with real world; etc.

[20] It is an approach that employs multiple intelligences as entry points or tools to teach subjects. Based on particular needs or students' interests, teachers may incorporate all or some of the eight intelligences into daily or weekly lessons.

[21] A project approach offers students opportunities to explore topics deeply, to solve problems or create productions through different intelligences. Students are encouraged to choose topics that fit their interests, and represent information that draws on their preferred ways (other than writing). Generally speaking, extra opportunities such as active participation, cooperating with peers and developing reflective abilities are provided during the process of implementing projects, and students can benefit a lot from these experiences.

[22] The eight learning centers, physically located in areas of the classroom, feature the eight intelligences proposed by Gardner or the names of experts in particular intelligences. All learning activities in the centers are designed around the main lesson. After a brief instruction of each lesson, students work in a small group, rotating through the centers regularly or daily, to explore the topic of the lesson in eight different ways.

[23] Apprenticeships, similar to tutoring or mentoring programs, emphasize that students can benefit from working with experienced persons of particular domains in real world tasks. These experienced persons can be older students, parents, teachers and community experts.

[24] Because all intelligences have their own developmental sequences at different points, the MI-based curriculum design should also reflect the needs for learners of different ages. For pre-school children, rich opportunities integrated with basic skills practice should be the priority. During the school-age years, the connections between practical knowledge and various symbol systems are emphasized. When learners are in adulthood, multiple links with vocational pursuits become critical (Gardner, 1993a). Moreover, the developmentally based curriculum could be designed in terms of different learning or teaching stages. Lazear (1992) suggested four stages to teach with multiple intelligences: Awakening, amplifying, teaching and transferring. Campbell (1992) proposed the four-step

Campbell, 1992; Gardner, 1993a; Lazear, 1994), interdisciplinary curriculum[25] (Armstrong, 2000; Campbell et al., 1999:271 and 276), arts-infused curriculum[26] (Campbell et al., 1999; Krechevsky and Seidel, 1998), intelligence-based curriculum[27] (Armstrong, 2000; Campbell et al., 1999; Gardner, 1993a; Lazear, 1994) and MI strategies[28] (Kagan, 2000; Kagan and Kagan, 1998).

When teachers transform existing lessons/units[29] into learning opportunities of multi-modes, the strengths and preferences of each student are addressed at some point. Moreover, their learning potentials can be gradually stimulated, expanded and amplified through constant connections with multiplicity of activities and diversity of materials in organized and practical ways (Armstrong, 2000; Campbell et al., 1999; White et al., 1992).

The curricular adaptations of MI theory show as great a variety as do responses to a Rorschach test (Gardner, 1999). Different from most educational reforms, there is no single preferred model or prescription for the adaptation of the MI theory in curriculum development. Teachers and educators are thus encouraged to construct their own approaches or choose favorite models depending on diverse rationales, needs, goals, values and cultures of their particular educational settings (Armstrong, 2000; Campbell, 1997; Gardner, 1999; Hoerr, 1998).

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instructional model to implement an MI-based classroom program: the main lesson, learning in centers, sharing and reviewing and individual projects. As for Armstrong (2000), a seven-step procedure is offered to organize an MI-based unit: focusing on a specific objective or topic, asking key MI questions, considering the possibilities, brainstorming, selecting appropriate activities, setting up sequential plan and implementing the plan.

[25] It is an MI-based thematic instruction, which integrates different subjects or skills to cut traditional curricular boundaries.

[26] Because visual, musical, kinesthetic and interpersonal competencies all are forms of intelligence, the MI theory suggests that arts education should have an equal status and time with other subjects. Many schools, such as Ashley River Elementary School in Charleston, South Carolina, and the Expo for Excellence School in St. Paul, Minnesota, have run the arts-infused curriculum, where the arts are taught as the core subject on a daily basis (Campbell et al., 1999).

[27] The intelligence-based curriculum is designed to help students recognize the concepts of multiple intelligences and then best use their personal strengths to overcome school/learning difficulties.

[28] MI strategies or structures are developed by Kagan and Kagan (1998) as content-free ways to deliver curriculum as well as used to foster development of those intelligences. 'Find My Rule' (logical intelligences) and 'Telephone' (verbal intelligence) are examples.

[29] It refers to the procedure of designing and organizing objectives, outcomes, resources/materials, activities and course sequences (Campbell et al., 1999:267-270).

### 3.3.4 Expanding Instructional Repertoires (Pedagogy) to Approach More Students

Because each student possesses a unique combination of intelligences, and particular pedagogical strategies work best for some students but not for others, learning materials should be taught and recycled in various ways to satisfy diverse needs instead of educating all learners with the same treatment. It is suggested, therefore, that teachers go beyond the traditional facts-delivery lecturing mode, and employ the eight intelligences proposed by the MI theory as a optional direction for course preparation — reflecting on the nature of their own pedagogical choices, and enriching their teaching repertoires through adding or developing new strategies (Armstrong, 2000; Campbell et al., 1999; Krechevsky and Seidel, 1998). Several experienced educators such as Thomas Armstrong (2000), Linda and Bruce Campbell and Dee Dickinson (1999), Spencer and Miguel Kagan (1998), and David Lazear (1999b) have presented a number of teaching strategies for each of the eight intelligences, so teachers can take their thoughts as references or examples to generate more ideas for future teaching. Moreover, from the perspectives of multiple intelligences, Gardner proposed several suggestions for strengthening teaching. They are multiplicity of entry points[30], connections[31] and representations[32] (Gardner, 1999). He claimed that the awareness of multiple intelligences helps teachers reach more students as well as empower their school learning (Gardner, 1999).

In the real world, teachers of different school grades or subject matters have used MI as a tool to improve their teaching, motivate students' learning or deepen understanding of the target content. Smagorinsky (1995), a high school English teacher, explained how beneficial it is to use MI to help students expand their ways of thinking and develop various skills to interpret and exhibit their understanding of

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[30] Gardner identified seven entry points (1999:169-172): Narrational, quantitative/numerical, logical, foundational/existential, aesthetic, hands-on and social examination. These entry points, probably matched with specific intelligences, are employed to arouse students' curiosity, and activate their interests and motivation to the disciplinary topic.

[31] The multiple connections refer to what Gardner suggested "instructive analogies" (1999:172) and "metaphors" (1999:173). These connections are used to help students explore and grasp new or unfamiliar key concepts of the topic through already known knowledge or materials. However, how to qualify each analogy or metaphor to avoid misleading students in understanding the content is important for the teacher to consider before introducing them.

[32] Gardner claimed that the way to prove real understanding is to represent "the core features of that concept in several ways" (Gardner, 1999:175). In addition to helping students go beyond the level of recalling facts and explore knowledge profoundly through different ways, teachers also need to encourage students to show evidence of understanding through convincing performances of variety.

crucial texts. Simeone (1995) discussed the ways to use video and a chalkboard dictionary to help high school students actively learn language arts instead of through passive studies. As a result, she found that many students learn better from non-traditional methods. Merrefield (1997), a preschool teacher, discussed how she and her partner used MI to approach children, some with language problems, when introducing the fairy tale 'Three Billy Goats'. From informal observations, they found children's motivation and self-esteem are both promoted. More than that, the development of children's language skills is facilitated and improved. Emig (1997), a high school teacher in Pennsylvania also described her positive experience in teaching social studies classes through MI. She said:

> I am surprised to see that I become a better teacher each year as I vary my strategies.... By expanding my teaching and assessment strategies, I have energized both my students and myself. Gardner's approach has put the magic back in my teaching.
>
> (Emig 1997:50)

More scholarly evidence on the potential benefits of MI theory in educational application can be found in Project SUMIT (Schools Using Multiple Intelligences Theory, Kornhaber and Fierros, 2000; Kornhaber, Fierros and Veenema, 2004) and AMI (Adult Multiple Intelligences, Kallenbach and Veins, 2001 and 2002) study. The results show that participants' self-esteem, motivation and school performances have been improved. Their enthusiasm for learning has increased as well.

### 3.3.5 Using New Assessment Approaches

For a long time, the traditional paper-and-pencil tests have been used by schoolteachers as instruments to produce letter scores or numerical percentages. High grades have come to assume the status of benchmarks of achievement (Armstrong, 2000; Lazear, 2000). But, are these scores they deal with really fair and meaningful? Since these traditional evaluation tools[33] mainly highlight the logic and linguistic skills and test for mastery of factual information, they may leave out other valuable talents that students have which are important to demonstrate their understanding and growth. In order to involve students in assessment processes, bridge their strengths and weaknesses, and enhance their learning, new approaches should be developed and

[33] These are standardized tests. True or false, multiple choices and fill-in-the blank are examples.

added into the assessment repertoires of classroom teachers (Campbell et al., 1999; Krechevsky and Seidel, 1998; Lazear, 1995 and 2000; White et al., 1992).

In *Multiple Intelligences: A Theory in Practice* (1993a), Gardner held that assessment, an essential component of an MI education, is designed to elicit - rather than mask - these differences among students; thus, it is particularly important to use multiple modes of assessment that will allow students to show their strengths and perform optimally. He wrote:

> I define assessment as the obtaining of information about the skills and potentials of individuals, with the dual goals of providing useful feedback to the individuals and useful data to the surrounding community.
>
> (Gardner, 1993a: 174)

Gardner's view has recently gained the support of many testing professionals (Darling-Hammond et al., 1995; Gipps, 1994; Herman et al., 1992). They argue the importance of authentic measures[34], and share the belief that what students know (knowledge) and what students do (performance) should be assessed within the context of particular domains at work from different perspectives[35] and through various ways[36] (Armstrong, 2000; Bellanca et al.. 1995; Burke, 1999; Lazear, 2000; O'Malley and Valdez Pierce, 1996).

The eight general features of the new approach to assessment proposed by Gardner (1993a: 174-179) are: (1) it places emphasis on assessment rather than testing[37]; (2) it should be simple, natural and occurring in a regular schedule; (3) it has ecological validity[38]; (4) the assessment instruments are 'intelligence-fair'[39]; (5) multiple

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[34] Students are expected to show what they have learned in real contexts.

[35] Students can get feedback for their performances from teachers, peers, parents and knowledgeable community members as well as self-reflection (Campbell et al., 1999).

[36] The theory of MI provides a framework for assessing in different ways. Many sample assessment approaches for different intelligences can be found in several books written by experienced MI educators such as Lazear (1995 and 2000), Bellanca et al. (1995) and Campbell et al. (1999).

[37] Testing is explained as using formal instruments to elicit information of ordinary performance in an artificial and decontextualised setting (Gardner, 1993a).

[38] Gardner criticized the limited predictive validity of standardized tests for students' performance after school years. He proposed the ecological validity to emphasize the importance of assessing in "actual working conditions". He believed that predictions of individuals' final performance are more accurate when they are assessed in "actual working conditions" (Gardner, 1993a: 175). Apprenticeships are one of the assessment examples to reflect the ecological validity.

[39] These intelligence-fair tools are devised to directly assess "the intelligence-in-operation rather than processed via the detour of language and logical faculties" (Gardner, 1993:176).

measures are used; (6) it is sensitive to individual differences, developmental levels and forms of expertise; (7) the assessment materials are intrinsically interesting and motivating, and (8) it will be linked to recommendations, which benefit students.

Several school programs have developed their assessment models based on MI theory. Many of them have been directed by Gardner and his colleagues at Harvard Project Zero (Gardner, 1993a). These pilot projects reflect the characteristics of alternative assessment suggested by Gardner, and introduce several tools of assessment such as observation, documentation, performance tasks and student self-reflection (Krechevsky and Seidel, 1998). The Spectrum assessment approach (Gardner, 1993a; Krechevsky, 1991) integrates assessment into a regular educational program to dissolve the line between curriculum and assessment. Students (children), put in a rich classroom environment with a variety of materials, are assessed through meaningful and contextualised MI-based games/activities over time. Instead of using linguistic or logic measures, teachers look directly at students' (children's) performances in different areas and report their strengths for future learning. Furthermore, teachers in Indianapolis's Key School use videotapes to assess students' growth and personal uniqueness. During the school year, students' presentations of projects, and their participations in Pods[40] and engagement in activities in the Flow room[41] all are videotaped extensively. Valuable assessment information about students' learning is thereby provided through these video portfolios to teachers, administrators, and parents as well as students (Armstrong, 2000; Gardner, 1993a). Moreover, in Arts Propel, students' performances in domain projects[42] and processfolios[43] are evaluated in terms of three kinds of competences: production (performance), perception (comprehension) and reflection (metacognition), which are recommended as good

[40] Pods, apprenticeship-like group learning activities employed in Key School, are formed around different disciplines or cognitive pursuits of real-world skills and knowledge. It is believed that students' learning is enhanced when they work with competent teachers and peers of different ages in their interest areas (Armstrong, 2000; Gardner, 1993a).

[41] The 'Flow room', named after Csikszentmihalyi's concept of 'flow'-- "a feeling of deep involvement" (cited from Gardner, 1993a: 118), is a place to provide rich learning materials and activities to stimulate students' multiple intelligences (Armstrong, 2000). Students are encouraged to pursue their own interests at their own space in the flow room through open-ended and inspiring ways (Gardner, 1999).

[42] A domain project is developed with rich exercises to help students focus on a particular area or theme through deep exploration (Gardner, 1993a).

[43] A school-year collection of students' works such as drafts, revisions, final products, and observations of their projects performance is named processfolio (Gardner, 1993). It is used to record a student's process of learning and creation (White et al., 1992).

guidelines for teachers of other subjects to adopt for changing assessment procedures (Gardner, 1993a: 144-152).

In classroom practice, Lazear (1994, 1995 and 2000) presented a *Multiple Intelligences Assessment Menu* for teachers to structure various assessment tasks for the eight intelligences. Bellanca et al. (1995) also recommended multiple strategies[44] and evaluation tools[45] for authentic assessment in a multiple intelligences classroom. Their work has expanded teachers' repertoires in assessment strategies as well as provided many good samples for teachers to follow. However, in order to be sure that the MI-based approaches to assessment can be accepted and effective, setting clear and well-defined rubrics[46] in advance is necessary to discern the depth of students' understanding and evaluate students' performance fairly, accurately and meaningfully (Bellanca et al., 1995; Lazear, 2000).

### 3.3.6 Building an Inclusive Learning Environment

In addition to changes or improvements in curriculum, instruction and assessment, an MI-inspired education also suggests the necessity of building a learning environment that accommodates students' needs, and gives them more opportunities to experience success. Creating a museum-style learning environment and building links with the wider community are contextual approaches proposed by Gardner to enrich learning opportunities and stimulate students' multiple intelligences (Gardner, 1993a).

Armstrong (2000) used MI theory to examine the ecological factors in learning, and raised several questions for educators to think about how to restructure a suitable learning environment. Example questions are 'What is the physical arrangement of an inclusive classroom?' 'Are there stimulating and hands-on materials in the classroom that allow students to select and work with them?' and 'Are students given opportunities to learn in natural settings?' Furthermore, he suggested teachers create

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[44] These are exhibits, performances, journals and logs, demonstrations, products, problem-solving process, graphic organizers, and projects (Bellanca et al., 1995).

[45] Evaluation tools, such as observation checklists, Likert Scales, Double- Entry responses, and teacher-made tests, are used to assess those authentic learning tasks (Bellanca et al., 1995).

[46] They are rules or guidelines that outline indicators and criteria of learning goals or achievement standards (Bellanca et al., 1995). Lazear (2000) suggested that it should be better to create a double set of rubrics for each specified MI-based assessment: one relates to the curriculum (e.g. content, information, concepts and materials that students should master) and the other to the intelligences (e.g. students' performances and the quality of products).

'intelligence-friendly' permanent or temporary activity centers (Armstrong, 2000). These centers can be open-ended or topic-specific depending on different needs or goals. The potential advantages of these activity centers are:

> Activity centers provide students with the opportunity to engage in "active learning". They serve as oases in the desert for many students who are thirsting for something other than dry worksheets and individual work at their desks.
>
> (Armstrong, 2000:73)

In order to create a classroom that "matches, stretches and celebrates all intelligences", Kagan and Kagan (1998) mentioned the possibility of building MI stations, decorating an MI-friendly environment, taking students on field trips[47] and providing rich classroom resources[48]. When students have more choices to discover what they feel interested in, through the ways they prefer, in a stimulating environment, crystallizing experiences[49] may happen (Armstrong, 2000). MI educators always believe that a rich, real, motivating and meaningful environment should engage more students— not only are students' curiosity and enthusiasm to learning increased but their multiple intelligences are also developed (Armstrong, 2000; Gardner, 1993a; Kagan and Kagan, 1998).

## 3.4 Questions, Criticisms and Explanations of Multiple Intelligences Theory

Since the publication of MI theory, several questions and criticisms have been proposed. These issues are centered on terminology, the theoretical status of MI theory, the structure of intelligences and their combination, educational considerations, to name a few (Gardner, 1993a and 1999). Five common questions that have confused people and caused criticisms are briefly explained in terms of Gardner's perspectives (Gardner, 1993a and 1999).

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[47] Field trips mean that teachers can take students outside of the classroom like visiting historical landmarks, going to a concert or attending a sporting event, to help them develop intelligences in natural settings. Moreover, students may witness how people use their intelligences in the real world (Kagan and Kagan, 1998).

[48] Classroom resources include various books, tapes, videos, computer software, crafts, props, sports equipment, measuring tools and games; etc (Kagan and Kagan, 1998).

[49] Crystallizing experiences are turning points in our life, which help the development of intelligences, and bring us closer to our goals (Armstrong, 2000; Christison, 1998b).

### 3.4.1 Are Intelligence, Domain, Talent and Ability All the Same?

Some critics claimed that intelligences are the same things as talents, gifts and abilities (Morgan, 1992; Stage et al., 1998). Gardner showed no objection to the idea, but he wanted the logical-mathematical and linguistic capacities also labeled as talents, gifts or abilities, rather than being promoted with the bias of Western culture that has been influenced by the psychometric tests of intelligence (Gardner, 1993a and 1999). Furthermore, based on Gardner's identifications, intelligence and domain is different. Intelligence is "a biopsychological potential" (Gardner, 1993a: 37), but domain is the "discipline or craft that is practiced in a society" (Gardner, 1993a: 37) and is from "socially constructed human endeavors" (Gardner, 1999:82). Gardner asserted that the realization of a person's intelligences is influenced by experiential, cultural and motivational factors (Gardner, 1999:82). However, domain, an organized set of activities within a culture, is mainly characterized by a specific symbol system and its relevant operations (Gardner, 1999:82). Thus, in modern Western culture, cooking, rap music and chess all are examples of domains. Following Gardner's points, domain can be accomplished through the use of several intelligences, and a particular intelligence can be applied in various domains (Gardner, 1999:83). For example, in the domain of music, a director of opera needs musical, spatial, personal and linguistic intelligences; a particular intelligence, say a spatial intelligence, can be used in many domains such as sculpture and surgery (Gardner, 1993a and 1999).

### 3.4.2 Is an Intelligence the Same as a Learning Style?

Many educators have considered multiple intelligences as another model of learning styles (Berman, 1998; Reid, 1998). Nevertheless, Gardner has tried to distinguish the difference between an intelligence and a learning style. He wrote:

> The concept of style designates a general approach that an individual can apply equally to an indefinite range of content. In contrast, an intelligence is a capacity, with its component computational processes, that is geared to a specific content in the world.
>
> (Gardner, 1999: 84)

Recently, educators Silver and colleagues (Silver et al., 2000) have attempted to clarify the difference between MI and learning styles, and Gardner (1999) also refers people to their ideas in order to understand the possible relationship between MI and

learning styles. Silver et al. (2000: 41) explained that the model of learning styles is around "the individualized process of learning, but does not directly address the content of that learning". As for MI, it is concerned about "the content of learning and the relationship between learning and eight distinct fields of knowledge or disciplines". Therefore, they claimed learning styles[50] and MI need each other (Silver et al., 2000:41), and assumed people with strengths in particular intelligences may have different styles to develop these strengths. For example, artists such as Adams, Rockwell, Escher and Picasso all are gifted in spatial intelligence, but they demonstrated different dominant styles in their works. Picasso is a classic case of the Self-Expressive (Intuitive-Feeling) style, Escher an Understanding (Intuitive-Thinking) style, Rockwell the Interpersonal (Sensing-Feeling) style and Adams the Mastery (Sensing-Thinking) style (Silver et al., 2000: 38).

### 3.4.3 What about the General Capacities such as Memory and Critical Thinking?

Some people claimed that MI theory fails to explicate the existence of general intelligence such as memory and critical thinking (Morgan, 1992). Gardner argued that substantial neuropsychological evidence has suggested the fact that linguistic memory is separated from spatial, bodily or musical memory. That is, a person with a good memory for verbal information does not also have a good memory for remembering a piece of music (Gardner, 1993a and 1999). Similarly, Gardner believed that particular domains of human competence require their own critical thinking. For example, the kind of thinking in analyzing a poem is different from that involved in debugging a program (Gardner, 1993a). Therefore, Gardner (1993a and 1999) asserted memory and critical thinking are not general capacities that operate in a content independent way.

### 3.4.4 Is it Possible to Develop a Battery of MI Tests to Assess Human Being's MI?

Gardner (1999) claimed that developing tests is not consistent with the tenets of MI theory because MI theory presents a critique to the psychometric approach, which has

[50] Because of the complexity of the learning process, various conceptions of styles are developed, which have made the field of learning styles very fragmented (Reid, 1998). The model of learning styles adopted by Silver et al. (2000) is based on Swiss psychologist Carl Jung's four psychological dimensions of human personalities: Sensation, thinking, feeling and intuition.

identified human being's intelligence through paper-and-pencil instruments. He insisted that the assessment principles should be "intelligence fair" (Gardner, 1999:80). Instead of using ordinary paper-and-pencil tests that focus on linguistic or logical intelligence, Gardner thought intelligences should be directly examined. Observing and recording how children work or play with familiar and interesting materials in a comfortable and inclusive environment is a direct way of assessment employed by the Project Spectrum, and recommended by Gardner (1993a and 1999).

### 3.4.5 Is MI an Empirical Theory?

Since MI theory is based on the empirical findings from a wide variety of independent research traditions: neurology, psychology, anthropology and so on, it is an empirical theory that can be confirmed or verified through experiments or empirical investigation (Gardner, 1993a and 1999). In fact, Gardner keeps open attitudes to the development of MI theory. He emphasized that the theory could be reformulated or validated by new evidence and educational applications (Gardner 1993a and 1999). Gardner stated:

> Indeed, no empirically based theory is ever established permanently. All claims are perpetually "at risk" in the light of new findings, and properly so. The questions to ask a new theory are whether it stimulates important questions and investigations, whether its initial delineation of factors appears to be on the right track.
>
> (Gardner, 1999:86)

Recently, the validity of the eight intelligences has been questioned because of insufficient supporting data from brain research and psychometric studies (Collins, 1998; Kagan and Kagan, 1998). Some educators start to worry that the new MI-based assessment system may produce a new category of losers (Kagan, 1998; Osburg, 1995). Others criticize teaching through MI as wasting time to emphasize less important skills (Collins, 1998). The theory may be falsified, but over the last fifteen years, many studies have been conducted to show evidence that MI theory is on the right track (Gardner, 1999; Kezar, 2001) and new brain research findings also confirm the theory (Gardner, 1999; Sylwester, 1995). Nevertheless, further investigations and firm research are definitely needed (Collins, 1998; Gardner, 1993a and 1999).

## 3.5 Summary

In this chapter, a brief review of traditional (psychometric) thoughts on intelligence has been given. The information can help us understand how the commonsense view of intelligence has been affected and shaped by IQ tests and relevant beliefs. It also provides the background to explain Howard Gardner's dissatisfaction with the narrow view of intelligence and thereby he developed Multiple Intelligences theory. Before introducing Gardner's MI theory, three influential cognitive theories on contemporary perspectives of intelligence were presented. They are Piagetian theory of cognitive development, Vygotsky's sociocultural theory and Sternberg's triarchic theory, which may lead us to feel the trends on interpreting the concept of human intelligence. In order to give a detailed description and explanation of Gardner's MI theory, the identification of intelligence, the criteria for distinguishing an intelligence, and the features of eight intelligences were all reviewed to provide a general impression of the theory in this chapter. Furthermore, relevant implications and applications of MI theory on education have been discussed with examples. The common questions and criticisms of the theory have been explained as well. In short, this chapter serves as a foundation for further exploration and understanding in the relationship of MI theory to foreign/second language acquisition. In the next chapter, the implications of MI theory for EFL/ESL teaching and learning, its applicability to adult EFL learners and its appropriateness to non-English speaking contexts will be discussed. The relevant literature of MI in EFL/ESL education and comments from EFL/ESL professionals about the theory will also be included.

# Chapter 4

## *Multiple Intelligences and Foreign/Second Language Acquisition*

### 4.0 Introduction

The original plan for Gardner in devising Multiple Intelligences theory was to challenge the traditional single and static view of intelligence in cognitive science, not discuss educational reform (Gardner, 1993a). However, in the last two decades, in spite of a lack of concern in the scholarly psychological community, the MI theory has attracted the attention of many educators and particularly became a popular concept among K-12 schools in the United States (Gardner, 1995b; Kezar, 2001). While many teachers have used the MI theory as a framework to develop curriculum and classroom methodology, the application of MI in foreign/second language teaching and learning has been very recent and little research has been done so far (Haley, 2001; Richards and Rodgers, 2001). In this chapter, the implications of MI for foreign/second language acquisition are explored first. Then, the relationship of MI to adult language learners and the appropriateness of applying MI to non-English speaking contexts are discussed. Following that is a review of recent literature on using MI in EFL/ESL education. Comments about the application of MI theory from language educators are included as well. Finally, the purpose of applying MI theory in the present study is briefly discussed.

### 4.1 The Implications of Multiple Intelligences for Foreign/Second Language Acquisition

In order to understand the implications of Multiple Intelligences (MI) for foreign/second language acquisition, the relationship of MI with language and language learning is inferred from looking into the main points proposed by MI.

Obviously, foreign/second language acquisition is closely linked to the 'linguistic intelligence'[1] in MI theory. If we want to understand the perspectives of MI on language or language learning, we first need to be familiar with how Gardner

[1] Gardner identified linguistic intelligence as involving "the sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals" (Gardner, 1999:41).

interprets the eight intelligences. This recognition may help us realize Gardner's views on 'linguistic intelligence', and further explore the implication of MI for language and language learning.

Founded on biological studies, Gardner claimed that we are not born with a blank brain shaped completely by the environment. Rather, he proposed there are several distinct areas in our brain that are genetically dedicated to the problems and solutions of general human beings, which are called multiple intelligences (Gardner, 1983). Multiple intelligences, like innate cognitive capabilities, may not be functional at birth, but they can be developed to a moderate or even to a high level of ability when learning opportunities in an enriched environment are available (Gardner, 1999; Sylwester, 1995). Gardner believed in the existence of innate 'intellectual modules' but he highlighted the significance of opportunities and experiences in different cultural settings for triggering, developing and flourishing each of the eight intelligences (Gardner, 1987 and 1993a). In Gardner's opinion, all intelligences are educable, and they are the results of a constant interaction among biological and environmental factors (Gardner, 1993a and 1999). That is, the development of each intelligence is both specific and heavily dependent on experience (Krechevsky and Seidel, 1998). Although Gardner proposed eight different and semi-autonomous intelligences, he emphasized these intelligences always work together in complex ways and no intelligence can really exist by itself (Christison, 1998a and b; Gardner, 1999), just as different functions of the brain, they work cooperatively when stimulated by multi-sensory activities (Jensen, 1998). In particular, Gardner claimed that all people have the eight intelligences that manifest themselves with different distributions. When opportunities are available for people to stimulate, guide, teach and encourage multiple intelligences, in addition to the strong (preferred) ones, their weak intelligences can also be effectively developed at the same time. Furthermore, he took practical perspectives for the performance and functions of multiple intelligences, and stated that they are realized in the process of creating products or solving problems in real life situations (Gardner, 1993a and 1999).

When following Gardner's way, we may say that linguistic intelligence, a main innate module for language learning and use (Gardner, 1983), can be learned and well-developed to achieve its practical goals (e.g. communication) if rich opportunities in

the surrounding environments are offered (e.g. tools and training). Based on this belief, we may declare that innate knowledge and environmental stimuli both are important factors, from MI perspectives, for developing linguistic intelligence and influencing the effects of language learning, which is similar to a socio-cognitive approach[2] to language acquisition, but different from the extreme positions of the behaviorist[3] and innatist[4].

In the real world, rather than operating independently, linguistic intelligence comes to work together with other intelligences for achieving diverse communicative goals. In the spoken language (e.g. sales language for persuading customers to buy products), linguistic intelligence is combined with gesture, facial expressions, body movement, posture as well as the visible contexts of setting and activity. As for the written language (e.g. journal writing for self-reflection), linguistic intelligence is frequently accompanied by pictorial and graphic images, inner feelings and meticulous observation. Consequently, MI proponents believe that "other intelligences enrich the tapestry of communication we call *language*" (Richards and Rodgers, 2001: 117). By the same token, learning to use a language, including the mother tongue and foreign/second languages, in the MI scene, encompasses the capacities to appropriately implement an integrated application of linguistic intelligence and other intelligences in real contexts for attaining practical goals. For example, developing the competence of semantics or pragmatics may need contribution from personal (interpersonal and intrapersonal) and logical intelligences (Gardner, 1983); learning the phonology of a language is connected with the bodily-kinesthetic intelligence (Brown, 2000); the rhythm, tone and pitch of a language may be more related to musical intelligence than to linguistic one (Fonseca Mora, 2000; Richards and Rodgers, 2001); the intrapersonal intelligence (e.g. affective factors) plays a key role is successful language learning (Brown, 2000). In addition to mastering verbal

[2] The notion of a socio-cognitive perspective on foreign/second language acquisition is proposed by Atkinson (2002:525). He viewed "language and language acquisition as simultaneously occurring and interactively constructed both *in the head* and *in the world*".

[3] Behaviorists claim that language learning is a process of imitation, practice, reinforcement and habit formation (Brown, 2000).

[4] Innatists believe that the innate principles of Universal Grammar allow human beings to acquire the language of their environment, especially before the critical period. In other words, language learning totally depends on our mind, the innate linguistic endowment. As for the exposed environment, it is only used to trigger the development of target language through serving samples (Lightbown and Spada, 1999).

communication skills, language learning should include the overall development of multiple intelligences (Christison, 1999). Because multiple intelligences can be activated by sensory-based activities and exercises (Christison, 1998b; Lazear, 1999a), which provide supplement and context for linguistic intelligence to function meaningfully and purposely in our life, a multi-sensory view of language has been suggested (Richards and Rodgers, 2001). Language use (communication) embraces a complex interaction and cooperation of personal multiple intelligences within themselves and with the authentic world; therefore, the issues of individual differences, environmental factors and learning strategies are signified as of importance during the process of target language development according to MI theory. The following is a brief discussion of these MI-inspired implications for language and language learning.

### 4.1.1 A Multi-sensory View of Language

Based on the tenets and practice of MI, language, which encompasses all aspects of communication, is the integration of verbal language, music, graphic representation, bodily activity, interpersonal relationship, and abstract patterns (Richards and Rodgers, 2001). In authentic settings of human communication, linguistic intelligence cannot work by itself and needs to cooperate with other intelligences to function meaningfully (Gardner, 1983 and 1993a). As we examine and reflect on those situations where language is used for different purposes (e.g. political speech and job interview), we are persuaded that apart from linguistic intelligence, other intelligences are involved. Specifically, language is closely tied to our life through the senses, thereby all intelligences that can be activated by senses[5] play key roles to enrich the development and function of language. For example, if a child wants to understand the meaning of a new word, s/he has to integrate many different sources such as sound input, visual information, tactile information, and reflective thinking about past experience (Genesee, 2000). Thus, we may say that MI suggests a multi-sensory view of language (Richards and Rodgers, 2001). In natural settings, language in use involves a multifaceted interaction and cooperation of multiple intelligences. Therefore, we may assume that successful foreign/second language learning needs

[5] According to Lazear's explanation (1999a: 11), "each of the intelligences is related to the five senses. In general, a particular intelligence can be activated or triggered through exercises and activities which use the sensory bases — sight, sound, taste, touch, smell, speech, and communication with others — as well as inner senses — intuition, metacognition, and spiritual insight".

learners' active practice of multiple intelligences as well as the opportunities for their engagement in purposeful use of the target language.

Rodgers (2001) also discussed the necessity to expand the identification of language to include a full view of human communication. He said:

> We know that the linguistic part of human communication represents only a small fraction of total meaning...Language teaching has chosen to restrict its attention to the linguistic component of human communication, even when the approach is labeled Communicative. The methodological proposal is to provide instructional focus on the non-linguistic aspects of communication, including rhythm, speed, pitch, intonation, tone, and hesitation phenomena in speech and gesture, facial expression, posture, and distance in non-verbal messaging.
>
> (Rodgers, 2001:6)

Given that language has been explored through the 'linguistic way' for a long time (Thornbury, 1997), it is not surprising to find that some language teachers have been used to employing linguistic approaches or methods to help learners acquire or improve their specific language abilities[6] (Chao, 1999). As a result, the development of pragmatic competence[7], strategic competence[8] and paralanguage[9] is delayed or ignored. In order to help language learners develop their 'communicative competence for use' effectively, foreign/second language educators are advised to use a holistic approach to look at language. The multi-sensory view of language suggested by MI theory should be one of the choices to empower the overall abilities of language learners, because the development of many important components of human communication, such as pragmatic competence, strategic competence and nonverbal aspects, could be facilitated through appropriate application of multiple intelligences.

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[6] The specific language abilities can be the knowledge of grammar and vocabulary or the skills such as listening, speaking, reading and writing.

[7] The pragmatic competence (Bachman, 1990) includes illocutionary competence (functional aspects of language, such as heuristic and manipulative functions) and sociolinguistic competence (sociolinguistic aspects, such as sensitivities to register, varieties and cultural references).

[8] The strategic competence mainly refers to communication strategies, including avoidance strategies and compensatory strategies (see Dörnyei, 1995 for details).

[9] A broad definition of paralanguage is used here (Pennycook, 1985). It includes kinesics (gestures), proxemics (space) and paraverbal features (e.g. intonation, eye contacts and the role of silence).

### 4.1.2 Individual Differences in Language Learning

The traditional view of intelligence that only focuses on logical and linguistic intelligences has ignored the multiple ways of being smart and limited the development of the whole person. Since teachers have a responsibility to cultivate the whole student in their classroom, the awareness of each student's individual differences (multiple intelligences) is necessary (Armstrong, 2000; Christison, 1999). Gardner argued that people possess all eight intelligences but they are unique with different strengths and combinations of intelligences (Gardner, 1993a and 1999). Because of the diversity, each person has his/her preferred approach (e.g. using specific intelligences) to learn new things, solve problems or create products, and also in foreign/second language learning and use. Even within the language domain, people present their linguistic talents differently (Armstrong, 2000). For example, a student may not write well but can still be an excellent storyteller. In addition, it is thought that students' interest and motivation (affective experiences) to learning will be promoted when individual differences are acknowledged and recognized in school education (Chao, 1999 and 2001b; Christison, 1996a; Gardner, 1993a and 1999).

However, in the language classroom, the intelligence-biased instruction that devalues the individual differences does exist (Chao, 1999 and 2000b). Larsen-Freeman (2001:172) mentioned that "In language classrooms, without any special attention, it is likely that verbal/linguistic intelligence and interpersonal intelligence will be regularly activated." Therefore, in order to satisfy the diverse needs of the wide range of students and solve the affective crisis, language teachers should recognize and appreciate the unique strengths that students bring in, as well as take these specific qualities into classroom situations. For example, language teachers may address individual differences by means of accommodating multiple intelligences in curriculum development, instruction and assessment. During the process of MI-based teaching, learning and assessment, learners' self-image and confidence will be increased gradually because their preferred intelligences are more or less addressed. Moreover, as students have multiple pathways to learn and present their outcomes, deeper comprehension and effective application (production) could be facilitated as a result of these crystallizing experiences and meaningful opportunities (Armstrong, 2000; Christison, 1998b).

### 4.1.3 Environmental Factors[10] in Language Learning

For Gardner (1993a), intelligences are always an interaction between biological proclivities and the learning opportunities that exist in that environment. Alongside this recognition of the pluralistic view of intelligence, Gardner (1993a) suggested that educators should re-think intelligence in terms of the two dimensions: contextualization and distribution. The notion that intelligence is contextualized and distributed, implies the importance of environmental factors to facilitate the occurrence and function of multiple intelligences (Gardner, 1993a). That is, when the context is familiar and meaningful to us, we perform better; when suitable tools are provided to help us, our intelligences function better (Vialle et al., 2002). According to Gardner's standpoint (Gardner, 1983, 1993a and 1999), we may conclude that all intellectual works, including learning a foreign/second language, could not function in isolation because they are tied to the socio-cultural context in which human beings live. In other words, without suitable nurture, stimulation, enrichment from environments, many human talents cannot be manifested. It is thought that ample opportunities for exploration, interaction and exposure in inclusive environments are essential for the development and realization of multiple intelligences, which are believed to maximize learning potential (Armstrong, 1999; Gardner, 1993a and 1999). As Gardner said:

> Indeed, the "smarter" the environment and the more powerful the interventions and the available resources, the more proficient people will become, and the less important will be their particular genetic inheritance.
>
> (Gardner, 1999:87)

Following this viewpoint, we may say that MI puts a great emphasis on the dynamic nature of the interplay between learners and environmental factors. It also implies that creating an intelligence-friendly environment and offering rich MI-inspired learning opportunities for foreign/second language learners to practice or interact with are important. This perspective of rich and meaningful interaction in context also resonates with the socio-cultural nature of development by Vygotsky (1978)[11], and the

[10] Environmental factors refer to the available learning sources for interaction, exploration and exposure, such as persons, tools, techniques or symbol systems in a culture, society, community, school, classroom or home.

[11] Vygotsky (1978) argued that all cognitive development, including language development, entirely arises from social interactions. That is, a supportive interactive environment can bring a learner to a

current interactive views[12] proposed by several foreign/second language acquisition researchers (Long, 1983 and 1996; Pica, 1994; van Lier, 1996).

In the practice of the real world, many suggestions by Gardner for general education can be applied to foreign/second language learning as well. One of the proposals is building links with a wider community (Gardner, 1993a), which means more authentic opportunities beyond the classroom for exposure and practice are necessary. As an example of an application, EFL language teachers can arrange an Internet Pen-Pal exchange program for learners to 'chat' (using the target language for authentic communication) with students in English speaking countries.

### 4.1.4 Multiple Intelligences[13] and Language Learning Strategies

Any real-world activities a person undertakes will inevitably involve a blend of intelligences (Gardner, 1993a) and language learning is no exception. Accordingly, all intelligences are important capacities for human beings to develop if they want to improve or promote their abilities to deal with things in their life successfully. Gardner (1993a) asserted that everyone has the capacity to enhance and amplify all intelligences to a reasonably high level over a lifetime if inspiring opportunities are available. Because all intelligences are learnable, in addition to creating a motivating environment or offering authentic opportunities[14] (external stimuli) mentioned above, educators need to help students actively understand, develop and apply their intelligences as fully as possible by means of well-managed training or practice (Kagan and Kagan, 1998). It is believed that these MI-inspired strategies may open many additional windows for students to experience learning positively and solve problems efficiently (Armstrong, 1999 and 2000; Gardner, 1993a).

This perspective is compatible with the current theory of language learning strategies.

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higher level of knowledge and performance than what s/he can do independently.

[12] Long (1983, 1996) argued that modified interaction which makes input comprehensive is important for the process of foreign/second language acquisition. van Lier (1996) also emphasized that learners construct the target language through socially mediated interaction.

[13] The application of Multiple Intelligences can help students expand their learning strategies and approach their learning effectively. For example, those strategies implied by the eight intelligences can help students facilitate the development of different cognitive skills such as memory, problem-solving abilities and high-order thinking (Armstrong, 2000).

[14] Authentic opportunities can be MI-based teaching and learning activities, tasks and projects that link with the needs or contexts of the real world.

The proponents of language learning strategies credited part of the differential success rate in language learning to the effectiveness and varieties of strategies that learners bring to their tasks (Griffiths and Parr, 2002). Being opposed to Krashen's Monitor and Acquisition/Learning Hypothesis (Krashen, 1982) that language could not be consciously learned but solely acquired through natural communication, they believed that learners could influence their own learning, and conscious learning strategies can be useful in the development of the target language (Griffith and Parr, 2002). In fact, the contribution of learning strategies [15] to the development of foreign/second language has been confirmed through numerous studies (Cohen, 1998; O'Malley and Chamot, 1990; Oxford, 1990; Wenden and Rubin, 1987). Particularly, the recent strategies-based instruction (SBI) has also been proved to be effective for FL/SL learners in different contexts (Cohen, 1998; Hill, 1994; McDonough, 1999; Oxford et al., 1990; Oxford, 2002; Wenden, 1992). Although approaches to name or classify these strategies are divergent [16], the value of helping language learners improve learning effectiveness and get greater self-confidence through the awareness and application of strategies cannot be ignored (Ellis, 1999).

With a closer examination of MI theory, it is found that the eight intelligences can operate comfortably alongside current theories of language learning strategy. For example, the eight intelligences can fit easily with the six groups of language learning strategies proposed by Oxford (1990): cognitive, memory, social, affective, compensation and metacognitive. The eight intelligences are "themselves cognitive capacities" (Armstrong, 2000:112), so they can function as *cognitive* and *memory* strategies to facilitate learners' thinking and problem-solving abilities. The cultivation and operation of intrapersonal intelligence can help learners develop suitable *affective strategies* to deal with learning anxiety, as well as *metacognitive strategies* to arrange and plan their own learning. The application of interpersonal intelligence can contribute to the development of *social and compensation strategies* for improving communicative abilities. The fact that Multiple Intelligences can work so easily alongside the theories of language learning strategies implies that MI has the potential

[15] Language learning strategies are "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford, 1990: 8).

[16] Different strategy taxonomies have been proposed by foreign/second language researchers such as Rubin (1975), Bialystok (1981), O'Mally and Chamot (1990), Oxford (1990) and Cohen (1998).

to be a valuable component of contemporary strategy-based instruction.

Since the application of multiple intelligences can benefit the development of language learning strategies (Christison, 1998b), language teachers are reminded that, in addition to teaching the target language, they need to help learners recognize how to learn — realize their potential with multiple intelligences in the learning process. For example, many EFL learners have difficulties in learning English grammar. They may have tried very hard to memorize grammatical formula or done many grammar exercises, but these grammar rules are still not theirs. The reason is that they may have used wrong strategies, which do not fit their strengths. If they can be advised to employ preferred strengths or use other alternatives, such as looking for the target grammar in English songs and then singing along, the learning problem could be easily worked out (Chao, 1999 and 2001a).

## 4.2 Multiple Intelligences and Adult Foreign/Second Language Learners

The implications of multiple intelligences for language and language learning can also apply to adult language learners. Neurobiological evidence has shown that language learners after puberty or even earlier have more difficulties because the lateralization of language to the left hemisphere becomes weaken with age. After the end of the critical period, language processing may be limited by the mechanisms to the right hemisphere (Gardner, 1983; Sylwester, 1995). Namely, instead of using innate biological structures available to young children, adult learners may use general learning abilities to learn a new language (Brown, 2000; Lightbown and Spada, 1999). If the Critical Period Hypothesis is true, the necessity to exploit other intellectual strengths (cognitive faculties) to help adult learners maximize foreign/second language learning potential becomes urgent, and the MI theory can be argued as a good framework to provide opportunities of diversity and variety. In addition, Schumann (1997 and 1999) mentioned that language learning after the critical period mainly depends on motivation. He explained that learning a new language for learners that have passed the sensitive period is like a brain recovering from damage that requires devotion to therapeutic treatment. During the process of searching, trying and finding new ways for adaptation to reacquire the skill lost in the brain damage,

personal motivation plays a crucial role (Sacks, 1995; Schumann, 1999). Derived from neuropsychological perspectives, Schumann (1997 and 1999) further argued the significance of providing suitable learning situations (e.g. teaching approaches or techniques) to resonate with the learner's neural system where the emotional relevance and motivational significance of stimuli are appraised. Since positive appraisals of the language learning situations[17] can increase motivation and enhance learning, it is suggested that teachers should avoid doing things to frustrate students (Dörnyei, 2001; Schumann, 1997 and 1999). For the purpose of positively satisfying adult FL/SL learners' affective needs and learning experiences, a brain-compatible instruction is recommended, and multiple intelligences, framed in the light of biological origins, seems to be a suitable teaching and learning guidance.

Moreover, founded on the extensive research into adult learning, Brundage and MacKeracher (1980) claimed that adult learners learn best (more productively) when information is presented through a variety of sensory modes and experiences with enough repetitions and variations on themes. The finding also confirms that MI, a resource of multi-sensory activities, can be very supportive for adult learners to acquire a new language. Since many adult learners had been taught by the traditional approaches that favored logic and verbal skills when they were children, some of them might have suffered from or failed in school learning (Kallenbah and Veins, 2001). However, if language teachers can teach them with MI, adult learners will have opportunities to experience success because their other intelligences are tapped and acknowledged (Christison and Kennedy, 1999).

## 4.3 The Appropriateness of Applying Multiple Intelligences in Non-English Speaking Contexts

After examining the accumulated evidence and knowledge in brain research, human development, evolution and cross-cultural comparison, Gardner felt the necessity to identify human intelligence in a culture-free way because intelligence in all forms

[17] The appraisals of the language learning situations can be the target language culture, the teacher, the syllabus, and the learning material (Schumann, 1999). To decide whether the appraisal is negative or positive, five dimensions suggested by Scherer (1984) and elicited by SLA researchers (motivation studies) are employed in Schumann's neurobiological model of affect in language learning (Schumann, 1997). The five dimensions are novelty/familiarity, pleasantness, goal/need significance, coping potential and self/social image (see Schumann, 1997 and 1999 for details).

should be highly respected (Gardner, 1983, 1993a and 1999). Accordingly, Gardner (1983) proposed a framework that not only accounts for the cognitive diversity of human beings but also for socio-cultural aspects of diversity. He argued that the development of individual intelligences is shaped and transformed by the particular practices and values of a culture or a society; thus, people in different socio-cultural circumstances may have their specific ways of approaching their learning (Gardner, 1983). Gardner used three prototypical learners in three cultural settings to explain the influence of different educational processes: A youthful navigator in Puluwat; an Islamic male in Koranic school; and a young music programmer in Paris (Gardner, 1983).

To be an aspiring sailor in Puluwat, the youthful navigator acquires the important skills in sailing through linguistic, interpersonal, spatial and bodily-kinesthetic intelligences. However, the Koranic student heavily draws on his linguistic, interpersonal and logical-mathematical intelligences to recite the Koran and improve his abilities in literacy and argument about the Arabic language, which are valued in his culture. As for the Parisian music composer at her computer terminal, she needs to combine her logical-mathematical, musical and intrapersonal intelligences to create a work of music. Gardner (1983) claimed that the three examples have presented different forms of learning in diverse cultural settings.

Gardner further mentioned the difficulties and problems of imposing western forms of education upon other cultures, and emphasized the significance of cultural sensitivity in education (Gardner, 1983). In other words, those intelligences valued in other socio-cultural contexts should have equal status with the intelligences emphasized in western societies (Gardner, 1983, 1993a and 1999). Gardner believed that as people's preferred (strong) intelligences have been acknowledged and activated, their interest, motivation and self-worth should be promoted, which is beneficial for learning (Gardner, 1983, 1993a and 1999). Because Gardner (1983) understood and appreciated the influence of different socio-cultural factors in the development of a human being's intellectual abilities, his theory, which examined and integrated the various aspects of culture and social realities, is suggested as an effective way to reach diverse populations of students from a variety of socio-cultural backgrounds, such as those learners in the EFL classroom (Christison and Kennedy, 1999).

Moreover, Gardner accentuated that MI theory only provides educators with a framework to get a broad view of human abilities without offering prescriptions about how and what to teach (Gardner, 1993a and 1999). Therefore, educators of different fields, countries, societies and cultures may apply it depending on their values, needs and situations. Due to socio-cultural sensitivities and implemental flexibilities of MI theory, the possibility of its practical application in non-English speaking contexts, such as countries in Asia, is amplified.

## 4.4 Multiple Intelligences in EFL/ESL Education: A Literature Review

Currently, English is an international language that allows wider communication for a great variety of purposes, such as worldwide information sharing and commercial exchange, so the number learning English as a foreign (EFL)/second (ESL) or an international language (EIL) is growing (Graddol, 1999; McKay 2002). Particularly in foreign/second language (FL/SL) education, English has attracted more attention than other modern languages in the world (Rossner and Bolitho, 1990). Although there is little literature on the application of multiple intelligences in EFL/ESL contexts, these insights are still valuable for future practice.

Mary Ann Christison has written several articles (1996a and b, 1998a and b, 1999) to introduce the MI theory and give language teachers suggestions and examples for EFL/ESL education. She summarized several reasons for using MI.

To begin with, she thought Gardner's MI theory, with the characteristics of respecting intelligences in different cultures, is important in EFL/ESL contexts because the learners language teachers work with have different cultural and linguistic backgrounds (Christison, 1998 b). In EFL/ESL classrooms, MI can be a 'structured' way for language teachers to understand, address and nurture the differences of their students (Christison, 1996 a and 1998 b). Thus, learners with different cultural backgrounds may experience more success in an MI-based learning context (Christison, 1998 b). Then, she suggested MI could be used as a tool for language teachers to examine their teaching techniques and strategies in the light of human differences. It also could be used as a guide to enrich teaching strategies and help

teachers develop classroom activities that address multiple ways of learning and knowing (Christison, 1996 a and 1998 a and b). When language teachers integrate MI into lesson plans or curricula, learners' needs are satisfied somehow because they can find more richer and varied opportunities to learn the target language. Moreover, learners gain more control over their own learning when being encouraged to solve problems or demonstrate their learning through personal choices or strengths (Christison, 1996 a).

Furthermore, Christison (1996 a and b, 1999) proposed four ways to use MI in the EFL/ESL classroom. Firstly, language teachers can teach students about MI through interesting activities such as 'Find Someone Who" or "Possible solutions for a problem" (Christison, 1996 a and 1998 a). After that, the teacher can use an MI inventory to help learners know the theory and themselves (Christison, 1996 a and 1998 b). During the process of exploring and recognizing intelligences, teachers can understand learners better, and learners can appreciate themselves more (1996 a, 1998 a and b). Christison (1996 a: 11) insisted that "the more aware students become of their own intelligences and how they work, the more they will know how to use that intelligence to access the necessary information/knowledge from a lesson." Secondly, teachers can use MI as a framework to identify the frequently used activities in the classroom and categorize them to see where these activities fit into the MI category. Later on, language teachers may track what they are doing in real teaching (e.g. teaching strategies) and analyze these activities by a weekly checklist (Christison, 1996 a and 1998 b). In other words, teacher can use MI as a tool for self-reflection to get more ideas or information for future course design. For example, they may expand the classroom activities to include the neglected intelligences. Christison (1998 b:7) believed that "as we learn more about our own profile, we become more confident in the choices we make that affect our teaching." Thirdly, language teachers can integrate MI into their regular lesson plans to enhance instruction. Christison employed Lazear's four-stage model: awakening, amplifying, teaching for/with and transferring (Lazear, 1999 b), to apply MI in EFL/ESL lesson planning. Also, she clearly articulated sample activities (Christison, 1996 a) at each stage for the teacher's reference. Finally, she encouraged language teachers to use MI to develop various assessment techniques or tasks that match the MI-based instruction for learners to demonstrate their comprehension and production (Christison, 1996 b, 1998 a and b).

Based on Christison's personal teaching experience, she asserted that the overall development of MI for EFL/ESL learners is more important than simply improving their abilities in English (Christison, 1999). When students learn the target language through MI, they all get valuable opportunities for personal growth and language learning (Christison, 1996a).

As for the other literature about the applications of MI in EFL/ESL education, it revolves mainly around discussions of the development of an MI-based survey/questionnaire (Christison, 1998 b; Sauer, 1998) and of the design of classroom activities (Berman, 1998; Chao, 2001a; Larsen-Freeman, 2001; Richards and Rodgers, 2001; Rosie, 2001; Simpson, 2000). Few systematic investigations or analytical studies of applying MI in EFL/ESL context have been published. Until now, only two are available for us to see the research results of using MI in real contexts. One is the report of ESOL (English for Speakers of other languages) teaching in Adult Multiple Intelligences study (AMI, Kallenbach and Viens, 2001), and the other is an MI action research carried out by Haley (2001).

In the AMI study, the research reports of two ESOL teachers are informative and encouraging for EFL/ESL educators. Terri D. Coustan (Kallenbach and Viens, 2001: 61-88) described how she used MI as a framework to understand students' MI-related strengths and learning strategies, and how she designed MI-inspired choice activities for students to engage in the learning content beyond the verbal level. Although she found students had difficulties in understanding MI theory, they did improve their learning abilities and make academic progress finally. Moreover, she found giving students more choices and setting up a trusting learning environment made students feel more confident and enthusiastic for class participation, which was an obvious contrast to student passivity in the previous three-year learning period. Coustan credited the result to her implementation of an MI-informed approach, which made a significant change to her class. Diane Paxton, another ESOL teacher in the AMI study, also described the challenge to integrate MI into her teaching strategies (Kallenbach and Viens, 2001:145-176). In the beginning, Paxton resisted MI because she found the notion of assessing students' intelligences was difficult and problematic. However, when she understood the assessment of MI is not prescribed by the theory, she felt

comfortable to use MI as a framework to enhance her instruction. Because of the difference from traditional approaches, Paxton's students showed initial resistance to the MI-based teaching. They thought the approach was childish and unusual. After several classes, she found students' attitudes and perceptions changed. Paxton explained the changes were mainly due to the building-up of a trusting learning environment over time. During the process of implementing MI ideas, Paxton not only helped students know how these MI-inspired activities could help them improve their English but also displayed their work on the walls to show appreciation. As a consequence, students became engaged and enjoyed the theme-based units and projects that were informed by MI. Moreover, they showed acceptance and enthusiasm for the MI-based learning. Paxton believed that MI is a useful tool to support English teaching and learning, but concluded her study with suggestions that understanding one's own teaching context and taking a critical view of a particular approach are important before using it (Kallenbach and Viens, 2001).

The goal of the nine-week action research conducted by Haley (2001) was to find out the impact of implementing the MI theory in foreign and second language (ESL) classrooms. There were fifteen grade 8-12 teachers and 450 students from six different states (in the USA) in the study. These teachers integrated MI into their daily or weekly teaching strategies, learning activities and assessments. To examine the effects of the MI-based intervention, informal interviews, student exit slips and MI surveys were collected from students of the experimental group. Participating teachers' reflective journals, daily MI logs and classroom observations were also used to find out their perspectives. The results revealed that most students showed positive feelings to the MI-based intervention. Participating teachers' reaction to the MI theory was also positive because of its greater variety, choices and flexibility. Since the finding confirmed that "students' strengths and weaknesses can be affected by a teacher's pedagogical style" (Haley, 2001:359), Haley emphasized for language teachers the significance of widening their pedagogical repertoire to reach more students. She further commented that MI "is not a quick fix" (Haley, 2001: 359), but MI does greatly inform FL/SL teachers and educators about learner-centered instruction and assessment.

## 4.5 Comments on the Application of Multiple Intelligences Theory in EFL/ESL Education

Richards and Rodgers (2001:123) mentioned that MI theory has provided "a rich source of classroom ideas" for language teachers to teach creatively as well as to respond to the uniqueness of learners. However, they suggested that further investigations and evaluations are required to see the effects of MI-based innovation. Larsen-Freeman (2001) confirmed the value of MI theory in honoring the diversity of language learners, but she cautioned language teachers not to lose sight of their teaching purpose – helping learners acquire the target language. Harmer (2003a) also appreciated the concept of MI theory for facilitating language teachers' self-awareness in their design of learning tasks to satisfy the needs of individual differences. Teachers are informed "the same learning task may not be appropriate for all of our students" (Harmer, 2003a: 47) and thus teachers should constantly examine and self-reflect "if they have given their class a variety of activities to help the various types of learner" (Harmer, 2003a: 48) as MI theory suggests.

## 4.6 The Purpose of Applying Multiple Intelligences in the Present Study

The incorporation of MI theory into EFL classrooms and its effects on learners and language teacher requires investigation. Although support for the use of MI theory in classroom contexts is growing, the scholarly research to support its use is still in the initial stages of theory building (Collins, 1998; Gardner, 1999). According to current literature in EFL education, the informed and systematic study of the application of MI theory in a non-English speaking school context is almost non-existent. More research is required to understand if an application of MI theory can support learning in an EFL classroom.

The present study aims to understand how university students in Taiwan's technological and vocational education (TVE) system feel and go about their language learning in their previous EFL study and during the MI-based intervention. In addition, I want to explore and identify the nature of my beliefs and thoughts as well as the patterns of my actions throughout the MI-based classroom practice to increase my awareness about EFL teaching. These findings may provide valuable information to

understand, examine and interpret the possible effects of applying MI theory as a potential solution in response to the common questions "Can I learn?" and "How should I learn?" asked by many university EFL learners in Taiwan's TVE system. Moreover, the results can contribute helpful insights to the development and improvement of future EFL education (e.g. effective teaching and assessment methods) in Taiwan's TVE system and other contexts having similar problems. In the next chapter, the research design of the present study will be described and interpreted.

# Chapter 5

## *Research Design*

### 5.0 Introduction

The purpose of the present study, motivated by the two common student questions "Can I learn?" and "How should I learn?" was to understand and interpret the impact of using Multiple Intelligences (MI) as a potential solution[1] for university EFL learners in Taiwan's technological and vocational education (TVE) system. This chapter gives a description and interpretation of the research design for the study.

To begin with, my conceptual framework for the study is explained to clarify what I intended to do in the research and why. Then, the research aims, and how and why I approached these aims through a qualitative interpretive way are stated. Next, I argue the significance of teacher-initiated classroom research and then identify my role as a teacher-researcher in this research. Since the study was considered to be qualitative teacher-initiated classroom research, the issues of validity and reliability needed be taken into consideration to make the research results credible and dependable. Therefore, the two issues are discussed with relevant strategies employed in the study. After that, I describe the procedure for choosing student participants, explain how the protection of ethical issues was addressed and then provide the background information for all participants involved. This is followed by an outline of the contents, purposes and administration of all data generation methods used in the study, and an illustration of the data generation processes. In the section on data analysis, the two main approaches for data analysis, induction and deduction, are introduced first. Then, the analytic procedures of different data sources (e.g. questionnaires and learning diaries) are described with examples. Finally, a brief introduction to the models and theories used for analytic deduction in the study is presented.

[1] The use of Multiple Intelligences as a potential solution in the study, namely MI-based intervention, consisted of three main components: an MI workshop, MI-informed instructional activities/tasks and MI-inspired authentic assessment tasks. The content of the intervention and how it was integrated into a standardized university EFL course are explained in Chapter 6.

## 5.1 Conceptual Context

In a language classroom, although many people take it for granted that teachers make all decisions about what should be taught and which ways to teach, the fact is that successful instruction drawing on learners' active participation and feedback cannot be ignored (Allwright and Bailey, 2002). Several recent research findings have demonstrated that considerable discrepancies between teachers' and learners' opinions do exist in relation to issues like what learners need, what they prefer and which activities are important in language learning (Barkhuizen, 1998; Block, 1994 and 1996; Kern, 1995; Kumaravadivelu, 1991; Spratt, 1999). Therefore, taking learners' perceptions into consideration for designing and implementing suitable and effective classroom practice is necessary. It is also thought that no matter how good a theory is from either researchers' or teachers' views, it is still not valuable if it has not been practiced in a real context and learners' perspectives have not been included (Littlewood, 1994). Given that many classroom investigations have benefited greatly from the insights that language learners have provided (Allwright and Bailey, 2002; Bailey and Nunan, 2000), an explanation of learners' viewpoints is important if language teachers definitely want to understand the ways students learn in classes applying Multiple Intelligences. As Nunan mentioned, "It is the learner who must remain the center of the process, for no matter how much energy and effort we expend, it is the learner who has to do the learning" (Nunan, 1995: 155).

I believe that the ways students see themselves as EFL learners and understand their learning, in and beyond the classroom, affect their approaches to tackling learning tasks, and their attitudes to and beliefs about English learning. The processes of learning language involve many cognitive (e.g. strategies), affective (e.g. motivation or attitudes) and contextual (e.g. opportunities or environments) factors that play central roles in constructing knowledge, but these factors may not be ultimately seen according to teachers' observations or subjective teaching experiences. Consequently, in order to help learners, language teachers not only need to develop suitable courses but also have to 'listen to' learners. Learners should have opportunities to express their feelings and opinions about the course as well as share their experiences of language learning. Thus, in this study, I decided to 'explore' learners' voices. I felt the necessity to have a thorough understanding of learners' previous English learning

experiences, as well as to have an in-depth investigation of their developing conceptions, concerns or perspectives on English learning and use during the whole process of the MI-based intervention. The information from learners could help me recognize their perspectives and behaviors, and then effectively and objectively interpret the impact of my teaching practice on learners when applying an MI-based intervention into an EFL course.

Just as the voices of learners are important in clarifying the learning that goes on in classes, so too is the voice of the teacher. Learners and teachers embark on a journey together, and the journey itself brings changes for all. I have always kept a teacher diary to document important classroom events, my decisions, feelings and comments, and I decided to continue with this practice in this study because it could provide a direct source of information about my teaching for further examination. Although I had not intended to use my diary as data, I found that my observations and reflections on my own teaching revealed my values and emphasis in teaching, and shed light on my thought processes about problem-solving and decision-making. Thus, I felt my diary could help explain and provide a setting for what was happening in the class for myself and for learners. It could also help me monitor myself to discover the possible effects of the MI-based intervention I brought to the classes. These documented perspectives could be compared with learners' perspectives for further critical reflection. Henderson has reminded teachers, "If you, as a teacher, are not thoughtful about your professional work, how do you expect your students to be thoughtful about their learning?" (Henderson, 1996:vii); therefore, I used my diary as a tool for reflection on my teaching experience and hoped my students could be encouraged to be reflective and autonomous learners as well.

Consequently, I decided to gather the perspectives and experiences of the students and myself (the language teacher) for analysis in the study to have a better understanding of the impact of my teaching during an MI-based EFL course on university Chinese EFL learners.

## 5. 2 Research Aims

The research in general aimed to help me understand my EFL students and their

learning through their voices, and interpret their learning experiences, perspectives and behaviors in their previous EFL study and during the MI-based intervention. Also, I wanted to explore and identify the nature of my beliefs and the patterns of my behaviors throughout the MI-based classroom practice to increase my awareness about EFL teaching. Moreover, I chose to explore and map a full picture of the EFL course with the MI-based intervention and its impact on learners through the voices of all participants, not merely focusing on the direct effects from Multiple Intelligences strategies. I believed the recognition of and comparison between these perspectives (voices) from students and me (the language teacher), could give a whole picture of my teaching using multiple intelligences strategies and then help me decide whether students' questions "Can I learn?" and "How should I learn?" were addressed or not and why. The research aimed specifically to:

Research Aim 1:

Explore my own EFL teaching and identify what I have learned as a teacher-researcher.

Research Aim 2:

Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system

(a) felt about their previous English learning (before attending an MI-based EFL course) and their reasons for these affective experiences; and
(b) went about their previous English learning (before attending an MI-based EFL course) and the reasons for their ways of learning.

Research Aim 3:

Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system

(a) feel about their English learning during the MI-based intervention and their reasons for these affective experiences; and
(b) go about their English learning during the MI-based intervention and the reasons for their ways of learning.

## 5.3 Research Approach

In this section, an explanation is provided of the values and purposes of using an interpretive qualitative approach in the present classroom study by a teacher-researcher.

### 5.3.1 The Nature of Knowledge

With the paradigm[2] shift in sciences, traditions in foreign/second language research have also shifted from the solely positivist to innovations such as increasing acceptance and advocacy of qualitative research methodology (Davis, 1995; Jacobs and Farrell, 2001; Lynch, 1996; Nunan, 2001). The tradition of positivism is concerned with pursuing general and objective truth through tightly controlled experiments. When evaluating classroom language learning through this paradigm, the analysis of product and student achievement is its focus (Lynch, 1996). In contrast, qualitative research focuses attention on the values of subjective and affective aspects, of the participants' emic[3] views, and of the process and context in which actions or events occur (Burns, 1999; Davis, 1995; Jacobs and Farrell, 2001; van Lier, 1989). The fundamental difference between the two paradigms is what counts as evidence (logic justification) in the research being pursued. Therefore, an awareness of epistemological issues for researchers is important because they will affect choice of methodology and focus (Guba and Lincoln, 1982).

Foreign/second language classroom teaching and learning is a variable and complex social process, which is open, unpredictable and indeterminate. It cannot be explained only through a simple cause-effect relationship suggested by traditional experimental research. In other words, it is inappropriate to explore the interactions and inward views of participants in real learning contexts such as EFL classrooms in terms of a high degree of control and context-free design (van Lier, 1989). While the realities in natural situations cannot be seen completely by quantitative research[4], data collected by qualitative research[5], on the contrary, may provide richer and more comprehensive details in description, interpretation and clarification of participants' beliefs or behaviors within the research context (van Lier, 1989). Rather than valuing outsiders' studies of the language classroom with predetermined criteria and interests, language

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[2] A paradigm is "a basic set of beliefs that guide action" (Guba, 1990:17).

[3] It refers to the "rules, concepts, beliefs, and meanings of the people themselves, functioning within their own group" (van Lier, 1989:43).

[4] Quantitative research refers to cause-effect studies widely used in experimental sciences. In order to pursue objective truth, variables control and suitable mathematical procedures are important in research design (Allwright and Bailey, 2002).

[5] Qualitative research is used as a general term to cover a variety of approaches to inquiry in social sciences and humanities. It is always used to pursue in-depth understanding of the phenomenon in question (Denzin and Lincoln, 1994).

teachers have been encouraged to be responsible to systematically explore and portray the dynamics of classroom learning in a specific group or context, and collect internal views (emic perspectives) of its participants (e.g. classroom learners and teacher) during the teaching and learning process for further analysis and interpretation (Freeman and Richards, 1996; Jansen and Liddicoat, 1998; Richards and Lockhart, 1999). Such 'thick' information is believed to help teachers, researchers and administrators to be increasingly aware of the 'facts' in classroom learning and teaching (Allwright and Bailey, 2002; van Lier, 1989; Watson-Gegeo, 1988).

Based on these reasons, I will approach my study through 'hermeneutic/interpretive epistemology' (Usher, 1996). Different from the experimental tradition in natural sciences that follows a sole model of rationality and seeks a universal 'truth', the hermeneutic/interpretive view holds that the world is neither stable nor uniform and therefore, knowledge is concerned with "interpretation, meaning and illuminations" (Usher, 1996:18), and assumes that "all human actions are meaningful" and hence need "to be interpreted and understood within the context of social practices" (Usher, 1996:18). On the process of understanding meaning and developing interpretations of human actions, researchers and participants in real-life contexts can both be the interpreters contributing to the construction and re-construction of 'truth' (Usher, 1996). Similarly, the EFL language classroom is like a small social world full of human actions such as interactions and negotiations between teacher and students or among students. It seems impossible to clearly understand the complex phenomena of classroom language learning, say students' reactions to a specific instructional activity, only through numerical information collected by quantitative research. Obviously, information about the learning context, the teaching process and the inward views of learners as well as of the classroom teacher all need to be taken into account in understanding and interpreting the realities of classroom language learning (Burns, 1999; Davis, 1995; Guba and Lincoln, 1989; van Lier, 1989; Watson-Gegeo, 1988).

### 5.3.2 An Interpretive Qualitative Approach

Based on the belief that "phenomena can be understood only within the context in which they are studied" (Guba and Lincoln, 1989: 45), I felt a tightly controlled approach could not help me understand the impact of the MI-based intervention on learners because there were many unanticipated factors involved in the real world. In

general, I saw the MI-based intervention being understood and evaluated in the present study as a process that was continuously changing rather than a stable and invariant treatment in a laboratory-like setting. The priority in the study should be to discover and describe the possible effects of an MI-based EFL course on learners, finding out what learners and I actually did, and how they and myself thought during the intervention. I did not know what I would find but I wanted to seek rich data in detail and embedded in contexts, and avoid data being incomplete, partial or fragmented that could not present participants' perspectives. Therefore, instead of getting only numerical data by conducting a survey with a Likert Scale to evaluate the impact of this intervention, I thought it was important to understand the 'meaning' of participants' perspectives on events or their actions during the process. In other words, I was interested in collecting data about how students saw themselves as EFL learners and their EFL learning, how this influenced their attitudes and behaviors during the MI-based intervention, and how I as their language teacher understood and reflected on my classroom practice throughout the MI-based intervention. When the central focus of qualitative research is on understanding the 'meaning' of a particular activity or a social context from the perspectives of the research participants, it is considered as an "interpretive approach" (Maxwell, 1996:17). Therefore, I employed an interpretive qualitative approach in the study.

Because the study was conducted by an interpretive qualitative approach, collecting 'thick' data from participants was my goal. A brief account of the ways I did this follows. More detailed discussion is included in Section 5.5 below.

In order to obtain rich perspectives from learners, especially their personal and unobservable aspects, I decided that keeping a learning diary was a suitable way for learners to document their learning experiences and perspectives during the MI-based intervention through their personal observation, introspection and retrospection. A simple guideline (see Appendix 4) had been provided for diary entries to suggest participants the focus content in the study. Nevertheless, the format of the learning diary was completely participant-initiated and learners were also encouraged to document anything they thought was important and related to their English learning during the intervention. Moreover, a semi-structured interview, a commonly used data collection method in a qualitative research, was employed twice, before and after the

MI-based intervention, with the same volunteer participants in the research group to get basic, as well as more personal and complex information. The interview in the study was used as a purposeful interaction, between a learner and an interviewer, based on predetermined but flexible questions. Therefore, I was able to obtain important data such as their previous learning experience, their interests in, and attitudes to, English learning and the intervention, which could not be obtained easily from observation. Since learning diaries and interviews are both methods that can provide rich description and interpretation of learners' perspectives, I felt these data sources would be valuable for me, the teacher-researcher in the study, to understand the meanings of learners' perceptions, attitudes or behaviors during the intervention period. The information from diary entries and interview transcripts could also be used to clarify perspectives and complement the insights of learners as well as confirm findings from other data sources.

Moreover, two evaluation questionnaires were developed to elicit learners' responses to the MI-based course and relevant MI-informed activities/tasks. The course evaluation questionnaire was designed with scaled questions and two open-ended questions. As for the MI activities/tasks evaluation, it was presented in a multiple-choice format with an open-ended section. Both of them were conducted anonymously for all learners in the research to evaluate the effects of the MI-based intervention on their English learning at the end of the course. The product-oriented data obtained from questionnaires were included in the study to supplement or complement the understanding of learners' perspectives from other data sources.

Even though multiple data were collected about the learners' perspectives, my perspectives of the learners and of my teaching, documented in a teaching diary, were also important in the study as I was one of the participants and familiar with the whole group. My perspectives and experiences were subjective, but still valuable, especially since all participants' voices together can present the reality of the particular group and their learning. Therefore, my teaching diary, providing direct information on my teaching, was used as another data source for understanding the impact of the MI-based intervention on EFL learners, as well as on my own teaching in the study for further reflection.

### 5.3.3 Teacher-Researcher and Classroom Research

Since classroom teachers have direct experience of working with learners, they are in a particularly privileged position to decide what should be investigated in a classroom setting (Allwright and Bailey, 2002; Jansen and Liddicoat, 1998). Recently, there has been a growing interest in promoting teacher-initiated classroom research as it has been felt that language teachers can use classroom research to understand their own practices and students' learning in depth, which may facilitate their professional awareness, renewal and development (Allwright and Bailey, 2002; Burns and Hood, 1995; Field, 1997; Nunan, 1989b and 2001; Richards and Lockhart, 1999; Wallace, 1998). Additionally, these vital insights into classroom practices developed by teachers could help generate a broader knowledge base about the teaching profession (Freeman and Richards, 1996).

Rather than uncritically importing and applying ideas from theoretical principles handed down by inspectors, trainers and researchers, it has been emphasized that teachers in classroom research have control over their own practice by carrying out changes to solve the practical problems they face every day or to improve outcomes in real contexts (Field, 1997; Nunan, 1989b). During the process of exploring classroom learning and teaching, teachers can gradually become mature within their language-teaching profession in terms of constant self-reflection (Burns, 1999; Richards and Lockhart, 1999; Wallace, 1998). Moreover, the findings of systematic investigation may enrich teachers' knowledge of classrooms and bridge the gap between theory and practice (Allwright and Bailey, 2002; Burns and Hood, 1995; Field, 1997; Nunan, 1989b and 2001; Richards and Lockhart, 1999; Wallace, 1998). Because classroom research always responds to real and pressing questions, which are central to the success of curriculum innovation, its results may also provide other teachers in similar situations with valuable insights (Burns and Hood, 1995). In short, the classroom research that language teachers generate has the potential not only of contributing to their own professional growth, but also of providing valuable sources of knowledge for other teachers (Jansen and Liddicoat, 1998).

Particularly in the EFL context, the classroom is a crucial place for learners to learn the target language; thus, teacher-initiated classroom research becomes a very important tool to deal with immediate learning problems, to evaluate the impact of

different practices on learners and to understand the process of teaching and learning.

I conducted this research study as a language teacher in my own classroom, so it could be considered as teacher-initiated classroom research[6]. 'Classroom' here is used as a general term to cover a wide range of language learning contexts for enabling learners to develop their language repertoires (Brown and Rodgers, 2002). The contexts could be regular classes in school, self-access Centers, on-line learning in computer rooms, field trips and so on. My role in the study was as a classroom EFL teacher, who introduced an MI-based intervention to address EFL learners' learning problems (their failure to learn English effectively and confidently), and also as a researcher, who planned to explore, evaluate and interpret the impact of an MI-based EFL course on learners from their perspectives and from my own during the process.

### 5.3.4 Validity and Reliability in Qualitative Classroom Research

Since validity and reliability of findings are essential issues in judging the merit of any research in fields, which engage in scientific inquiry (Brown and Rodgers, 2002; Nunan, 2001), making a qualitative classroom research credible and dependable became an important concern when I was designing my research. In the following sections, how the issues of validity and reliability were considered in this study with relevant strategies or techniques are discussed with examples.

#### 5.3.4.1 Validity

Validity has been defined as "the degree to which the results can be accurately interpreted and effectively generalized" (Brown and Rodgers, 2002: 241). Generally, validity can be divided into *internal validity* and *external validity*. The former concerns the credibility of the research results and the latter stresses the degree to which the findings can be generalized to other settings (Brown and Rodgers, 2002). For qualitative researchers, it has been suggested that validation strategies like

[6] Teacher-initiated classroom research, similar to action research, is conducted to deal with immediate classroom learning problems and increase teachers' understanding of classroom teaching and learning (Allwright and Bailey, 2002); however, the rigid suggestion that action research must follow a defined cycle has made commentators prefer to use the term 'classroom research' instead of 'action research' (Field, 1997). In the present study, 'classroom research' is used to represent a teacher-initiated research for assessing the impact of an MI-based intervention on solving practical learning problems of classroom EFL learners.

member checking, triangulation, thick description, peer reviews and external audits can be used to build validity in a qualitative research (Lincoln and Guba, 1985; Maxwell, 1996; Merriam, 1998; Nunan, 2001). Nevertheless, researchers may be engaged in one or more of these procedures of validation depending on the lens[7] they want to use and their paradigm assumptions (Creswell and Miller, 2000).

### *1. Internal Validity*

As I believe that reality is socially constructed and it is what participants observe or identify it to be, checking how accurately participants' realities were conveyed in the study became a major concern. In other words, how to elicit the truth of participants' views in real contexts and cross-validate these perspectives was important for me to demonstrate the *internal validity* of the study. Therefore, seven validation strategies - *triangulation, negative case, reactivity, collaboration, member checking, peer support* and *external audit* - were employed in the procedures of data generation or analysis to achieve the credibility of the research results. A brief overview of these strategies follows.

***Triangulation***, a term borrowed from military navigation at sea where sailors decide the position of their ship's bearing by triangulating among different distant points (Jick, 1979, cited from Brown and Rodgers, 2002), is always used in social science to study some aspects of human behaviors by collecting more than one standpoint for understanding (Brown and Rodgers, 2002). Brown and Rodgers have summarized seven types[8] of triangulation and claimed they could be applied to procedures of data generation or analysis to maximize the possibility of getting credible findings (Brown and Rodgers, 2002).

In this study, *triangulation* was used to avoid the bias inherent in any particular data source or research method and to compile a more complete and credible picture of the research results through different sources (Lynch, 1996). Moreover, it was a validity

[7] The lens means "the views of people who conduct, participate in, or read and review a study" (Creswell and Miller, 2000:125).

[8] Brown and Rodgers have summarized seven types of triangulation that have been employed in research for getting credible findings: Data triangulation, investigator triangulation, theory triangulation, methodological triangulation, interdisciplinary triangulation, time triangulation and location triangulation (Brown and Rodgers, 2002: 244).

procedure employed by me as teacher-researcher to seek agreement and support among multiple and different data sources in order to form themes and categories (Creswell and Miller, 2000). Since I went through a systematic process of sorting data and was dependent on multiple forms of evidence rather than a single event or data point, the validity of the final account of the research findings should be increased (Maxwell, 1996). Burns also argued that, "if different methods of investigation produce the same result then the data are likely to be valid" (Burns, 1994: 272). Three types of triangulation among the seven summarized by Brown and Rodgers (2002: 224) were employed in the study. They were:

1. *Data source triangulation*: I gathered perspectives of the teacher-researcher (myself) and all student participants to help analyze and explain the issues under investigation.

2. *Methodological triangulation:* I employed multiple data-gathering procedures such as learning diaries, interviews, questionnaires and a teacher diary to cross-validate the issue under investigation.

3. *Time triangulation:* Data (e.g. learning diary and interviews) were collected during the process of the intervention instead of only being gathered at the end of the course to gain a holistic view of the learning process in the study.

Reality is multiple and complex from a qualitative view, therefore, looking for ***negative case*** or *disconfirming evidence* becomes a necessary validation procedure in qualitative research (Maxwell, 1996; Miles and Huberman, 1994). Certainly, researchers have the proclivity to find confirming evidence rather than discrepant ideas during the process of analysis. However, the existence of negative evidence cannot be ignored and should be included in the final account to present the reality, which may be used to falsify a proposed conclusion for further modification or retention (Creswell and Miller, 2000; Maxwell, 1996). More than that, the negative cases allow readers to evaluate these cases and make their own conclusions (Wolcott, 1990). In the present study, I used the 'negative evidence' technique when I went through all data sources for themes and categories. In other words, when I examined the data for evidence that was consistent with preliminary or potential themes and categories, I also looked for discrepant evidence. During the process of examination, some of my working hypotheses on the evaluation of the intervention were revised. For example, I had expected positive effects from employing an audiotaped journal

for learners as an alternative to spoken practice, but the results were the opposite of my expectation. A few participants expressed their preferences for face-to-face oral practice or complained that it was difficult to find a quiet place in the school dormitory to record their audiotaped journals.

The issue of ***reactivity*** is also an important one when discussing internal validity (Lynch, 1996; Maxwell, 1996). Reactivity refers to the influence of the researcher on the participants under study. In particular, in interviews or questionnaires, the presence of the researcher may have a powerful and inescapable influence on participants' functions (Lynch, 1996; Maxwell, 1996). In order to reduce the risk of participants not feeling comfortable to directly tell me, their language teacher, 'the feelings and attitudes to the course', I decided to ask my colleagues for help. In the present study, all interviews and questionnaires were therefore conducted with the assistance of three colleagues in Ming-Hsin University of Science and Technology (MUST) instead of me.

When turning to the strategy of ***collaboration***, the validity procedure in the study shifted from the teacher-researcher to the student participants. Creswell and Miller have mentioned that, "credible data also come from close *collaboration* with participants throughout the process of research" (Creswell and Miller, 2000: 128). Since participants' perspectives play key roles in qualitative research to help researchers understand reality, determining how to build participants' perspectives into the study was important for me to actually understand the effects of the MI-based EFL course on them during the whole process. Passive collaboration such as eliciting information from participants by interview and questionnaires was important, but how generating an active collaborative relationship was also necessary and valuable (Creswell and Miller, 2000). Therefore, I decided to encourage participants to keep learning dairies, like my teaching diary, for documenting the events they observed, their feelings and their strategies in English learning. The information gave me a valuable source to interpret the impact of my teaching on students during the MI-based intervention. By doing so, participants in the study were like my research partners who actively provided relevant information through their diary entries even though they were not explicitly informed.

It is believed that ***member checking*** is "a trustworthiness technique to improve credibility" (Lincoln and Guba, 1985: 11). Member checking consists of taking data, analysis, interpretations and conclusions back to the respondents (participants) for confirmation (Brown and Rodgers, 2002). Before data analysis, the interview transcripts and my summarized reports of the raw data (interview transcripts) were given to the two interviewers as well as interviewees (twelve volunteer students) for verification. Moreover, the results of two questionnaires that had been organized into numbers and tables with themes and categories by me were sent to participants to make sure that the presented information was realistic and accurate. Participants were reminded that their comments were very welcome. The result was that all of them seemed to be satisfied[9] with the raw data and my way of organizing their views reported in interviews and questionnaires.

Furthermore, I used ***peer support*** to make sure the accuracy (internal validity) of English translation in quoted diary entries and interview data could be achieved. Therefore, two local EFL teachers and one English native speaker[10] were involved during the process of data translation for verification.

In order to build up the credibility of the qualitative study, researchers are recommended to use ***external auditors***, individuals external to the research, to review the narrative account of the study (Creswell and Miller, 2000). After data analysis and writing, I gave my first draft of the research results with clear documentations to my supervisors and one teacher reader. They were invited to examine both the process and product of the study and then determine the trustworthiness of the findings.

In addition to the strategies mentioned above, I tried to be careful during the process of data generation and analysis. For example, the list of interview questions had been discussed with two interviewers (my colleagues in Ming-Hsin University of Science

[9] The class mentor of the research group e-mailed me, "students feel satisfied with your organization of these data and appreciate your respect and hard work."

[10] Because the data of diaries and interview were mainly done in Chinese, credible translation (Chinese to English) was necessary when the research results are reported in English. Two local EFL teachers in Taiwan were invited by me to do the translation job (translating the quoted data) together. After that, the translated scripts were brought to an English native speaker in Australia for proof reading. To be certain that the accuracy of participants' original meanings has been achieved, I had a further discussion with the native speaker.

and Technology) before administration so as to confirm that they understood the issues I was concerned with in the study. All participants in the study were also asked to put a date on each of their diary entries to be certain all their entries could consistently reflect the procedure during the MI-based intervention. In short, I tried my best to make all research data sources in the study represent participants' views as well as possible.

### 2. *External Validity*

In addition to the strategies for improving internal validity mentioned above, how to enhance the *external validity*, the transferability, of qualitative research is also worthy of attention. Since what teacher-researchers are really concerned with are insights about "how and why something works and for whom it works within the contexts of particular classrooms" (Cochran-Smith and Lytle, 1993:15), the focus of qualitative classroom research is on an in-depth understanding of its natural setting and participants as 'representativeness', instead of formulating general laws about what works commonly in classrooms (Creswell and Miller, 2000; Lynch, 1996; Nunan, 2001). As the power of this kind of research is the relevance of its findings to the teacher-researchers, the issue of generalization is therefore not so crucial in the tradition of teacher-initiated classroom research (Allwright and Bailey, 2002). Most of the time, readers are responsible for making decisions about whether the findings can be generalized to their own settings or not (Creswell and Miller, 2000; Lynch, 1996; Nunan, 2001). Nevertheless, thick and rich description has been recommended as a key technique to enhance the transferability of a qualitative study, because vivid details can help readers relate to the experiences described in the study, understand the credibility of the description and make decisions about its applicability to similar contexts (Lynch, 1996; Creswell and Miller, 2000; Brown and Rodgers, 2002). As a teacher-researcher in this study, I also provided as much detail as possible to describe and interpret participants' perspectives on the MI-based EFL course and their English learning. I did not intend to generalize my findings to any population or context, but I believed "understanding one classroom helps us to understand better all classrooms" (Cochran-Smith and Lytle, 1993:15) and hoped the research findings could bring insights to people who are interested in EFL language teaching, EFL language learners, the application of Multiple Intelligences theory in EFL education and other relevant issues.

#### 5.3.4.2 Reliability

Reliability is defined as the degree to which the research can be replicated (LeCompte and Goetz, 1982) or as the extent to which the results of a study are consistent (Brown and Rodgers, 2002). The concept of reliability can be divided into two parts: internal reliability and external reliability. The first term concerns the degree of consistency in results that would be produced if another researcher re-analyzes the research data. The second term refers to the degree of consistency in results if the original study is repeated (Brown and Rodgers, 2002).

When dealing with reliability issues, qualitative research is often criticized as problematic because of the difficulties in data re-analysis and research replication. However, the fact is that qualitative research is conducted in natural settings by researchers to record processes over time, and to portray the uniqueness of a particular context in detail and is thus different from doing laboratory experiments with standardized controls (LeCompte and Goetz, 1982; Nunan, 2001). Therefore, it becomes more difficult to replicate the original qualitative study than that in a traditional experimental design. Also, it is impossible to include all data in a published qualitative research report because of the constraints of time and space. As a result, it becomes difficult for outsiders to re-analyze these original data and draw similar findings (LeCompte and Goetz, 1982; Nunan, 2001).

*1. Internal Reliability*

In order to protect a study from threats to internal reliability, LeCompte and Goetz (1982) have identified several strategies, including low inference descriptors, multiple researchers, peer examination and mechanically recorded data. However, my research interest, time and sources could not allow me to use all of these strategies. The three strategies I employed were *mechanically recorded data, peer examination* and the involvement of *multiple researchers*. Firstly, for the preservation of data, all interviews in the study were tape-recorded. Secondly, in the process of categorizing diary and interview data, I regularly contacted two local teachers[11] in Taiwan to

[11] One is a university assistant professor who is familiar with Oxford's strategy model (Oxford, 1990) and interested in Schumann's neurobiological perspectives on affect (Schumann, 1997). The other one has been an MI teacher in a junior high school for two years, so she is familiar with Multiple Intelligences theory. Because both of them are familiar with the models or theories I used for data analysis, they were contacted regularly for discussion and suggestions on the process of categorization.

examine the consistency of the working analysis. Thirdly, to seek further confirmation or verification of the data analysis, other researchers, two English native-speaking language experts[12] in Australia, were invited to validate the analysis results based on the adopted models or theories.

*2. External Reliability*

LeCompte and Goetz (1982) have also proposed suggestions to enhance the external reliability, the replication of the study by others. They have advised qualitative researchers to make explicit descriptions in five aspects of the research: the status of the researcher, the choice of participants, the social context, the definitions of analytic constructs and premises, and the data generation and analysis methods (LeCompte and Goetz, 1982; Nunan, 2001). When detailed information in the five key aspects has been provided, the research report can be used as a reference for other researchers wishing to repeat the study (LeCompte and Goetz, 1982; Nunan, 2001). Taking LeCompte and Goetz's suggestion, I give explicit descriptions of the five aspects in my study. I believe my "care and explicitness" (Nunan, 2001:62) could help the qualitative classroom research achieve reasonable reliability as Nunan and many qualitative researchers have claimed.

## 5.4 Participants in the Research

In this section, the procedures of selecting a group of participants in the Ming-Hsin University of Science and Technology (MUST), HsinChu, Taiwan, and of dealing with ethical issues of human subjects are explained first. Following that are a description of student participants' basic background information and my role in the research group.

### 5.4.1 Recruiting Student Participants

I began the study by recruiting my research participants. To recruit participants, I made earlier announcements and explanations to all my randomly assigned EFL classes[13] (I had six classes in the spring semester of 2002) and then had further

[12] Two English native-speaking language experts (one is a university senior lecturer and the other is an experienced English tutor) in Australia were invited to do data cross-checking with me, in strategy categorization and affect analysis.

[13] Every lecturer (with master degree) in MUST was required to teach at least twelve hours a week

discussions with students and mentors of six different classes. Finally, one class was chosen as a research group because all students in the group were willing to follow the requirements of the study, and their class mentor also could help me administer questionnaires.

In order to get richer data from learners, I also tried to find some volunteer students in the chosen group for interviews. After an announcement, twelve volunteers came to me to join the study. To avoid offending any individuals, I accepted all of them as participants. These interviews, tape-recorded by two interviewers, were transcribed and summarized by me for later analysis and interpretation.

### 5.4.2 Protection of Student Participants: The Human Ethics Issues

The first ethical issue to deal with in the research was the extra time for running a three-hour MI workshop and the completion of two questionnaires. To contend with this issue, negotiations and discussion with all student participants to get their permission were conducted before implementation.

Another issue was the use of students' personal information. Before the fifty-one participants signed the group consent form (Appendix 2), they had been informed that their learning diaries, results of questionnaires or performance records in the course would be used later for research purposes. However, they had been guaranteed confidentiality of data and anonymity of each participant in any future published report (Appendix 1: Explanatory Statement of the Research Project).

In the same way, the twelve volunteer students for interviews (five males and seven females) had been informed of their rights and responsibilities in the study before signing another individual consent form (Appendix 3). After that, they were invited to participate in two in-depth interviews, which were conducted before and after the intervention of multiple intelligences.

Moreover, all students were informed that if some of them changed their mind later, they still could drop out of the research and be helped to transfer to another class,

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with four (3 credits x 4 regular classes) to six (2 credits x 6 regular classes) different classes. In this system, I was no exception.

using the traditional approaches with different EFL teachers but the same time schedule.

### 5.4.3 Student Participants: Background Information

In this study, participants came from one university class of fifty-one Chinese EFL learners, of whom thirty-two were female and nineteen were male. They were all Information Management majors and were in the first grade of the two-year undergraduate day-school program at MUST, HsinChu City, Taiwan. Their average age was twenty-two, and their average years[14] in learning EFL were seven. They were considered to be at 'high beginner level' or 'low intermediate level' in English with better reading abilities and relatively little chance to use (speak, listen and write) the target language. All of them had at least 200 minutes (four classes) per week of the *Practical English Training* course[15] with me.

### 5.4.4 Teacher-Researcher as a Participant

My role in the study was as a teacher-researcher and I identified myself as one participant in the research group because I thought teacher and students all play important roles in classroom language learning. In the classroom context, I considered myself as an organizer of lesson plans, a source person for providing input and a facilitator of students' learning activities/tasks, whereas in situations outside the classroom context, I was the students' counselor and friend. Since I had been an EFL teacher in the university for eight years, I was very familiar with the teaching system and students' English levels at the university. I was recognized as an experienced EFL teacher as were other teachers who had worked for more than five years. When I was implementing the MI-based intervention in the chosen class for the present study, I was also responsible for teaching another five classes (different types), more than 250 students. I was used to building good rapport and trust with my students because I thought harmonious relationships could shorten the traditional teacher-student distance and motivate students' willingness to attend English classes and to learn

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[14] For most participants in the research group, their EFL study-year included six years in high schools and one year in a two-year college. For some students who graduated from a five-year junior college, their study years were three years in a junior high school and three or four years in a five-year junior college.

[15] It was a compulsory one-semester course with 100-minutes regular instruction and 100-minutes tutoring session per week.

English.

## 5.5 Data Generation Methods

The data generation methods employed in this qualitative classroom research were learning diaries, semi-structured interviews, one self-awareness checklist of multiple intelligences, two semi-open questionnaires and one teaching diary. Further details about these research instruments are presented below.

### 5.5.1 Language Learning Diaries

Language learning diaries are an amalgamation of learners' documents of their feelings, perceptions and learning strategies as well as their interpretations of those learning experiences and perspectives through self-observation, introspection or retrospection[16] (Bailey, 1991). Because the diary data can provide teachers or researchers with some hidden views of language learning, they become valuable sources to advance our understanding of classroom language learning (Bailey, 1983 and 1991). As Bailey stated:

> The diary studies are absolutely essential to advancing our understanding of classroom learning. At the present time we are working with an unrefined tool to craft an only dimly understood representation of language learning. Properly done, the diary studies can provide us with important missing pieces in this incredibly complex mosaic – pieces which may not be fully accessible by other means.
>
> (Bailey 1991: 87)

Diary studies have been considered particularly valuable for providing teachers and researchers with unobservable information, in which they may get rich insights into affective, cognitive and instructional factors that have influenced students' language learning over a period of time (Bailey, 1983 and 1991; Macaro, 2001; Nunan, 1989b; Schumann, 1997; van Lier, 1988); therefore, the language learning diary was used as a research tool[17] in this study to explore the invisible affective aspects (e.g. how the students in this study feel about their learning) and the use of personal strategies (e.g.

[16] 'Introspection' means self-report during the event/task, but 'retrospection' involves a broad time span from right after the event/task to years later (Bailey, 1991).

[17] Learning diary was also used as a learning activity for self-reflection and self-awareness in the course under study.

how these students go about their learning) during the process of language learning, both in and out of class. In order to guide students in how to write a learning diary, a simple guideline[18] (see Appendix 4) had been provided before they started to write.

In this study, the fifty-one EFL learners were encouraged to make at least three entries honestly and openly each week in their preferred language (Chinese, English or both). They could write down feelings, thoughts, attitudes and reactions to their English learning during the MI-based EFL course, as well as the strategies involved or difficulties experienced during the process of the intervention. They might also document their classroom lives and out-of-class learning events with the language teacher, fellow learners or others during the period of time.

In addition, in order to understand these participants' EFL learning history for a later comparison, I asked them to record a personal retrospective report of their previous learning experiences[19], as part of their first-week diary entries.

Students handed their diaries to an assistant to the research project every three weeks. These diaries were not returned unless requested. Urgent contacts or necessary interaction between students and me were mainly through e-mail. Instead of stimulating and developing the learners' English writing abilities, the learning diaries, largely used to record information related to the inward aspects of the language learners, through their personal observation, introspection or retrospection, were expected to help me, the teacher-researcher, gain 'thick' insights with regard to the learners' experiences, perspectives, attitudes and strategy use in their previous EFL learning, and during the MI-based intervention.

### 5.5.2 Semi-Structured Interviews with Learners

Collecting information from learners through interview allows researchers to obtain interesting insights from learners in face-to-face interactions, not revealed by either

[18] The general guideline was used to elicit the focus information of the study, but students had freedom to create their own writing styles without the limitation of a specified format.

[19] The fifty-one participants were encouraged to report 'how they felt about English learning' and 'how they learned English' based on their previous experience. A brief introduction of writing learning history was also included in the general guideline of keeping a learning diary (Appendix 4).

observation or structured questionnaire (McDonough and McDonough, 1997; Nunan, 1989b). In terms of classroom research, an interview may be used along with other research tools to investigate issues in language learning or triangulate data collected from other sources (McDonough and McDonough, 1997).

In the study, two interviewers, the on-site colleagues in the Center of Applied Foreign Languages, helped me employ the semi-structured interviews[20] to elicit personalized responses (e.g. the knowledge, opinions, ideas and experiences of learners) from twelve volunteer students. The main reason I did not interview students myself was because I was afraid that my presence would influence what they said. They might not feel comfortable to directly discuss their attitudes or feelings to the course with their teacher. During the process of the interview, the order of some questions was changed, depending on the situational or personal needs. The interviews, which lasted from twenty to fifty minutes in length, were audiotaped, transcribed and summarized in Chinese. In order to make the twelve participants feel comfortable to express their opinions fully, all of them were interviewed in their first language, Chinese.

There were three parts and seventeen questions on the interview schedule (Appendix 5). All questions in the prepared interview schedule were designed by me to elicit the information under investigation. Part A (Q1-Q9) concerned the participants' personal details about previous learning experiences (e.g. number of years of learning, purposes, learning places, affective states and strategy use). This part was asked before the intervention of multiple intelligences strategies. The transcripts of Part A were mainly used to supplement or complement the information that I obtained from the learning history included in their first-week diary entries. I believed the information could help me gain a clear picture of the learning background of these EFL learners. Part B (Q10-Q14) consisted of five items, which were designed to understand the interviewee's general beliefs or attitudes to English learning (Q10 and Q11) on the one hand, and their subjective reflections about their personal English learning (Q 12-Q14) on the other. This part was conducted twice, before and after the

[20] There are three types of interview: structured, semi-structured and unstructured. The structured interview uses questions tightly specified in advance. The semi-structured interview asks questions with a framework but allows greater flexibilities. As for the unstructured one, it is like a natural conversation with a rough checklist (McDonough and McDonough, 1997).

intervention to see if there were changes, or if more ideas emerged from the learners' perspectives. Part C (Q15-Q17) was devised to obtain direct information from the interviewees regarding their English learning experience after taking the EFL course with the MI-based intervention. This part was conducted at the final stage of the research, at the end of the semester. Information from this part could be used to evaluate the effects of the MI-based intervention on learners. It was hoped that these viewpoints, experiences and comments that students shared during the interview could add a qualitative dimension to the results gathered from other data sources as well.

### 5.5.3 Questionnaires

Questionnaires come in various forms with different purposes and can be utilized to investigate any aspect of the teaching and learning process (Nunan, 1989 b and 2001). The general advantage of using structured questionnaires is that a great deal of information can be provided in an economical form with precision and clarity (Nunan, 1989 b; McDonough and McDonough, 1997). Teachers can compare percentages and frequencies of responses from different learners much more quickly from structured questionnaire data than that from the free responses obtained in unstructured interviews or diaries. Learners also can easily count the frequencies they have ticked to understand their tendencies. In general, the categories and questions of structured questionnaires have been developed before data collection, so what will be actually found, to a large extent, has been predetermined, unlike other free-form data with more flexibility (Nunan, 1989 b). However, except for the closed questions elicited by the structured questionnaires, many others include open-ended questions to invite respondents to express their opinions freely and provide more detailed information (McDonough and McDonough, 1997). In the current study, the three questionnaires that were used are discussed below.

#### 5.5.3.1 An MI Inventory for Adults

The *MI Inventory for Adults* was designed by Armstrong (2000:13-16, see Appendix 18) to arouse people's self-awareness about multiple intelligences and to connect their life experiences with the eight intelligences. The questionnaire (inventory) was used in the study as one of the activities in a three-hour MI workshop, just before the MI-based course began. Armstrong (2000), the author of the inventory, has

emphasized that the best way to assess each person's intellectual spectrum is through real performance on tasks, activities or experiences linked with different intelligences. Therefore, the inventory is just used for earlier exploration or understanding of the intelligences, instead of producing quantitative information to decide different people's multiple intelligences. There are eighty items under eight categories in the MI inventory. Each category of ten statements stands for one intelligence. For the purpose of quick understanding in personal MI, I put a choice of five Likert-scale responses (1, 2, 3, 4, or 5) under each statement in the Chinese translation version for learners in the study to decide how often they had used a particular intelligence in different situations.

#### 5.5.3.2 Evaluation of the MI-based Intervention

The anonymous *Evaluation of the MI-based Intervention* (see Appendix 6) was used to evaluate the effects on Chinese EFL learners of the MI-based intervention in the course *Practical English Training*. The director and colleagues in the Center of Applied Foreign Languages had given me invaluable help and were therefore interested in the result. The evaluation sheet was originally developed by me but administered by them at the end of the semester to survey the fifty-one participants' responses toward the use of the MI-based intervention as well as its effect on their English learning.

The questionnaire included two parts. There were seven statements in the first part, focusing on exploring students' perceptions toward the effects of the MI-based intervention on them through a choice of Likert scale type questions (1, 2, 3, 4 or 5). As for the two open-ended questions in the second part, students were invited to self-assess their current English abilities and express their ideas about the MI-based course freely.

#### 5.5.3.3 A Feedback Questionnaire on the MI-informed Activities/Tasks

*A Feedback Questionnaire on the MI-informed Activities/Tasks* (see Appendix 7), designed by me, was conducted anonymously to identify students' responses to the core thirty-two MI-informed activities/tasks used in the course. The results could explain whether these MI-informed activities/tasks had made their English learning become easier or not. The information was also important for me to understand to

what extent these activities/tasks had affected or assisted learners in the target language learning.

In the first section of the questionnaire, students were invited to circle the activities/tasks that they had considered as enjoyable or less enjoyable, and helpful or less helpful for English learning when taking the course. Moreover, they were encouraged to openly state personal reasons of choices, and express comments on these activities/tasks in the second section.

### 5.5.4 Teaching Diary

A teaching diary, or a teaching journal, is usually defined as a first person account of teaching experience (Bailey, 1990; Gebhard and Oprandy, 1999). It can function as a place for an on-going record of teachers' observations and discovery of classroom events as well as for their reflection and analysis in teaching (Brock et al., 1992; Burns, 1999). In addition, it can be used to express teachers' affective experiences including what frustrates, annoys or encourages them (Bailey, 1990; Gebhard and Oprandy, 1999). It has been suggested that "in reworking, rethinking, and interpreting the diary entries, teachers can gain powerful insights into their own classroom behavior and motivation" (Bailey, 1990:225), so a teaching diary has been considered as a tool to enhance awareness of teaching practices and beliefs (Gebhard and Oprandy, 1999). In the present study, I also kept a teaching diary to document my teaching practices and experiences. The firsthand account of my teaching practice revealed my thoughts, values, strategies, feeling and process in teaching with the MI-based intervention. I believed the information could help me understand the effects of the intervention and the nature of my own teaching from a reflective view; moreover, the information could provide a different "window on the classroom world" (Bailey, 1990:225) and be used to compare with the learners' perspectives (e.g. learning diaries and interviews) for further examination and explanation of the issues under investigation. In other words, a teaching diary in the study was considered as a place to document the teaching process of the course with the MI-based intervention, and as a self-reflection tool for critical awareness of my teaching. In Chapter 6, the description and interpretation of planning, acting, observation and reflection of my teaching during the MI-based intervention are mainly based on my teaching diary entries. My teaching diary therefore became important data sources in the study to

provide not only facts and events of my teaching process, but also personal feelings about and reflections on teaching practices.

## 5. 6 Data Generation Processes

The study was conducted during a ten-week period (from the 9th week to the 18th week of the semester). During the first week, an MI workshop was conducted in order to familiarize students with the principles behind the MI-informed activities/tasks. Some data were gathered during this week as well. The following eight weeks were used to put MI-informed instructional activities/tasks and MI-inspired authentic assessment tasks into practice. The tenth (last) week was mainly used to collect data.

Before the study began, the participants in the research group had been exposed to traditional teaching, like students in other classes, for almost eight weeks delivered by me, lecturing most of the time using a textbook-driven approach with some drills and pair practice. The main reasons that the intervention could not start right from the beginning of the semester were, firstly, it took me a while to find a class (a group of students) that were willing to participate in the project, and secondly I needed to get the approval from the ethics committee at Monash University before the intervention.

Generally, the procedures for data generation could be divided into three phases as the classroom research progressed. They are explained below.

### 5.6.1 The First Phase of Data Generation

The first interview was conducted in the school lunch hour (12:00-1:00 p.m.) during the 9th week of the semester with the assistance of two colleagues at MUST, and with the whole procedure being audiotaped. Moreover, the fifty-one students started to write their learning diary from this week, based on a diary guide (Appendix 4) given beforehand.

### 5.6.2 The Second Phase of Data Generation

It was the second phase (from the 10th week to the 17th week of the semester) in which MI-informed activities/tasks were used for regular instruction, tutorial sessions and after-class learning hours. During this period of time, students' diaries were collected

every three weeks by a teaching assistant and then reorganized by me for further data analysis.

### 5.6.3 The Third Phase of Data Generation

The last week, considered as the third phase, was for final data collection. During this week (the 18th week of the semester), the class mentor helped me conduct the *Feedback Questionnaire on the MI-informed Activities/Tasks*. After that, interviews were administered for the second time with the same persons, procedures and locations as in phase 1. The last diary entries were collected in this phase as well. In addition, the director of the Center of Applied Foreign Languages managed the *Evaluation of the MI-based Intervention* at the closure of the semester. The complete data collection timetable is presented in Table 5.1 below for further clarification.

**Table 5.1.Data Generation Timetable**

| Week | Data Generation Methods | Administer(s)/ Data collector(s) | Location | Research Aims |
|---|---|---|---|---|
| 1~8 | Preparation | Preparation | Preparation | Preparation |
| 9 | Learning diary | 51 Students start to write | …….. | Aim1, Aim2, Aim3 |
| 9 | Learner-Interview (1): Part A and B | Two EFL teachers in MUST | Teacher's office | Aim1, Aim2 |
| 9 | An MI Inventory for Adults | Teacher-researcher | Language lab (MI workshop) | For self-awareness only |
| 12 | Learning diary (1) | Teaching assistant | Language lab | Aim1, Aim3 |
| 15 | Learning diary (2) | Teaching assistant | Language lab | Aim1, Aim3 |
| 18 | A Feedback Questionnaire on the MI-informed activities/Tasks | Class mentor | Classroom | Aim1, Aim3 |
| 18 | Learning diary (3) | Teaching assistant | Classroom | Aim1, Aim3 |
| 18 | Learner-Interview (2): Part B and C | Two EFL teachers in MUST | Teacher's office | Aim1, Aim3 |
| 18 | Evaluation of the MI-based Intervention | The director of Center of Applied Foreign Languages | Classroom | Aim1, Aim3 |
| 18 | Teaching Diary | Teacher-researcher | | Aim1, Aim3 |

## 5.7 Data Analysis

In this section, two main approaches for data analysis are explained, namely, deduction (the top down approach) and induction (the bottom up approach/ grounded

theory) employed throughout the interpretive qualitative classroom research. Then, I describe the analytic procedures of different data sources. Two questionnaires are discussed first. After that, the six stages (the procedures) of data analysis for learners' diaries, interview data and a teacher's diary are provided. In addition, five models or theories, used as pre-determined concepts in the study for analytic deduction, are briefly introduced with examples.

### 5.7.1 Two Approaches for Qualitative Data Analysis

In order to find the ideas, patterns and themes within the masses of qualitative data, it is important for researchers to employ useful approaches, devices and techniques to organize and reduce the data properly for interpretation (LeCompte and Schensul, 1999). In the study, two main approaches, deduction and induction, suggested by many ethnographers (LeCompte and Schensul, 1999), were employed in the study for data analysis. They are discussed as follows.

#### 5.7.1.1 Deductive analysis: the top down approach

Deductive analysis means that a set of concepts is chosen first and then these concepts are applied to sort out the data in terms of which concepts the data best fit (LeCompte and Schensul, 1999). These principal concepts, drawn from pre-determined ideas, existing models and theories, are generally used as a starting point (a preliminary framework or initial coding categories) to code data. Codes refer to "names and symbols used to stand for a group of similar items, ideas, or phenomena that the researcher has noticed in his or her data set" (LeCompte and Schensul, 1999: 55). Data coding is a process of reading through the data and assigning different codes to relevant words, sentences or paragraphs in the data. For example, I used the eight issues about *Learner Receptivity in Language Classroom* suggested by Allwright and Bailey (2002, see 5.7.4.2. for details of this model) as a set of concepts in the study to explore the possible affective themes[21], emerging from learning diaries and interviews.

#### 5.7.1.2 Inductive analysis: the bottom up approach

Inductive analysis, or grounded theory, means that researchers approach the data with

[21]They are the themes that caused learners' different affective experiences in previous learning or during the MI-based intervention (how students felt about their English learning).

an open mind, so the features or patterns are found based on the data collected (Martin and Turner, 1986; Strauss and Corbin, 1998). During analytic induction, researchers should first examine the data to discern into what kinds of chunks the data seem to fall into naturally. Then, they can decide a set of themes or patterns (categories) to explain why the data fell that way (LeCompte and Schensul, 1999; Strauss and Corbin, 1998).

In the beginning of analytic induction, researchers are encouraged to concentrate on the detailed examination (microanalysis) of the collected data before they generate initial categories and suggest the relationships among categories (Strauss and Corbin, 1998). In general, asking questions, making comparisons and writing notes/memos in the margins or on cards are the essential techniques used frequently during microanalysis (Strauss and Corbin, 1998). When the microscopic examination has been completed thoroughly, researchers can quickly perceive emerging categories (themes or patterns) with their properties and dimensions from the whole data set (Strauss and Corbin, 1998). Furthermore, by constant comparing and contrasting these emerging themes or patterns with those from chosen models or pre-existing concepts, researchers can select suitable ones to present the features of the data for further examination (LeCompte and Schensul, 1999). At the same time, researchers can hypothesize the relationships among these working categories (themes and patterns) in terms of their dimensions and properties (Martin and Turner, 1986; Strauss and Corbin, 1998). Gradually, final categories (concepts stand for phenomena) for data interpretation can be developed. Eventually, researchers can draw findings and conclusions based on their discovery grounded in the data (LeCompte and Schensul, 1999; Martin and Turner, 1986; Strauss and Corbin, 1998).

In the study, I used the inductive method frequently to look into the data for natural patterns, which might have been ignored or omitted in pre-determined concepts, existing models and theories. For example, in addition to adopting Allwright and Bailey's eight issues about *Learner Receptivity in Language Classroom* (see 5.7.4.2. for details of the model) for initial data coding about 'affect' (how students felt about their English learning), I also read through the data with an open mind to see any possible affective themes naturally emerging from the data. After a thorough reading and examination, finally, I revised the eight issues and added some themes, completely depending on the features of the data (the final affective themes can be

found in Chapter 7, Learners' Voices (I): Affective Experiences and Language Learners).

### 5.7.2 Data Analysis: Two Questionnaires

Two questionnaires, the *Evaluation of the MI-based intervention* (Appendix 6) and *A Feedback Questionnaire on the MI-informed Activities/Tasks* (Appendix7), were conducted at the end of the semester for course evaluation. They both produced quantitative (first section) and qualitative (second section) data.

The quantitative data from the first part of the *Evaluation of the MI-based intervention* was analyzed by descriptive statistics. The mean (average) and standard deviation of each item were computed and then organized into a display table to show the rating results (see Chapter 9: Table 9.1). Also, the values (from 1 to 5) of each item were counted for frequencies. Such information is used to recognize how often participants mentioned the effectiveness of the MI-based intervention on their affective experiences (Q3, Q4 and Q5), strategy use (Q2 and Q6) and learning outcomes (Q 1 and Q7). These findings were arranged into another table (see Chapter 9: Table 9.2). Moreover, participants' responses to the two open-ended questions in the second part of this questionnaire were analyzed deductively and inductively. The qualitative responses were thereby categorized into several obvious themes (e.g. MI-based activities/tasks) and relevant properties (e.g. positive experiences). The occurrence of each theme with its content feature in the data was counted. The results were organized into two tables (See Chapter 9: Tables 9.3 and 9.4).

When analyzing the circled responses in the first part of *A Feedback Questionnaire on the MI-informed Activities/tasks*, making tallies, counting and percentage calculation were the techniques I employed. Students' feedback was first tallied under the names of thirty-two MI-informed activities/tasks on a separate paper. Then, the frequency of each activity/task that had been chosen by the fifty-one participants as helpful or less helpful, and enjoyable or less enjoyable was counted. The results of students' preferred and unpopular activities/tasks were put into two tables respectively to encapsulate the findings in a practical way (see Chapter 9: Tables 9.5 and 9.6). Moreover, students' reasons for their choices on these activities/tasks in the second part of the questionnaire were compiled and then analyzed deductively and

inductively. The summarized outcomes are discussed in Chapter 9 with their circled results.

### 5.7.3 Data Analysis: Learners' Diaries and Interviews, and a Teacher's Diary

The main data sources in the study consisted of ten weeks of diary entries from fifty-one learners, two interviews with twelve volunteers, and a teacher's diary. Since the nature of qualitative data is open-ended, the processes of condensing the complex data into a manageable form for understanding and interpretation may be "difficult, time-consuming, and challenging." (Mills, 2000:99). However, researchers are encouraged to be patient with the data through systematic observation, exploration, examination, comparison and reflection, because there is no easy way to make this work (analysis) accurate and reliable (Mills, 2000).

Based upon LeCompte (2000) and Burn's (1999) perspectives and suggestions on the procedure of data analysis, six stages were adopted in the research for efficiently analyzing the three main data sources mentioned above, with the help of inductive and deductive approaches. The six stages were (1) Tidying up the data, (2) Data familiarization, (3) Selecting and developing coding categories, (4) Coding data, (5) Displaying data, and (6) Mapping and interpretation. They are discussed below with examples.

#### 5.7.3.1 Tidying up the data

In this preparation stage, I tried to get the qualitative data ready for analysis. The first thing I did to the voluminous diary entries of the fifty-one students[22] was to reorganize the collected diary data and put them into appropriate files. The pages of learning histories that were included in learners' first-week diary entries were taken off and put into a particular file in numerical order[23], named *previous EFL learning experiences of fifty-one students*. As for other entries, they were put into three files labeled respectively as *stage 1* (week 9~ week 11), *stage2* (week 12~ week 14) and *stage 3* (week 15~ week 17) *of the MI-based intervention*. Finally, four different files

[22] Each student gave 3-5 entries a week and the total entries of fifty-one learners during the ten weeks were around 1847.

[23] Each of the fifty-one students in the study was given an identification number or reference number (from No. 1 to No.51) without mentioning their real names.

containing learners' diary entries were ready for analysis.

The two interviews conducted before and after the intervention with twelve volunteer students were transcribed[24] and summarized by me with the dates and the pseudonyms of the interviewees[25]. Then, two files, marked as 'Interview I' and 'Interview II', were used to store relevant transcripts and summaries. Moreover, the loose pages of my teaching diary were gathered together in chronological order in another file.

Two different copies of these diary files and interview transcripts were prepared so that the notes and comments I made for one focus topic (e.g. affect) would not influence the possible identification of those notes or comments for the other. Generally, the stage of 'tidying up' permitted me to make a preliminary assessment of the data set.

**5.7.3.2 Data familiarization**

The next stage involved going through data for familiarization. I tried to gain an overview of the body of materials gathered: listening to the tapes, reading transcripts, studying learners' diaries and my diary carefully. Moreover, I highlighted the chunks (they included words, phrases, sentences or a whole paragraph) related to the research aims: 'how students felt and went about their English learning', and 'how I reflected on my own teaching'.

Because each student participant was given a diary guide before they began their entries, the diary content naturally reflected the two topics under the research aims: 'affective experiences' (e.g. their feelings and attitudes) and 'learning behaviors' (e.g. strategy use). Likewise, the interview questions had been designed to elicit EFL learner's affective experiences and strategy behaviors in their previous English

[24] In order to facilitate comprehension, the ideas or comments that appeared in incomplete forms or had been interrupted by interviewer (s) have been rewritten as complete sentences, and the fillers during interview have been omitted. However, the words used by interviewees to express their meanings or ideas have not been changed. An example is available in Appendix 20.

[25] I will refer to the twelve volunteer students by the pseudonyms, Chang Hsin-Han, Chao Liang, Chou Chia-Ming, Chu Chia-Ling, Chu Hui-Shang, Hsiao Han-Yi, Ku Ya-Chun, Lee Shan-Jen, Lin Celia, Ling Yin, Liu Shu-Jing and Wu Wei-Chen.

learning and during the MI-based intervention. Therefore, the specific information about the two topics, 'affect' (how did participants feel about their English learning?) and 'learning strategy' (how did participants go about their English learning?), could be acquired from the interview data.

Because I as the teacher-researcher wrote the teaching diary, the process of data familiarization became easier. I was able to understand the entire context of each statement, and therefore categorized the emergent themes about my comments and thoughts on teaching as thoroughly as possible.

Besides reviewing and marking these materials for recurrent themes or patterns, during the process of familiarization, I read relevant literature to gain insights and look for suitable models or theories for further application and analysis. All the inductive and deductive processes of thinking were the basis for developing suitable coding categories to present the data.

#### 5.7.3.3 Selecting and developing coding categories

At this stage, I immersed myself in selecting coding categories to develop a suitable coding system within which the material would be sifted and sorted. The purpose was to reduce the large amount of data to more manageable concepts for understanding. During the process of constructing the coding categories for each topic in the study, I re-read the data, reviewed and reflected on my notes and comments on emergent themes or particular patterns; moreover, I examined the possibility of applying the concepts suggested by existing models or theories to the data. In other words, I approached the data through deductive and inductive ways, which did help me discover potential categories (working categories) for data analysis.

After several applications of these working categories to the data (e.g. interview transcripts and diary entries), the primary coding categories for the three main topics (i.e. affective experiences, strategy use and teacher's reflection) under the research aims were gradually developed within a process of constant examination and consideration. More details about how I developed the coding categories at this stage for the three topics 'affective experiences', 'strategy usage' and 'my thoughts and

comments on my teaching' are discussed below.

*1. Learners' affective experiences (How they felt/feel about their English learning)*

As I was searching for suitable coding categories that may interpret students' different affective experiences (factors and features) of English learning, I was open to the data and made notes all the time (inductive analysis). In addition, two models were used for deductive analysis. They are Allwright and Bailey's *Learner Receptivity in Language Classroom* (2002) and Scherer's identification of *Stimulus Evaluation Checks (SECs)* in differentiating emotional states (1984). The eight issues about *Learner Receptivity in Language Classroom* were used as a potential list of themes (codes) to examine the possible factors that had influenced learners' affective experiences. Scherer's *Stimulus Evaluation Checks* (1984) introduced by Schumann (1997) as patterns of affect (motivation) was employed in the study to check and interpret the features and properties (emotional dimensions) of learners' affective experiences. However, some of the concepts proposed by the two existing models were modified because the data themselves suggested other categories. For example, the theme 'target language and culture', one of the eight issues to influence learners' affective experiences was revised as 'instrumental purposes'. The feature 'variety' was added to the novelty check, one of the five appraisal dimensions in Scherer's model.

On the way to developing or deciding categories for coding 'affect' data, I also kept asking myself questions to clarify the main trends of the whole data set. The questions could be 'Why did several students mention this? Did it imply anything? How about other learners' reactions to the same issue? Had the issue been mentioned frequently during the two months?' In addition to re-reading and examining the data for answers, I made comparisons with different data sources (diary entries and interview transcripts) to understand the possible relationships between affective factors (themes) and affective features (emotional patterns). Gradually, I discovered the differences of affective experiences between the two periods (previous EFL learning and MI-based intervention) and understood the affective changes and relevant factors within the two-month intervention. All these earlier findings were put in my research notes for further analysis and interpretation. Certainly, the process of inductive thinking mentioned above (e.g. re-reading, asking questions, examination, and comparison) did

help me reflect on how to refine the potential 'affect' categories for coding to fit the whole data set.

*2. Learners' strategy use (How they went/go about their English learning)*

Because one of the topics under the research aims, "how students went/go about their English learning', was concerned with the issue of strategy use, exploring learners' employment and choices of learning strategies was important. After reviewing these reported learning strategies across learners' diaries and interview data, I felt it was better to list all reported strategies for grouping and understanding. Therefore, I identified these strategies carefully with corresponding students' numbers on separate papers. After that, I examined all identified strategies and put similar descriptive strategies under the same heading (inductive analysis). The total identified strategies employed in previous EFL learning were seventeen in-class and twenty-three out-of-class strategies. The reported strategies during the MI-based intervention included sixty-two in-class and one hundred and twenty-six out-of-class strategies. In order to reduce the large amount of these strategies for easy management, understanding and interpretation, I decided to use pre-existing models, Oxford's strategy taxonomy system and Armstrong's summary of multiple intelligences, to re-examine these identified data for classification (deductive analysis).

When I was trying the concepts suggested by the two pre-existing models to analyze the types and intelligences involved in the reported learning strategies, I also employed analytic induction— systematic perceiving, comparing and linking of the whole data set, to understand other important patterns in the topic 'strategy', such as the factors (themes) for strategy choice. During the process of seeking for factors that might have influenced learners' strategy choices, for example, I discovered that learners' beliefs during the MI-based intervention played an important role, particularly for out-of-class strategies. Moreover, I found a close relationship between the strategy use and learners' 'willingness' to use different strategies. In short, all the insights and ideas about strategy, coming out from the inductive and deductive processes of selecting coding categories, were noted down for further investigation and interpretation.

*3. Teacher's thoughts and comments on teaching*

In order to provide a clear picture of my teaching process in the intervention, I tried to organize the emerging thoughts and comments in my diary entries and look for patterns among them for reflection. After reading Richard and Lockhart's book *Reflective Teaching in Second Language Classrooms* (1999), I was inspired to list several topics discussed in their book, such as 'teacher decision making' and 'the role of the teacher', as the basis to examine my diary entries. Based on the potential list and my earlier notes on those emergent themes, I read through my diary entries again, crossed out irrelevant issues and left the themes that might reflect my teaching experiences and thoughts during the intervention.

**5.7.3.4 Coding data**

At this stage, all the data were read and annotated according to the coding categories developed at stage three. However, during the process of data coding, some codes (themes or patterns) were divided into several sub-codes and a few were revised, depending on the features of those data. In other words, all coding categories were finalized at this stage.

During the process of data coding, corresponding student numbers, dates, or names were put on separate papers with relevant coding headings (themes or categories) for easy reference. Supporting and negative evidence of each topic with the numbers or names of participants were particularly highlighted. In addition, the coding results of learners' diaries and interview transcripts were quantified with counts (numbers) to present the tendency of student participants' experiences, perspectives and reported behaviors. As for the teaching diary entries, the process of categorization was completed twice with the help of one of my colleagues in an effort to ensure that the analysis and my comments were as consistent as possible. In general, all data were organized into coded categories (conceptual taxonomies) with clear references (e.g. student numbers and frequency) and the coding job was finished at this stage. Several coded examples from learners' diaries and interviews can be found in Appendixes 14 and 19 for reference.

#### 5.7.3.5 Displaying data

At this stage, I tried to build up tables to convey the findings by considering the range and occurrence of participants' attitudes, perspectives and experiences for each topic (e.g. affective experiences). Moreover, I used figures (concept maps) to provide visual representations of the relationships that existed among the data. Based on the belief that "a display is an organized compressed assembly of information that permits conclusion drawing and action" (Miles and Huberman, 1994: 11), displaying findings through tables and figures became an important technique in the study to summarize the information I collected in an appropriate and meaningful format. These tables and figures also made data interpretation easier and more comprehensible.

#### 5.7.3.6 Mapping and interpretation

When all the data had been sorted and charted according to core themes and features (coding categories), I began to pull together key characteristics of the data, and to map and interpret the data set as a whole. For example, I reviewed the tables, figures and research notes first. Then, I compared and contrasted the findings (it could be results from learning strategies or affective experiences) in their previous EFL learning and during MI-based intervention, in terms of searching for patterns, connections and explanations within the data. Eventually, I tried to articulate the meaning and significance of these categorized themes and features with supporting (or negative) extracts from diary entries or interview quotations. In addition to interpreting meaning from the data, the relevant implications were also indicated at the same time. Details of the interpretation and implications of the results on the three topics, teacher's reflection, learners' affective experiences and strategy use, in the study can be found in Chapters 6 to 10.

### 5.7.4 The Models or Theories Used for Analytic Deduction

When classifying and reducing data, I employed several existing models or theories to facilitate the process of data analysis. Allwright and Bailey's (2002) eight issues about *Learner Receptivity in Language Classroom* and Richards and Lockhart's (1999) ideas about *Reflective Teaching in Second Language Classrooms* were introduced as potential concepts to examine if some suggested (pre-determined) themes and patterns existed in the data. In addition, Scherer's (1984) identification of stimulus evaluation checks in differentiating emotional states, Oxford's (1990) strategy classification

system and Armstrong's (2000) summary of Multiple Intelligences were used as three sets of coding categories to characterize the properties or dimensions of relevant themes in 'affect' or 'strategy' to make all coding results consistent, credible and comparable.

#### 5.7.4.1 Schumann's neurobiological perspective on affect and Scherer's stimulus evaluation checks (SECs)

Based on the belief that variable success in second language acquisition is emotionally driven and our brain is the site of language acquisition, Schumann (1997, 1999 and 2001) tried to discover some mechanism in the brain that allows emotion to influence learning, in terms of neurobiology and appraisal psychology. He proposed a neutral mechanism for stimulus appraisal[26] to interpret how the brain evaluates the stimuli it receives through input from the surrounding environments (e.g. language learning in classroom contexts) and leads to different emotional reactions (Schumann, 1997). He introduced Scherer's definition of five dimensions (*stimulation evaluation checks* or called SECs) as patterns (Scherer, 1984) to assess the emotional relevance and motivational significance of stimuli. Scherer, a psychologist interested in the study of emotion, formulated five dimensions along which stimulus appraisals are made, and argued that the different emotional states (e.g. anger, fear and joy) "are the result of the successive outcomes of a series of stimulus evaluation checks (SECs)" (Scherer, 1984: 38). The five dimensions contain (1) Novelty, (2) Intrinsic pleasantness, (3) Goal/need significance, (4) Coping potential and (5) Norm/self compatibility (Scherer, 1984: 38-39). The details of the five *stimulus evaluation checks* (SECs) are included in Appendix 12 for reference.

After an item by item analysis of motivation questionnaires (Schumann, 1997: Chapter three), Schumann noted that the questions used in motivation (affective variables) questionnaires in second language acquisition research, such as Gardner's Attitude and Motivation Test Battery (AMTB), were actually designed to assess the learner's appraisal of the objects, events, activities and agents related to the target language or language learning situation. Moreover, Schumann found the analysis

[26] The proposed system contains the amygdala, the orbitofrontal cortex, the body proper, and the connections among them. The figure of the neural system can be found in Appendix 13.

results of diary studies and autobiographies of second language learners (Schumann, 1997: Chapter four) supported his perspective—"motivation may actually be patterns of stimulus appraisals" (Schumann, 2001: 28). Based on the evidence, Schumann argued that when the stimulus appraisals are positive, such as pleasurable, reinforcing or rewarding to the target language learning, learners are motivated to reach their goals. On the other hand, language learning can be hindered if the appraisals are negative (Schumann, 1997 and 1999).

In order to present participants' affective experiences (e.g. motivational or emotional patterns) in their previous EFL learning and during the MI-based intervention, the five appraisal dimensions, identified by Scherer, elicited by second language acquisition (SLA) researchers in motivation study and suggested by Schumann to constitute motivation, were used in the study as coding categories. That is, the properties and dimensions of learners' reported affective states caused by the stimuli they accepted from different sources (different affective themes, such as learning context and significant others) were analyzed through the five stimulus evaluation checks for understanding.

**5.7.4.2 Allwright and Bailey's learner receptivity in language classroom**

Allwright and Bailey identified 'receptivity' as "a state of mind, whether permanent or temporary, that is open to the experience of becoming a speaker of another language, somebody else's language" (Allwright and Bailey, 2002: 157). Furthermore, they claimed that 'defensiveness', the opposite of receptivity, as "the state of mind of feelings threatened by the experience and therefore needing to set up defenses against it" (Allwright and Bailey 2002: 157). Based on their interpretation, I found receptivity, a term used to describe learners' openness to different issues, is similar to exploring learners' affective experiences with different input during the process of target language learning. Therefore, I employed the eight issues, proposed by Allwright and Bailey as important factors in classroom language learning, to investigate affective themes. In other words, I used the eight issues as potential factors (pre-determined concepts/ themes) to examine if these issues also appeared among participants' diary entries and interview data in the study. The eight issues include (1) the target language and culture, (2) the teacher as a person, (3) other learners, (4) the teacher's way of teaching, (5) course content, (6) the materials, (7) the idea of being a successful

language learner, and (8) the idea of communicating with other people (Allwright and Bailey 2002: 158-165).

#### 5.7.4.3 Oxford's taxonomy of learning strategies

In order to reduce the large amount of reported learning strategies by participants into manageable concepts for understanding and interpretation, Oxford's taxonomy of learning strategies (1990) was introduced into the study to classify those identified strategies. Oxford's model was chosen in the study as a framework for strategy analysis because it is "perhaps the most comprehensible classification of learning strategies to date" (Ellis, 1994: 539) and it has been widely employed in the studies of second language learning strategy use (Oxford and Burry-Stock, 1995). Moreover, by using the model, the results of current data analysis also can be compared with the findings of other relevant strategy research to reduce the difficulty in comparability across different studies.

In Oxford's method of strategy classification (Oxford, 1990), she first divided language learning strategies into two classes, direct and indirect strategies, and then further into six groups. The direct strategies are those directly involving the use of target language and consist of memory, cognitive and compensation strategies (Oxford, 1990). The indirect strategies are used to support language learning without directly involving the target language. They are metacognitive, affective and social strategies (Oxford, 1990). The detailed description of the six groups of strategies (e.g. cognitive strategy) and their subgroups (e.g. practicing-repeating) are provided in Appendix 15: the definition of six learning strategies, and Appendix 16: the diagram of the strategy system showing all the strategies (Oxford, 1990). In general, the definition and diagram functioned as the basic tools in the study for analyzing the types of reported strategies.

#### 5.7.4.4 Armstrong's summary of Multiple Intelligences

The reason that I wanted to explore/examine the intelligences involved in those reported strategies in the study was because I wanted to understand if the MI-based intervention was did influence the EFL learners' strategy choice and use, through the provision of a set of strategic tools that might satisfy their needs, interests and goals. Therefore, I employed Armstrong's summary chart of MI theory (Armstrong, 2000:

4-6) and the figure of eight ways of learning (Armstrong, 2000: 22) as the guide to analyze the employment of eight intelligences in those strategies reported by participants, in their previous EFL learning and during the MI-based intervention.

Armstrong's accounts of MI theory in his book *Multiple Intelligences in the Classroom* (Armstrong, 2000) has been recommended by Gardner as reliable and readable (Armstrong, 2000: v-vi); therefore, I chose his interpretation as a guide to analyze and understand the intelligences involved in each reported strategy in the study. His summary of eight intelligences is in Appendix 17 for reference. More information about the introduction of the eight intelligences (multiple intelligences) can be found in Chapter 3, Notions of Intelligence: From Psychometric Views to Multiple Intelligences Theory.

#### 5.7.4.5 Richards and Lockhart's suggestions on the important dimensions of teaching for exploration and reflection

In the book *Reflective Teaching in Second Language Classrooms*, Richards and Lockhart (1999) provided many questions for language teachers to examine their teaching for critical reflections, such as 'how did I modify my language to facilitate teaching and learning?' and 'what grouping arrangement did I use?' These questions are under several broad themes: teacher's beliefs, focus on the learner, teacher decision making, the role of the teacher, the structure of a language lesson, interaction in the second language classroom, the nature of language learning activities and language use in the classroom. All these themes (as well as their sub-themes) became a helpful guide for me to examine the patterns in my diary entries for understanding and reflecting on my teaching practices in the study.

## 5.8 Summary

In this chapter, I have argued the values and purposes of using an interpretive qualitative approach to understand the reality of classroom teaching and learning. Because of the dynamics of the classroom, I used multiple data generation methods such as learner diaries, interviews and semi-open questionnaires to allow for learners' responses of more than one type (e.g. written and oral, individual and group), which might help me effectively capture the phenomena under investigation. Moreover, I

have emphasized the significance of the teacher's perspectives in my teaching diary because the voice of every participant in the classroom context is important to reveal the reality. In order to avoid threats to validity and reliability, several strategies, such as triangulation, member checking, collaboration, and thick description, were taken into consideration when implementing the research and have been justified in this chapter. Furthermore, my status as a teacher-researcher, the procedure of choosing student participants, the ways to address ethical issues and the background of all participants, all have been described to give an explicit introduction of relevant information in the study. A detailed explanation of the contents, purposes and administration of all data generation methods has been included as well. Moreover, the data generation processes, the data analysis approaches, the procedures of data analysis, and the models or theories used for analytic deduction have been presented with examples. All the information in this chapter gives a complete picture of the methodology and procedures, which is the basis for understanding the following chapters.

# Chapter 6

## *Teacher's Voice: The Intervention of Multiple Intelligences in an University English as a Foreign Language Classroom*

### 6.0 Introduction

Since there is no single preferred model or prescription for the adaptation of Multiple Intelligences (MI) theory in educational contexts, teachers can develop their own interpretation and application based on their needs (Gardner, 1999). This chapter provides a description, interpretation of and reflection on how the intervention of multiple intelligences strategies, namely the MI-based intervention, was designed by me and then employed in a standardized university English as a Foreign Language (EFL) course *Practical English Training*. My intention in applying MI theory to an EFL course was to help university EFL students in Taiwan's technological and vocational education (TVE) system overcome learning difficulties and make good progress in their English learning.

Firstly, the teaching context of the study is introduced. Then, details are given of the main components of the intervention: an MI workshop, MI-informed activities/tasks, and MI-inspired authentic assessment. Afterward, the integration of a lesson within the *Practical English Training* course and these MI-informed instructional activities and assessment tasks is described. All of the information intends to give an overview of my plans and actions when applying the MI-based intervention to my classroom.

However, teaching is much more than this. Teaching involves a complex interactive process among students, teacher or other relevant variables in their social contexts (Bartlett, 1990). In order to give a clear picture of my teaching process using Multiple Intelligences strategies, my thought processes about problem-solving and decision-making are explored through my teaching dairy. Moreover, personal perspectives and reflections on my abilities to manage the course, on my role as an EFL language teacher, and on my students' learning, drawn from teaching diary entries, are included for discussion. In other words, I have chosen to explore my full teaching, not merely focusing on the direct causal effects from adding multiple

intelligences strategies to my practice. I believe the process of reflecting in my diary entries could help me have an initial understanding of my teaching (Research Aim 1) and of my students' learning (Research Aim 3) during the EFL course with the MI-based intervention.

## 6.1 Teaching Context

In this study, *Practical English Training* was the course in which I implemented an intervention using multiple intelligences strategies. It was a compulsory one-semester course with 100-minutes of regular instruction[1] and 100-minutes of tutorials[2] per week. With the aim of satisfying an urgent need to promote practical English proficiency such as speaking and listening abilities, the course was offered to non-English major university students in the two-year program by the Center of Applied Foreign Languages in Ming-Hsin University of Science and Technology (MUST), HsinChu, Taiwan. Because traditional university English courses that spent most of the time on developing reading abilities could not reflect practical needs in the real world, many universities in Taiwan were pushed to provide useful English courses (Chia et al., 1999). The course *Practical English Training* was thereby a school policy to offer university students in Ming-Hsin University of Science and Technology (MUST) opportunities to develop their English communication skills and abilities.

Generally speaking, all courses provided by the Center of Applied Foreign Languages had their own standardized syllabuses, which had been designed by the curriculum development committee. The members of the committee were responsible for choosing textbooks, arranging course schedules, deciding syllabuses and selecting evaluation tools. The assigned textbook in the spring semester of 2002 for *Practical English Training* was *Impact Listening II* (with CD) published by Longman (2001), and supplementary self-study material *Basic Conversation Patterns* (with CD) by

[1] 'Regular instruction' is also called 'lecturing hours'. However, the 100-minutes regular instruction in the study was taught through MI-informed activities/tasks instead of only teacher-centered lecturing.

[2] The tutorials of the course *Practical English Training* were originally used to give students more practice through extensive and intensive listening exercises in a language lab or watching instructional videos for getting more comprehensible input. In the study, the portion of passive learning activities (only listening and watching) was reduced during the tutorial session to include more opportunities for students to use English actively in real contexts.

Crane (2000). The course syllabus had been decided and distributed to teachers before the semester started. For reasons of fairness[3], the intervention class followed all basic requirements of the course like other classes did. Fifty-one participants in the study used the same learning materials with a standardized course syllabus[4] and took two listening tests[5].

The purpose of the intervention in the study was to help university Chinese EFL students in Taiwan's TVE system overcome psychological insecurity about English learning, improve their English learning and communication strategies, as well as promote their English abilities (especially their listening and speaking abilities). That is, I wanted to help them learn English effectively and confidently.

The implementation of the MI-based intervention in the study contained a three-hour MI workshop, eight-week MI-informed activities, and MI-inspired authentic assessment tasks. The intervention was introduced halfway through the semester[6], so students in the course had been taught through traditional teaching methods in the first eight weeks of the semester by me, lecturing all the time through a textbook-driven approach[7] with some drills and pair practices. The intervention began in the 9th week

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[3] It was impossible to change the whole curriculum like some MI studies that had been done in the USA (Campbell et al., 1999) because I needed to take opinions of teachers from other classes into consideration. 'Fairness' was the issue they cared about, so I adopted 'intervention' instead of 'a curriculum reform' in the research.

[4] The course syllabus developed by the curriculum development committee of the Center of Applied Foreign Languages was mainly based on the 20 units of the textbook *Impact Listening II* (2001). Teachers could choose or skip some units because of time limitation, but all units were assessed in two standardized listening tests during the semester.

[5] Two standardized listening tests, a package accompanying the textbook *Impact Listening II* and *Teacher's Manual* were developed by the Longman publisher (2001) and used for students of the university taking the compulsory course *Practical English Training* in the spring semester of 2002 to evaluate the effectiveness of instruction and identify learners' learning achievement. One was implemented in the 9th week of the semester as a midterm exam and the other in the 13th week as a final exam. The students in the study, being taught through conventional ways from week 1 to week 8, and then MI-based intervention from week 9 to week 17, took the two standardized tests as other classes did during the school exam periods with no exception. Because of the maturation issue, the two tests were not used in the study for comparison to decide if the intervention of multiple intelligences strategies could help learners improve language proficiency or not.

[6] The intervention could not start from the beginning of the semester because I needed to find a group of participants for the study and wait for the approval from the Human Ethics Committee at Monash University.

[7] A textbook-driven approach in a communication-oriented EFL class was to follow all directions proposed by the teacher manual of a textbook (Most books were imported from USA or UK). The routine sequence of teaching was asking predetermined questions, implementing suggested activities, playing relevant tapes/CDs and checking learners' understanding through already prepared exercises or tests.

of the same semester and lasted for another eight weeks (the 10th week ~the17th week). The following section is a brief account of the MI-based intervention that had been put into practice during that period of time.

## 6.2 The Design of the Intervention of Multiple Intelligences Strategies

The intervention of Multiple Intelligences strategies employed in the study consisted of three components: an MI workshop, MI-informed activities/tasks and MI-inspired authentic assessment. My reasons for running an MI workshop were that I thought all learners had the right to understand the theory and principles behind the intervention, and I believed understanding what MI theory is could help students appreciate themselves and others, which might be beneficial for their English learning (Armstrong, 2000; Campbell et al., 1999). Furthermore, instruction and assessment are two sides of a coin, so reliable and suitable (intelligence-fair) assessment tasks are as important as effective teaching/learning activities in supporting students' learning (Lazear, 2000; O'Malley and Valdez Pierce, 1996). In order to avoid a mismatch between instruction and assessment that had existed in traditional EFL classrooms for a long time, the MI-informed activities/tasks of teaching, learning and assessment all were integrated together in the study with the same purposes – to help my EFL students overcome learning barriers and maximize their chances of successful target language learning and usage.

### 6.2.1 The MI Workshop

I began the workshop motivated by the belief that all students can learn English in their own ways, and the idea that learners should be aware of and know more about their own talents, as well as those of others. With this goal in my mind, a three-hour workshop was designed to help students understand Multiple Intelligences theory and their current intellectual spectrum. I believed this kind of understanding could facilitate students' awareness and appreciation of strengths in themselves and others.

The workshop was conducted during the week of the midterm exam in Ming-Hsin University of Science and Technology. Because students in the course had taken their midterm listening test on Monday of this week, the Wednesday tutorial session was

used to run a three-hour MI workshop with students' permission[8].

The workshop started with a problem solving activity (Lazear, 1999a: 2). Students brainstormed solutions to the problem and understood the differences among people. After that, an *MI Inventory for Adults* (Armstrong, 2000: 13-16, see Appendix 18) was provided for all students to decide how often they had used eight intelligences in different situations. When students had some ideas about their preferred intelligences, an MI Pizza picture (Armstrong, 2000:33) was introduced with a thorough explanation of the eight intelligences. Accompanied by relevant pictures and body language, several examples and vivid stories from *Seven Kinds of Smart* (Armstrong, 1999), *Seven Pathways of Learning* (Lazear, 1994) and *Eight Ways of Knowing* (Lazear, 1999a) were used to inform students about the eight intelligences. During the process of demonstrating and interpreting the eight intelligences, there were interactions with the class through interesting questions such as "Do you know how to say I love you through the eight intelligences?" Students were very active in giving answers. Later, students were divided into groups[9] to discuss and list people of the eight intelligences. The discussion was followed by a guessing and sharing game. Each group contributed a description of a famous or a successful person in local context, national-wide areas or international situations for the whole class to guess his/her name, identify his/her strengths and explore reasons. Subsequently, an application activity was implemented. Each group was given a worksheet with several problems listed. Students collaborated with one another to figure out how to use the eight intelligences to solve current situations (Lazear, 1994: 110-112).

In order to stimulate students' further thinking in applying MI to English learning, a *Self-evaluation Sheet: How do I Learn English Best?* and *A List of Eight Learning Ways* (Chao, 2001a: 19-20 and 150) were given during the last hour of the workshop for group discussion and whole class sharing. Students were encouraged to do more

[8] The original time of the tutorial session was 100 minutes (1:10-3:00 p.m.), but I got permission from students (consent forms) to conduct a three-hour (1:10-4:10 p.m.) workshop under the research project of MI-based intervention. According to our university schedule, the time from 3:10 to 5:10 p.m. of Wednesdays was arranged for students to attend club activities; however, students could decide how to use the time with flexibility.

[9] In the workshop, I used different techniques inspired by MI theory to group participants. For example, I gave each student an animal picture card. They were encouraged to imitate the voice and behavior of the animal they had received and walk around to find persons whose voices and behaviors were similar to theirs to form a group (Chao, 2001a).

reflection and exploration of their English learning in terms of multiple intelligences perspectives. The workshop ended with a song *Everyone is Differently Abled*[10]. Students sang the song together with creative body movements. After the workshop, many students asked about appropriate books for reading. *Seven Kinds of Smart* (Armstrong, 1999) was recommended by me as a guide book owing to its friendly content and availability in a Chinese version[11].

### 6.2.2 The MI-informed Activities/Tasks

Previous teaching experience had shown me that if I wanted to reach and engage all students through MI in the long term, to design new and complex lessons on a continuous basis was impossible because of the limitations of time, workload and financial considerations. Kagan and Kagan (1998) also refer to similar issues when applying MI into the every day classroom. In order to integrate multiple intelligences into a language course with realistic and practical ways, I found a basic instructional structure was necessary to lead to sustained implementation. Therefore, the thirty-two MI-informed activities/tasks, which had been chosen from relevant literature or had been created and experimented in pilot teachings by me (Chao, 1999, 2001a and b), became the basic MI strategies in all lesson design during the two-month intervention. The course content of the intervention relating to three units[12] was recycled through these MI-informed instructional and assessment activities/tasks in a balanced way. Table 6.1 specifically details names, features, main intelligences and resources of the thirty-two MI-informed activities/tasks.

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[10] The song was written by Danny Deardorff, a young American singer and composer. It can be found in an album, named *Let's be Friends*, of a children's performing group, Tickle Tune Typhoon.

[11] The Chinese version of *Seven Kinds of Smart*, translated by Luo and Si, was printed by Taiwan's Yuan-Liou Publishing Co. in 2001 (ISBN 957-32-4097-1, see http://www.ylib.com for details).

[12] There were twelve units of *Impact Listening II* being scheduled in the course syllabus of *Practical English Training* during the intervention time. It seemed impossible to cover all units within the two months, so I chose some of them for instruction depending on students' needs or interests like other teacners did in the same course. In the study, three units (job, travel, and health) were chosen after students' voting. As for those untaught units, students were encouraged to self-study with the attached CD. Moreover, they were told that the content of these units would still be included in the final standardized listening test.

**Table 6.1.A Brief Introduction of the Thirty-two MI-informed Activities/Tasks**

| Names of Activities/ Tasks | Features | Main intelligence(s)[13] | Resources |
|---|---|---|---|
| 1. Reading aloud: pair or whole class | Taking turns to read for two voices | Verbal-linguistic<br>Interpersonal | Hsu (1998)<br>Kagan and Kagan (1998) |
| 2. Class discussion, brainstorming: group or whole class | Open-ended information sharing/ group evaluation | Verbal-linguistic<br>Interpersonal,<br>Intrapersonal | Hsu (1998)<br>Kagan and Kagan (1998) |
| 3.Teacher-centered lecturing | Teacher imparts knowledge | Verbal-linguistic | Traditional teaching mode |
| 4. Riddles creation | Using the target language creatively | Verbal-linguistic | Collis (1996) |
| 5. Drills practice | Repeat basic conversation patterns | Verbal-linguistic | Hsu (1998)<br>Bennett (2000) |
| 6.Audiotaped journal | An alternative form of speaking practice | Verbal-linguistic<br>Intrapersonal<br>(Depending on learners' orientations) | Brown et al. (1996) |
| 7. Games: words, idioms and nonverbal languages | Learning the target language through games such as 'Bingo', 'Telephone' or 'Teacher say' for fun and effective learning | Verbal-linguistic,<br>Bodily-kinesthetic and Interpersonal<br>(Depending on the features of games) | Baudains and Baudains (1990)<br>Wright et al. (1992)<br>Lewis (1997)<br>Hsu (1998)<br>Kagan and Kagan (1998)<br>Chao (2001a) |
| 8. Authentic listening practice | Listening practice from Textbook *Impact Listening 2* | Verbal-linguistic | Hsu (1998)<br>Robbins and MacNeill (2001) |
| 9. Grammatical rules | Using formula or table to present grammatical knowledge | Logical-mathematical and Verbal-linguistic | Murphy (1997) |
| 10.Team Jigsaw problem solving | Students cooperate together to figure out clues from the cards they receive to solve a problem | Logical-mathematical and Interpersonal | Hsu (1998)<br>Kagan and Kagan (1998)<br>Campbell et al. (1999) |
| 11.Thinking/observation activities | Inductive thinking through observation, such as 'find my rule' | Logical-mathematical and Naturalist | Kagan and Kagan (1998)<br>Campbell et al. (1999) |
| 12. Imagination activities | Guided imagery is used for students to visualize the spoken content | Visual-spatial<br>Intrapersonal | Kagan and Kagan (1998)<br>Campbell et al. (1999) |
| 13. Mind mapping practice | Students create a visual map of their ideas by using symbols, icons or bridges; etc. | Visual-spatial | Baudains and Baudains (1990)<br>Kagan and Kagan (1998) |
| 14.Visual presentations | Using realia such as pictures, flash cards and wall charts; etc. to | Visual-spatial | Doff (1989)<br>Wright (1997)<br>Kagan and Kagan |

[13] In this section, only main intelligence(s) of each activity are listed for reference.

| | | | |
|---|---|---|---|
| | strengthen memory and comprehension | | (1998)<br>Adelson-Goldstein et al. (2000) |
| 15. Film/video teaching and learning | Content-based learning to motivate students and improve their oral English through observation and discussion | Visual-spatial, Naturalist, Verbal-linguistic | Cooper et al. (1991)<br>Chapple and Curtis (2000) |
| 16. Drawing activities | Drawing what teacher says | Bodily-kinesthetic, Visual-spatial | Hsu (1998)<br>Kagan and Kagan (1998) |
| 17. Minds in motion: Tactile/bodily activities | Using hands to feel (e.g. secret bag) or body movements (mime) to present the learning content | Bodily-kinesthetic | Seaver (1993)<br>Richard-Amato (1996)<br>Campbell et al. (1999)<br>Chao (2001a) |
| 18. English songs in motion: dancing | Students and teacher creating the steps for dancing | Bodily-kinesthetic and Musical-rhythmic | Campbell et al. (1999)<br>Chao (2001a) |
| 19. Role-play (Drama) | Students perform one of the episodes from the Video *Rebecca's Story* | Bodily, Interpersonal and Verbal-linguistic (Depending on learners' orientations) | Ladousse (1988)<br>Rodrigues and White (1993)<br>Stern (1993)<br>Wessels (1995)<br>Campbell et al. (1999) |
| 20. Music and English Songs learning and appreciation | English songs or music related to course themes are contributed by teacher or students for learning and appreciation | Musical-rhythmic and Verbal-linguistic | Murphy (1996)<br>Richard-Amato (1996)<br>Campbell et al. (1999)<br>Armstrong (2000) |
| 21. Lyrics creation | Students create lyrics and perform them with familiar tune or melody | Musical-rhythmic and Verbal-linguistic | Murphy (1996)<br>Richard-Amato (1996) |
| 22. Oral practice through Jazz Chants | Using repetitive drills that draw attention to rhythmic and kinesthetic properties of utterances. | Musical-rhythmic, Bodily-kinesthetic And Verbal/linguistic | Graham (1993 a & b)<br>Richard-Amato (1996)<br>Chao (2001a) |
| 23. Puppet show: intercultural issues discussion | Students use finger puppets to present an intercultural event for whole class discussion | Bodily-kinesthetic, Interpersonal and Verbal-linguistic (Depending on learners' orientations) | Tomalin and Stempleski (1993)<br>Fantini (1997)<br>Kagan and Kagan (1998)<br>Lustig and Koester (1999) |
| 24. Cooperative learning: Students (pair or group) work together to finish a task. | Tasks can be questions survey such as 'find someone who' and 'information gap', or group evaluation. | Interpersonal | Fried-Booth (1986)<br>Ladousse (1994)<br>Kagan and Kagan (1998)<br>Chao (2001a) |
| 25.Asking 'E.T.': E-mail Exchange with English Teacher (using English or Chinese) | Students can ask teacher questions or share information any time through e-mail | Interpersonal and Intrapersonal | Warschauer (1995) |
| 26. Final projects: | Students can | Intrapersonal and | Fried-Booth (1986) |

| | | | |
|---|---|---|---|
| group or personal | demonstrate their learning in their own ways | Interpersonal (Depending on learners' orientations) | Gardner (1993a)<br>Campbell et al. (1999)<br>Armstrong (2000) |
| 27. Surfing English learning websites | Teacher provides useful and interesting websites for learners to try after class | Intrapersonal<br>Visual-spatial | Sperling (1998)<br>Brown (1999) |
| 28. E.Q. Time/ personal reflection time | Students learn how to deal with their emotions during the process of language learning | Intrapersonal<br>Visual-spatial<br>(Depending on features of activities) | Campbell et al. (1999) |
| 29. Independent Study in Self-access Center | Students can use visual, audio and tactile materials in the center to achieve personal needs | Intrapersonal<br>Interpersonal | Dickinson (1994)<br>Sheerin (1996) |
| 30. Keeping a learning diary | Writing reflections about beliefs, emotions, strategies, and self-assessment. | Intrapersonal | Matsumoto (1996)<br>Goh (1997)<br>Kagan and Kagan (1998)<br>Campbell et al. (1999)<br>Armstrong (2000) |
| 31. Field trips or extracurricular activities | Students learn and use English from surrounding environments, such as shopping mall, community or school campus | Naturalist,<br>Verbal-linguistic and<br>Interpersonal | Kagan and Kagan (1998)<br>Campbell et al. (1999)<br>Lazear (1999a)<br>Armstrong (2000) |
| 32. Observation and classification | Looking for the similarities and differences/ using different systems to categorize things | Naturalist and<br>Logical-mathematical | Kagan and Kagan (1998)<br>Campbell et al. (1999)<br>Lazear (1999a)<br>Armstrong (2000) |

Among the thirty-two MI-informed activities/tasks, most of them were implemented in a combined way during regular instruction time but some were only managed in the tutorial session or out-of-class hours.

Out-of-class activities like 'independent study in self-access center', 'surfing English learning websites', 'asking E.T.: email exchange with English teacher' and 'field trips/extracurricular activities' were mainly designed to help learners know how to keep learning English after class with the assistance of their teacher, the school and community resources. In addition, I expected multiple intelligences of different learners could be activated when being involved in these activities and then develop effective learning strategies. However, depending on personal needs, students were encouraged, not forced, to attend these activities. In order to arouse self-awareness and self-reflection, all students were required to keep 'a language learning diary' to

record their own learning within or outside the classroom.

During tutorial sessions, students were given opportunities to practice English through activities/tasks such as a 'puppet show' and a 'role-play'. In order to promote learners' motivation and improve their English learning and communication abilities, 'film/video teaching and learning' and 'surfing English learning websites' were both introduced regularly in the weekly tutorial session as well. When learning English through videos, students could discuss and understand how people communicate in real contexts in terms of observing their linguistic usage and non-verbal expressions. As I, as their language teacher, introduced and demonstrated relevant learning websites, students could immediately experience the advantage of using internet to learn English and then be encouraged to do more surfing during private study time. Because the four project-like learning activities/tasks, 'audio-taped journal', 'role-play (drama)', 'puppet show' and 'final projects', were also considered as MI-inspired forms of authentic assessment in the study, they are discussed in detail in the next section.

### 6.2.3 The MI-inspired Authentic Assessment Tasks

MI theory suggests teachers provide multiple opportunities for students to use their strengths and interests to demonstrate their abilities in contexts or in real life settings rather than evaluating them only through paper-and-pencil tests (Armstrong, 2000; Campbell et al., 1999; Gardner, 1993a; Lazear, 1995). Therefore, multiple forms of authentic assessment tasks (the four MI-inspired project-like learning activities) that are consistent with classroom goals and instruction, and involve students in all phases of the learning process, were introduced during the intervention.

The first one was recording an audiotaped journal regularly and creatively. Learners were encouraged to develop their own audiotaped journal[14] and handed it to me twice

[14] Audio-taped journal was a required assignment, accounting for 20% of the final grade in the course under study. Other requirements were regular attendance (10%), performance in role-play (10%), puppet show (10%), final project (20%), and two listening tests (30%). Since students submitted their audiotaped journals to me twice a month, there were a total of four entries during the two-month intervention. Generally, students recorded their English for about 3-5 minutes in each entry. The content of recording could be discussion of any information received in the class or issues happening in society. Students were advised to organize their ideas before approaching the recorder. After their entries were submitted to me, I recorded my responses and returned the tapes. In addition, the grading

a month for practicing spoken English abilities through their own ways. The second one was role-playing an episode. Students were divided into groups to perform their favorite episode from the drama *Connect with English: Rebecca's Story*[15] that had been recommended for them to watch in the university's Self-access Center after the research started. Each week, different groups took turns to role-play the plot of their chosen episode in the tutorial session. Another assessment activity was the puppet show. Because English has become an international language, the development of cross-cultural awareness or understanding is quite important (McKay, 2002). In the study, I designed the 'puppet show' activity to let students explore the intercultural issue through collaborative work. Every week, students of three groups used English to present different cross-cultural events through finger puppets for stimulating further classroom discussion[16]. On the whole, each student in the course had at least one chance to perform in the drama and puppet show during Wednesday's tutorial session within the two-month intervention. The last one was a final project. The purpose for an individual or a group to devise a final project was to allow students to demonstrate their learning through their preferred approaches, beyond verbal means. A list of MI-informed final project choices (see Appendix 10) had been provided one month earlier before the final exhibition (the 17th week). During the process of preparation, students could discuss with their classmates, specialists in MUST and me, their ideas, inspiration and suggestions. The performance days were during classes in the last week of the intervention, and all students were welcome to invite their friends or teachers to the exhibition for sharing and enjoyment.

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system was announced before their recording, so all students knew how the teacher evaluated their progress. The grading system included four key components: content, fluency, intelligibility and creativity.

[15] *Connect with English: Rebecca's Story*, including 48 episodes, is a series of instructional videos published by McGraw-Hill Co. (1998). Rebecca is an American university student with a 'musician' dream. In her story, love, friendship, family relationship and academic pursuits are all integrated into dramatic plots. In the course under study, students were encouraged to watch at least six episodes a week (one episode is around 20-30 minutes) in the Self-access Center. To prepare for role-play performance (10-15 minutes), video scripts were available if they needed. The information about the role-play evaluation sheet is included in Appendix 9.

[16] Before students collected information for the 'puppet show' presentation, a sample of a cross-cultural event (See Appendix 11) had been provided for class discussion in the 10th week. During the pilot 'puppet show' practice, students were encouraged to develop dialogues together based on the event.

## 6.3 The Design of an MI-based Lesson Plan

Lesson preparation is a thinking process, during which many decisions are made. These decisions should not only satisfy the specific needs of learners but also take note of the constraints of teaching hours, learning materials and the teaching context. Having been a university EFL teacher in Taiwan for eight years, I find developing lesson plans has become quite important to clarify my thinking, as well as to organize a prescribed learning content which definitely reflects the instructional goals that also correspond to a teacher's beliefs. As far as I am concerned, I believe language learning is a process of self-discovery through active use of and exposure to the target language in context. On the way to acquiring the target language, motivation has certainly played a key role to convert input to intake and then output, and classroom instruction seems to be a 'social catalyst' to speed its effects. I have not expected that my students can learn perfect English[17] from me within limited school hours, but I am sure they will use the target language effectively and confidently if I help them recognize how to appreciate themselves and develop personal strategies for English learning and usage, which are valuable for lifelong English learning.

### 6.3.1 The Procedure of Designing a Lesson Plan with the MI-based Intervention

In order to achieve the goal that learners can appreciate their strengths, develop personal strategies and make good progress in English learning, I tried to integrate the content of the assigned learning materials with MI-informed activities/tasks into weekly lesson plans of the study in terms of four stages: awaken, amplify, teach and transfer, proposed by Lazear (1999b). Basically, the four stages have reflected a gradual and complementary learning cycle that matches my course design principle — learning from known to unknown in safe and comfortable learning situations.

When designing lesson plans for an EFL course, I used to start the first class of each week with awaken and amplify stages, in which activities were designed to attract students' attention, stimulate their interests and provide background knowledge of the target unit. After that, activities of instruction (teach stage) and of application (transfer stage) were implemented in pairs or groups when students felt ready. Therefore, the

[17] A prevalent expectation of English learning commonly held in Taiwan is a native-like (standard) accent after being taught (Liou, 2001).

four stages became the basic routine of a language lesson in the study. However, several reflective questions were guiding my thinking when designing each lesson based on the cycle (Chao, 2001a). Questions such as: What do I want my learners to learn from this lesson (clear goal)? What activities should be included in the lesson (variety of activity)? What grouping techniques will I use (class management)? How to link learning content to real context (authentic content)? How to assess learners' learning in suitable ways (comprehensive assessment)?

After clarifying these questions, I elaborated each lesson in terms of four stages. The functions of the four stages in the study are explained along these lines. (1) awaken stage: students use their multiple intelligences to feel the target language; (2) amplify stage: students are encouraged to watch, listen and strengthen the target language through multiple intelligences; (3) teach stage: teacher guides students to think and learn the target language through multiple intelligences; (4) transfer stage: students use multiple intelligences to practice, perform and demonstrate the target language. The basic application of the four stages in this study can be found in lesson plans of some regular classes (see Appendix 8). Although the activities/tasks of a tutorial session and out-of-class hours are not signaled in these lesson plans with the stages that they belonged to, they still followed a learning cycle. For example, watching *Rebecca's Story* in the Self-access Center was in the stages of awaken and amplify. Teaching selective episode(s) of *Rebecca's Story* each week was in the teach stage. As regards role-playing a favorite episode, it could be roughly categorized under the transfer stage. In fact, the four project-like learning activities, which were integrated with instructional activities and considered as authentic assessment tasks, all had gone through the four stages. In other words, learners with these assessment tasks should experience a process of constant exploring and growing before giving their final presentations or products.

## 6.4 Struggles and Solutions during the Process of Course Design

The procedure of designing the intervention of multiple intelligences strategies and MI-based lesson plans did not go as smoothly as I had expected, because I constantly struggled with my beliefs and experiences and with contextual factors. In this section,

I discuss the issue with four examples drawn from teaching diary entries[18] and try to identify the guiding principles underlying my solutions.

### 6.4.1 How to Help Students Develop Communicative Competence

The first struggle started with my beliefs about English. I saw English as a means for international exchange, and authentic English usage involved an integrated application of multiple intelligences. When effective communication in the real world was the goal, MI theory gave implications for the importance of developing 'communicative competence' rather than mastering linguistic competence only. However, I must admit that it became difficult for a non-native English teacher to teach pragmatic (functional and sociolinguistic) competence and paralanguage (gestures, space and paraverbal features) of the target language when few resources were available in EFL contexts. My diary entries showed my struggles, persistence and solutions.

I was not satisfied with the content of the chosen textbooks because of their failure to provide helpful information for EFL learners in developing communicative competence; however, the limitations of the surrounding environments and my personal competence made me wonder how to implement my beliefs. The exemplar entry listed below showed my struggles and persistence:

> *I want my students to know the fact that accumulated knowledge of grammar and vocabulary cannot guarantee successful communication...Students need to develop more abilities than linguistic knowledge...To my disappointment, most textbooks focus on the finished product of communication...the books we use now, written by native speakers, do not clearly give examples of the routine for communication. They do not tell students how to use English appropriately in different contexts and do not provide relevant information in the teacher's manual either. Students may memorize many patterns but do not know how to use them in suitable situations...They may understand all listening materials but have no ideas about how to respond appropriately... I hope I can provide concrete examples of the target units for students to compare and discuss...Students can see the real communications around issues such as 'seeing a doctor', ... and 'asking for help during traveling' etc., instead of only listening to artificial 'listening tasks' in the air...However, it seems difficult for me to create this kind of information because English is my foreign language and because I cannot provide real situations for students to experience ...I need to help students develop pragmatic competence and practical knowledge of paralanguage through MI...I need concrete content and examples for application...What should I do? I do not want to be a tape-playing teacher or a grammar-translation machine as some colleagues suggest to me...I ask the director about the possibility of changing textbooks, but the answer is 'no'...I know what is good for my students if they want to use English effectively in real*

[18] In original diary entries, I frequently mixed Chinese words or sentences into my writing, especially in quotations from learners and colleagues. For easy understanding, the extracts mentioned here were revised into an English-only version.

*contexts. Ideas...solutions... what should I do?* (15 March)

After a few days, I developed an idea for a solution through personal observation and active searching for possible sources. My entry documented the solution:

> *I find many students enjoy seeing movies, even English language movies, so I decide to find some films and videos that may provide contexts relevant to the chosen units for learners' observations and discussions...In this week, I asked some of my colleagues for advice...I called representatives of ELT textbooks agencies in Taiwan for assistance...I contacted self-access centers of six universities in northern areas of Taiwan to collect relevant film/video catalogues...I went surfing the website... I visited several film rental shops to gather information...I get lots of valuable information... Luckily, I find Connect with English: Rebecca's Story is a good choice. All conversations are natural and contextualised...and I can find the relevant topics I look for among the 48 episodes of the instructional videos as well... I review all episodes many times and decide to use it as a supplementary material for the course...I really like its story plot and relevant songs such as Dream Catcher. I will suggest the Self-access Center purchase them...I think my students should be motivated to see these videos after class.* (22 March)

Because of my persistence and efforts, I finally found ways to develop communicative competence in my students.

### 6.4.2 How to Familiarize Myself with the Eight Intelligences

Another struggle was obviously presented in the fact that I was not an expert in the eight intelligences, but I wanted to integrate the MI-based activities/tasks into the standardized university EFL course for implementation; nevertheless, I did not give up my preference for applying MI theory in my instruction because I thought these MI-based activities/tasks could benefit different learners. Again, my belief about teaching gave me persistence and resulted in my struggle. The process of struggling was also a process of self-awareness:

> *The more I become familiar with MI theory, the more I feel I need team work... However, few colleagues want to take risks doing something different...I keep thinking about the purpose of my teaching...earning money...helping learners or self-actualization... Any way, I want to improve and learn...it is my responsibility...I should be a good model for students to follow...I can directly tell students my needs and ask their cooperation...It is normal for anyone with a different intellectual spectrum, but I think it becomes quite difficult for Chinese teachers to ask students for help.* (6 March)

Because I was aware of my strengths and weakness, I tried to empower myself by extensively reading books in different fields and asking specialists or colleagues for suggestions or clarification. Moreover, I was looking for opportunities to learn new things. The process of active inquiry and learning became my strategy to overcome these limitations. Several sample entries are presented below.

The first entry showed an understanding of my weaknesses and my determination to improve them:

> *I know myself...I am not good in nonverbal grouping techniques... I cannot dance well... I am not really familiar with current English songs that my students like...I have a good voice but kind of dumb in playing musical instruments...I am not a person who has talents in socializing with people...Nevertheless, I think all situations can be improved if I have chances...I can create opportunities for myself...Ongoing-learning is not only for my students but also for myself... I want to discover my potential in teaching different students effectively...* (8 March)

Then, I actively asked colleagues (experts) from different departments in my university for books worthy of being read. I was eager to broaden my knowledge base about different intelligences and prepare myself to be ready to approach more students:

> *In this week, I have asked several colleagues in different departments of my university for easy-to-read books to empower my basic knowledge in their fields...they all are friendly and helpful...some of them even promise me to be my tutor... this week, I read several books about 'doing experiments in nature', 'consulting skills', 'introduction to classical music', 'folktales of different cultures' and 'homepage design', etc. I gain many insights and get a lot of fun from reading and trying them...I think all this information should be helpful for me to experience different intelligences... I decide to read a wider variety of books during my leisure time, instead of only reading books or journals in the field of language education....* (22 March)

Another example showed my enthusiasm to look for opportunities of learning new things:

> *Today, I am quite excited to see several announcements posted in the bulletin board of student activities... There will be an interesting workshop about how to reduce pressure held by the Center of Student Counseling Service in the coming Friday afternoon...I think I want to attend and gain some ideas... Another one is a training course about how to be successful actors and actresses... The drama club has invited several famous experts to teach interested students... Great! I want to go.* (2 April)

From these entries, it is clear that I was trying hard to broaden my own competence in Multiple Intelligences for effectively implementing the intervention.

### 6.4.3 How to Avoid Superficial Application of MI Theory

Although MI is a well-known theory among teachers, how to apply it appropriately seems to be not easy. In order to avoid a "shallow" understanding of the MI theory as Gardner has reminded practitioners (Gardner 1999: 89-92), I kept reflecting on my lesson plans and figuring out if these employed activities/tasks which could benefit the cultivation of learners' minds or bodies, and facilitate their target language learning. When I reviewed my initial design, I found most activities functioned as interest triggers or memory strengtheners. More activities/tasks were needed to

stimulate students' multiple intelligences (personal strengths) to 'learn' English, such as developing strategies for solving their learning problems, and to 'use' English, similar to creating a product or project. My consideration of how to apply the theory seriously and meaningfully in instruction and assessment left me struggling with searching for suitable practice activities/tasks.

My concern with the issue of how to apply MI theory appropriately in educational contexts was presented in my diary entry through personal observation, reflection and self-awareness:

> *I find more and more teachers in Taiwan know MI theory, but they use it in wrong ways... The worst is that some teachers in private language schools use MI as a commercial means to attract parents' attention and earn money... I agree with Gardner's ideas...moving arms or running around cannot enhance bodily-kinesthetic intelligence... intelligence is not only a common skill such as talking and climbing...intelligence is a potential to solve problems and create products...I need to keep this identification in my mind when implementing MI-based activities.* (2 March)

A re-examination of my initial design in MI-based activities pushed me to look for more activities/tasks that encourage the active application of multiple intelligences. During the process of making regular diary entries, some insights (solutions) were triggered. The following entry presented not only an exploratory process but also a discovery process when I was eagerly looking for a solution:

> *I spend the whole day re-examining the activities I want to use in the course as intervention, and I find most of them are used to strengthen memory or promote learning interests...It seems not enough...I need to include more activities for learners to solve problems or create products...like a celebration of learners' differences and efforts...role-play and puppet show sound good...But I do not have enough time in regular instruction time...the tutorial session may be used to implement these activities...these activities can be alternative assessment tasks as well...The original plan for tutorial session should be changed...Learners cannot be passive learners only...extensive listening training in language lab is not enough...they should use the target language to do something...doing projects are good ideas...guidelines are needed if I want students to create or implement a project....* (11 March)

From these entries, I realize that the process of constant thinking and writing helped me propose solutions to my dilemmas and brainstorm meaningful MI activities.

### 6.4.4 Chinese Culture and Multiple Intelligences

Ideally, university students who have at least a six-year high school EFL learning experience should be ready to accept a communicative EFL course, but literature (Rao, 2002) and my previous teaching experiences told me it would be difficult to implement an extremely communicative course for Chinese students in an EFL

context because of a host of constraints. Nevertheless, I did not decide to revert to the traditional approaches, characterized as grammar-translation and audio-lingualism, because these approaches cannot reflect the reality that different learners have different needs, even though some scholars have argued these approaches match the Chinese culture of teaching and learning (Hu, 2002). The Methodology debate is not my interest because the dynamics of classroom teaching and learning cannot be recognized only through that issue. What I care about is how to gain insights from different theories and develop suitable tasks or activities to benefit my learners in terms of constant observation, exploratory teaching and self-reflection.

I appreciate the merits of MI theory because it respects individual differences. However, doing is one thing and expressing is another. The shaping of my justification about the appropriateness of the MI theory to Chinese learners in an EFL context became another struggle for me during the process of course design because some colleagues directly questioned me about the sensitivity of MI theory to Chinese culture. In fact, I did think about the question before my application and found what Gardner has proposed is compatible with what the Chinese philosopher Confucius had promoted for education—*yingcai shijiao* (teachers should vary their ways to approach students with different talents). The struggle was that I knew my reason but my colleagues could not understand my position and looked for an explanation. My diary entry documented part of my dialogue with two colleagues about the issue and presented my reason for using MI, which turned out to be a solution to my situation:

> *Today, I met two critical colleagues... They were curious about my intervention ... They thought MI theory might be like another Communicative Language Teaching that cannot find a place in Chinese communities...the result will be criticized as "another cultural imperialism from western society" or "a lip-service approach". Nevertheless, I tried my best to tell them why I think the theory is compatible with Chinese culture and the reason I use it.*
>
> *Firstly, I asked them what is the fundamental assumption underlying the Confucian tradition of education. They quickly answered me "youjiao wulei (No distinctions should be made in dispensing education)". Then, I confirmed if they agreed that the strong belief held by Chinese culture about education is that "Everyone is educable and capable of achieving perfection". They said, "Yes". Later, I asked them "What are considered as determinants of educational achievement in Chinese culture? Are they intelligences, abilities, diligences or others?" Both of them replied to me "diligences". Following their words, I asked them if they agreed with the Chinese motto "diligence compensates for stupidity". They said "Of course". After clarifying their thoughts about educational beliefs held by Chinese culture, I told them the main claim made by Gardner is "everyone has a unique blend of intelligences to present their different talents" and explained what these intelligences are and mean. "...You mean Gardner respects all learners because he believes each of them has different talents" one of them asked me. "Yes, he believes all students are educable and capable as Confucius thought but he gives different*

*suggestions for learning" I said. "According to Gardner's views, how to develop personal strengths is more important to achieve effective learning than how to be a diligent learner with pains-taking efforts" I explained. "Yeah…it is quite constructive…students need to be diligent in right ways…their strengths…" one of them concluded his understanding. "Maybe that is why Chinese students consider studying as pains-taking experience…they keep reminding themselves to work hard without developing suitable strategies…" the other supplemented.*

*…I could feel they seemed to be persuaded by my explanation and interested in my intervention…they borrowed some books from me after thirty minutes conversation…They also asked me if I needed help for the research…I was glad to have the chance to clarify my position to my colleagues…their support will make my intervention easier…I know what I am doing, I am not used to jumping on another bandwagon…I am not sure of the actual effects of MI on my learners but I know why I want to use the theory and the merits of the theory…I think Chinese teachers need to open their minds to gain some insights from good theories that may enrich our culture of teaching and learning….* (17 April)

The entry showed that I was able to clarify my own viewpoint by explaining MI in the context of Chinese learners to my colleagues.

### 6.4.5 The Principles Guiding My Solutions

As I reviewed diary entries relevant to my struggles and solutions during the period of course design for the first time, I thought I was a very determined teacher because I persisted in finding solutions to these problems. When I discussed with a good friend (a university associate professor of educational psychology) about my finding, she asked me if she could read these entries. After reading several extracts, she told me "I agree you are a very determined teacher; however, I also think you are a teacher with high self-esteem. You believe yourself to be capable, significant, worthy and successful". After listening to her comment, I assured her I was a very humble teacher and I understood the importance of self-reflection. She said with a smile, "I know you are…and just remind you to examine your teaching through this perspective. You may have new findings". When I went back to my entries for further understanding, I found it was true that I was very confident about my beliefs and I was willing to take risks and even fight for my goals and values. Implicitly, I expressed that what I did was important and I could solve these problems successfully if I wanted to try. From a positive view, high self-esteem can motivate language teachers to achieve their instructional goals efficiently. On the contrary, unrealistic high self-esteem may blind language teachers' visions and make them reject others' opinions. I am reminded to be cautious about my 'high self-esteem' when approaching my teaching role to make sure it operates in positive ways.

When I studied my entries again for understanding of my own underlying principles, I found 'accomplishing goals' and 'achieving self-actualization' were two key principles guiding or motivating me to seek solutions for my problems. The two principles were consistent with my high self-esteem in my teaching role. I wanted to accomplish several goals such as helping students develop communicative competence and avoiding superficial application of the MI theory. These goals that symbolized my beliefs are thought to benefit EFL learners, so I was very active to find solutions with various attempts. On the one hand, it was clear goals that pushed me to try harder, but on the other hand, it was my personal expectation to realize my beliefs.

## 6.5 Decision Making[19] during the Intervention Practice

Since classroom learning is dynamic in nature, lesson plans may be modified when learning contexts change (Richards and Lockhart, 1999). Unpredictable aspects of teaching may occur in and out of class, teachers therefore need to make immediate decisions or develop strategies to handle these situations. In addition, after-class reflection is important and necessary because the ongoing process of self-inquiry and awareness may help language teachers generate appropriate modifications to benefit the quality of implementing the next teaching plans. In order to provide suitable support for learning, language teachers cannot solely follow each lesson plan rigidly and ignore the complicated interaction of the language classroom (Richards and Lockhart, 1999). They need to recognize practical needs and make suitable changes, as the contexts require. Furthermore, understanding the process of their own decision making is crucial for language teachers, because the exploration of their thought processes about making changes can facilitate the understanding of "teacher learning in general and language teaching in particular" (Freeman, 1996:362).

During the practice of the MI-based intervention, my personal beliefs and experiences, informal class observation, and other contextual factors (e.g. interactions with students), all led to some modifications in original lesson plans. Since some important events and ideas in relation to my decision-making throughout the two-month intervention were documented in my teaching diary, these entries become valuable

[19] It refers to decisions teachers make while teaching and after teaching (Richards and Lockhart, 1999).

data to explain how I dealt with these situations and made decisions. As I reviewed these entries, three main themes, 'cooperative learning in a large class', 'learners' contributions' and 'unexpected events', emerged. In this section, the three themes are discussed with the accompanying extracts respectively, and the operative principles that underpinned these themes are explored as well.

### 6.5.1 Cooperative Learning in a Large Class

My decision concerning extensively integrating cooperative learning into activities/tasks of a large class was attributed to my beliefs, observation, reflection and students' responses. The first extract presented my original reasons (my beliefs) of integrating cooperative learning activities/tasks into the course although some colleagues doubted its effectiveness:

> *Some senior colleagues keep reminding me that cooperative learning cannot work well on 'our learners' because it is difficult to control the quality of their tasks in such a large class. In addition, learners may chat in Chinese all the time and they may learn bad English with one another. Nevertheless, I still include some activities/tasks of cooperative learning in my lesson plans because I believe English is for communication and developing interpersonal intelligence is quite important for language learners.... What does bad English mean? Maybe it is not 'standard' and has a 'foreign accent'... Well, I think 'intelligibility' is more important than native-like for foreign language learners.* (28 April)

Then, the following quotation described how my informal classroom observation of students' interactions through cooperative learning activities/tasks confirmed my original decision. I could feel a positive learning atmosphere was built through students' cooperation. Small groups seemed to be very beneficial for meeting learners' affective needs and producing more opportunities for practice:

> *I walked around the room to understand students' progress and I found all of them (twenty-three pairs) were devoted to the task 'Matching verbs with suitable Job skills and job search.' They helped each other with 'fragmented' English, body language and translation machine but they really enjoyed working together. I could feel their strong willingness to learn English that really touched me. I told my colleagues we should trust students because they need opportunities to speak out!* (6 May)

The next entry showed that I ignored the negative responses about my class from colleagues of other courses because I believed in what I saw. In other words, my experiential knowledge allowed me to insist that cooperative activities/tasks could actually encourage learners to use the target language without hesitation because of a supportive learning environment:

> *My observations tell me students really enjoy group work although some teachers of other subjects close to my classroom complained, "Your class is so noisy! Everyone is*

*talking without paying attention to you!"...How can a language class be very quiet? I cannot understand...language is learned for use not for study only...I am glad that students in the class are willing to be talkative. I think they must feel very comfortable to talk about...low anxiety and high motivation is what I expect.* (13 May)

My final decision about modifying the original plan and integrating more cooperative learning activities/tasks into the course was mainly due to students' support as well as their positive affective experiences:

*Since last week, I have got lots of (forty-two) e-mails from students talking about how interested they feel to practice English with different partners. They told me they cherish these chances to learn English through communication. Many of them also mentioned they continue their English conversation after class. One student wrote "once start, never stop!" to express his motivation. I think I may modify my lesson plans to integrate more opportunities of cooperative learning with other MI-informed activities/tasks.* (20 May)

This type of feedback from students encouraged me to continue with more cooperative MI activities in the course of the following weeks.

### 6.5.2 Learners' Contributions: Information Centers

The voices and strengths of students cannot be ignored because I actually experienced my learners being rich sources throughout the intervention. They were like enthusiastic 'information centers' which not only helped me expand my original plans to provide students with more learning opportunities, but also provided me with much valuable information about their classmates that was useful for running different activities/tasks efficiently. Several examples that had been noted down in my teaching diary are presented below.

#### 6.5.2.1 English songs

In the first example, I decided to 'enrich' my course by adding more musical elements after a discussion with several students. The story of this example started with a 'music smart' activity. The first extract described how a 'music smart' activity aroused students' motivation to English learning and even stimulated some students' willingness to provide me with English songs for classroom sharing or instruction:

*Students like English songs. After Monday's class, many students asked me for the lyrics of the fifteen songs that had been played in the 'Music Smart' activity. I was impressed by their enthusiasm. ...This morning, I got six e-mails from students. They gave me different lists of 'good' and 'teachable' songs. They told me they are glad to be my 'counselor' in collecting relevant music or songs for classroom usage. I think I need to figure out how to respond to their kindness.* (8 May)

The next entry showed my consideration in taking students' ideas into my course

because I knew the importance of including learners' interests. Therefore, I actively invited those enthusiastic students through e-mails for a further talk:

> *Tonight, I sent the six students my appreciation about their ideas. I want to make appointments with them this week and discuss my needs.* (9 May)

Because the music or songs that students wanted to contribute were not actually related to our target units, it was not suitable to integrate them into regular instruction time. However, I appreciated students' enthusiasm and did not want to disappoint them. Moreover, I believed more input was better than nothing. The idea of 'using break time' came to my mind during my discussion with interested students and they seemed to be happy with my suggestion. The final decision emerged in my diary entry as follows:

> *I feel encouraged because of students' support. These 'music-smart' learners really want to contribute to the class, so this class will be very 'musical' in the following weeks. We will have break time music/song every week except for some activities/tasks integrated with musical-rhythmic intelligence.* (12 May)

The last entry on this theme was about my students' hard work for their promises and my appreciation of what they did. Students really cherished the chance to contribute their favorite English songs to the class, even only during the break time:

> *I am so pleased to see my students have actively prepared Chinese-English handouts for introducing the song they will play during break time. They are adorable!* (13 May)

From this experience, I realize the importance of caring for learners' interests and affective needs, and allowing them to contribute their ideas to their classes. Learners are always motivated if we, teachers, respect each of them as a whole person.

#### 6.5.2.2 Field trips and extracurricular activities

With the purpose of giving students more chances to discover and use English in real contexts, I had arranged one field trip and one extracurricular activity for the duration of the two-month intervention in my original lesson plans. However, my students made things different. They actively suggested more places for field trips and provided relevant information for extracurricular activities. Their eagerness pushed me to consider the possibility of including more out-of-class activities into my lesson plans. The initial entry about arranging out-of-class activities started with my reason and worry:

> *I think it will be good to provide out-of-class activities during the two-month intervention, because students need contextualized learning. However, I still wonder how many of*

*them will attend these activities. I don't want to force them and I know they are busy with many subjects.... I think I need to encourage them to come and have fun together.* (29 April)

The next entry showed how the first out of-class activity became a success and motivated two students to be volunteers in providing relevant information for out-of-class learning activities or arranging field trips:

> *I am glad that the first out-of-class activity attracted many students' participation. That was a successful English learning seminar and I found my learners really enjoyed it.... After the seminar, two students came to me asking for approval to arrange more after-class activities for the class and their words really moved me.*
>
> *Ling said, "I am surprised to find many classmates like to attend this kind of activity. My sister and I are English language lovers, so we attend many activities like this on weekends. If you don't mind, I'm glad to provide weekly information for the whole class" The other student James even came out with some ideas for field trips. He said, "We may visit Watson's and COSMED when we are doing the unit 'Health', because my good friends work there and they will arrange it for us...You know, many products in drugstores are imported from USA, U.K., Australia and New Zealand.... It is a good chance to understand those imported products through their English interpretations with my classmates and teacher".*
>
> *I told them I appreciate their ideas and I will contact them later through e-mail. I think I need to include their ideas because they are constructive to the class.* (2 May)

The following entry showed my decision about cooperating with the two students to provide all learners in the class with more opportunities for out-of-class learning:

> *I contacted the two students this morning... During the lunch hour, I discussed with them what I need for the class. They seemed to be pleased to cooperate with me.... Ling will be in charge of collecting information, from which I will choose suitable ones to announce for attendance. James will contact places for field trips with his partner Ho, and pass information to me. Then, I will negotiate with students and make final decisions. I am satisfied with what I have done so far. Hopefully, other students will appreciate our arrangement and benefit from it!* (3 May)

From these entries, it is clear that these students could generate activities for their own learning. As I trusted my students and encouraged them as my course developers, they not only did well but also successfully. For example, we had a wonderful field trip — language learning in a supermarket:

> *I think I will not forget today's wonderful experience-- learning English with my students in RT-Mart (a supermarket)...James, Ho and Bill told me their plan before today's field trip...It was a group competition for contextualized English learning.*
>
> *I met all students in the parking lot of RT-mart around 3:30 p.m. (Saturday afternoon)... Students had been divided into twelve groups (4-5 Ss as a group) already...The first hour was familiarization with the environment...students and I went around the departments that they felt interested in and tried to learn English from the products... The second hour was group time. Each group found an area or department they wanted to focus on and then each group's members tried to remember as many items as possible...Moreover,*

*they needed to know details such as ingredients, where they are made, for what purposes, and who uses it and so on...Ho even announced "it will be good if you can link your group work to the units we are learning...maybe you will get extra points from our English teacher...haha..." many students also laughed... It was so interesting to see students busy checking products, discussing content and trying strategies to remember things. Of course, many customers were attracted by their behaviors...*

*Students could ask me for help but only twice for each group...When time was up, all students gathered in a big square at the back of the supermarket and the competition game started...I was the judge and I invited the responsible students of the trip as judges too...My students' funny performances attracted many pedestrians' attention.... It was an unforgettable afternoon.... Finally, the winner was recognized as the group Purple Lady: Four girls...their gift was a free dinner... After the field trip, we went to an all-you-can-eat hot pot restaurant...The other forty-seven students and I shared the bill of the four girls...it was fun. We also had a very good night.* (1 June)

As can be seen by my diary entry of the student-organized field trip, students were highly motivated to learn and use English in the context of an authentic EFL learning experience.

#### 6.5.2.3 Helpers and facilitators in the MI-based course

As a result of understanding the importance of respecting individual differences in the language classroom, MI was integrated into the study to reduce the risk of ignoring students' various talents. Maybe the MI workshop or on-going MI-based course activated students' appreciation of other classmates, so students kept telling me their friends' talents and what they could contribute to the class via emails. Their information made me discover that the class was full of different experts and geniuses. The strengths of learners were not something I could observe immediately within a few months, but they became familiar to me in a very short time with the assistance of my students. This kind of recognition helped me teach the MI-based course more smoothly.

The first example described how a student helped me understand the characteristics of his classmates and made me be aware of the importance of choosing the right persons to perform or do different classroom activities. I really benefited from his information because this kind of understanding could reduce uncomfortable learning or teaching experiences and avoid misunderstanding between teacher and students.

The first entry documented my carelessness about calling on a student for physical performance without understanding his difficulty. What I had done made the student

feel bad but I was hardly aware. However, his good friend told me the situation through e-mail and gave me suggestions with relevant information about the classmates:

> *I got several e-mails today. ... Bryan seemed to be very upset because he had been chosen to perform in one of today's bodily-kinesthetic activities. I didn't know he was too shy to perform in front of others. His good friend Daniel wrote, "Dear teacher, Bryan is a good cartoon drawer but not a good performer. After today's class, he told me he felt extremely embarrassed to have the worst performance in the class. I think, next time, if you want someone to do physical activities individually, you'd better call Bi-chi, Chu-li, Tsai and Han. They are fun makers and good performers. Trust me! They are anxious to be called.... Bryan needs time." I did not know a random call had caused Bryan's uneasiness but I am glad Daniel told me. He gave me valuable information.* (15 May)

My student's suggestions made me aware that I could build Bryan's confidence in a spatial-visual activity where his skills and talents could be shown to the class. The following entry showed my awareness about choosing the right persons for different tasks let me find a chance to make the student Bryan who earlier felt embarrassed to perform a physical activity, feel good about himself in front of others this time:

> *I can feel everyone is busy with his or her final projects. In order to make the final exhibition more formal, I told students invitation cards were necessary. Some students suggested we should buy the ready made ones but others wanted to design our own. During the process of discussion, Bryan's name came to my mind. I said maybe we needed Bryan's help. To my surprise, more than half of the class students clapped their hands. Finally, Bryan agreed to work with Irene to design a special card for the final exhibition.... This was the first time I saw Bryan smiling in the class.* (6 June)

This experience has reminded me of the importance of understanding students' different talents for effectively running various learning activities/tasks.

The second example was talking about how a student helped me make 'a good idea', setting up an English website, come true in terms of his expertise. My initial impression of the student that I could ask him for help was completely based on the information passed to me by another learner.

Again, I benefited from my learners, not only in getting information but also in problem solving. My diary entry presented my awareness of personal weakness and appreciation of this student's talents:

> *Many students told me they hope we can set up an English learning website for information sharing and after-class English chats. I think it is a great idea but I am a 'computer idiot' and have no ideas about how to set up a website for my students. Maybe Dick can help me! I remember Lee told me Dick is a computer expert and he has won several awards in program design. I will e-mail Dick tonight to ask him about the possibility.* (17 May)

I actively asked the student, who is good at computer science for help, and his positive feedback made me feel encouraged. Again, the student's assistance expanded the scope of my course because more opportunities to practice English would be provided through internet communication:

> *This morning, Dick sent me e-mail back and promised me he will set up the website within three days. He wrote, "It's my pleasure to do something for the class. I don't know who told you I am an expert but I really appreciate your attention. I am just a computer lover. Don't call me 'expert', please.... I will set up the website within three days. Don't worry about the technical things. What I need is suggestions for the content. I think I will e-mail all classmates and they may contribute some ideas...." Dick's feedback really encourages me. I am pretty sure more after-class Internet-learning will happen in the class.* (19 May)

Apparently, when drawing on students' talents and skills, hearing about them from classmates, the whole culture of the class became inclusive for all students.

### 6.5.3 A Challenge to the Language Teacher: Unexpected Events

Reactions to unexpected events are a challenge to a teacher's competence and skills. Because a teacher's decisions may lead to "a derailment of the lesson or a contribution to learning" (Allwight and Bailey, 2002:25), professional judgment is necessary. However, in order to improve our professional intuition or problem-solving abilities, close observation, active exploration and self-reflection are important (Richards and Lockhart, 1999). My diary entries on four events that reflected this issue are described below.

#### 6.5.3.1 "I have no idea!"

The first unexpected event happened in the last hour of the MI workshop. My original plan was to let each student have a chance to do an independent self-evaluation on how to use his/her strengths to learn English effectively after knowing the MI theory. However, I found that many students sat there looking at me and waiting for answers although I had given them one handout, *A List of Eight Learning Ways* (Chao, 2001a: 19-20), to guide their thinking and stimulate their imagination. I definitely wanted learners to create their own answers instead of depending on the teacher's ideas, but the feeling that they needed a supportive learning environment came to my mind soon after I asked one of the students to clarify a reason for their hesitation. Therefore, I changed the format of the activity from 'independent thinking and group discussion' to 'group thinking and whole class discussion'. My observation, thinking and learners' responses pushed me to make a prompt decision. Students' reaction to the

decision made me aware of the fact that students' needs do not always follow my original plans and expectations:

> *Today's workshop was good...I hoped my students could be inspired by the MI theory...*
>
> *Students today contributed a lot of their ideas to the workshop for discussion and sharing, but most were done through group work...They seemed not used to being independent thinkers...Anyway, they did well through group cooperation finally.... To be honest, when I saw students sitting there looking at me without actions during the time of independent self-evaluation, I was very disappointed. Instead of blaming them, I thought I should be sensitive to their needs. "Do they feel bored? Tired? Or my instruction is not clear?" Many questions came to my mind at that time. I walked to one of the students and asked him, "Do you need help?" "Yes, I have no idea. Could you give us more examples...or May I discuss with my classmates?" The student replied to me sincerely. I immediately realized students needed time to experience the theory and then develop their personal strategies. Therefore, I announced to the whole class "if you feel comfortable or if you think it may help to work in groups, you can do it! 3-4 persons and make sure good ideas are generalized..." "Hurrah!" I found students quickly formed their groups and started their discussion...I had a lesson today. That is my students' needs do not always follow my plans and expectations.* (24 April)

Being able to react when a student said "I have no idea" enabled me to provide another way to help students learn by using their interpersonal intelligence. From this experience, I have realized the importance of being a sensitive and understanding teacher to achieve effective classroom teaching and learning.

#### 6.5.3.2 "More Chinese, please!"

The second event began with an interruption generated by a student, begging for more usage of native tongue (Chinese) during the class time. My informal observation of students' responses let me immediately decide to employ a code-switching technique—using English and Chinese interchangeably as the class proceeded. I understood judicious use of native tongue could facilitate the management of the learning process, particularly in grammatical and lexical issues, but the lack of available English input in EFL situations made me feel the necessity of using English as the medium of classroom instruction. Therefore, I tried to explore a suitable solution after the class. The following entry described the event and a process of self-inquiry and exploration. A conversation with an experienced teacher trainer shed insights for me and finally I drafted an eclectic solution to the problem:

> *I felt embarrassed in today's class because one student interrupted my lecturing by loudly saying, "More Chinese, please!" I stopped teaching and asked them "Have you no idea about what I am saying?" Some students nodded their heads. "O.K. but you don't need to understand everything. You just need to catch key points!" I said. Meanwhile, one student replied, "We have no idea about the key points". Therefore, I immediately decided to use both Chinese and English as the class proceeded to make sure they felt comfortable.*

*During the break time, I asked some students for opinions and most of their answers were similar, "our listening abilities are poor, so we can't follow what you say and feel confused...."*

*After today's class, I kept thinking, "what should I do?" Then, I talked to one colleague who had done teacher education for kindergarten EFL teachers for several years. She said, "Classroom English is quite important to help students follow directions, or understand what you say, easily. I always ask my student teachers to practice 'classroom English' before observing English-native-speakers' classes. Student teachers told me the knowledge of classroom English is helpful to follow the class and useful to demonstrate English teaching efficiently in internship". Her advice seemed reasonable. EFL students need background vocabulary or conventional expressions to build up their earlier confidence.*

*Finally, I decide that a list of useful classroom English for students is needed; nevertheless, more visual presentations and body language in the class are also needed to help learners understand what's going on in the class.... However, Chinese will also be used in situations where comprehension of the target learning content can be achieved effectively.* (29 April)

I did use more Chinese because of students' request. However, after several talks with some students and an experienced colleague, as well as following a self-reflection, I decided to use more useful classroom English with the help of visual aids and body language to ease the transition for EFL students.

**6.5.3.3 Teaching pronunciation**

The third example was that an unexpected request for teaching pronunciation challenged my competence. I used to think teaching pronunciation was a junior high school EFL teacher's job, so I did not have real experience in teaching adult learners pronunciation skills and I did not give much attention to the issue either (in fact, I only had experience teaching young children and myself). However, the problems produced by adult EFL learners without solid background knowledge of pronunciation skills became obvious in the class. Their unintelligible words/messages might cause misunderstanding or a breakdown of communication. Because EFL learning is quite different from ESL learning, and the scanty exposure to the target language may make the 'let-it-just-happen' expectation impossible, explicit teaching becomes important. The extracts from the diary entries listed below described my immediate reaction to the learners' request and a process of after-class exploration for up-dating my professional skills for teaching pronunciation to meet learners' needs:

*Today, when we discussed different types of illness, one student gave us an example, "log conceal". I didn't catch his meaning first time and another student explained, "He means long cancel". I finally understood he meant "lung cancer". When I was demonstrating how to pronounce 'lung', and 'cancer', some students could not help asking for concrete examples to effectively pronounce different vowels, and some even*

*begged for the rules of 'phonics'. "I hope I can pronounce all words I see", one student said and more than half of the class nodded their heads. Therefore, I stopped my original plan—eliciting more names of health problems, and started to teach them a simple chant for phonics and how to pronounce vowels correctly by using gestures.*

*After today's class, I went to the school library and Internet searching for practical books on teaching pronunciation or phonics. I also contacted colleagues for suggestions. One colleague was very enthusiastic to help me by lending me several interesting teacher resource books. Since we don't get beginners in university, I may have ignored pronunciation teaching and think it should be a junior high school EFL teacher's job. ... Although students looked satisfied with my explanation and demonstration today, I think I need to prepare more useful handouts for them to practice after class...The content should include the articulatory skills and other features of pronunciation such as stress, rhythm and intonation.* (28 May)

In order to satisfy students' request – a need for help with their pronunciation – I tried to find ways to help students to build their confidence in speaking intelligible English. From this experience, I really feel that the teacher's life-long learning is necessary for effective EFL teaching and learning.

**6.5.3.4 Jokes**

The fourth event was about understanding the 'story behind jokes'. My experiences tell me all students like jokes no matter if these jokes are versions of English or Chinese. However, most English jokes, especially those produced by non-native speakers mainly arise out of a shortage of communicative competence, such as pragmatic problems, incomplete grammatical knowledge and difficulties in nonverbal aspects (e.g. eye contact and the stress of a sentence).

The first part of the next entry documented how I stopped a group of students, telling English jokes after finishing their jigsaw task, with an excuse "I need your help" to avoid their behavior influencing other students. Nevertheless, the fact that many students wanted to know the jokes they were telling, and the idea that students should understand the importance of developing communicative competence when learning English, came to my mind. Finally, I decided to change my original plan and let the topic continue when all students finished their tasks. The second part of the entry presented how a joke issue was allowed to continue and then aroused learners' hot discussion as well as their awareness of English learning:

*In today's class, we had team jigsaw problem solving. Students needed to put scrambled conversations in the correct order. One group had finished very fast and then they started to talk about Internet English jokes. Their laughter had influenced other groups, so I came to the group and told them I needed their help for other teams. The four students followed what I said and joined different groups.*

*After all teams got the problem done, instead of using my original plan—asking each team to read aloud the conversation, I suggested the four students tell us the jokes they enjoyed earlier because I thought many students were eager to know. After their sharing two jokes, "You see, no seat, if see, stand see" and "Two cars Bom (bump into together) and A-Yi (the sound of ambulance) came", I saw everyone laughing loudly and asking for more. I took time to explain how important it is to develop good English proficiency and avoid producing jokes and losing face.*

*Later, a lot of discussion went on about how incomplete English abilities had produced misunderstanding and even tragedy. Students were active in talking and sharing. I still remembered some students' conversations. One student said, "...So memorizing voluminous vocabulary cannot assure successful communication. We need to know how to use words appropriately in context." The other said, "Yes, We need to learn conventional structures of communication.... Only doing grammar exercises is insufficient." At the same time, several voices came out as well, "Understanding how to correctly use words, sentences and even body language with people from different cultures is important...like what we have done in the Puppet Show." And "Using monolingual dictionary is better than using bilingual translation machine because we can get English definition and sentence examples for each new word in the monolingual one. Then, we can use the word properly".*

*I am glad I took the chance to make students be aware of the shortcomings of incomplete English abilities and even let them brainstorm ideas about how to learn English for efficient or successful communication. I believe all students should have benefited from the prompt discussions, as I had.* (3 June)

As the diary entry showed, I tried my best to turn 'inappropriate in-class behavior' (chatting internet jokes) to become 'positive learning content' (understanding the importance of developing communicative competence). This experience has confirmed my belief that an effective language teacher, instead of feeling panic or helpless when meeting difficulties, should take every opportunity to rethink their practice to help students learn English.

### 6.5.4 The Principles Guiding My Decision Making

For language teachers, knowing the thought processes about decision making can help them decide what has been successful or not in their teaching strategies and actions (Bailey, 2000). In order to discover and understand the lessons and insights gained from my teaching practice, I tried to explore my "logic in use" (Bailey, 2000: 36) and to look for the underlying principles of my decision making as well. After reading and thinking about my entries related to the issue of decision making, I found three principles guiding me as I decided to depart from or modify the original plans. These principles are 'drawing upon learners' needs or interests', 'building a harmonious learning atmosphere' and 'promoting learners' involvement and participation'. They are briefly discussed below.

#### 6.5.4.1 Drawing upon learners' needs or interests

The fact that I cared about students' interests could be reflected in my acceptance of their suggestions for the course, and my understanding of their preferences for activities such as including their recommended English songs, arranging more opportunities for field-trip learning and continuing the jokes issue they felt interested in. In order to satisfy their needs, I decided to integrate more cooperative learning activities/tasks into the course and tried to find 'an expert' to set up a website for their out-of-class English learning and sharing. My immediate in-class decisions such as using a code-switching technique and giving students prompt teaching of pronunciation also represented my concern for their needs.

#### 6.5.4.2 Building a harmonious learning atmosphere

When reading my entries, I also found my intention to build a harmonious learning atmosphere for the purpose of keeping a positive relationship between teacher-student and student-student. To achieve this goal, I observed learners' performance carefully and listened to their voices patiently. When I knew cooperative learning activities had made students feel relaxed, secure and responsive, I decided to include more cooperative learning opportunities for them in the following classes. Particularly as I was informed I had made a student feel upset because of my random decision, I tried to find a chance to let him regain face. I did not want to offend my students especially as they were enthusiastic to share something with their classmates and me. Like the students contributing English songs, what they wanted to contribute was not really related to the topics, but I showed my sincere appreciation of their ideas and found time to let their work be recognized.

#### 6.5.4.3 Promoting learners' involvement and participation

For the purpose of promoting learners' involvement and participation, I was open to students' suggestions and sensitive to their strengths in order to make changes in my original plans to fit this goal. I believed students could generate good ideas and lessons to motivate their own learning if I trusted and cooperated with them. Because I respected their differences and appreciated their opinions, students became very active in contributing to the class. As I went through my entries, I found I acknowledged what students did for the course and strongly expressed my enjoyable teaching experiences with them. In other words, as I removed the image of

teacher-being-an-authority, I found students all became my course development partners. One of the field-trip experiences, the visit to RT-Mart mentioned above gave an obvious example of students' high motivation to participate in an out-of-class learning activity that had been planned by students themselves.

## 6.6 Other Reflections on the Intervention Practice

In addition to personal reflections on the struggles and solutions of my pre-instructional course design, and the processes of in-teaching and after-teaching decision making, my awareness and comments on my abilities in course management, my role of being an EFL language teacher and my students' learning are worthy to be explored and recognized as well. In this section, I discuss the three issues with relevant diary entries for further understanding and examination of my teaching practice during the two-month MI-based intervention.

### 6.6.1 Self-Reflection on My Abilities in Course Management

In order to make teaching effective, teachers' abilities in course management are very important (Richards, 1999). The managerial abilities I refer to here are not only the strategies in which a lesson is implemented or the interactions with students are carried out, but also the control of the whole learning environment such as the efficient usage of classroom facilities. My concern with the development of my managerial abilities during the intervention time was around the 'work well or not' issue. Both positive and negative experiences of my managerial abilities are briefly discussed with the relevant dairy entries and comments.

#### 6.6.1.1 Positive experiences

The positive experiences in relation to the course management in my diary focused on two themes: pacing and interaction.

My confidence in course management was shown in knowing how to attract students' attention and motivate their learning with the assistance of appropriate *pacing*. In my original lesson plans, the time for each activity was not predetermined because I trusted my experience, observation and intuition that could help me decide when to shorten or prolong an activity depending on different requirements or situations.

However, how was I empowered with these abilities? 'Keeping attending conferences and workshops' and 'mental plans rehearsal' were mentioned as the key reasons:

> *Sometimes, I really appreciate my abilities to pace a lesson...when to start, prolong, shorten and end an activity. Like today's plan, I felt satisfied. I ran each of them efficiently... I found no one felt bored... Students' reactions and classroom atmosphere were the clues for me to know... How do I get these abilities? I remember some of my colleagues who observed my classes asked me the same question. I think my active attendance at conferences and workshops is one of the tips for me to combine theory and practice. I cherish opportunities to present and share my ideas with others as well as get lessons and insights from them. In addition, I like to rehearse all activities in my mind. It is quite helpful...* (22 May)

Moreover, I believed flexibility of *pacing* gave me more opportunities to satisfy students' needs and manage each activity successfully:

> *Students looked uninterested in today's authentic listening practice, so I only played the listening CD once instead of twice or three times, and directly went to the follow-up activity 'read aloud the target conversations with your emotion and body language'... Students were given scripts of the listening tasks and required to practice with their partner to 'liven' these 'boring' dialogues...I think I was right because students' enthusiasm was obviously triggered again...During the time of group discussion, some students asked me to play these listening tasks again and their reasons were such as "We want to listen again and try to figure out how they express emotion with different tones" and "We want to feel the relationship of the speakers". When students found being familiar with these listening practices could facilitate their current tasks, they actively asked for the listening CD to be played once more...I should say students really benefited from my flexible time arrangement of each activity because I helped them learn what they were eager to learn within a suitable time span.* (10 June)

As the entries showed, appropriate *pacing* of each activity and flexible time arrangement were my strengths that helped me manage the MI-based course smoothly.

As for the in-class or out-of-class *interaction* with students, I was pleased by my performance in the course. My personal styles, such as understanding that seemed to be easily demonstrated through the application of MI theory, were thought to reduce students' hesitation for *interaction* as I observed:

> *I feel full of energy when I see students pay attention to my course with high spirits...My intention is that nobody feels sleepy and everyone is motivated in the course... I always walk among students when lecturing or giving instruction instead of standing on the platform...I try to remember all students' names and even their nicknames if they do not mind ...I can feel students like me to call their first names in greeting and appreciation... I also know students are attracted by my personal stories and jokes with funny body language... As I present these characteristics: funny, friendly, understanding and humorous, many students like to have in-class or out-of-class interactions with me. The teacher-student distance seems to be shortened. Although some of them still keep quiet, their smiles or approving eye contact encourage me...sometimes, I wonder if it is my personality that let me choose MI theory as the basis of the intervention or if it is the theory that influences my behaviors or both.* (12 June)

When I expressed my appreciation of the improvement in the teacher-student and student-student *interaction*, I also attributed the possible cause to the application of MI theory. The fundamental claims of the theory 'respecting individual differences' and 'appreciating variety of talents' became key maxims of my teaching:

> *I am really pleased by my teaching and students' performance in today's course… I like the MI theory because it lets me have a theoretical basis to bring various activities/tasks systematically into my class to satisfy students' different needs and facilitate classroom interaction. I can feel the relationship of teacher-student and student-student is totally different from before… Learners' participation and involvement really increase week by week… It is very important for language teachers to implement a course that respects individual differences and appreciates variety of talents.* (12 June)

From these entries, it is obvious to see my satisfaction with the MI-based course. I was pleased to find my students enjoyed this course. I attributed these positive teaching experiences to my appropriate pacing, active interaction with students and my application of MI theory.

#### 6.6.1.2 Negative experiences

My negative experiences of the course management were largely related to the usage of facilities in the language laboratory and the messy moment of group formation.

The *language laboratory* I employed for the regular class time of the course was also widely used by other EFL teachers at Ming-Hsin University of Science and Technology. How to maintain facilities in good condition or make sure every user follows the correct procedures for running this complicated equipment was not easy. I was stuck several times by problems such as no batteries in the remote control, no sounds coming from the speakers, poor function of the teacher's control panel or students' earphones. Even though I told my colleagues I was not influenced by these repeated 'minor' problems, I complained in my diary:

> *The thing which made me very upset was that the teacher's control panel was totally out of control today… Who used the room before my class? Why I was not informed of the problem? However, complaints and anger could not solve the problem. I know all teachers like to use the new language laboratory, but many of them do not follow the procedure about how to appropriately use the equipment or honestly report the problems they encountered to the responsible teacher…My solution today was to change all students into another empty room (a regular classroom with only a blackboard, tables and seats) and to borrow a portable CD player from the Self-access Center…The class still went on and I pretended nothing happened, but my mood could not calm down until the break time when a song "What a wonderful world" came to my ears…Thanks to my students…I think I need to report the problem to the director immediately….* (3 June)

However, my latest reflection on the issue mentioned the truth that I was not really

familiar with the whole procedure of managing the facilities of the language laboratory as other teachers were. As I recognized that using the equipment efficiently was one of the important parts of the course management skills, I was reminded that checking if all equipment in the language laboratory was functioning well before the class started should be one of my responsibilities:

> *Because many students will use the laboratory facilities for final presentations, I asked the lab technician to teach my students how to use them appropriately today. We use the lunch hours for step by step demonstration...During the process, I understood many problems I met before were not real problems...I just need to reset the program of the control panel or press some buttons I did not touch...Like learning a language, learners cannot acquire a language by solely memorizing all rules without thinking...Thorough understanding can help me fix different problems I encounter instead of following a predetermined procedure without flexibility. I am sure many language teachers similar to me hate to touch 'mechanical things'. Nevertheless, my lessons remind me I need to overcome the barrier to manage my course successfully at a 'technical level' as well. 'Learning and checking' is what I need...no more excuse like "It is the technician or the director's business, and my job is teaching".* (13 June)

The entry showed my awareness of how to manage my course effectively at a 'technical level'. My learning of the new skill with the students – how to use the control panel properly – also has reminded me of the importance of endless learning during my teaching profession.

The other unsuccessful experience was associated with the messy moment after my announcement of *grouping principles* for in-class activities/tasks. Although the time for forming groups was only a small portion of the whole class, I still believed the transition time should be influential in impeding or promoting learning. My reactions to the grouping issue were presented in the following extract:

> *I like to try different grouping techniques to motivate students' learning interests and hope they find different partners to practice English each time. However, I dislike the messy moment although it is very short, particularly when it is time for students to form a group based on my instruction or the cards they hold. Some students are used to being 'headless flies', walking around the class without directions. Most of the time, I directly come to them and ask if they need help. I find 'listening problems' and 'personality' are the main reasons to cause 'helplessness'. Therefore, it becomes very difficult to handle...'patience' is the word I give myself...I will add Chinese to make sure they can understand my directions better. I do not want students to feel helpless during the transition time that may influence their follow-up group work.* (10 May)

My awareness of how to implement my ideas — employing different grouping patterns effectively, was aroused by watching a children's TV program with my son. I understood 'appropriateness' was much more important than an extreme focus on 'quantity' and 'variety'. In other words, instead of developing and introducing many different grouping strategies for my weekly classes, I was reminded that I could only

use some of them for a period of time. As students' familiarity with these repeated group formation patterns increased, the messy moment would be reduced:

> *Today I watched a puppet show program with my son and what the puppet dog mao mao said shed light on my messy experience of grouping. The cute puppet dog mao mao had a lovely owner—a little boy. The boy used to feed the dog with various delicious foods every day. One day, the dog ate too much and became seriously sick. The little boy came to see mao mao and said sadly "poor mao mao, I won't feed you anymore because your digestion is too bad to take meat, eggs, ice cream, pizzas, chocolates, noodles, steaks, apple pies...at the same time". "Dear! Don't treat me like that, please. I will die of hunger. How about rotation? You can give me 2~3 kinds of food a day, not much. I won't be greedy, I can enjoy different food in the whole month and I will be healthy again..." the puppet dog replied. The word "rotation" hit my mind. Rather than introducing many different techniques to group students for my weekly activities, I can just choose some of them for monthly rotation. Students not only have chances to try different grouping strategies but also have opportunities to familiarize themselves with these strategies to avoid confusion.* (12 May)

Interestingly, I learned how to solve my teaching problem of the grouping arrangement through watching a TV show with my son. This experience has made me realize that good teaching ideas could be inspired by my daily life if I am willing to pay attention to the things around me.

### 6.6.2 Self-Reflection on My Role as an EFL Teacher

During the process of teaching, the awareness of teachers' affective experiences of being language teachers are as important as the understanding of their cognitive processes of teaching practice. Self-reflection on these affective experiences, such as attitudes, values and feelings, may help language teachers understand their weakness and need for further help. Moreover, it could be a chance to build personal confidence in their teaching profession. My affective experiences of being an EFL language teacher during the two-month intervention were associated with and influenced by the three issues: my limitations, strengths and satisfaction. The description and interpretation of these experiences are discussed respectively.

#### 6.6.2.1 My limitations

Since I am a non-native English teacher in an EFL context, the limitations (weaknesses and difficulties) caused by personal or external factors during the process of teaching are quite common. To be honest, these limitations sometimes frustrate me but most of the time they motivate me to work harder. In general, personal factors include less proficiency in language skills (e.g. speaking and listening) and language

knowledge (e.g. vocabulary and speech functions) or fear of making mistakes and losing face. The insufficient teaching hours, the shortage of available live target language input and the relevant teaching materials are examples of external constraints. In fact, these limitations have prevailed and been recognized widely among local EFL teachers in Taiwan. These limitations may also explain why local EFL teachers are readily drawn back to the traditional ways in which lessons can be easily organized within their control. They can lecture the course through their native tongue with low stress and follow a familiar instructional routine such as the Teaching-Response-Evaluation model for reasons of safety and keeping face, even though the effectiveness of developing practical target language abilities with these approaches has been doubted. As far as I am concerned, I believe if language teachers definitely want to be good models for learners and effective teachers, they must overcome their limitations, either personal or external, and adjust those associated negative affective experiences to be encouraging ones. My diary entries also showed several examples of my personal awareness and efforts on this point.

The first example described how I got rid of personal anxiety and was motivated to look for opportunities of empowering my English abilities every day:

> *In order to carry out my teaching duties as efficiently as I expect, I keep empowering my English abilities by extensive reading and listening to English education broadcasting every day. Being a non-native English teacher, I admit I have the anxiety to try some new things with a foreign language (English). However, I comfort myself constantly 'you are marvelous, you can be a good model for learners! Keep going.' Moreover, I appreciate my progress with a daily star mark on my table calendar. These stars are personal symbols of encouragement, expressing my hard work and achievement.* (29 April)

Furthermore, I recognized my lack of competence in cross-cultural understanding; nevertheless, as I decided to cooperate with learners to explore the issue through the weekly 'puppet show' activities, my worries were all gone:

> *"How dare you include the cross-cultural issue in your course? Which textbook do you want to use? Why not focus on American cultures? How about the book The Spotlight on USA?" one of my colleagues asks me a series of questions after she recognizes I have included the intercultural issue into my course... I understood the shortage of this kind of learning material for EFL learners as well as my personal limitations, but I did not want to surrender to the phenomenon if it could be overcome with personal efforts and others' help...I keep empowering myself through extensive reading and information gathering ...I also tell students my limitations...it becomes easier to deal with the issue when I am willing to tell students my limitations and ask for cooperation...The 'puppet show' activity has been run very well since last week...we develop our awareness and understanding of several intercultural issues... as I share my burden with learners, I find they make quicker progress than before. They bring the information they gather and discuss it with me. I enjoy the positive cooperative experience with my students instead of teaching them with authority. I find my worries can be released if I do not insist I am the*

*only important knowledge imparter.* (17 May)

I understood that being an English teacher does not mean I know English of different fields very well, like an encyclopedia, but high expectations occasionally led to personal frustration. Usually the articles, which students brought to me for help, ranged from daily newspapers to professional journals. Because I could not answer all questions they asked without preparation sometimes, I simply felt uneasy and upset. Nevertheless, regular self-exploration through diary entries helped me a lot during the process of feeling bad because I used to come out with several ideas to comfort my uneasiness or form possible solutions:

> *I feel disappointed sometimes when students come to me for help but with their questions unanswered... I really wish I was a native speaker and could discuss any topics naturally...This kind of disappointment has been like an unconscious pressure in my teaching...how should I keep myself in the affective peak while facing my teaching job? I think I need to open my mind and accept the reality...just as MI theory suggests, everyone has different talents...but my pressure is I AM AN EFL LANGUAGE TEACHER, so 'a good command of English' seems to be a basic requirement and part of my talents... I need to think about the bright side of being a non-native English teacher.... I need to appreciate that students are willing to come to me and ask for help...Do I make them feel bad if I cannot really help them? What does 'help' mean? I do not need to feel embarrassed to tell students I am unfamiliar, in either conceptual or linguistic terms, with what they ask, or directly tell them I need time to think...I may ask them to cooperate with me or with their subject teachers to find answers... I need to understand teaching is a process of learning. The teacher is not perfect... If I cannot persuade myself to look at the bright side, how can I help my students?* (24 May)

From these entries, I find I did benefit a lot from cooperating with my students during the intervention. Moreover, I realize that self-reflection and self-encouragement helped me gradually overcome my limitations during the process of teaching, and then develop self–confidence in being an effective EFL teacher.

#### 6.6.2.2 My strengths

Although I was aware of several limitations throughout my teaching, I knew understanding and using my strengths could benefit my teaching. Since I was used to telling my students the importance of discovering their strengths to improve their English learning, I kept reminding myself of the strengths of being a non-native English teacher:

> *I need to think about the bright side of being a non-native English teacher. For example, I can understand the problems or difficulties my students had experienced, are suffering or will encounter. My previous learning experiences make me easily show my sympathy and generate appropriate ways to approach my learners. In other words, I am a good comforter when students feel upset or disappointed in learning English. Moreover, I am a source provider of learning strategies and language knowledge... I need to cherish my*

*position and my knowledge because I have many good qualities that native speakers may not have.* (24 May)

During the process of teaching English through MI strategies, I was also learning to appreciate my strengths. This entry showed that as I appreciated my personal values as a non-native EFL teacher, I felt more encouraged and motivated in my teaching.

#### 6.6.2.3 My satisfaction

In spite of the influences of limitations and strengths on my affective development, my feelings about my teaching job were largely reflected in pleasing experiences. Many joyful statements documented in my diary could be the evidence to show my satisfaction with the two-month teaching practice with the MI-based intervention. These repeated sentences were "*I feel excited to see students enjoy my class*", "*I have a sense of achievement when I see learners' works*", "*I am glad students become my friends*", "*it is a wonderful class because I can cooperate with learners*", "*I like learners' performance, they are amazing!*" and "*I enjoy today's teaching*". Obviously, the source of my satisfaction with the course was mainly from learners' high motivation, active participation and progress. In addition, my appreciation of the building–up of a harmonious and cooperative relationship with my students was another satisfactory enjoyment.

From this diary analysis concerning my teaching discussed above, I find I can better understand the patterns of my teaching beliefs, principles and strategies, as well as my feelings towards my teaching during the intervention (Bailey, 1990). I also have experienced the facts that regular diary entries helped me gain many insights about teaching (Richards and Lockhart, 1999) and develop my self-confidence in teaching (Bailey, 1990).

### 6.6.3 Self-Reflection on My Students' Learning

In this section, I briefly discuss my understanding of students' learning within the two-month intervention in terms of exploring two questions. The reflections are based on my notes of informal observation of in-class and out-of-class activities/tasks, and e-mail exchange experiences with students, documented in my teaching diary. The first question is 'What did I think students learnt from the course?' and the second question is 'What did I think students liked/disliked most about the course?'

#### 6.6.3.1 What did I think students learnt from the course?

My informal observations and subjective impressions told me students made observable progress in four aspects. To begin with, learners' willingness to communicate with teacher and classmates through the target language (English) obviously increased. I found students showed great enthusiasm to try their spoken English in small group work and they kept encouraging one another during the process of discussion. After class time, they also gradually felt comfortable to chat with me in English. Secondly, their positive affective involvement was expressed in their high motivation to actively participate in learning activities/tasks, as well as being reflected in the e-mail messages that I got from students talking about their enjoyment and appreciation of the course. They told me they liked the course because some activities did match their needs and interests. Thirdly, their interactive competence (communication strategies) was developed. I found students could interact appropriately with classmates, teachers or other specialists (subject teachers) at Ming-Hsin University of Science and Technology while implementing learning tasks and final projects. Lastly, their learning strategies seemed to have improved. As I discussed with students about their proposals for final projects, I found many of them had a good understanding of themselves and developed clear ideas of what they should do. My intuition and observation told me students were using their strengths to 'produce a meaningful product', demonstrating their learning through their own ways. Their reactions were totally different from the students of other classes I taught[20], so I believed they should have made progress in developing personal learning strategies after taking the course.

#### 6.6.3.2 What did I think students liked or disliked most about the course?

Learners' active preparation and satisfactory performances made me believe they liked those authentic assessment activities/tasks such as 'puppet show', 'role-play', and 'final projects'. Students seemed to appreciate the alternative opportunities to present their learning rather than employing paper-and-pencil tests only. In addition, I ranked activities/tasks such as 'cooperative learning', 'field trips/ extracurricular activities' and 'film/video teaching and learning' as their top favorites because of their

[20] Most students whom I taught through a textbook-driven approach with some drills and pair practice disliked to voice their opinions and used to adopt a passive attitude to language learning.

high participation in these activities/tasks and frequent mentions in their e-mail. Moreover, 'the independent study in the Self-access Center' was another preferred activity because the student service officer in the Self-access Center told me of their strong enthusiasm to watch the instructional videos *Connect with English, Rebecca's Story*:

> *Today, I am very happy to hear the student service officer teli me my students like to self-study in the Self-access Center. She told me "Your students enjoy the videos (Rebecca's Story) so much. They come to borrow and watch them almost every day. Some students watch an episode several times...some come in groups and discuss the plot hotly...how do you motivate them? It is amazing. I am thinking of ordering more copies because more and more students from other classes have started to ask to borrow these videos recently". I am really encouraged by what she said because I know I have made a right choice.* (7 June)

My students' interest in these videos was also reflected in their website discussion (the temporary English learning website set up by a student Dick for our class). I found many students enjoyed discussing the story plot through English on the website. Occasionally, students of other classes joined the discussion or expressed opinions. I was very pleased to see my students' eagerness and progress in using English for communication. I felt they were not far away from being autonomous learners.

As I reviewed the process of my intervention with an initial look, I found everything seemed to be fine because of my constant self-reflection and on-going interaction with students. The only thing I guessed students probably disliked most was that they might feel anxious to take the midterm and final listening tests that were required to cover all units of the assigned textbook according to the school policy.

## 6.7 My Preliminary Evaluation of the EFL Course with the MI-based Intervention

These questions 'Is the course successful?' and 'Is my intervention effective?' came to my mind as soon as I finished the two-month MI-based intervention. My preliminary response to the questions was "*I do not feel bad but I am uncertain about the effects of the MI-based intervention.*" The first reason for me to make this statement was I disagreed about using a cause-and-effect relationship to explain teaching and learning because of the many variables being involved in the complex intervention process. As my teaching diary entries showed, multiple intelligences strategies seemed to be like a catalyst during the intervention period. Many other variables, such as teacher's

prompt decisions and the cooperation of learners, also played important roles in influencing the classroom culture and the experience of these people working within it. The second reason why I was unsure was I felt I could not draw conclusions about its effectiveness when learners' perspectives were not included in the discussion. Certainly, I had a strong feeling that students in the course were motivated to learn English and they increasingly developed their strategies in English learning and communication. On the other hand, I still wanted to leave the answers to the learners because my subjective bias and superficial impression might intervene, and also because learners have the right to evaluate their own learning.

## 6.8 Summary

In the first part of this chapter, I have given a description and interpretation of the MI-based intervention that I designed and implemented in this study. Then, an exploration and discussion of my perspectives and reflections on my teaching during the intervention, drawn from the teaching diary, have been provided with examples. The main findings are summarized below, under four categories focusing on: my own affective experiences as an EFL teacher; my pedagogy including beliefs, principles and strategies on which I based my teaching; the affective experiences of my students; and their ways of learning.

**(1) A focus on the language teacher's *affective* issues (Research Aim 1):**

- Through constant self-reflection and self-encouragement, I could gradually overcome my limitations (weakness and difficulties) and have *self-confidence* in being an effective non-native EFL teacher.
- I was *satisfied* with some of my teaching abilities (e.g. decision-making and pacing) because they made the course go smoothly.
- I *enjoyed* my teaching during the MI-based intervention because of students' cooperation, enthusiasm and excellent performances.
- I was *glad* to find the intervention of MI strategies did help me run the EFL course effectively because it stimulated excellent interactions among students.
- I *appreciated* some unexpected events (e.g. teaching pronunciation) I met during the course, because they reminded me of the importance of endless teacher learning for effective EFL teaching and learning.

**(2) A focus on the language teacher's *pedagogy* (Research Aim 1):**

- I was a determined EFL teacher with high-esteem in my teaching role. 'Accomplishing goals' and 'achieving self-actualization' were key *principles* motivating me to seek solutions for teaching problems.
- Three *principles* were found to guide me as I decided to depart from or modify the original plans. Principle 1: drawing upon learners' needs and interests. Principle 2: building a harmonious learning atmosphere. Principle 3: promoting learners' involvement and participation.
- The key *strategies* I used to generate useful ideas for the problems I met in teaching were: close observation of surrounding people and events; regular teaching diary entries; and having on-going interaction with students and colleagues.
- I was attempting to be an understanding and helpful EFL teacher because I *believed* those characteristics could help me shorten the distance between teacher and students, and then make their learning be more interesting and effective.
- I opened my mind to accept students' suggestions because I *believed* I could benefit from the different talents of my students during my teaching.
- I was seeking opportunities to cooperate with my students because I *believed* their different strengths could make this class become more inclusive.

**(3) A focus on the *affective* experiences of students (Research Aim 3-a):**

- Because of my respect for and appreciation of the different talents of students, they not only *enjoyed* the MI-based class but also became *helpful* partners in the course development.
- Students' *willingness to communicate* through English increased during the intervention because of the positive learning environment and many practice opportunities provided throughout the MI-based intervention.
- Students *liked* to talk to me through e-mail because I did reply to their questions and messages.
- Students *liked* authentic assessment tasks/activities because they could use their preferred ways to learn English as well as to demonstrate their learning outcomes.
- Students *did not like* school listening tests and they looked very *anxious* when they knew they still needed to take these standardized tests.

**(4) A focus on the students' *ways of learning* (Research Aim 3-b):**

- After attending the MI workshop and MI-based instructional activities/tasks, many students became sensitive to their own talents in learning English and started to appreciate others' strengths as well. Gradually, they not only developed their *personal strategies* in learning and using English, but also liked to *cooperate with classmates* in different learning tasks/activities.
- Students' *communication strategies* were triggered and improved because of the many opportunities provided by the group activities during the MI-based course.
- Students made progress in developing personal *English learning strategies* particularly when preparing their final projects.

All these findings summarized above were only based on my perspectives and reflections. Because of the complex variables involved in the process of the MI-based intervention, my preliminary evaluation of the course was "*I do not feel bad but I am uncertain of its effects*". I left the answer to my students for further understanding. Nevertheless, it is clear that the process of exploration and reflection allowed a holistic awareness of my teaching. I find I gave almost equal weight to: my perceptions of my students' experiences, my own beliefs, principles and practices, and my feelings of limitations, self-confidence and achievement. These experiences helped me remain in tune with the class and my students.

In order to catch a whole picture for interpreting the impact of the EFL course with an MI-based intervention on student participants, learners' previous EFL learning experiences, and their feelings and actions during the intervention period, are both important to be recognized. It thus seems worthwhile to have a close look at the students' diaries and interview data collected during the ten weeks. The information can help me know how these students felt and went about their English learning in their prior school study and during the MI-based intervention and why they made these statements. In the next two chapters, Chapter 7 and Chapter 8, EFL learners' affective experiences (How did they feel about English learning?) and strategy development (How did they go about English learning?), in their previous EFL study and during the MI-based intervention, are explored through the diary entries of fifty-one participants, with the interview data of twelve volunteers being used for supplementary purposes.

# Chapter 7

## *Learners' Voices* (I): *Affective Experiences and Language Learners*

### 7.0 Introduction

Affect, playing as critical a role as cognition in foreign/second language acquisition, is concerned with the emotions, feelings, beliefs and attitudes of learners during their learning processes (Arnold, 1999; Ehrman, 1996; Nunan and Lamb, 1996). Many recent research reports from the fields of psychology and neurobiology also indicate the power of affect to influence language learning. Based on research in psychology, Stevick (1996) claimed that affect is very closely linked to memory, one of the vital aspects of achieving effective language learning. For example, when learners' needs and goals are not met, negative affective experiences such as anger and frustration can interfere with one's abilities to put new resources in long-term memory as well as to draw on information that is already established in long-term memory (Stevick 1996 and 1999). Williams and Burden (2001) also argued that the more closely the input conforms to what learners perceive as useful, interesting and emotionally stimulating, the more likely it will be integrated and learned. Furthermore, Schumann (1997) proposed from neurobiological views that the stimulus-appraisal system in the brain, which allows affect (it can be anxiety or self-confidence) to influence cognition, may guide the variable success in foreign/second language learning, especially for those post-sensitive period learners.

Since affect and cognition work as partners in our mind (LeDoux, 1996), understanding EFL learners' affective experiences during their learning processes is necessary for language teachers to efficiently fulfill the goal of effective classroom teaching and learning. As language teachers are familiar with the nature (what), procedure (how) and rationale (why) that have caused negative (harmful) emotions in learners, they can, based on the information, develop suitable strategies to help EFL learners to handle negative affective problems and then produce positive learning results (Arnold, 1999).

The intention of this chapter is in response to one of the questions "Can I learn?"

asked by many university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system. Since the question has reflected an emotional (psychological) insecurity of EFL learners, closely related to affective barriers, I was reminded that if I definitely wanted to help these learners face and solve the problem, I should take learners' affective experiences into consideration during my teaching. By affective experiences, I mean how some factors have stimulated and influenced the extent of learners' affective orientation (e.g. interests), involvement (e.g. willingness to communication), receptivity (e.g. openness to the target language) or defensiveness (e.g. avoidance to the target language learning) during their learning processes. It is believed that these affective experiences have much power to decide whether learners can acquire the target language effectively and confidently or not (Brown, 2000).

The rationale for choosing Multiple Intelligences theory as an intervention in the course under study aimed to address the 'affective question'. Recent research findings have reported that all parts of our brain, responsible for the working of affect and cognition, are highly interconnected and involved in the process of language learning (Jacobs and Schumann, 1992; Schumann, 1994; Sylwester, 1995). Therefore, integrating a brain-compatible educational theory into course design is absolutely necessary. This kind of integration may support quality input and provide positive emotional contexts to satisfy the affective and cognitive needs of different learners. In order to help EFL learners overcome their affective barriers when learning English, Multiple Intelligences theory, a brain-compatible theory with an emphasis on respecting individual differences and concerning the unique development of each person (Armstrong, 2000; Lazear, 1999a &b; Sylwester, 1995), was therefore chosen by me, the teacher-researcher in the current study as a teaching intervention. The impact of the EFL course with the MI-based intervention on fifty-one EFL participants' affective experiences is the focus of this chapter.

In this chapter, firstly, I seek to explore which factors influenced learners' attitudes and motivation towards learning English and how this happened, both in their previous EFL learning (Research Aim 2-a) and during the MI-based intervention (Research Aim 3-a). Then, I discuss why these experiences enhanced or frustrated their attention and effort devoted to learning the target language. The understanding of these EFL participants' previous affective experiences is designed mainly for a

legitimate recognition, comparison and discussion of final results about the impact of the EFL course with the MI-based intervention on these participants. All findings[1] (comparative results) in this chapter mainly draw upon ten-week diary entries[2] of fifty-one students, accompanied by relevant interview information[3] from twelve volunteer students among the group.

## 7.1 Students' Previous Affective Experiences of English Learning

In this section, the previous affective experiences of learning English of fifty-one EFL learners are discussed with the relevant factors (themes), which were reflected in their diary entries and interview data. There were ten themes, categorized under four issues, emerging from the data. These 'affective' themes were significant causes (stimuli) to result in different emotional responses from these students' previous EFL learning. The issues and relevant themes are listed below:

1. *Self*: the self-concept of being an effective EFL learner
2. *Significant others*: parents; teachers; classmates
3. *Learning contexts*: instructional activities; the content of teaching materials; cram schools; learning/application opportunities
4. *Societal factors*: English tests; instrumental purposes

The relationships among the ten themes (factors/ stimuli) and students' previous affective experiences of EFL learning are visualized in Figure 7.1.

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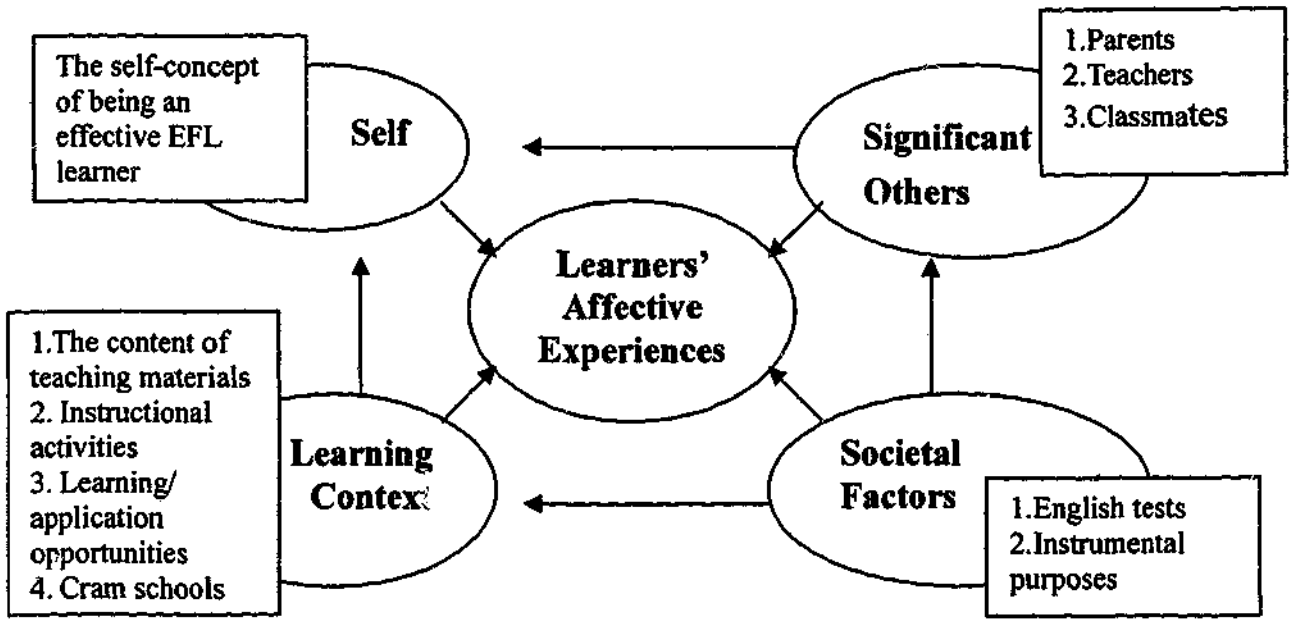
[1] In this study, the data of diaries and interview were originally done in Chinese. Because the research results are reported in English, all quoted data in this chapter were translated into English by me and two local EFL teachers in Taiwan. A further discussion of the translation scripts with an English native speaker was conducted by me to make sure the accuracy of participants' original meanings has been achieved.

[2] The codes 'LHD-A' and 'MID-A' are used in this chapter to indicate the sources of the quoted extracts were from learning diaries of 51 participants. 'D' signifies diary data. LHD refers to participants' learning history (previous learning experiences) reported in their first-week diaries and MID means participants' MI-based learning experiences documented in diaries. Moreover, 'A' is put after each data source, such as MID-A, to indicate these reported experiences were related to affect.

[3] The codes 'LHI-A' and 'MII-A' are used to indicate the sources of the quotations were from the interview data with 12 volunteer students. In this chapter, interview information, which was related to participants' learning history (previous English learning experiences), is simplified as 'LHI', and those were related to MI-based intervention is marked as 'MII'. In addition, 'A' is put after acronyms such as LHI-A and MII-A to emphasize the interview content was related to affective experiences.

**Figure7.1. The Relationships among the Themes and Learners' Affective Experiences in their Previous EFL Study**



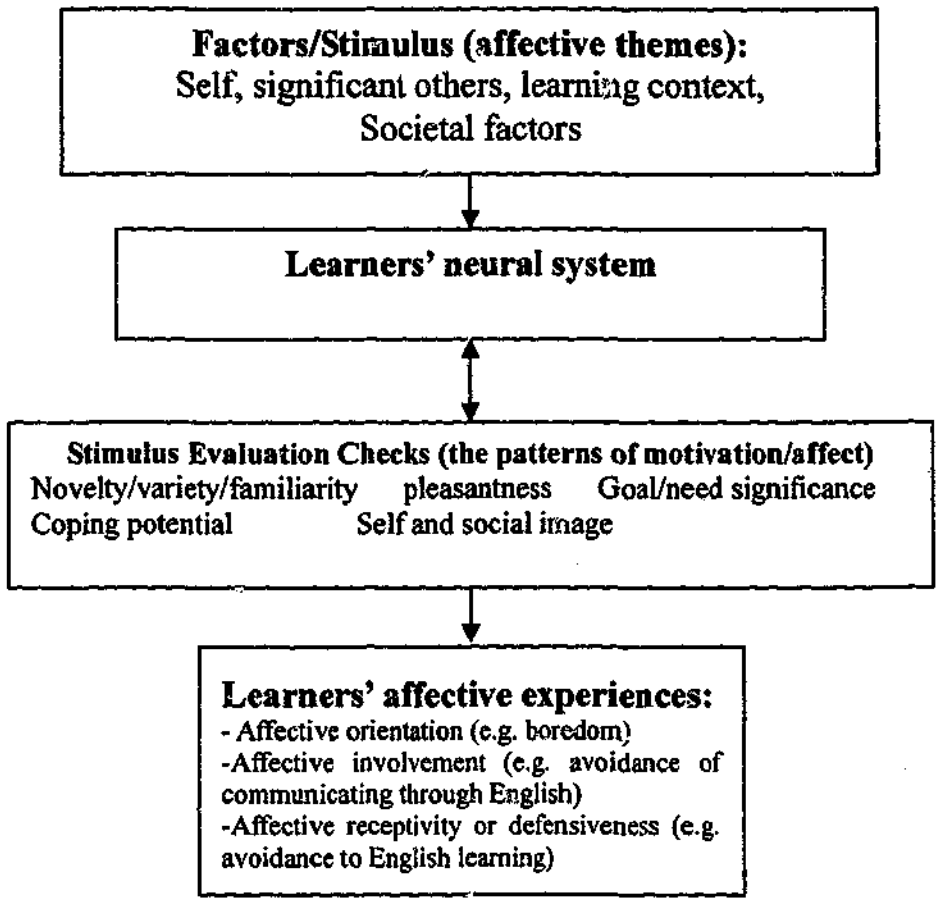

Moreover, the five dimensions of affect, identified by Scherer (1984) as *stimulus evaluation checks* (SECs) and suggested by Schumann (1997) as patterns of motivation (see Appendix 12), were employed to categorize the features of affective experiences related to (caused by) the ten themes, in students' previous EFL study. The five dimensions include:

1. Novelty, familiarity and variety[4]
2. Pleasantness or unpleasantness
3. The relevance/significance of goal/need
4. Coping potential
5. Self and social image

In addition, the procedure of how these factors (affective themes) were evaluated by learners' neural system (Appendix 13) through SECs (the five dimensions of affect) and then led to different affective experiences in previous EFL learning is illustrated in Figure 7.2. In other words, a neuropsychological view is used to explain the development of their affective experiences in prior EFL study.

[4] I added 'variety' into the 'novelty and familiarity' group, based on the features of the research data.

**Figure7.2. The Procedure of the Development of Learners' Affective Experiences in their Previous EFL Study**




In this section, previous affective experiences of the fifty-one learners characterized by the five dimensions of affect and ten relevant themes (Appendix 14: coded examples) are discussed with related quotations from their learning diaries or the interview results. The information should be valuable for me to recognize how these EFL learners' previous affective experiences of English learning formed their attitudes, motivation and effort, and why they made these statements. The findings are used as a comparison with their affective experiences during the MI-based intervention to understand whether EFL learners' emotional insecurity ("Can I learn?") was thereby overcome and why they developed these affective experiences during the MI-based intervention or because of other factors.

### 7.1.1 Novelty, Familiarity or Variety

Many participants in the study stated that instructional activities played significant roles in influencing their previous English learning. About twenty-seven students mentioned their motivation was reduced because of the boredom of English learning in the classroom context where teacher-centered lecturing with exam-oriented

activities was dominant:

> *High school English teachers only taught textbook articles and explained relevant grammar to us. After that, they asked us to memorize vocabulary and understand grammatical rules for daily quizzes... The repeated routine made the school English learning experience extremely boring. I felt sleepy during class time although I constantly told myself English was important.* (LHD-A, S21, 23 April)

In addition, some of them complained that the familiar teaching activities were not what they expected, but they had no choice and did not know what they should do to improve the situation:

> *I felt I was like a poor duck fed with much indigestible food when learning English... I hated grammar analysis, sentence translation... those routine and boring instructional activities because they could not help me solve problems... I could not complain because I was a student...teachers kept telling us what they did was for our future.* (LHD-A, S5, 22 April)

Several interviewees also expressed similar comments. They could not do anything with these traditional classroom instructional activities because they wanted to pass important school tests and the English course as well:

> Ya-Chun, Ku (LHI-A): *I did not like junior high school English classes because all classroom activities were related to grammar analysis, very boring, not practical at all. Teacher told us passing tests was enough and other things were not important. I could do nothing to alter the teacher's choice because I did not want to fail in the course.* (Interview I /Part A: Q5, 23 April)

> Shan-Jen, Lee (LHI-A): *All instructional activities followed the direction of tests because passing paper-and-pencil tests was the goal. If students followed the directions and reviewed their English in this way, they would be all right in school tests. Although I did not like these activities, I needed to follow what our teacher wanted us to do, to be a good student.* (Interview I /Part A: Q5, 23 April)

Thus, these students gradually surrendered to the traditional instructional activities because they thought the widely accepted teaching model should help them learn English and pass important tests, even though the feelings of boredom associated with fear, disgust and anxiety were their common responses to this kind of EFL teaching and learning:

> *I think I was not the only student who felt sick of English classes in previous learning but I must face the reality— I needed to get high scores to enter good schools. I kept telling myself that these routine teaching activities such as grammar analysis, translation practice and vocabulary tests could help me learn English anyway.* (LHD-A, S49, 23 April)

> *I used to quickly forget the words I tried to memorize and feel bored in grammar cloze tests. However, the knowledge of grammar and vocabulary was the basis of English language and the main points in important English test. I learned English with mixed feelings. The fear of failure made me feel anxious about my performance in all tests. The*

*disgust of stressful and boring teaching routine made me feel like a passive and helpless learning machine but I still forced myself to operate.* (LHD-A, S22, 22 April)

Some students also described their unforgettable English learning experience with different instructional activities in or after school:

> *Under the pressure of entrance exam, junior high school learning was a nightmare... However, my third-year English teacher was good...she taught us English songs twice a month...My classmates and me really enjoyed that year...Singing those old and popular English songs such as You are My Sunshine, Morning has Broken and Inside of My Guitar gave me wonderful time when preparing entrance exam. Moreover, I acquired many new words and sentences from singing those songs... I looked forward to English course because I wanted to know which song the English teacher would teach us.* (LHD-A, S2, 23 April)

> *I really appreciated the creative English teacher Mr. Ling I met in a cram school...My English was poor when I was studying in a vocational senior high school...I decided to improve my English so I took an extra English course in a cram school...Mr. Ling was good...He used funny gestures or jokes to strengthen our memory in the usage of idioms, vocabulary or grammatical rules...His class was full of laughter...Many students looked forward to his class because he used to come out with different ideas to teach us how to 'play' with English.* (LHD-A, S9, 21 April)

From these entries, it is clear to see that these students expressed their appreciation of, and longing for, novelty and variety in EFL instructional activities.

Nevertheless, about four students liked the traditional instructional activities and their reason was that these activities were a very safe and efficient way to help learners pass public exams or important tests. The two quotations below illustrate this view:

> *I liked the traditional ways to learn English...Explicit grammar teaching could help me understand sentence structures...More knowledge in vocabulary, prepositions and idioms could let me read articles quickly and have good performances in entrance exams.* (LHD-A, S43, 21 April)

> *Reading sentences aloud, English-Chinese translation and vocabulary dictation were very organized ways to learn English...All my English teachers in high schools repeatedly used these activities to help us learn English...These activities were helpful for me to pass important English tests.* (LHD-A, S11, 23 April)

Based on these entries and interview information, I find most students felt bored with traditional instructional activities in their previous English study, and the aspiration for change was obvious from those students having positive learning experiences with different learning activities. However, when passing important English tests was the priority, a few students still liked those traditional activities, such as English-Chinese translation and grammar teaching.

### 7.1.2 Pleasantness or Unpleasantness

Reviewing the reports of fifty-one participants' previous EFL learning experiences and checking the interview information, I found many participants experienced that their unpleasant feelings were affected by external factors. These unpleasant experiences, associated with different negative affective states (e.g. anxiety, depression, pressure, boredom, dissatisfaction and loneliness), prompted their avoidance of learning and using the target language. Generally, teachers, parents, classmates, instructional activities, the content of teaching materials, cram schools, and English tests (e.g. school tests and public exams) were the common themes frequently mentioned by these EFL learners to determine their unpleasant orientations. On the other hand, a few students who considered English as an appealing language revealed that their positive (pleasant) learning experiences were mainly due to some of these external factors, such as instructional activities and the language teacher.

To start with, teachers appear to play a very important role in an EFL context as to whether English learning is a joyful and meaningful thing, worthy of endeavor and attention, or not. Many learners mentioned that the high school EFL teachers' attitudes to their efforts and achievement in English learning made them feel anxious and unhappy:

> *Grades mean everything.... English teachers used to evaluate our performances through paper-and-pencil tests.... I was disappointed with the ways teachers employed to decide if I could pass English course or not.... I felt nervous when taking English tests because I needed to make sure I could fill in answers quickly and correctly within an hour.* (LHD-A, S17, 23 April)

Also, several learners mentioned how badly previous English teachers treated the students with low grades. Sixteen students among the fifty-one participants had the experiences of being punished physically or being blamed verbally because of their poor performances in school English tests. These unpleasant affective experiences resulted in their avoidance or refusal to learn and use English. The worst was some of them ultimately lost their self-confidence:

> *To be frank with you, I am not satisfied with the exam-oriented English teaching in Taiwan... The endless physical punishment put me under stress. Many high school English teachers considered physical punishment as an effective strategy to push students with low grades to study harder but I feel it is a cruel strategy to destroy our self-confidence.... My final decision was to give up English.* (LHD-A, S48, 22 April)

> *I HATED the way the junior high school English teachers treated me...I was punished*

*everyday because I failed in English tests. The punishment could be cleaning the school public toilet or teachers' offices. Sometimes, I was assigned extra assignments to practice English after class, such as copying the target articles one hundred times. Nevertheless, I did not make any progress. English became a nightmare for me and I lost my confidence completely.* (LHD-A, S19, 23 April)

*When I was in junior high school, I was punished physically quite often because I could not achieve the goal my English teachers set up for me. Since then, I have hated English...In five-year college, the situation was worse than before. My low scores in English tests caused many heart aches from teachers who blamed me.... The verbal insults made my heart bleed.... How could I, a language idiot, have the motivation and abilities to learn English?* (LHD-A, S6, 22 April)

The communication styles English teachers used with EFL learners also influenced students' learning attitudes or motivation. The teachers, who had few or no interaction with learners, who liked to show personal authority or preferred those students with high scores, were labeled as unpopular ones. In their diaries, some students described this kind of teacher as an unfair and impatient 'educator', who was lacking in sympathy:

*Many English teachers I met in high schools liked students with good grades and looked down on students with low scores. How could they be called 'educators'? They used to ignore the existence of us, the limited-English-proficiency group, and were impatient with our questions. I thought these teachers must consider us as stupid and hopeless students because their attitudes were not friendly... I disliked this kind of teacher and thought it was not fair for me to be given up. Although my English was not good, I still needed teachers' care and attention.* (LHD-A, S25, 22 April)

*I was afraid of English teachers.... They were strict and cold 'killers' without sympathy...English teachers used to tell us how important English is and then forced us to do many exercises every day in order to get high scores in school tests and college entrance exam or other important official English tests.* (LHD-A, S39, 23 April)

Moreover, when the teaching materials and instructional activities that language teachers decided to use were only limited to textbooks, some students felt bored and unsatisfied with the learning content. They expected teachers could introduce more practical things through interesting activities. Two interviewees described this kind of teacher as a lazy educator, who reduced their willingness to learn:

Yin, Ling (LHI-A): *Language teachers only followed the content of textbooks. The content was really boring and not practical at all...They made all relevant learning activities become extremely unappealing... no connection to our daily life...Movies, newspapers, songs, jokes and novels all need to be included...I could not understand why Taiwanese high school English teachers were so lazy.* (Interview I /Part A: Q6, 23 April)

Wei-Chen, Wu (LHI-A): *High school English teachers used to complain students did not study hard, but they had never reflected on their own teaching... They only knew how to teach from textbooks and to repeat those cliché activities...They did not know how to support the content of textbooks with more interesting and practical things. As a result,*

*many students felt sick of the subject...I think they were lazy teachers...It is really a shame!* (Interview I/Part A: Q6, 23 April)

On the contrary, a few students described the teacher's friendly attitude and practical instructional activities which could change their inner willingness and then motivate them to learn and use the target language:

> *Luckily, I met a good English teacher in my first year of study in the five-year college... He tried to understand our needs and give us more practice in conversation... I started to have interest in learning and using English because of his friendly attitude.* (LHD-A, S30, 22 April)

> *The impressive English learning experience was in the last year of the 2-year college...the teacher was very nice. She tried to understand our interests and then introduced many activities into English classes such as singing English songs and discussing English newspapers. It was the first time I felt that learning English was fun and practical.* (LHD-A, S29, 22 April)

In addition to the factors related to teachers, parents' attitudes to their English learning achievement played another significant role to influence affective experiences of these participants during their previous EFL learning. About thirty-two students mentioned they had suffered pressure from parents when learning English in high schools. Parents' high expectations and critical comparisons resulted in many negative effects. Stress, depression, selfishness and anxiety seemed to be the common affective characteristics many students had experienced in previous EFL learning:

> *My efforts meant nothing and what parents cared about were grades. My parents' high expectation became my pressure and burden. I felt very depressed and unhappy as my parents' serious and threatening words occupied my mind.* (LHD-A, S23, 23 April)

> *My parents liked to compare my grades with my cousins, classmates and their friends' children. I felt bad about the comparison and kept wondering if I had no talent in learning English. Learning English became a stressful job without joy.* (LHD-A, S34, 22 April)

> *My parents kept asking me about my English grades and ignored my efforts. I felt sad but I must face the reality. In order to get high grades, I found I became a selfish student and tried all means to get high scores even cheating... As you know, competition did make learning become joyless.* (LHD-A, S37, 21 April)

Generally speaking, parents' attitudes are more or less influenced by the values and requirements emphasized by the local society. Since the indicator of good English abilities has been associated with high scores in important tests, such as Joint College Entrance Exam (JCET), Test of English as Foreign Language (TOEFL) and General English Proficiency Test (GEPT), for a long time, many people in Taiwan consider studying hard to pass these tests as a personal goal to success. As the surrounding media keep advertising the significance of these English tests and the benefits of

many successful cases, teachers, parents, students, employers and employees are all trapped in the culture of test-oriented English learning – high grades mean good English abilities and success. However, the test-oriented culture has not improved Taiwanese English abilities. Instead, negative affective responses often appear with the test-pressure and then result in unpleasant learning experiences. Many participants' retrospective reports of previous English learning reflected the phenomenon:

> *I was jealous of those geniuses promoted by newspapers and books. They could easily get high scores in TOEFL or GEPT. Why did I follow the way they suggested and study hard but could not get the same results? It was not fair!* (LHD-A, S38, 23 April)

> *Everyone says English is important from president, mayors, bosses, teachers, my parents to school classmates. I could feel the trends but I had no ideas about how to improve my English abilities. I felt helpless…. I could not feel any joy especially as English was associated with tests.* (LHD-A, S51, 23 April)

In particular, about thirty-six participants mentioned the competitive relationship with classmates, mainly caused by standardized tests, as unpleasant learning experiences. Those negative feelings, such as dissatisfaction, jealousy, selfishness and loneliness, which were closely connected with school classmates, became the barriers to their enjoyment of learning English:

> *It was quite difficult to get help from classmates because everyone was afraid that others would get higher scores…I found I was very unhappy and felt lonely when learning in a very competitive atmosphere.* (LHD-A, S20, 23 April)

> *Classmates with good grades in English had no friends because they were very selfish and proud…I disliked this kind of student, so I hated learning English. As I studied English, those disgusting images came to my mind and made me feel upset.* (LHD-A, S33, 22 April)

Because of the high expectations from teachers and parents as well as the competitive relationship with classmates, going to cram schools becomes a trend in Taiwan to make sure students should not lose in an exam-first society. Unfortunately, many students in the study were not happy about the idea but they must follow the trend because cram schools did help them pass English tests in some ways. Further discussions about the theme cram schools are in section 7.1.3 Learners' Needs and Goals.

Only one student described his pleasant English learning experiences as due to his parents and classmates. The student had opportunities to study English overseas

during school vacations each year. Being supported by his parents and encouraged by the classmates he met in international language schools, the student developed a very positive attitude to learning and using English:

> *My parents told me English should be learned through natural ways. They encouraged me to watch English language movies and listen to English songs. They provided financial support each year to study English overseas and they thought it would be a valuable investment.... I had studied English in language schools of different countries (such as U.K., U.S.A and Australia). I made many good friends over there... I like the classmates I made in language schools. They are my friends and we are still keeping contact right now.... They come from different countries, but we encourage one another and become learning partners through e-mails.... I think I am very lucky to have understanding parents and 'international' classmates. Because of their support, I find English is a very interesting and practical language to learn. No matter when, I enjoy and value the opportunities I have for learning and using English.* (LHD-A, S27, 22 April)

From these quotations, it is evident that these learners' unpleasant experiences of previous EFL learning had been influenced by the seven themes: (1) the biased attitude and authoritative communicative styles of language teachers, (2) the textbook-based learning materials, (3) the boring and impractical instructional activities, (4) the high expectations and critical comparisons from parents, (5) the competitive relationship with classmates, (6) the test-first pressure emphasized in Taiwan's society, and (7) the idea of going to cram schools.

By the same token, the only single student who had a pleasant English learning experience was mainly due to the two factors: (1) the support from parents, and (2) the encouragement of classmates.

### 7.1.3 Learners' Needs and Goals

Language teachers have been reminded of the significance of understanding learners' needs and goals (Nunan, 1999). When learners' needs and goals are not recognized and satisfied, they may develop negative feelings to English learning that may reduce their learning results. Based on the data of learners' diaries and interview, eight themes related learners' needs and goals are found to influence participants' affective experiences of previous EFL learning. They are listed along these lines for further discussion: instrumental purposes, cram schools, English tests, instructional activities, language teachers, learning/application opportunities, the content of teaching materials, and the self-concept of being an EFL learner.

In recent research on motivation (Oxford, 1996), researchers suggest that instrumental orientations (purposes) should significantly contribute to the motivation of foreign

language learners, such as learners of English as a foreign language (EFL). According to learners' diary reports about their attitudes to English (the target language) as well as the relevant information collected from interview transcripts (Part A: Q 2), this interpretation seemed to be true. Most participants in the study strongly agreed that English was an important foreign (international) language for some practical reasons. These reasons were mainly based on instrumental[5] (practical) goals:

> *English is the key medium to negotiate with overseas customers, so my parents wanted me to improve my English abilities to take over their business in the future.* (LHD-A, S11, 23 April)

> *My uncle who is a senior manager in a well-known semi-conductor company told me if I want to find a decent job, good English abilities are necessary.* (LHD-A, S46, 23 April)

> *I had worked as a secretary for three years before entering university, so I can really understand the importance of having fluent English abilities.* (LHD-A, S35, 23 April)

> *Almost all professional articles or books of computer science are written in English, so I kept telling myself I should empower my English abilities to advance my professional knowledge.* (LHD-A, S9, 21 April)

Nevertheless, 'knowing is one thing and doing is another'. Many learners did not show high motivation or positive attitudes to English learning, let alone strong instrumental orientations. The surrounding learning contexts made many of them suffer psychological conflicts of how to get a balance between satisfying urgent school needs and achieving long-term instrumental goals. These conflicts were mainly related to local school EFL education.

In Taiwan, developing fluent English proficiency in four skills has been the emphasis of the society, but the exam-oriented English instruction and scanty opportunities in school contexts for application have made the expectation and goal of cultivating effective English users difficult or impossible. As a result, school EFL learning and teaching have only functioned as a tool to satisfy short-term needs – to pass important English tests and get high grades in public exams. Some participants expressed their negative emotional responses, such as worries about learning English for passing tests, instead of developing communicative abilities:

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[5] Instrumental orientations (goals) refer to a more functional reason for learning the target language, such as job promotion and course requirements, which is different from integrative orientations. For learners having strong integrative orientations, they show a favorable attitude toward the target language community. They may wish to integrate and adapt to a new target language culture through use of the language (Gardner, R.C. 1985).

*I found school English classes could not help me develop practical English abilities in the real world. The content of textbooks could not reflect practical needs. The teaching activities were always around reading skills and grammar points. In order to pass school tests and get credits, I needed to study English for tests and entrance exams. Many classmates were not satisfied with school EFL education but we accepted it. We chose to be successful English tests takers instead of fluent English users. I felt bad when I found I could not write a short note, understand a basic conversation or express myself after years of learning, but I must admit satisfying urgent test needs seemed to be more important than practical needs in my situation. Nevertheless, the worries about my poor English abilities still exist.* (LHD-A, S13, 22 April)

*For me, previous school English learning was a waste of time. I spent a lot of time developing skills in grammar-analysis and passing important English tests to satisfy school needs and get a certificate. I felt anxious with my studies and handicapped in my English abilities because I found I could not apply the target language in my daily life. I knew many words and grammar rules, but I had difficulties putting them together when I talked. English has still been like a 'textbook' language after years of learning. I think if I had more practice opportunities and met a good teacher, my English communication abilities would be better.* (LHD-A, S44, 23 April)

In addition to the worries or anxiety about how to achieve long-term goals through school EFL education, the complaints that school language teachers could not help them achieve short-term needs were common. Therefore, cram schools, a product of the test-oriented culture, became a 'must go' place frequently mentioned by forty-one participants as a 'panacea' to empower their test abilities and then satisfy their urgent needs at different school stages. Facing the 'must go' choice, many students felt unhappy, unfairly treated or guilty about the decision:

*In junior high school, everyone went to a cram school to have extra training after school English classes. I must admit that the teachers in cram schools were more organized than school language teachers both in grammar analysis and summary of key points. Moreover, they taught us skills to get correct answers quickly, and strategies to understand and memorize new words or idioms efficiently. It is ironic and ridiculous to discover that the cram school education has been a guarantee in Taiwan's test-oriented culture... I could not understand why high school EFL teachers could not provide teaching of quality. Finally, students needed to pay extra money to learn English for the purpose of getting high grades in entrance exams even though they hated to accept another "exam education" in super-big classes. Also, it was not fair for students from poor families because they could not afford it.* (LHD-A, S1, 22 April)

The worst phenomenon mentioned by several students was that many school English teachers opened their own after-class cram schools to earn extra money. If students wanted to attain ideal performances in school tests, they needed to attend extra classes with extra payment to have better teaching and training. Several interviewees pointed out the situation with disgusted voices:

Han-Yi, Hsiao (LHI-A): *I think being an English teacher in Taiwan is really a 'profitable' job because they can make double money. In junior high school, I was the only one who did not attend the after-class course at the English teacher's home. I think that was why the English teacher did not like me and kept finding my mistakes. In the class, she skipped some parts because she said everyone understood...It was really an*

*experience of torture to meet this kind of English teacher. I think many classmates had similar experiences. Their high school English teachers must be like this, very snobbish. These teachers sacrificed students' rights and needs to earn 'dirty' money. It seemed impossible for them to consider students' difficulties and provide free help.* (Interview I/Part A: Q7, 23 April)

Chia-Ling, Chu (LHI-A): *My problem in previous English learning was that I had met many 'terrible' English teachers. They did not really care about the needs of students...In senior high school, my English teacher used to make students lose face in the class, especially those who did not attend a special English course at his place...He wanted to emphasize how bad our English was and the need for extra classes to make up...He told us the payment would be cheaper than that of others because we were his students...It was really disgusting.* (Interview I/Part A: Q7, 23 April)

Based on these learners' reports about their previous EFL learning, I find that the test-first culture had misguided the direction of EFL instruction and negatively influenced many students' affective experiences. As these learners mentioned, instructional activities and teaching materials were exam-oriented, and cram schools were recommended for test preparation. Few application opportunities were available during their school classes and what language teachers had emphasized were test performance rather than practical goals (instrumental purposes). When these EFL learners' <u>needs</u> could not be satisfied and their <u>goals</u> could not be achieved, many of them produced negative feelings towards English learning.

However, a few students still kept an 'English dream' in their minds hoping to overcome learning difficulties and make their goals come true one day. These learners had a strong self-concept of being an effective English learner, which might become a positive force to motivate them to achieve their goals. Ya-Chun and Chia-Ming clearly stated their desire and self-expectation during their interview:

Ya-Chun, Ku (LHI-A): *I was willing to learn and wanted to learn...English is very difficult, so an understanding mentor and suitable materials are what I need. In order to improve my English abilities and be a fluent user, I need to devote more time to the language. I cannot be bitten by those negative learning experiences.* (Interview I/Part A: Q7, 23 April)

Chia-Ming, Chou (LHI-A): *Although my English was not good and I felt bad about my poor English, I never gave up on myself. I hope I can use the language fluently one day...I believe practice can make perfect. I need to look away and go ahead!* (Interview I/Part A: Q 7, 23 April)

The two interview quotations showed that there were still some learners being motivated to learn English because of a strong self-concept of being an effective EFL learner, even though their goals had not been achieved yet.

### 7.1.4 Personal Coping Potential

Drawn from the fifty-one EFL participants' retrospective reports of their previous learning, the self-concept of being an EFL learner seemed to become an important internal factor to facilitate or inhibit their learning and use of the target language. After years of English learning, instead of developing a positive attitude to face personal English learning difficulties, many participants became doubtful of their coping potential and kept a pessimistic attitude towards their learning abilities. The 'debilitating' development in the self-concept of being an effective EFL learner became a fatal weakness for these participants when acquiring the target language has been an important goal in Taiwan's education.

In general, the reasons that caused these participants' negative feelings and beliefs about their potential for coping with English were found mostly linked with school EFL teachers, parents, classmates, and the paper-and-pencil tests emphasized by school EFL education. In other words, what the surrounding persons said, and how they behaved based on the test-oriented social expectation, were the critical factors that unconsciously made some learners regress.

Two examples are provided below to explain how the feelings of disappointment and failure about their personal ability to cope with English learning were due to the influence of these recurring themes:

> *English Teachers and my parents liked to use school test results to decide if we studied hard or if we made progress. They told us it was school policy and we should follow...Classmates also used the same standard to evaluate English abilities... Although I studied hard, I did not get the grade I expected and felt very frustrated. I was not a successful English learner and I thought I might not have foreign language talent... I told my difficulties to one of my English teachers in junior high school. The teacher seemed to pity my situation but she could not provide further help because of the pressure from school policy... Finally, I decided to give up English and spent more time in studying other subjects.* (LHD-A, S45, 23 April)

> *I felt anxious when being asked to memorize many new English words for daily quizzes in high schools. To be honest, I was not a lazy learner but I could not achieve the goal teachers and parents expected. Therefore, I was punished quite often in school because of my terrible test grades... my parents were angry with my grades in English tests all the time... I thought I must be a language idiot. English alphabets, like meaningless symbols, were very complicated and difficult for me to put them together correctly or to remember the combined forms effectively. My final decision about English, the important subject in college entrance exam, was to give up. Since I did not have language talents, why did I need to waste my time?* (LHD-A, S28, 22 April)

Furthermore, some students described their timid attitudes to their English language

learning abilities even though opportunities for practicing the target language in real situations were available. Since language teachers emphasized test results, the common instructional activities in school EFL education were continuous practice of target language knowledge through paper-and-pencil tests. Accordingly, active learning (application) opportunities were limited. After accepting this kind of EFL education for years, many students who had not had overseas (practical) English learning experiences became the victims of a test-oriented culture, in which developing fluent English communication abilities is only paid 'lip service'. Consequently, 'escape' or 'avoidance' was the common choice many EFL learners made to hide their fear, anxiety and frustration when they needed to use English for real communication. Their potential in learning and using English was thereby hindered. The following interview information provided vivid descriptions of two students' previous experiences of 'escape' or 'avoidance' due to their self-denial of personal coping potential, even though communication opportunities were available:

> Celia, Lin (LHI-A): *I feel embarrassed to talk about my current English abilities because I do not know how to express myself through English... My listening abilities are extremely poor...Although what high school teachers taught could help me pass entrance exams, I find my practical English abilities are still poor...I feel lost when I need to study English independently...I cannot read English newspapers and understand English broadcasting after seven years of learning...The worst is I am terribly afraid of seeing native speakers even when chances are available... Two months ago, I saw a foreign guy (Blue eyes and brown hair) in an Italian restaurant at Taipei SOGO Mall. He had problems with his meal order because of communication difficulties with waiters. I tried to ignore him although I hoped I could have helped him.... A very guilty feeling came to my mind at that time and I could not help sighing, "The seven-year English learning is completely in vain!"* (Interview I/Part B: Q14, 23 April)

> Shan-Jen, Lee (LHI-A): *My English abilities are terrible. I had no experience in using English for communication ... I think I do not have talent in learning English... Could you believe I had never heard my high school English teachers speak fluent English or use English as a medium of communication? They used Chinese to explain 'textbook' English. Yes, they only read or repeated English in textbooks...I think it is the main reason I have not developed the habit of using the target language for communicative purposes. It is not my fault because English is a difficult language for Chinese speakers. My summer part-time job experience in a McDonald fast-food restaurant, about eight months ago, made me feel the disadvantage of my linguistic deficit in English. My avoidance of using English [in order to save face because of my poor English proficiency] made some foreign customers misunderstand my intention and complain to the store manager about my 'rude attitude'...It was a shame to mention the event because I lost my part-time job finally. It was really a shock to me but I could do nothing. I still feel helpless with my English abilities now. I do not think it is right to push a language idiot to learn English successfully.* (Interview I/Part B: Q14, 23 April)

These learners' voices have indicated that the development of English communication abilities cannot be achieved through a test-oriented approach. Without application experiences during their previous English learning, many students became timid in

using English, even when real opportunities were available. As a result, they might lose self-confidence in their personal English abilities.

### 7.1.5 Self and Social Image

All students are part of the society, thus, social values and expectations profoundly affect EFL learners' attitudes and values (images) of themselves during their English learning process. Since English has been considered as an important global language for international trade and communication around the world, learning English has been a countrywide activity in Taiwan. In order to demonstrate English abilities, apart from English tests in entrance (public) exams, EFL learners are encouraged by Taiwan's government, universities, and well-known companies to take official tests such as GEPT and TOEFL. That is, teachers, parents and employers all use these tests to compare students' or applicants' degree of English proficiency, and determine if they can be accepted. In the same way, students use test results to judge if they are good and successful learners. Increasingly, most students develop their self-image of being an effective English learner according to the values and expectations emphasized by the society.

About eleven learners strongly claimed their desire to upgrade English abilities, through passing those important tests with good performances. Their purpose in pursuing high scores in English tests was to demonstrate their good English ability. After that, they could win people's respect, earn more money and get a higher position:

> *I tried very hard to improve my English abilities to increase my self-confidence. I found if I wanted to win a teacher's attention in schools, good English abilities were one of the reasons. My father told me people would respect me more if I can speak fluent English…My senior sister also told me what bosses care about are degree and English proficiency. Good English abilities mean better salary and more opportunities for promotion. GEPT score is the important indicator in Taiwan. I passed the basic level of GEPT three months ago and hope I will pass the intermediate level of GEPT in the future.* (LHD-A, S27, 24 April/Stage1)

> *Learning English and accepting level evaluation have become a national activity in Taiwan. From kids to senior citizens, everyone has been encouraged to improve English abilities and pass official tests. I told myself if I wanted to have a good job and future, I needed to improve my English abilities and pass those tests. In order to prepare for TOEFL, an important reference of English proficiency for many American companies in Taiwan, I have taken extra classes for the test in a private language school for two months. I hope my English abilities will be improved and that I will successfully pass TOEFL, the international test, at the end of this year.* (LHD-A, S18, 28 April/Stage1)

Disappointingly, most of the time, the strong social expectation for good test performance did not motivate EFL learners but caused negative effects on many participants' previous English learning. In addition to several negative affective states such as jealousy, competitiveness, loneliness and unpleasantness mentioned earlier, more than half of the participants complained that they were hurt by the over-emphasis on 'abnormal expectations'. Living under a test-oriented culture and certificate-first pressure, many students' opinions of themselves in learning or using English were completely directed, or negatively affected, by the 'exaggerated values' of tests emphasized by the people (classmates, teachers and parents) in the society. Gradually, students devalued themselves because they failed to pass important English tests advocated by society. They lost self-esteem or self-confidence in learning or using English. Finally, they developed a negative self-concept of being an effective EFL learner. As the negative self and social image was shaped in this way, it became a critical inner force to shut down their willingness to learn.

An interviewee, Celia stated "*low English grades equal poor English abilities and imply my failure in the future*" and "*I should be a loser in job markets because of my poor English abilities*". Such pessimistic feelings also pervaded the diary entries of many participants:

> *English has become a subject that keeps reminding me of my weakness and inability…I was not an ideal learner because I used to fail in English tests… I feel sad to tell you I was deeply hurt by learning English, the language…. Punishments, blame and ridicule have been like nightmares in my previous school life… I still remember in the last year of my five-year College study, my teachers, parents, classmates and elder brothers blamed and looked down on me without listening to my inner voice, because I did not want to attend the basic level test of GEPT to accept degree evaluation. I was considered as a naughty student without hope. At the graduation ceremony of five-year College, my only wish was no more English classes in the future…I think I am a language idiot… I am a loser. I cannot perform well in tests and I cannot even use English to write a memo.* (LHD-A, S6, 22 April)

> *I know English is important but I cannot understand why all teachers and parents in Taiwan have been crazy about testing students' English abilities and asking us to get official certificates. I wonder if these tests and grades can help me in real communication. Originally, I liked English because I enjoyed Celine Dion's songs but the feelings no longer exist. The well-accepted social expectations have made me lose confidence and interest in learning English because of my poor performances. Sometimes, I devalued myself because of my terrible test results. I hated classmates or friends having better scores. I really felt confused about myself as well as those 'abnormal' expectations. My self-image seemed to be gradually destroyed by others' expectations and my unrealistic desire. I wanted to be a fluent English user but I could not achieve my goal because I did not know how to make it become a reality. I think nobody could understand my conflicts and sufferings. How could I feel motivated when people around me kept telling me a bright future would be impossible because of my poor English grades? I have been*

*pursuing a kind of satisfaction with learning English but I have not found it...I have felt disappointed with my English learning abilities for a long time, and sincerely hope my current English teacher can understand my situation.* (LHD-A, S36, 23 April)

The disadvantages of an exam-oriented EFL education in Taiwan have been clearly demonstrated from the above two interview quotations. Because of the over-emphasis on test performances in their previous EFL learning, many students developed a negative self-image when they could not achieve what society expected. Gradually, they lost self-confidence in learning and using English.

## 7.2 EFL Learners' Affective Experiences During the MI-based Intervention

In this section, I address university EFL learners' affective experiences during the MI-based intervention, mainly drawn from the diary entries of the fifty-one participants. In order to clearly grasp learners' perspectives on aspects of affective experiences such as changes or progress during the whole learning process, the diary data at three stages[6] were reviewed, explored and analyzed with the supplementary information collected from interview data. I believe that a detailed focus on the qualitative content of learners' working conceptions in the three stages can help me recognize how their feelings, motivation and attitudes towards EFL learning over time were affected. The results can also be compared with findings of their previous affective experiences to make an interpretation of participants' affective experiences associated with the MI-based intervention or other factors during the two months.

Based on the results of data analysis, ten themes, classified under four issues, emerged as important factors resulting in different affective experiences. These issues and relevant themes are listed as follows:

1. *Self-concept of being an EFL learner*: Learning diary; learner-initiated learning or communication experiences
2. *Significant others*: the language teacher; classmates (peers)
3. *Leaning contexts*: MI workshop; MI-informed activities/tasks (in-class and

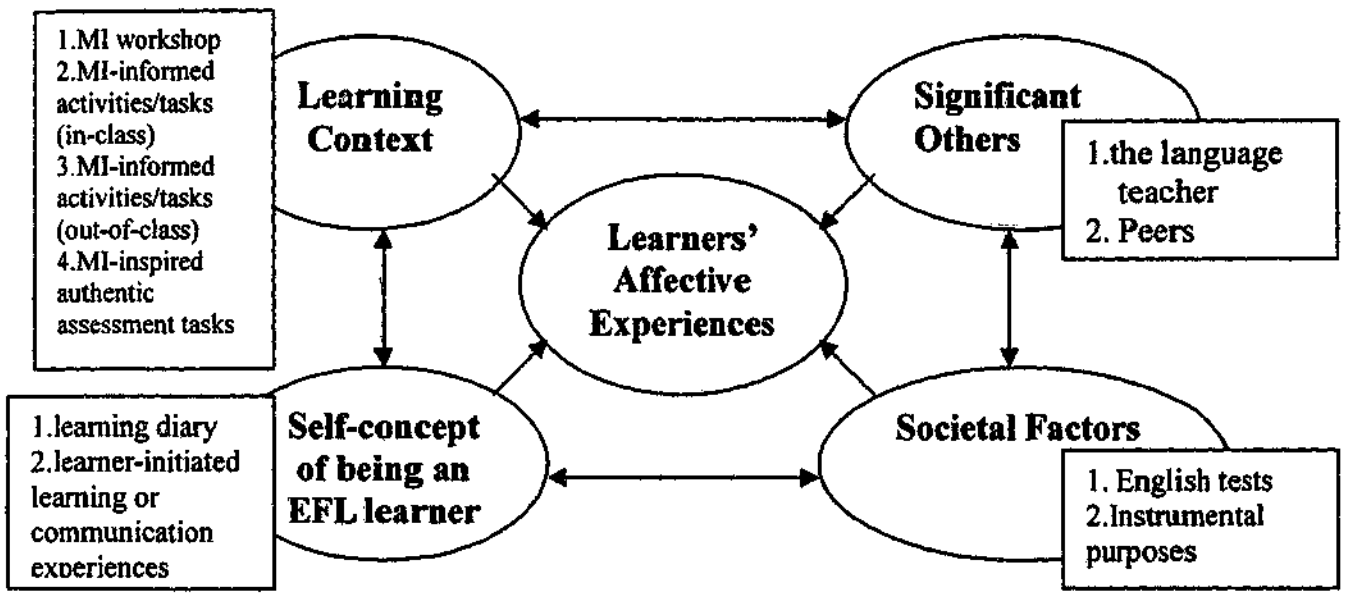
[6] The three stages included stage 1 (week 9-11), stage 2 (week 12-14) and stage 3 (week 15-17). For example, if the entry date that a student marked in his/her diary was during week 13, this entry was grouped under stage 2.

out-of-class); MI-inspired authentic assessment tasks

4. *Societal factors*: English tests; instrumental purposes

The relationships among the ten affective factors (themes) and learners' affective experiences during the MI-based intervention are illustrated in Figure 7.3.

**Figure7.3. The Relationships among the Themes and Learners' Affective Experiences during the MI-based Intervention**




Moreover, the patterns of feelings and attitudes (affective features) that related to (caused by) the ten themes were examined through the five dimensions (categories) of emotional appraisals to reveal how the fifty-one EFL learners' affective orientation, receptivity, and engagement were influenced and shaped during the MI-based intervention (Appendix 14: coded examples). The five dimensions formulated by Scherer (1984) as stimulus evaluation checks (SECs) and suggested by Schumann (1997) as patterns of motivation (Appendix 12), were employed to understand learners' affective experiences. The five categories are:

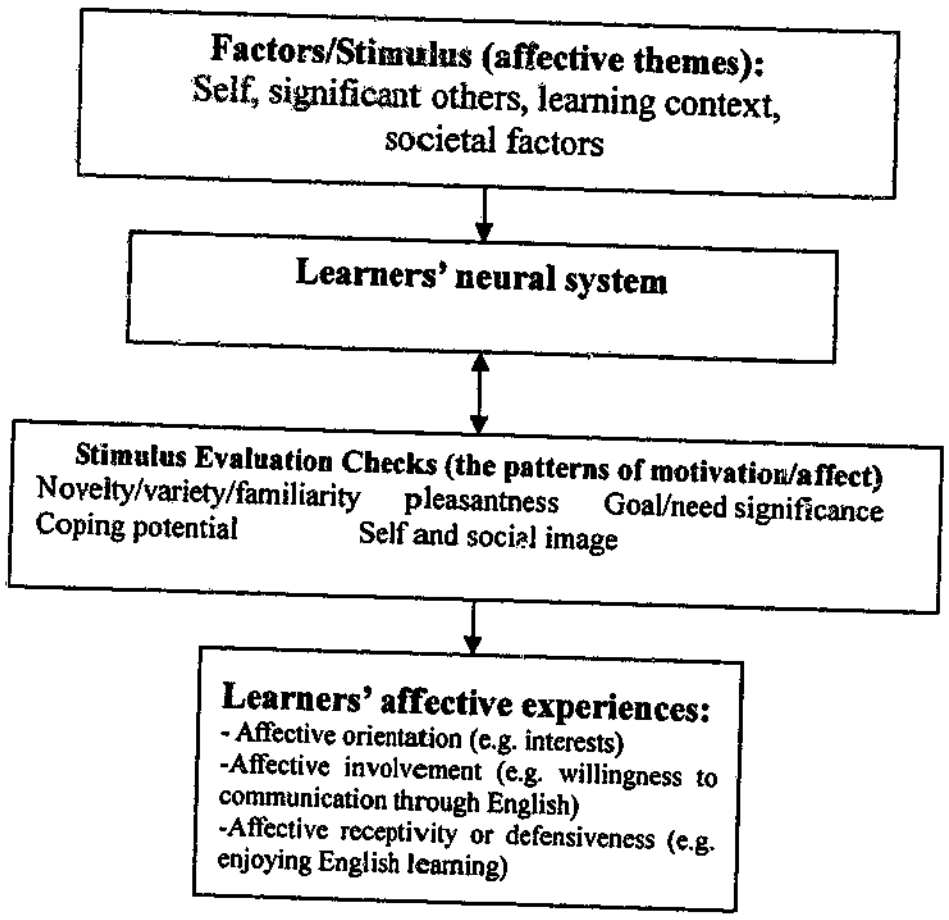
1. Novelty, familiarity and variety[7]
2. Pleasantness or unpleasantness
3. The relevance/significance of goal/need
4. Coping potential

[7] I added 'variety' into the 'novelty and familiarity' group, based on the features of the research data.

5. Self and social image

The procedure of how these factors (affective themes) were evaluated by learners' neural system (Appendix 13) through SECs and then led to different affective experiences during the MI-based intervention is illustrated in Figure 7.4.

**Figure7.4. The Procedure of the Development of Learners' Affective Experiences during the MI-based Intervention**




The two figures above are an overview of the findings about 'affect' drawn from the learners' diaries and interview information. Figure 7.3 presents the relationships among learners' affective experiences and relevant themes (factors) during the MI-based intervention, and Figure 7.4 illustrates the procedure of the development of their affective experiences during the intervention period, through a neuropsychological view. The two figures are basic for understanding the following discussion.

### 7.2.1 Novelty, Variety and Familiarity

The MI-based intervention, frequently mentioned by participants in the study as significant factors (themes) to influence their affective experiences of English learning, included the MI workshop, MI-informed activities and authentic assessment

tasks. The attraction of these teaching and assessment activities/tasks was their novelty, variety or familiarity to EFL learners.

#### 7.2.1.1 Surprises stimulate learners' expectation of the EFL course

Many participants expressed their excitement about participating in the "*special EFL course using MI strategies*" especially reflected in their diary entries of stage 1 (week 9-11):

> *The MI workshop was a very special and encouraging way for me to understand the different talents of human beings. It is also exciting news to know I CAN learn English effectively if I find the right ways. I believe the following weeks of the course should be very different and I expect to play with MI-based learning activities.* (MID-A, S13, 27 April/Stage 1)

> *The teaching activities integrated with MI ideas are good. I do not feel sleepy because surprises all the time! Today's activities were creative and unforgettable...Teacher encouraged us to use music and imagination to learn. I start to look forward toward next week's course.* (MID-A, S22, 6 May/Stage 1)

> *I am surprised to know we have out-of-class learning activities and I do not know how to express my feelings to the touching news. In short, many thanks and high expectation!* (MID-A, S31, 1 May/Stage 1)

About twenty-one participants also felt surprised as they were informed they would be evaluated through different ways, such as a 'role play' and a 'final project'. The mixed feelings of excitement, fun, and nervousness were articulated in their diary entries when participants knew they would have to accept the new challenge:

> *What I want to say is the class is really different. The English teacher told us we would be evaluated through a Role Play and a Puppet Show. I feel nervous about the ideas but it must be fun to see our classmates' performances.* (MID-A, S25, 1 May/Stage1)

> *I am excited to know the teacher will use other ways to evaluate my progress because it implies I still have hope...Moreover, I think we will get a lot of fun when observing others' presentations.* (MID-A, S41, 30 April/ Stage 1)

A final interview with Yin also indicated that her strong expectation of the course was due to the 'surprises' the teacher designed for each class:

> Yin, Ling (MII-A): *I feel very lucky to take the course. The course is very special and different. It is like adding spice to my English learning and so my school days were enriched...I think the teacher must have designed the course from her heart. We had fun in each class. They are Bingo Games, the relaxation exercise with music therapy and aromatherapy, jigsaw problem solving, singing English songs. I can name it! There were many examples. I find learning English through these different activities has really increased my learning motivation. I feel English is a very interesting language now. English is available everywhere if I look at my surroundings with careful eyes and sensitive ears!* (Interview II/Part C: Q 17, 26June)

#### 7.2.1.2 Variety makes English learning meaningful

There were three students showing doubtful attitudes to the 'different' teaching model in their entries of the first three weeks (stage 1). Their reasons were:

> *I wonder if the MI-based instructional activities can make my classroom EFL learning different, far more effective than before.* (MID-A, S38, 29 April/ Stage1)

> *I kept thinking about the MI theory this week. I do not know if the theory can be applied into my English learning or not. I do not believe the theory can make my English learning become effective.* (MID-A, S14, 29April/Stage1)

> *I appreciate that the teacher comforted us with the theory but I do not believe my English can make any progress because of the MI-based activities. My previous experiences have made me completely give up on myself.* (MID-A, S28, 3 May/ Stage 1)

However, the three of them expressed their appreciation of these instructional activities/tasks after one-month's learning (stage 2 and stage 3) because of the variety of activities/tasks. They agreed that this variety in instructional activities/tasks had satisfied different needs and made their English learning become meaningful:

> *I enjoyed the inclusive EFL course because of its variety. In particular, I found I could learn fast through pictures, games and observing others' performances... These different activities have made English learning become a meaningful and possible thing for me* (MID-A, S38, 29 May/Stage2)

> *I think I have benefited a lot from cooperating with my classmates through various activities in the course...these activities not only let English become a live language but also make English learning become meaningful ...I find my learning willingness seems to be higher than before due to these interesting and practical experiences.* (MID-A, S14, 19 June/ Stage3)

> *I need more time to explore my strategies and develop my English abilities, but I feel grateful to the interesting course...various activities have inspired and encouraged me to rethink the possibilities of overcoming my unconscious avoidance to learn English.* (MID-A, S28, 20 June /Stage 3)

In the final interview, seven among the twelve volunteer interviewees also mentioned the importance of variety as an issue when being asked to give suggestions for future EFL teachers in course/activity design. Wei-Chen's words, as reported in the following quotation, represent the inner thoughts of these EFL learners:

> Wei-Chen, Wu (MII-A): *I dislike the boring teaching routine with traditional learning strategies in high schools because it could not help me approach the practical aspects of the target language. I really appreciate meaningful learning through various instructional activities. I find various activities help me understand that English could be acquired everywhere at anytime. The field trip has motivated me to observe and discover the other aspects of the target language... English does have a relationship with my life and it is not only a subject to pass without joy and practical purposes. The course let me become aware that English exists in music, sport, food, computer... and I can learn it effectively through different strategies... Although it looks like a simple self-awareness, it means a*

*lot to me. Therefore, I suggest all EFL teachers in Taiwan should understand how to design various learning activities to enrich their classroom teaching. If students can learn English through various opportunities in meaningful contexts, they should make progress quickly.* (Interview II/ Part C: Q 17, 26 June)

In fact, the benefits of practicing English with various MI-informed activities/tasks were the diary focus of many participants during stage 2 (week 12- 14) and stage 3 (week 15-17). Many learners repeatedly described which activities/tasks they enjoyed most and explained why. Because the issue was closely related to 'pleasantness', it will be discussed in section 7.2.2.

**7.2.1.3 The familiarity of MI theory increases EFL learners' sense of security**

In the diary entries, several participants appreciated that the MI workshop brought them a feeling of familiarity with MI theory. The issue of familiarity, 'learning from known to unknown', was considered as a successful starting point by many learners because they could recognize what the MI-based intervention would be like. This kind of understanding increased the learners' sense of security as well:

> *Although there are many new activities in the course, I do not feel lost. The MI workshop has helped me to follow the course. Moreover, the teacher always gives us clear explanations and demonstrations on how to implement each learning activity based on the Multiple Intelligences ideas during the process. I really appreciate that.* (MID-A, S10, 15 May/ Stage2)

> *After three weeks of the MI-based course, I gradually understand the advantage of having a MI workshop before the course started.... My sense of security during the process of learning seems to be thereby enhanced. It is really thoughtful that the English teacher gave us a chance to see the theory behind the course. I believe learning from known to unknown should be more meaningful and efficient than from unknown to unknown.* (MID-A, S8, 20 May/ Stage2)

Moreover, several interviewees mentioned that the MI workshop was a trigger for them to examine the theory. The reading of several books about MI applications, recommended by me, their English teacher, also helped them to understand the theory thoroughly and then feel comfortable in taking the MI-based course:

> Yin, Ling (MII-A): *I could feel English teacher's appreciation of her students as I took the MI workshop and read the book Seven Kinds of Smart recommended by her... I do agree 'Give me a fish and I eat for a day. Teach me to fish and I eat for a lifetime'. I also understood I need to be responsible for my own learning and trust my abilities... After these wonderful experiences of understanding MI, I was very sure I would not be like 'a rat in another experimental teaching'. I should be safe to take the special course because the teacher wanted us to appreciate ourselves and develop our potential. As my inner feelings about myself in learning English changed, I found it seemed easier to open my mind to face my problems and find solutions...* (Interview II/ Part C: Q15, 26 June)

In this section, how these learners were motivated to learn English by the novelty and variety of the MI-based intervention has been discussed with examples. Obviously, these MI-based instructional or assessment activities/tasks had stimulated learners' expectation of the EFL course, as well as made their EFL learning become meaningful. The introduction of MI theory, through the MI workshop and reading relevant books recommended by me, their language teacher, was also useful for these students. Because of the familiarity with the MI theory, students not only felt comfortable to try the subsequent MI-based activities/tasks but also better understood how to apply the theory in their own learning.

### 7.2.2 Pleasure Orientations

Intrinsic pleasure is one of the important indicators of learning motivation. According to the self-report of the fifty-one participants, it was found that the MI-based intervention could bring both enjoyable and unpleasant learning experiences, depending on individual differences. That is, on the one hand, the MI workshop, MI-informed activities/tasks and MI-inspired assessment tasks could become important sources to elicit pleasant feelings from some EFL learners. But on the other hand, the MI-based intervention could become a kind of pressure that inhibited some participants' willingness to learn because of their inner dislike of some activities/tasks. In fact, apart from the influence of the MI-based intervention, there were other variables found to affect participants' enjoyment of English learning. They were the teacher's styles of teaching and communication, and collaborating with fellow learners (classmates). The impact of these factors on learners' pleasure orientations towards English learning is discussed as follows.

#### 7.2.2.1 Pleasant or unpleasant experiences with the MI-based intervention

Different learners have different preferences that may influence their pleasure orientations. Many learners expressed that their enjoyable experience of the EFL course with the MI-based intervention resulted from some activities/tasks implemented during the process of the MI-based intervention. The following examples clearly stated how learners experienced pleasant learning during the three stages through different MI strategies: (1) MI workshop, (2) in-class instructional activities/tasks, (3) out-of-class learning activities/tasks, and (4) authentic assessment tasks.

(1). *I like today's MI workshop because the theory has confirmed my strengths and many student-centered activities made the process interesting. In today's workshop, I was lucky enough to be called by the teacher to 'perform' some English words and sentences in front of classmates through my 'creativity'. During the process of my performance, I found I could acquire English very fast. I also found using the body to feel the target language was more effective than only using my eyes...I also got a lot of fun when cooperating with classmates and hope the future classes could be like this—happy learning.* (MID-A, S22, 24 April/ Stage1)

(2). *My heart is full of joy today because we have English class...I really like today's warm-up activity—dancing and singing. The review activity — Listen and tap (using a fly-swat!) is also cool! Nobody felt sleepy and everyone was full of energy... I have been so impressed by the two songs, Yellow Submarine and the Wheels on the Bus that I create my own lyrics and record them in my audiotaped journal.*
(MID-A, S36, 13 May/Stage 2)

(3). *I like to watch English language movies although my English abilities are not good...I really like the series of videos—Rebecca's Story. Rebecca is like me, a university student pursuing her dream...I am really attracted by the story plot and appreciate we have chances to play the characters in the story...I find learning English is no longer difficult because English is closely linked with my daily life...Each week, I am eager to watch new episodes in the Self Study Center to know what's happened with Rebecca, Alberto and Ramón. I find my interest in learning English has been promoted.* (MID-A, S15, 24 May/ Stage2)

(4). *I like the final project idea...I am a computer lover and teacher agrees that I can create a multimedia learning website for our class as a final project...It is good news for me! Recently, I am busy putting what we have learned in the course on the website... During the process of design, I have chances to review all materials and feel satisfied with my progress. I also record my oral English into the computer... If you click the button of 'a little man', you can hear my voice...Yes, It's English! The project is very interactive and interesting. I feel happy when learning English through this way although it looks like an impossible challenge.* (MID-A, S46, 1 June/Stage3)

These entries showed that the MI-based intervention could provide EFL learners with various opportunities to discover their own ways and to personalize their learning process. The 'matching' feelings made some of them feel motivated and satisfied, which might have triggered and elicited their inner pleasure.

In addition to the fact that personal preferred activities/tasks were resonant with pleasure orientations throughout the study, many participants in stage 3 (week 15-17) mentioned that the pleasant feelings also came from their progress in trying new things during the MI-based intervention:

> *I did not think I enjoyed drawing but I gradually find drawing is a good way to strengthen my comprehension and memory... Now, I am interested in seeing the drawing works created by classmates. These works are 'terrible' but 'meaningful' and 'unforgettable'. I think it does not matter if I am an artist or have talents of drawing or not. "Trying for fun" is a way to make myself happy and broaden my potential.*
> (MID-A, S19, 8 June/Stage 3)

*I could not believe my performance in role-play has won many praises from classmates…I am happy to discover my talent in drama… I think learning English needs 'emotion' and 'understanding'. Because I really like the character 'Rebecca', I try to understand the character thoroughly before performance. To my surprise, I find I can perform the character naturally with fluent English. Anyway, I am so glad to see my progress through the course.* (MID-A, S 18, 21 May/Stage 3)

When these learners found their learning potential was broadened during the process of trying new things suggested by the MI-based activities/tasks, they felt more motivated to learn or use English.

Of course, there were a few learners who had unpleasant experiences with the MI-based intervention. The mixed feelings, "*like some but dislike some*", were a common phenomenon among these learners, especially reflected in their diary entries during stages 1 and 2. The following extracts obviously show the reality of individual differences. The same activity could be favored by one but disliked by another. As one student wrote:

*I prefer no pressure learning, like learning through games and singing in groups… I hate to give an individual performance before others because I feel embarrassed with my terrible English.* (MID-A, S26, 2 May/Stage 1)

Whereas the other student said:

*Sometimes, the class is very noisy…. I do not like to play and sing in class, like kids, not university students. I prefer oral presentation training through formal ways.* (MID-A, S11, 9 May/Stage 2)

Another example is about the boredom of authentic listening practice:

*It is difficult to describe my feelings to the course. Sometimes, I enjoy, but sometimes, I feel bored…I think we can do the listening tasks at home with the assistance of scripts. I feel bored when teacher plays listening CD in the class. The authentic listening practice is a boring activity. I prefer more activities in teaching English songs and watching videos.* (MID-A, S2, 17 May /Stage2)

However, some asked for more for this kind of practice. One student pointed out:

*I still hope we can spend more time in extensive listening practice and grammar analysis because they are the main points in TOEFL…I find some MI-based activities are very noisy... I am used to being a quiet learner and believe I can learn English efficiently through traditional ways.* (MID-A, S43, 23 May/Stage 2)

Moreover, many participants named the audiotaped journal, one of the project-like MI-based activities/tasks, as an unpopular alternative assessment even though several students mentioned their benefits from the assignment:

*I feel bad when I know I need to prepare an audiotaped journal twice a month… Unlike*

*performing in the puppet show and the role play, there is no fun in preparing an audiotaped journal... I like face-to-face interaction because I can get responses and suggestions immediately...I hate to talk to a machine.* (MID-A, S20, 10 May/ Stage1)

*It is very difficult to record my audiotaped journal in the campus dorm. Noise is everywhere...I need to record many times and the results are not what I expect...my voice is not clear. I don't know if it is a problem with my machine, but I do not have extra budget to buy a new one... It is not convenient to borrow a tape recorder from others all the time.* (MID-A, S6, 23 May/Stage 2)

*I would prefer the audiotaped journal to be done with classmates rather than by myself...I feel embarrassed to record my English into a machine...I hope teacher can arrange another time to give us spoken tests instead of using audiotaped journal...Twice a week is too much because the puppet show and role play both are done once a semester.* (MID-A, S51, 3 June/Stage 3)

These EFL learners' entries about their use of audiotaped journal showed that personal and contextual factors were the main reasons to explain their inner dislike of this alternative assessment.

Two students in interview also mentioned they preferred some activities/tasks to others during the MI-based intervention. However, they explained that they still had a very pleasant experience with the MI-based EFL course, because they knew what they were learning during the process:

Liang, Chao (MII-A): *My feelings about the course are very positive even though there have been some activities I do not like... Although some activities look funny, like dancing or using a fly swat to tap new words, I am very clear about the purpose of each activity/task because of teacher's notes on the board or handouts...Similar to the out-of-class field trip, the English teacher always gives us clear explanations...Purposeful learning has made me feel learning English has become a happy thing. When everything is clear, my worries are gone and my brain becomes smarter than before. That is why I feel I have learned a lot from the MI-based course so far.* (Interview II /Part C: Q17, 26 June)

Hsin-Han, Chang (MII-A): *I like to hear English teacher tell us what we could learn from each activity, even though the activity was something I might not like...As I understood all activities were designed for different purposes, I was motivated to try them because I knew I would not waste my time...Sometimes, the activity I disliked, such as note-taking listening input, became a helpful tool to improve my memory problem in authentic listening... I think 'intuitive happiness' is temporary because it cannot guarantee positive effects. Happiness for nothing is not what I expect because it should not last longer. However, those learning activities/tasks in the course have made me feel pleasure because of their clear purposes...For example, my initial response to the final project was a 'sigh', but now I recognize doing the final project is really a pleasant and meaningful thing.* (Interview II /Part C: Q17, 26 June)

Although some MI-based activities/tasks did not match these learners' original preferences or interests, they still enjoyed these activities/tasks because the purpose and utility of each activity were clearly explained and demonstrated, which were

believed to reduce their learning anxiety and increase their comprehension of the target learning materials. In other words, not only their strengths were addressed, but also their weaknesses were positively affected by the use of different MI-based activities, that were clearly explained and demonstrated to them.

#### 7.2.2.2 Enjoyment of English learning and the language teacher

The enjoyment of English learning was closely related to me, their language teacher. Many EFL students emphasized my styles of teaching (in class) and communication (after class) played a significant role in influencing their affective receptivity to the EFL course or to English learning.

My teaching styles many students appreciated throughout the study were "*the teacher is always full of energy*" (energetic/enthusiastic), "*when she is teaching, she is very sensitive to our needs and difficulties*" (sensitive), "*she supports and praises us even though we make mistakes*" (understanding and encouraging), "*the teacher is very organized to run each activity*" (organized), and "*she gives us clear guidelines or explanations all the time*" (responsible). The following are examples drawn from diary entries of three representative participants in the group:

> *The class is very relaxed because the teacher is not critical.... She respects our talking without interruptions and she is very sensitive to our needs. Many of us feel the learning atmosphere is extremely good...I find everyone seems to enjoy learning English like me... I look forward to the course because of the understanding teacher.*
> (MID-A, S41, 10 May/ Stage1)

> *I like the teacher's smiles, energy, body language, creativity, clear explanations and good-preparation in the course... The class is full of laughter and we are always in high spirits because the English teacher is very humorous and helpful...I like to hear her personal learning stories with very cute body language...I think the teacher's patience with our learning difficulties, and her hard work in the course have touched me deeply, so I am willing to give myself a try.* (MID-A, S30, 28 May/ Stage 2)

> *Today's puppet show-- on love relationships in Chinese and Western society has helped me 'step out' in using English to express my ideas...Teacher's clear demonstration and in-class praise have encouraged us a lot during the process of preparing for today's puppet show... I think I am so lucky to meet a good English teacher before my graduation.*
> (MID-A, S25, 12 June/ Stage 3)

Moreover, many students explained that their enjoyment of English learning was due to my style of communication (out-of-class). Similar statements, such as "*the teacher is like a friend*" and "*the teacher is a good listener*", made many learners feel comfortable and happy to keep sharing or expressing their opinions with me, through e-mail

exchange, in an office-hour conference or in the meetings during extracurricular activities:

> *Last week, Bill and Ho told us that the English teacher did reply to them when they e-mailed her...I think it's really good because I do not like to talk to school teachers face to face...Yesterday, I e-mailed the English teacher my difficulties and some ideas about the course. This morning, I was very excited to get her reply. She e-mailed me many self-study websites for English learning and gave me some suggestions about my difficulties...It is incredible in my school life to meet a language teacher so close and helpful to me, like a friend that cares about my feelings, efforts and progress in learning English. I find I am motivated to pick up English, the language I have given up for a long time.* (MID-A, S32, 2 May/ Stage1)

> *I find many girls in our class like to have lunch with the English teacher during her office hours. They told us the English teacher is very nice about their frequent visits and they have benefited a lot from talking with her... This week, we, five handsome boys, decided to follow these girls...As other classmates said, the English teacher was very friendly and funny, she told us her interesting learning experiences and shared with us her favorite singers and movies...We had a good time. Finally, 'the th[illegible]-faced Joe' borrowed several English tapes from the teacher but we also promised to [illegible]and the English teacher some CDs of popular English songs... After today's informal conference, I find the distance with the English teacher has disappeared. I appreciate she is a student-centered teacher and think I am lucky enough to be her student.* (MID-A, S31, 20 May/ Stage 2)

> *Today's field trip to visit the English novel Book Fair in HsinChu Elite Bookstore was an unforgettable learning experience.... During the process, the English teacher introduced us to many famous classic and modern English novels such as the Great Gatsby and Jane Eyre through interesting comparison with the story plots of popular Chinese novels...I think the teacher really understood our needs and interests.... Because of her patience and thoughtful attitude, I accepted her guidance and assistance, and then purchased two novels, Allan Poe's Short Stories and Mark Twain's Huckleberry Finn (the simplified English version). I believe reading English for pleasure can help me improve my English abilities. I appreciate that the English teacher helps me to open another window to learn English.* (MID-A, S44, 25 May/ Stage 2)

From these diary entries, it is clear to see the significance of being an understanding and helpful language teacher. These EFL learners were motivated to learn English because of the support and encouragement from me.

In the final interview, Ya-Chun expressed her awareness of the meaning of "*happy learning*". She also confirmed the importance of the language teacher to students' pleasant learning experiences:

> Ya-Chun, Ku (MII-A): *According to my previous opinions, I thought happy learning implied teachers were not strict and students could play all the time without tests... the English teacher played movies very often (with Chinese subtitles) and let all students pass the course ... Now, I reject the opinion because the course has made me understand 'happy learning' can be meaningful and needs purposeful efforts...Learning English can be an enjoyable thing if you meet a good teacher, who is very understanding and knowledgeable.* (Interview II/Part C: Q 17, 26 June)

#### 7.2.2.3 Enjoyment of English learning and fellow learners

Throughout the intervention, many participants noted that their positive learning experiences were mainly due to the involvement of their fellow learners (peers) in various MI-based activities, such as small group work and final projects. The supportive learning relationship among learners and the appreciation of the merits of different classmates, made these participants feel relaxed, happy and highly motivated:

> *In the course, we have many opportunities to cooperate with classmates…I like to walk around to visit different partners and finish a survey. Moreover, I enjoy playing an Act and Guess game with them…I get a lot of fun when working with classmates…. This kind of learning is very relaxed and I am glad to see many classmates can be good learning partners.* (MID-A, S9, 10 May/ Stage1)

> *I find the course has made everyone in the class become good friends, different from my previous learning…. I enjoyed observing others' performance and have learned a lot from working with them in the group activities/tasks…I did not recognize my classmates were so funny and smart until taking the course… I find each of them is eager to show their talents and help others…Do you know our neighboring classes have started to feel jealous of us? Our happiness and laughter have caused the attention of the whole building.* (MID-A, S20, 26 May/ Stage 2)

> *I really enjoy working with my classmates… During the process of preparing for our final project—Taiwanese Cinderella, many exciting things happen…Our project members do have talents in performance…we create interesting conversations with funny gestures because it is a comedy…The costumes we create are special as well…It will be a surprise in the final exhibition day.* (MID-A, S12, 13 June/ Stage 3)

In addition to the diary entries, which reflected that fellow learners (classmates) could cause pleasant EFL learning, all interviewees expressed the view that they enjoyed and benefited from those cooperative experiences with classmates in the course. Three quotations are given below to present their perspectives:

> Shan-Jeng, Lee (MII-A): *What I have enjoyed most is cooperating with my classmates during the two months… In the beginning, I thought it was safe to hide behind others. Later, I found it was impossible because everyone needed to contribute his/ her part… Anyway, I have got a lot of help from my dear classmates… I appreciate the harmonious and cooperative relationship with classmates, a precious learning experience I had not experienced in my previous school study.* (Interview II/Part C: Q 15, 26 June)

> Hui-Shang, Chu (MII-A): *I like to work with classmates because I find the more I provide help to others, the more help I get…I do not think the reason that I have enjoyed group work so much is because I am afraid of losing face. In fact, I am a very independent girl…. However, after taking the course, I have learned to appreciate the talents of different classmates. I think it has been valuable and interesting to work with classmates different from me and learn their merits during the process of cooperation.* (Interview II/Part C: Q 15, 26 June)

> Celia, Lin (MII-A): *I am glad to find classmates in the course have been supportive*

*learning partners, rather than enemies...Because the course has given me the impression that there is no good and bad student and everyone is special, I have been motivated to show my potential as well as to learn from others... It is true 'three heads are better than one' and I do enjoy the experience.* (Interview II/Part C: Q 15, 26 June)

Based on these written and verbal reports of EFL learners, it is found that my teaching and communication styles and the supportive learning relationship among classmates, played important roles in increasing their enjoyment of English learning, in addition to the impact of the MI-based intervention on them.

### 7.2.3 Learners' Needs and Goals

Many participants during the intervention constantly mentioned the importance of learning English because of practical reasons, as it was in their reports of previous EFL learning. Obviously, instrumental purposes played an important role in pushing EFL students to learn the target language with effort. Moreover, three factors were found to be influential in motivating many students' willingness to explore and understand their personal needs and goals of English learning, during the MI-based intervention. They were the affective concerns and support from the language teacher, the cooperating or collaborating experiences with classmates and participants' on-going writing of their learning diaries.

#### 7.2.3.1 Exploration and awareness of personal needs and goals with the assistance of the language teacher

Many participants mentioned that my concern about their difficulties, as well as my appreciation of their English learning potential motivated them to actively explore personal needs and goals.

The first example shows how I, as their language teacher, built 'a non-threatening learning context' through my patience and creativity. Some learners, encouraged by my understanding attitude, were willing to face their English listening problems and then develop personal learning plans:

*Because the English teacher found that many classmates had problems with 'only English, no Chinese' teaching, rather than blaming us seriously, she used Chinese, interesting body language and drawing activities in today's class to make sure we could understand what she was teaching...Moreover, she gave us immediate help if she found we looked lost...I found I could understand more English today because the teacher's attitude made the learning atmosphere become very pleasant and relaxed. Many students felt good about the teacher's patience, consideration and creativity...The*

*teacher's friendly attitude and understanding have warmed and motivated us to improve our listening abilities...Can you believe my roommates decide to choose one day as 'English only' day after today's class? I also made up my mind to improve my English abilities with them. I believe after-class learning with roommates should help me somehow.* (MID-A, S33, 6 May/ Stage 1)

The second example illustrates the significance of listening to learners' voices. As students found that I was interested in knowing and helping them, they became willing to reflect on what their problems and needs were, and to look for opportunities to overcome the difficulties they met:

*I like the course because the English teacher treats each of us fairly.... In particular, I appreciate that I can e-mail her every day to express my opinions on the course or share my learning difficulties and experiences with her...She has been sensitive to my needs and encouraged me all the time...I think it's the first time I am willing to face my problems because of her guidance... When I list all my difficulties and then note down possible strategies for self-reflection and further implementation, I find I am gradually on the right way to success!* (MID-A, S35, 30 May/ Stage2)

The third example presents students' appreciation of my respect of individual differences. The introduction of MI theory and the integration of MI ideas into learning and assessment activities/tasks encouraged many learners to actively look for personal strategies and develop personal learning goals:

*I really appreciate that the English teacher cares about our different talents and brings the MI ideas into the course to enrich our learning materials...After reading the book Seven Kinds of Smart that the English teacher recommended and taking several in-class activities/tasks based on Multiple Intelligences, I feel I have been encouraged and motivated by these ideas and strategies...The teacher has given me a good guide to reflect on my English learning. I start to look for my preferred ways of learning English and to make my learning plans.* (MID-A, S50, 21 May/ Stage 2)

After accepting these affective concerns and support from me, many participants stated they increasingly felt ready to face their English learning problems, understand what they needed, develop suitable strategies, and make individual plans. In addition, some interviewees suggested that affective concerns and support from language teachers, meaningful and important to learners, should be emphasized in school EFL education, in which a teacher-centered tradition has played a key role for a long time:

Han-Yi, Hsiao (MII-A): *I like the course because I can feel the teacher has taught us from her heart...she has tried her best to have interactions with us...she even borrowed her son's toys as realia to impress us. I sincerely hope all school English teachers in Taiwan can understand EFL learners' difficulties and needs. Knowledge transmitting is not enough because what many EFL learners need is affective support... I find an understanding teacher can help students be aware of their problems and find solutions.... After taking the course, I am reminded that communicative English abilities cannot be improved by extensive paper-and-pencil practice. Practice does not make perfect. Active learning through my strengths should be one of the good strategies to bring me to success. I think I have been really enlightened by what the English teacher has said and done during the semester. Her patience and creativity have made many of us willing to*

*open our minds to discuss our problems and to brainstorm possible strategies together.* (Interview II/Part C: Q 17, 26 June)

These responses obviously indicate the importance of integrating learners' affective needs into Taiwan's EFL education in the future.

#### 7.2.3.2 Exploration and awareness of personal needs and goals with fellow learners

Most students enjoyed group work during the MI-based intervention. Some of them even formed a small English-study club for weekly out-of-class learning. The diary entries of these students about their learning experiences in the learner-initiated small club presented a process of self-exploration and awareness in developing effective learning strategies with the help of fellow learners:

> *Being inspired by the MI workshop, Tim e-mailed many classmates about the idea of setting up an English learning club two weeks ago. He told us we could learn from one another efficiently through multiple intelligences... To our surprise, we have fifteen members now. I really enjoy talking with our club members... Tim always gives me constructive suggestions. Yesterday, he advised me to record my English reading for comparison with a native speaker's reading...I find it is effective to understand my speaking problems for further improvement this way.* (MID-A, S2, 10 May/ Stage1)

> *I have decided to achieve the goal—passing GEPT (intermediate level) at the end of the year with all club members... We have ordered a monthly bilingual magazine and decided to listen to the program every day. To empower our English communicative abilities, Yu-ling suggested we should find time to discuss the content every day in pairs...Tim and Tina also contributed good ideas for improving our English abilities...we all agreed that English should be learned through our strengths instead of mechanical practice.* (MID-A, S4, 22 May/ Stage 2)

> *Saving money for 'getting real application experiences' in English speaking countries such as Australia and New Zealand has become the annual plan of our club members before graduation...In order to improve my basic communication abilities, Ya-Ling invited me to watch Disney's cartoons with English subtitles once a week... I find I have benefited a lot from the ideas many fellow learners gave me.* (MID-A, S40, 3 June/ Stage3)

In the final interview, Hui-Shang described how she had benefited from sharing her English learning problems with classmates:

> Hui-Shang, Chu (MII-A): *My previous learning experiences made me believe students with foreign language talent were lucky learners because they had excellent innate abilities to learn English. I used to think the world was not fair. However, my inner questions have been gradually clarified during the two months. I have asked several classmates with good English abilities if they agree with my opinions or not. After several talks with these classmates, I find determination and strategies are more important than foreign language talent... Moreover, the surrounding people, especially friends, can play influential roles. This kind of awareness has helped me a lot. Now, I want to say I really feel thankful to my classmates. Their patience and encouragement let me feel more*

*confident on the way to acquiring the important international language.* (Interview II/Part C: Q 11, 26 June)

Shu-Jing also showed her gratitude for classmates' help in improving her oral abilities:

> Shu-Jing, Liu (MII-A): *I used to study alone by myself and get good grades in important tests. I thought my English was good...I looked down on others; especially those with low grades...The course let me find that my English is poor because speaking and listening abilities are the focus of evaluation...No grammar tests! I was disappointed first and felt helpless later... I was sad because I could not be the top student of the course. However, I have got a lot of help from classmates, even though many of their previous English grades were lower than me. They can speak English fluently without interruption... They are really good because they have helped me become a communicative learner finally. Now, I do believe everyone has his/ her own strengths when learning English and I need to be a humble learner.* (Interview II/Part B: Q11, 26 June)

Based on these learners' statements, it is clear that their positive learning experiences with their classmates during the MI-based intervention had helped them effectively explore and understand personal needs and goals. These experiences also became an important factor in motivating them to learn and use the target language with self-confidence.

#### 7.2.3.3 Exploration and awareness of personal needs and goals through diary writing

Several participants in the study mentioned the advantages of keeping a learning diary. They agreed that regular diary entries were a very effective way to explore and understand their learning needs and goals. During the process of diary writing, they could free their mind and write anything they wanted to say. As a result, their thoughts were always enlightened by these flowing ideas. Their needs and goals thus became clear in terms of the regular diary practice, as exemplified in the extracts below:

> *Diary writing is an effective process of exploration, reflection and awareness...I feel good because I can record my feelings and thoughts anytime... During the process of regular entries, I write down my deep voice on English learning and my observation of other classmates. I find I gradually understand my problems... Jealousy is my weakness. It is easy for me to feel jealous of other's performance...I like to compete with others, which becomes my unconscious learning pressure. I need to change my learning attitude because I find several classmates who like to help others or talk with others, make progress quickly...I need to open my mind to classmates and the English teacher. My enemy is myself rather than my classmates. My goal is to challenge myself, not to compete with others.* (MID-A, S5, 28 May/ Stage 2)

> *I feel diary writing is like putting a monitor beside me, but I really benefit from it. As I re-read my entries, I understand my learning interests and strategies. The valuable*

*information helps me understand my learning problems. I find I am a very dependent and passive learner. I used to be a quiet listener without giving any contribution. I enjoyed watching other's performance but I did not want to join them. If I definitely want to improve my communication abilities, I think I need to be active in all activities.* (MID-A, S36, 18 May/ Stage 2)

Nevertheless, one interviewee suggested the diary keeping would be more beneficial to learners if there were opportunities to discuss and share these thoughts with others. This is a suggestion that could be tried in a future class:

> Chia-Ling, Chu (MII-A): *I find keeping a diary during the MI-based intervention has helped me know what I was doing, systematically. This kind of understanding has influenced the process and outcome of my learning... I could reflect back upon these experiences, evaluate and improve my learning practices based on the valuable information... However, I think if the teacher gave me chances to share my diary thoughts with classmates, I would get more insights from them, especially those with high English proficiency. Anyway, I believe more self-awareness in Diary-keeping could be raised through group sharing and discussion.* (Interview II/Part C: Q 17, 26 June)

From all quotations related to learners' needs and goals, it is found that the language teacher, classmates, and diary writing experiences became important factors to strengthen the self-confidence of these students in being an effective EFL learner, and to encourage their active exploration of personal difficulties and solutions. During the process of frequent exploration and awareness of specific learning needs and goals, they gradually became their own masters of English learning.

### 7.2.4 Personal Coping Potential and Becoming Autonomous Learners

EFL learners' understanding of their personal coping potential and their willingness to be autonomous learners can play a critical role in deciding if foreign language learning can be successful or not. Here, personal coping potential refers to learners' awareness of their English learning abilities, and autonomy is related to participants' affective orientation (feelings) to be self-directed learners.

Based on the fifty-one participants' diary reports, it was exciting to find more than half of these EFL learners had gradually developed positive attitudes to personal coping potential during the intervention. The information was particularly reflected in their entries for stages 2 and 3. Moreover, many students of this study were motivated to be autonomous EFL learners. The details are discussed as follows.

#### 7.2.4.1 EFL learners' awareness of personal coping potential

During the ten-week diary entry period, many participants repeatedly mentioned that their awareness of personal coping potential was motivated by the MI workshop and MI-informed activities/tasks. One of the self-awareness examples was the following:

> *I used to feel frustrated when I could not understand the authentic listening practice in CDs. I kept questioning myself if I did not have talent... However, the MI workshop and many MI activities/tasks have inspired me a lot.... After these learning experiences, I try to look for ways to deal with my difficulties... I find the strategy 'reading transcript first and doing visual role play' can help me improve my listening problem...I am excited to understand I can learn English through my strengths.* (MID-A, S45, 26 May/ Stage2)

Moreover, many students described how they were encouraged by the MI ideas and thereby developed self-confidence in learning and using English. They became very active in looking for opportunities to use their strengths and then in practicing the target language. These learner-initiated learning/communication experiences in the real world also became valuable opportunities for them to understand and develop their learning potential. In the following example, the student Joe, being encouraged by the MI ideas, expressed his desire to use his strengths to improve his spoken English. He described how he persuaded himself to use English before taking actions and then successfully experienced that communicating with people through English was a pleasant thing. He finally concluded with his expectation of looking for more opportunities to enjoy the good feelings of communicating through English:

> *I am a talkative man when I speak my native tongue-Chinese. Classmates like to call me 'thick-faced' Joe, but I become 'thin-faced Joe' when learning English...I want to use my strengths to improve my spoken English like the English teacher has suggested us in the workshop—you should appreciate your own strengths. Because I am a social and performing man, I think I have strong bodily and interpersonal intelligences... This morning, I helped a foreigner (American?) at a '7-11' store near my house. The story was that an American lady wanted to heat her canned coffee in the store, but she had difficulties in communicating with the store clerk, and other customers in the store pretended to ignore her. Suddenly, I decided to help her with simple English because my English teacher's words came to my mind. I thought I might take the chance to use English for communication. I kept telling myself 'No fear! You are thick-faced Joe!' After I helped her with simple English and some body language, she said 'thank you' to me several times. The store clerk appreciated my 'good' English and I felt encouraged. I think I want to find more opportunities to practice my spoken English and enjoy the feelings of happiness and success in using English.* (MID-A, S22, 18 May/ Stage2)

The self-awareness aspect of the personal coping potential was differentiated from two sets of interview data, collected before and after the MI-based intervention. When being asked, 'What kind of learner can learn a foreign language successfully? (Q11)' and 'Do you think English is difficult to learn? Do you have confidence in mastering English as an international language? (Q13)', the first interview data shows that eight

among the twelve believed that innate abilities were important and the other four emphasized family background and financial situations were the key issues. In addition, all of them agreed English was difficult and they were not sure if they could acquire English or not. However, in their final (second) interview, all interviewees (twelve) expressed the belief that everyone can learn English. Moreover, they thought they have the potential to acquire this international language. One example is given below to demonstrate the awareness of personal coping potential after taking the MI-based EFL course:

> Wei-Chen, Wu (LHI-A)/ Before the MI-based Intervention:
> [Q11] *I think people who have language talents can learn English quickly.*
> (Interview I/Part B: Q11, 23 April)
>
> [Q13]...*I do not think I can learn and use English fluently... You know, English is very difficult, the hardest subject...I have no talents...and motivation.*
> (Interview I/Part B: Q11, 23 April)
>
> Wei-Chen, Wu (MII-A)/ After the MI-based Intervention:
> [Q11] *Understanding my strengths and using suitable strategies is important. In fact, everyone can learn English if they find the right ways.*
>
> (Interview II/Part C: Q 17, 26 June)
> [Q13] *I am still on the way to discovering my strategies and learning from others' strengths but, I think, now, I have more confidence than before.*
> (Interview II/Part C: Q 17, 26 June)

Obviously, these EFL learners' awareness of their personal coping potentials, motivated by the MI workshop, MI-based activities/tasks and learner-initiated learning or communication opportunities, not only contributed to the development of their self-confidence, but also prepared them to face their problems and seek solutions.

#### 7.2.4.2 EFL learners' willingness to be autonomous learners

Positive learning experiences gained while preparing the MI-inspired authentic assessment tasks (e.g. a role-play or a puppet show) were mentioned by many participants as significant activators to promote their willingness to accept responsibility for their own learning. The encouragement of, and assistance from me, their language teacher, and fellow learners also played supporting roles to strengthen their determination to be active practitioners as is recorded in the following comments:

*I have benefited a lot from active leaning experiences in preparing the puppet show with my group members... We took the teacher's advice and assigned each of us different jobs... I like music. My responsibility was to look for suitable background music for all dialogues... During the process of searching for matching music, I went through all dialogues many times and discussed them with group members. They were helpful... I wanted to show my best to the teacher and classmates because I knew many classmates were anticipating our performance.... The English teacher was very helpful because she supported us with many good ideas and resources. I am really satisfied with our performance, today, because I have not only contributed my 'music talents' to my group but also used all dialogues naturally.* (MID-A, S41, 15 May/ Stage 2)

*The final project of our three-person group is to record a radio broadcasting program. The story title is 'Escape!' ... I really enjoy cooperating with my best friends. So far, we have learned a lot from each other. The encouraging thing is that the English teacher helped us review all scripts.... She even arranged time to see our rehearsal last week. Since we only have three persons, each of us needs to play different characters. I play four characters, so I have spent much time in figuring out how to use different voices to present each character. However, I have got many suggestions and good ideas from classmates and group members. It has been very funny and interesting to have this kind of experience, to become other persons and to speak English with different voices.... The project is meaningful to the three of us because it has made us understand we can use English to express our creative ideas successfully. We will keep the tape forever and I will not forget the wonderful experience.* (MID-A, S32, 21 June/ Stage 3)

Students' appreciation of the MI-inspired authentic assessment tasks also prevailed in the final interview data. Because of the choice (e.g. final projects) and variety (e.g. a role play and a puppet show) in assessment tasks, many interviewees claimed that they were motivated to actively use the target language. The following comments illustrate this point:

Han-Yi, Hsiao (MII-A): *... In my previous study, learning English had been equated with the word 'suffering'... Although previous teachers kept warning and punishing me, I had no motivation...Now, I gradually understand my English is not that bad... Maybe, previous unhappy learning experiences had occupied my mind for a long time... You could not image how terrible it was to be one quiet audience all the time for a sport boy.*

*The MI-based course has made me constantly reflect on my learning... Many informal assessment tasks in the course, such as the role-play, have made me believe I CAN learn and use English. I have potential. Therefore, I want to say 'motivation' and 'right feelings' are key words for successful EFL learners. When I have various opportunities to play and experience the target language, I have strong motivation and determination to overcome my difficulties and achieve my goal. My different learning experiences in the role-play, the puppet show and final projects have made me feel ready to face future challenges.* (Interview II/Part C: Q 12, 26 June)

These quotations have demonstrated that as learners had opportunities to be evaluated through different ways, their willingness to be self-directed learners tended to be increased.

Drawn from these learners' perspectives and experiences, it is clear to find that the MI workshop, the MI-informed activities/tasks and learner-initiated application

opportunities, functioned as important triggers during the intervention to help learners be aware of their personal English coping potential. Moreover, the preparation and implementation of the MI-inspired authentic assessment tasks, as well as the encouragement and help from me, and fellow learners were important factors to motivate these EFL learners' willingness to be self-directed learners.

### 7.2.5 Learners' Self and Social Image

EFL learners' self-image, the feelings about themselves in learning and using English, cannot be ignored because these may affect their engagement in the learning process. Moreover, how EFL learners see the norms accepted by the society at large are important because their self-expectation and personal attitudes to English learning may be affected.

In this section, I firstly address the development of EFL learners' perceptions of self during the MI-based intervention, particularly referring to their self-confidence and self-esteem, through their words from the diary and interview data. Then, the participants' attitudes to social expectations (exam-oriented culture and instrumental purposes) are explored to recognize how they have interpreted these norms of society and have found their place in this society.

#### 7.2.5.1 EFL Learners' perceptions of self

In order to understand these EFL learners' self-image during the process of the MI-based intervention, exploring the development of their self-confidence or self-esteem is necessary. When searching for patterns of these learners' perceptions of self in English learning among their diary entries and interview information, I found that the ways EFL learners felt their own voices were heard in the group and how they identified their positions in the course (a small social community) played a critical role.

The results obviously reflected that many of these students felt more confident in their English learning than in previous study. When exploring the reasons behind the phenomenon, several external factors (themes) mentioned before are also found to have facilitated the positive development of the learners' self-concept in this study. The MI Workshop, MI-informed activities/tasks, the encouragement of and help from the language teacher and fellow learners, and various hands-on experiences in

alternative assessment tasks, and learner-initiated real-world learning/communication experiences all constituted the basis for shaping and strengthening these EFL learners' self-esteem or self-confidence. The quotations listed below present the progress of some EFL learners' self-image during the ten weeks of the MI-based intervention.

In the first week of the intervention, three different students expressed their appreciation of attending the MI workshop. Nevertheless, different from many learners, they were still not sure if they could apply the theory to their English learning at that time:

> *I enjoyed the MI workshop.... English is a difficult language, so I do not know if I can use what I learned in the workshop in my learning.* (MID-A, S7, 27 April/ Stage1)

> *I agree the MI workshop is encouraging, but I am not sure how long this kind of feeling will last.... All my friends know my English is extremely poor, so I do not expect a lot for my English.* (MID-A, S34, 25 April /Stage1)

> *The MI ideas are good but how many teachers have realized the significance of respecting individual differences...I do not think I can make any progress in English because of knowing the theory.* (MID-A, S17, 24 April /Stage1)

After several learning experiences with the MI ideas (e.g. in-class and out-of-class MI-informed activities/tasks), many students gradually developed their self-confidence in learning or using English. Similarly, the three students quoted above produced positive feelings and thoughts about themselves during the process of learning English:

> *I really like the course because it is a 'moving' course... It is the first time for me, a basketball player, to feel that my 'physical talent' can become a 'talent' in learning English.* (MID-A, S7, 28 May/ Stage2)

> *I like all the activities related to music.... I am happy to know that the English teacher has accepted my suggestions for the course...I feel excited to know that I will have opportunities to share my collection of many wonderful English songs with my classmates. I believe my classmates will learn a lot of useful English words from the handouts I prepare.* (MID-A, S34, 16 May/ Stage2)

> *I find out-of-class learning activities have been interesting and effective...I really enjoyed the learning experiences in RT-Mart and could not believe I was one of the winners (the team Purple Lady).... I find I start to have confidence in using English. It is really good news for me!* (MID-A, S17, 2 June/ Stage3)

In addition, several participants stated that I was an understanding language teacher. I protected their self-esteem as well as promoted their self-worth by employing different encouraging ways to motivate them to use the target language. The following

example shows that one of the students was encouraged by my praise in public:

> *I used to be a quiet student, especially in English course because English is not my language... Although I thought my English pronunciation was not bad, I did not have courage to speak out... Today, the English teacher wanted me to read the dialogues because she said she had been really impressed by my audiotaped journal.... She appreciated my 'beautiful' pronunciation in the class... After today's class, many classmates wanted to borrow my tapes. Some of them asked me how to improve pronunciation...I feel encouraged and even smile at midnight.* (MID-A, S20, 10 June/ Stage 3)

The second example demonstrates how the publication of students' work by me became another strategy to help learners develop a positive self-image in using English:

> *I am surprised to find the riddles our group created last week are posted on the bulletin board...This morning, my class mentor told me and my group members, 'Your English writing is good and the riddles are very creative'...I was speechless at his praises... but I was really happy to let people know I am not an English idiot... Anyway, I feel proud of our work and thankful to the English teacher's 'sharp eyes'. English is an interesting language, isn't it?* (MID-A, S32, 28 May/ Stage2)

Several participants also appreciated the support and encouragement from fellow learners because their self-confidence was built up gradually:

> *Because of the harmonious relationship among classmates, the course has become my favorite ...I do not know who told the English teacher about my interest is drawing. As a result, in today's class, the teacher suggested me that I design a special card with Irene for the final exhibition...I do not know how to describe my feelings now, but I am sure I get a lot support from my classmates. Their encouragement and understanding make me feel that learning English has become a meaningful thing. I feel good now because I can contribute something to the course.* (MID-A, S43, 5 June/ Stage3)

> *I really appreciate Roxanne and Emmy's encouragement because I can use simple English for basic communication... During the two months, they have tried to find various chances to practice English with me...Three of us like to watch Rebecca's videos in Self-Study Center...We imitate what the characters said and have a lot of fun...I find myself encouraged by the look in their eyes. They are my best friends.*
> (MID-A, S23, 18 May/ Stage2)

Finally, many participants claimed their successful performances in MI-inspired authentic assessment tasks increased their self-confidence:

> *I am surprised and happy to know my character 'a cute Italian man' in the puppet show was so popular that many classmates have asked me to perform the character again! Before preparing the theme 'cross-cultural misunderstanding', I was really worried about the content. However, internet surfing with team members helped us collect lots of information... Now I believe I have talents in learning and using English. I also believe I can direct a successful English comedy as a final project!*
> (MID-A, S2, 23 May/ Stage2)

> *I feel excited when I hear my own English in the audiotaped journal...I find I make progress after recording the spoken journal...In order to present my best to my teacher, I repeat the procedure – listen, delete, revise and record, many times. I like this kind of assessment because I have plenty of time to prepare my spoken English without anxiety.*

*Now I feel more confident to use English for communication.* (MID-A, S18, 31 May /Stage 2)

*Luckily, this week, we successfully borrowed a V8 to record our final project—Thee Good Friends...I felt nervous to perform before the camera. In order to have good performance, I had practiced my part many times and asked my partners and roommates for advice... When reviewing today's recording, I cannot believe my performance is so natural... My partners feel proud of our progress...I feel excited to see I am like a super 'English' actress in the camera.* (MID-A, S 41, 8 June/ Stage 3)

As these EFL learners felt their voices, talents and efforts had been heard, respected and recognized during the intervention, their self-confidence or self-esteem was promoted and thus they became more active learners and users.

**7.2.5.2 EFL Learners' attitudes to social values and expectations**

Because the culture that 'tests mean everything' has been widely accepted in Taiwan's society, studying hard to get good grades in important tests has become the expectation of many EFL learners. Many participants in their reports of previous English learning experiences expressed that this kind of social value and expectation had become their concern and burden. Nevertheless, a deep reflection was developed among many participants in stage three of the MI-based intervention. After taking the MI-based course, many EFL learners produced different perspectives on 'tests'.

Firstly, some participants re-identified their roles and goals in English learning but believed what they did currently during the MI-based course could be compatible with the needs and expectations of Taiwan's society:

*Because of the many practice opportunities in the course, I find my English oral abilities have been improved gradually...I start to realize that what I need to focus on is how to empower my English abilities rather than how to pass English tests. When my English abilities have achieved the expected level, passing tests and getting certificates will become an easy thing... I believe getting an official certificate to demonstrate our English abilities is a reasonable requirement... If I were a company leader, I would do the same thing to new applicants because it is a quick and fair way...Instead of finding excuses to avoid learning English, I think I should give myself a chance to be 'born again'...The course has enlightened me a lot. When I am willing to look for suitable strategies to learn English, nothing can hinder me. Tests only play a final role to evaluate my progress.* (MID-A, S9, 16 June/ Stage 3)

*I used to hate listening and speaking tests because I felt it was the most difficult part for all EFL learners in Taiwan...After two-months of learning experiences in the course, the helpful guide from the language teacher and the warm encouragement from classmates have changed my thoughts and feelings about myself in learning and using English...When I am preparing for the final listening test, I am surprised to find it becomes easier than before...It is really amazing to find I can understand many dialogues flowing out from the English CDs without anxiety...I think tests will not scare*

*me any more if I internalize the target language through suitable strategies. When I find my ways to learn English, tests will become a facilitator to push me to become a better user rather than a burden to reduce my interests.* (MID-A, S49, 18 June/ Stage3)

Certainly, there were some participants still suffering personal conflicts when facing the social expectation imposed on them. They appreciated what the course offered, and admitted their benefits from the course, but they felt helpless because of the social expectation (school policy) based on an exam-culture:

*I enjoyed the course because I found my values and strengths during the process of learning.... However, I still feel anxious about taking tests... I cannot understand why we still have final listening tests like the other classes...I think the course should be different from other classes. Maybe, I still need to face the reality the society has built up...School policy is something that cannot be changed.* (MID-A, S44, 11June/Stage 3)

Another voice represents the worries about the mismatch between real (practical or instrumental) needs and assessment types in Taiwan's EFL education, mentioned by several students during their final interviews. They stated that the current social norms are unrealistic because they may have destroyed the original purpose of EFL education. As Liang pointed out:

Liang, Chao (MII-A): *I do not agree with people in this society using tests to evaluate our English abilities... Many tests are decontextualised, not like real communication...I hope the idea of multiple assessments, employed in the course, can be spread to Taiwan's different educational units...Otherwise, all investment in EFL education will be in vain. Students will become English learning machines, instead of effective English users.* (Interview II/Part C: Q 17, 26 June)

Based on these learners' perspectives, it is evident that some learners had developed self-confidence in learning English after experiencing the intervention and kept a positive attitude to English tests after their self-reflection and awareness. However, there were still some learners feeling helpless or unsatisfied with the test-first social expectation. In order to reduce the negative effects of the paper-and-pencil-centered evaluation on EFL learners, multiple assessments have been suggested to future EFL teachers in Taiwan.

## 7.3 Discussion of EFL Learners' Affective Experiences

So far, it is clear to see that the EFL course with an MI-based intervention did influence EFL learners' affective experiences. In this section, I discuss the findings in terms of the comparative results of participants' affective experiences in their previous EFL learning and during the MI-based intervention across five aspects: self; fellow

learners; language teachers; instructional and assessment activities/tasks; and EFL learning.

### 7.3.1 EFL Learners' Feelings or Perceptions of Themselves

When talking about previous EFL learning experiences, many participants used words like "*victim*", "*language idiot*" or "*loser*" to describe their depressing perceptions of themselves. The associated negative emotions such as "*disappointed*", "*helpless*" and "*lonely*" prevailed everywhere among the retrospective reports of these EFL learners. In fact, their responses reflected the root problem of a test-oriented culture and the certificate-first EFL education in Taiwan. Although some learners, most being good exam takers, felt ambitious to attempt various national or international English tests, many participants stated that they were "*hurt*" by their anxiety about poor performances in these tests. Moreover, the lack of support from teachers, the blame expressed by parents and the competitive relationship among classmates all drove them to despair. It was obvious that their self-esteem or self-confidence in EFL learning was seriously challenged in that situation. Therefore, these participants might indirectly express their emotional insecurity and psychological conflict about their abilities in learning English, through such questions as "Can I learn?" after at least six-years of English learning.

However, the negative feelings about their abilities or potential seemed to change for the better after taking the MI-based course. According the views of these participants, the changes were mainly because of the self-awareness of their personal talents or strengths when taking the MI workshop, joining in-class MI-based activities/tasks, attending out-of-class field trips, doing projects and so forth. Of course, the praise from me (their language teacher) and the encouragement from fellow learners also made them value themselves. As these EFL learners felt they were accepted and appreciated for themselves, many of them became more active and confident than before in their EFL learning. They were eager to contribute their bit to the course and their self-image improved at the same time.

### 7.3.2 EFL Learners' Feelings and Perceptions of Fellow Learners

Chinese students have been considered to be a group that prefers collaborative learning with a de-emphasis of the self, as Nelson (1995:9) stated, "within the

Confucian tradition, students learn through cooperation, by working for the common good, by supporting each other and by not evaluating themselves above others". However, this cultural impression that collective responsibility and sociability are favored by Chinese learners becomes very ironic when many EFL participants in the study, having been brought up with Confucian values, expressed their anger and dissatisfaction with fellow learners because of the competitive relationship during their previous EFL learning. In other words, these participants considered their classmates as enemies rather than learning partners. Group work or helping one another was impossible for these participants in a strong exam-oriented atmosphere. Because of fear that other students would be better than them, jealousy that they were inferior to fellow learners or doubt that their classmates might look down on them, many participants claimed they were very selfish learners at that time without cooperative experiences and aspirations.

It is interesting to see obvious affective changes when I, as their language teacher, guided these participants, through MI theory and relevant activities/tasks, to appreciate the talents and efforts of other students, as well as giving them opportunities to work together. Many learners enjoyed a supportive relationship with classmates after several trials. "*Acceptance*", "*warmth*", "*belonging*", "*closeness*", "*understanding*" and "*caring*" were the common words they used to describe their positive affective experiences during the process of cooperation. For many participants, classmates became not only good friends to enrich their learning experience but also good models to learn from.

### 7.3.3 EFL Learners' Feelings of, and Attitudes to, Language Teachers

The results of the data analysis demonstrate that language teachers did play a very important affective role for participants in their previous EFL learning experiences. Unfortunately, these experiences seemed to be negative for many participants because they were not satisfied with the ways that their former EFL teachers treated, taught and evaluated them. The basic belief in Chinese society that teachers are always right due to their wisdom and knowledge also made many students feel helpless when meeting a "*terrible teacher*". The common reaction they adopted in that situation was keeping quiet. Nevertheless, when reading participants' retrospective reports, their anger with these "*terrible*" language teachers was obvious. They used many negative

words such as "*unfair*", "*impatient*", "*short of sympathy*" and "*disgusting*" to present their unpleasant experiences with these EFL teachers. In addition, many participants felt sick of the "*hypocritical*" authority of some language teachers because they thought these teachers were not really helpful in their acquisition of the target language. According to these learners' views, many school EFL teachers were very self-centered in their profession and there was no room for negotiation. Without understanding EFL learners' needs and difficulties, these language teachers were only committed to textbook-lecturing and asking students to study hard to pass important tests with good scores. They used verbal or physical punishment as strategies to push learners with low grades. Furthermore, some mentioned it was a shame to find a few language teachers taking advantage of their position to open classes at home to earn extra money. These negative experiences often led EFL learners to withdraw from English learning. The phenomenon could also explain why several sarcastic names, such as "*punishment expert*", "*money maker*" and "*king of test-writers*" flowed from some interviewees when discussing their attitudes to language teachers in their previous EFL learning.

The effects, both cognitive and affective, which EFL teachers have on learners, cannot be underestimated. The language teacher as an obvious source of positive affective development for EFL learners was proved during the process of MI-based intervention. Based on the participants' perspectives, my traits, as their language teacher, were more important than my professional knowledge in influencing their affective experiences. A great number of EFL learners felt English learning was enjoyable when taking the MI-based course because of my understanding attitude. Some of them claimed their interest and motivation in learning and using English were promoted mainly due to my patience, praise, consideration and enthusiasm. Others shared their positive self-awareness experiences in learning English by interacting with me frequently. Since I, as their language teacher, was like a friend who listened to learners, accepted their suggestions, understood their difficulties or provided them with suitable help, these EFL learners felt they were being nurtured and respected as individuals. Gradually, they changed their initial attitudes to the role of the language teacher. With the development of a very positive teacher-student relationship, many expressed that their willingness to acquire the target language was thereby strengthened.

### 7.3.4 EFL Learners' Feelings of, or Attitudes to Instructional and Assessment Activities/Tasks

The popular EFL instructional activities employed in Taiwan's EFL classrooms have been closely associated with standardized English tests. These activities are teacher-centered with little or no interaction. Explicit grammar formula teaching and English-Chinese translation activities are common examples. The teacher is the main lecturer to impart as much language knowledge as possible. Many participants stated they felt bored with these activities in their previous study but they had no choice and must accept it because they were afraid that without accumulating enough knowledge and practice, they would fail the important English tests. When passing tests was the learning goal, it was reasonable to see four learners (out of 51) expressed their loyal support to these traditional activities. However, when developing EFL communicative abilities were the learners' concern, many complained these teacher-centered activities could not satisfy their practical needs because their oral abilities were still poor after years of learning. Many students expressed their low motivation towards English learning because of the over-emphasized exam pressure, and their gradual loss of self-confidence as a result of poor test performances.

As for participants' attitudes to the MI-based instructional and assessment activities/tasks, many showed higher interest and motivation. The main reasons summarized from their diary entries and interview data were the features of these activities/tasks, such as novelty, variety and familiarity. In addition to the excited feelings when accepting different learning experiences, the variety of opportunities for learning and using the target language was mentioned by many learners as very influential to their positive affective involvement. These activities/tasks not only satisfied personal interests and practical needs of different participants, but also encouraged them to actively explore and employ their own ways during the process of learning the target language. Although some said they disliked a few activities/tasks, they still found their favorites among these activities/tasks, and developed a kind of self-awareness such as appreciating individual differences. Furthermore, many students emphasized that an understanding of the MI theory behind these activities/tasks made them feel safe as well as encouraged in their learning. In particular, the variety and choice of authentic assessment tasks also made many of

them feel respected and recognized. Therefore, they were eager to present their English abilities through their preferred ways. These affective changes were evident from their use of different words in the learning diaries. When "*hopeless*" and "*no choice*" were employed to state their common feelings about previous instructional and assessment activities, they chose "*interesting*", "*meaningful*" and "*helpful*" to express their pleasant attitudes to these MI-based activities/tasks.

### 7.3.5 EFL Learners' Feelings of, and Attitudes to, their EFL Learning

For many participants, the associated affective orientations to their previous EFL learning were "*anxiety*" and "*fear*". The destructive anxiety, experienced in preparing for important English tests, and the fear of failure in taking these tests, made many participants feel stressed, frustrated and unfairly treated when facing their EFL learning. As a result, some of them chose to give up the language, whereas others only wished to pass. In fact, their avoidance or refusal of EFL learning were apparently related to the attitudes of surrounding people, such as teachers, parents and classmates, which had been influenced by the exam-first social expectations. When these EFL learners, who could not perform well in tests despite their many efforts, found people around them believed 'good grades mean everything', the worries about their performances and the doubts about their learning abilities made them believe English was a difficult language to acquire. Many participants conveyed that these self-devaluing experiences in the exam-oriented culture were really torturing since they were constantly riddled with hatred, jealousy and disappointment during the process of EFL learning.

In contrast, most participants expressed that their attitudes to EFL learning in the MI-based course were very relaxed, interested, enjoyable and enlightening. They found English was not as difficult as they thought before. They were eager to participate in various activities/tasks, share their ideas and try the target language when comprehensible input and opportunities were available during the learning process. I found the chain-effects were obvious in the study. When these participants' affective experiences with others (e.g. teacher and classmates) and within the learning context (e.g. instructional activities) became positive, their attitudes to English learning changed, even under the exam-first social expectation. In other words, as these participants felt that their difficulties, needs and talents were recognized by

others, and as they also got support or practical help from surrounding people and learning contexts, their self-awareness of personal strengths and responsibility for EFL learning was gradually developed. When their self-esteem or self-confidence in learning English increased, their attitudes to EFL learning were positively improved.

## 7.4 Summary

In this chapter, how the affective themes influenced EFL learners' affective experiences in their previous English study and during the MI-based intervention, and their reasons for these experiences, have been explored through analyzing their learning diaries and interview data. In order to give a brief overview of the findings at the end of this chapter, the main emergent themes and features of learners' affective experiences in their previous EFL study and during the MI-based intervention are summarized as follows.

**1. EFL learners' *Affective* Experiences in their *Previous* English Study (Research Aim 2-a):**

(1) EFL learners were *not interested* in traditional instructional activities, because:

- *Traditional instructional activities* were boring, unappealing, and not helpful for developing their communicative English abilities.

(2) EFL learners had *unpleasant* learning experiences because:

- *Language teachers* only used *test results* to decide if they could pass the English course or not.
- *Language teachers* preferred students with high grades and punished those students with poor *test performances*, physically or verbally.
- *Language teachers* were the authority on the learning content (*teaching materials* and *instructional activities* were only limited to textbooks).
- Some *language teachers* were very self-serving. They opened their personal *cram schools* to earn extra money from their students.
- *Parents* used *test results* to evaluate their children's learning achievement. Students felt hurt by their *parents*' critical comparisons and high expectations.
- The relationship among *learners (classmates)* was competitive in an exam-first learning atmosphere.
- They needed to spend extra money to go to *cram schools* to learn the target materials to pass important *English tests*.

(3) EFL learners felt *disappointed* about their *needs and goals* because:

- They had strong *instrumental motivations* to learn English but the *exam-oriented* EFL education and *scanty practice opportunities* in school contexts made them feel the goal – developing English communicative abilities – difficult or impossible.

- *Language teachers* could not provide effective ways (e.g. *teaching activities* and *learning materials*) to help them develop practical English abilities. Some teachers even could not help them pass important *English tests*.

(4) EFL learners *doubted their personal learning potential* because:
- The over-emphasis on the results of *paper-and-pencil tests* by *teachers and parents* had destroyed many students' self-confidence in learning English.
- *Classmates* used to judge who was a successful learner through *test results*. Peer pressure made those students with poor grades doubt their personal English abilities and gradually lose self-confidence in learning English.
- There were few or no *application experiences* in school EFL classes. As a result, they were timid in using English for communication, even when real opportunities were available.

(5) EFL learners had a *negative self and social image* in learning English because:
- The *social expectation*, 'good test performances mean success', held by surrounding people, made learners who failed to pass important *English tests* feel inferior to others.
- They found their poor English communication abilities might not satisfy *the needs of the real world*.

**2. EFL Learners' *Affective* Experiences *during* the MI-based Intervention (Research Aim 3-a):**

(1) EFL learners *felt motivated* to learn and use English through these MI-informed activities/tasks because:
- The *novelty* and *variety* of the *MI-based intervention* stimulated their expectation of the course and made their EFL learning become meaningful.
- The introduction of MI theory, through the *MI workshop* and the reading of relevant books recommended by the *language teacher*, made them feel safe and comfortable to try the subsequent MI-based activities/tasks.

(2) EFL learners had *pleasant* learning experiences because:
- The *MI-based intervention* provided them with various opportunities to discover their own ways and to personalize their learning process.
- Their learning potential was broadened during the process of trying *various activities/tasks*.
- The purpose and utility of each activity was clearly demonstrated and explained by the *language teacher*.
- They liked the *language teacher's* styles of teaching and communication - very understanding and helpful.
- They enjoyed and benefited from the cooperative experiences with *classmates* through various *MI-based activities/tasks*.

(3) EFL learners were *motivated* to *understand personal needs* (e.g. difficulties) *and achieve personal goals* (e.g. solutions) because:
- The *language teacher* used different strategies (e.g. listening to learners' voices and creating a harmonious learning atmosphere) to satisfy their affective needs.

- The support and encouragement from *classmates* helped them build self-confidence in learning and using English.
- Keeping a *learning diary* helped them become reflective learners.

(4) EFL learners *believed* they had the *potential* to learn and use English effectively because:

- The *MI workshop* and *MI-informed instructional and assessment activities/tasks* made them be aware of their personal talents (strengths).
- Their *communication experiences in the real world*, encouraged by the MI ideas, helped them discover their personal potential.

(5) EFL learners were *willing to be autonomous learners* because:

- They had *opportunities* (authentic assessment tasks) to present their learning through different ways.
- The encouragement of, and assistance from, the language teacher and classmates strengthened their determination to be active practitioners.

(6) EFL learners *became more confident* in learning and using English because:

- They felt their voices, talents and efforts had been heard, respected and recognized during the intervention, in which the *MI-based intervention*, the encouragement and help from the *language teacher* and *classmates*, and *learner-initiated real world communication experiences*, were mentioned as important factors to build up their self-esteem and self-confidence.

The comparative results of the two learning periods showed that the *instructional activities*, *the types of evaluation*, *the role of a language teacher* and *the relationship among students* (classmates) were the main factors leading to different affective experiences of EFL learners in this study.

# Chapter 8

## *Learners' Voices* (II): *Strategy Development and Language Learning*

### 8.0 Introduction

Learning English as a foreign language is a complex process, during which many variables are involved to influence learning outcomes (Lightbown and Spada, 1999). Apart from affective concerns, the use of language learning strategies has been considered as one of the significant factors to affect the acquisition of the target language (Brown, 2000 and 2001; Cohen, 1998; O'Malley and Chamot, 1990; Oxford and Burry-Stock, 1995). Appropriately used language learning strategies have been shown by research as important tools for language learners to enhance learning achievement, increase success rate, and lead them to an overall gain in English proficiency or in certain language skills (Green and Oxford, 1995; Griffiths, 2003; Oxford, 2002; Oxford and Burry-Stock, 1995; Vann and Abraham, 1990). Therefore, it is suggested that EFL/ESL teachers help learners discover, learn and apply optimal strategies to develop communicative competence effectively (Chamot, 1998; Christison, 1998b; Cohen, 1998; Griffiths, 2003; Oxford, 1990 and 2002; Yang, 1996).

I always believe that language learners are able to consciously influence their own learning. With the intention to help my EFL students solve one of their common questions "how should I learn?" when facing English learning, I introduced the MI theory into the EFL course under study, through the MI workshop, MI-based activities and MI-inspired assessment. I believed the intervention of MI theory could provide EFL learners with a set of strategic tools (Armstrong, 1999, 2000 and 2003; Lazear, 1994, 1999a & b; Sylwester, 1995) that might satisfy their different needs, interests and goals. These students, after knowing and practicing the theory, were expected to go beyond the traditional verbal or logical learning modes, and apply their multiple intelligences to enrich strategy types and expand strategy use, so as to improve or advance their English proficiency effectively.

Because the MI-based intervention was designed with the aim of helping EFL

students develop language learning strategies and thereby improve their learning outcomes, it is necessary to investigate participants' perceptions and employment of language learning strategies, both in past EFL learning and during the MI-based intervention in order to effectively evaluate and interpret the possible effects of the MI-based intervention or other variables on EFL learners' strategy use.

In this chapter, I seek to explore participants' use of language learning strategies[1] and related reasons, both in their previous EFL learning (Research Aim 2-b) and during the MI-based intervention (Research Aim 3-b), through a close examination of their self-report (diary entries and interview data)[2] concerning their strategy use. All reported English learning strategies employed in the two periods (their previous English learning and during the MI-based course) were first identified and then analyzed through two models: Oxford's taxonomy of language learning strategies (Oxford, 1990) and Armstrong's summary of Gardner's Multiple Intelligences theory (Armstrong, 2000). Oxford's model was used to interpret which category the identified strategy belongs to, and Armstrong's summary was employed as a guide to pinpoint the intelligence(s) mainly involved in each specific strategy. Moreover, the underlying patterns or themes connected with these classified strategies were labeled and explained.

Since the current research intended to focus on the operation of major (widely employed) strategies taken by participants, the strategies that had been mentioned by more than half of the group members[3] are explored and reported in this chapter. The analysis results can help me understand the similarities or differences between the two periods in the employment of language learning strategies and linking issues, and then interpret these learners' strategy development. The concluding section of this chapter

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[1] The main concern of the current study is what learners do to learn language (rather than what they prefer in general), so the term 'language learning strategies' is defined as specific actions, behaviors or techniques consciously used by EFL learners to learn English.

[2] In this chapter, the codes 'LHD-S' and 'MID-S' are used to indicate the sources of strategy-related (S) quotations that were from fifty-one participants' learning dairy entries. 'LHD' refers to their learning history report (previous English learning experiences) and 'MID' means their MI-based learning experiences documented in diaries. Moreover, the codes 'LHI-S' and 'MII-S' are used to show that the strategy-related (S) quotations were from interview data with twelve volunteer students in two different periods, their previous English learning (LHI) and their MI-based learning experiences (MII).

[3] The focus rule, 'more than half of the group members', has been applied to both the data from diary entries of fifty-one students and interview information with twelve volunteer students. In other words, those strategies mentioned by more than fifty per cent of the total participants (fifty diarists or twelve interviewees) will be the focus of this chapter.

discusses the key points of the findings with relevant reasons. In addition, two issues about Chinese learners, passivity and rote learning, are discussed based on the results in the study.

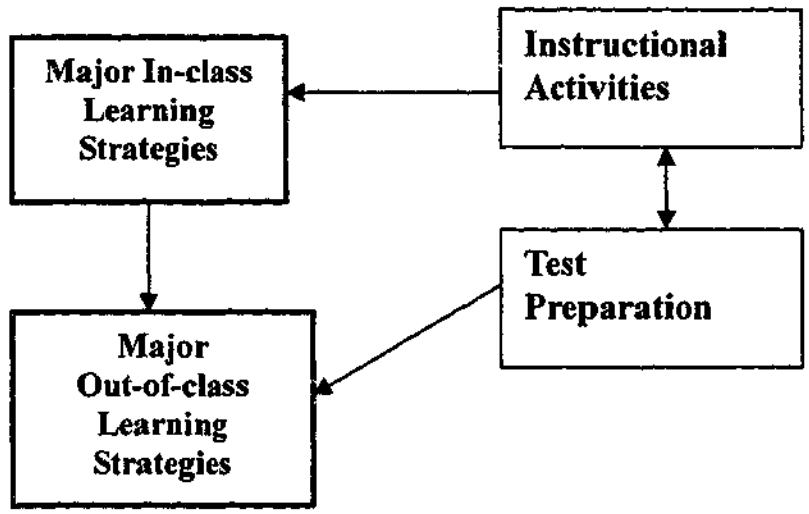
## 8.1 EFL Learners' Strategy Use in Previous English Learning

Analyses of the diaries and interview transcripts reveal that seventeen in-class strategies and twenty-three out-of-class strategies were employed by participants in previous EFL learning to assist their progress in developing English abilities. These strategies were used to improve relevant language skills and knowledge in particular learning situations to achieve specific learning goals. The data analysis results also show that most in-class learning strategies were influenced by instructional activities, such as explicit grammar instruction (i.e. grammar translation or grammar analyses), oral repetition, and doing exercises (i.e. simulated test practice). As for those out-of-class strategies that EFL participants decided to use, most were for test preparation, while only a few reflected personal factors.

In order to have a clear picture of the strategy types and related intelligences that these fifty-one learners used in their previous EFL learning for further comparison and discussion, these reported strategies were firstly categorized based on Oxford's strategy classification system (Oxford, 1990). After that, the intelligence(s) involved in each strategy were indicated through the core components of eight intelligences summarized by Armstrong (2000). Then, these classified strategies that had been mentioned by more than half of the participants were sorted out as the major strategies. They were used to present a general trend of the widely employed language strategies among these learners in their previous EFL learning. Finally, <u>five in-class</u> and <u>six out-of-class</u> strategies emerged from the overall list.

Figure 8.1 presents the relationships among the employment of these major in-class and out-of-class learning strategies, instructional activities, and test preparation in these EFL students' previous English learning.

**Figure 8.1. The Relationships among the Major Learning Strategies and Relevant Factors in their Previous English Study**




As can be seen in Figure 8.1, test preparation and instructional activities were the main factors in influencing these EFL students' ways of learning in their prior English study. Furthermore, in Tables 8.1 and 8.2, I have collated these major strategies, in class and out of class, respectively, with corresponding strategy categories and focus intelligence(s).

**Table 8.1. Major in-class Language Learning Strategies used in their Previous EFL learning**

| Oxford's Strategy Group | Oxford's Strategy Subgroup | Language Learning Strategies | Main Intelligence(s) |
|---|---|---|---|
| **Cognitive** (Direct strategy) | **Practicing** -Repeating | *1. Repeat after teacher loudly* | Verbal-linguistic |
| | **Receiving and sending messages** -Using resources | 2.*Use resource books, particularly for supplementing the content of textbooks* | Verbal-linguistic Logical-mathematical |
| | **Analyzing and reasoning** -Reasoning deductively | 3. *Consciously use grammatical rules to analyze each text* | Logical-mathematical Verbal-linguistic |
| | -Translating | *4. Use a translation machine (electronic bilingual dictionary)* | Verbal-linguistic Logical-mathematical |
| | **Creating structure for input and output** -Taking notes | *5.Take notes (write down important points) in native tongue* | Verbal-linguistic Logical-mathematical |

**Table 8.2. Major out-of-class Language Learning Strategies used in their Previous EFL Learning**

| Oxford's Strategy Group | Oxford's Strategy Subgroup | Language Learning Strategies | Main Intelligence(s) |
|---|---|---|---|
| **Cognitive** (Direct strategy) | **Practicing** -Repeating | *1. More practice on simulated tests* | Verbal-linguistic Logical-mathematical |
| | | *2.Do many exercises of grammatical rules* | Verbal-linguistic and logical-mathematical |
| | | *3. Say or write new words many times* | Verbal-linguistic |
| | **Receiving and sending messages** -Using resources | *4.Heavy use in resource books, particularly designed for textbooks* | Verbal-linguistic Logical-mathematical |
| | **Analyzing and reasoning** -Translating | *5.Understand the Chinese meaning of each segment in textbooks* | Logical-mathematical Verbal-linguistic |
| **Metacognitive** (Indirect strategy) | **Arranging and planning your learning** -Seeking practice opportunities | *6. Get extra lessons in cram schools to have better performance in English tests* | Intrapersonal |

These major in-class and out-of-class strategies used in participants' previous EFL learning are discussed with relevant diary extracts or interview quotations in sections 8.1.1 and 8.1.2. An exploration of underlying reasons for their previous EFL strategy use is included in 8.1.3.

### 8.1.1 Major in-Class Language Learning Strategies

Based on Oxford's model, the five major in-class strategies (see Table 8.1) could be grouped as four kinds of cognitive strategies: practicing through repeating, using resources for receiving and sending messages, analyzing and reasoning by translating, and using note-taking to create structure for input and output. These strategies are found to have a relationship with those in-class activities promoted by the two teaching methods [4]: grammar-translation (structure-based) and audiolingualism (stimulus/response/reinforcement-based). The use of relevant strategies implied by the

[4] The two teaching methods, grammar- translation and audiolingualism, have been widely used by local EFL teachers in Taiwan for years.

two methods is largely connected to the learning modes of verbal-linguistic and logical-mathematical intelligences.

#### 8.1.1.1 Language learning strategies and instructional activities

According to the analysis results, around ninety per cent of the students explained that when they listened to the language teacher's lectures, they used to take notes in their native tongue with the assistance of a translation machine. Apparently, these participants, having been educated with the explicit teaching and learning modes in school contexts for a long time, tried all means to understand the Chinese meaning of each word and every sentence during their teacher's lecturing (translation). For these learners, there seemed to be no tolerance of ambiguity in the target English learning materials, because uncertainty or vagueness was obviously against their learning habits:

> *During class time, I kept noting down the teacher's translation… I felt uneasy if I did not catch the Chinese meaning of the target learning materials…In fact, most classmates did the same thing … A bilingual translation machine was very helpful for me to fill in some missing translation because of my absent mindedness during class time.* (LHD-S, S3 22April)

> *Getting equivalent Chinese script of each segment in English textbooks was very important for English learning…I felt lost if there was no Chinese translation, when I was studying English…Most high school English teachers gave us clear Chinese translation and grammar analysis of each lesson, so in-class notes were quite important for later review…My English textbooks were full of Chinese characters. These in-class notes could remind me of the meaning of each sentence… The translation machine was a handy tool for me to understand some words that teachers did not translate during their lecturing.* (LHD-S, S24, 23 April)

Moreover, twenty-nine participants stated that they repeated loudely after the teacher for oral English practice. These students trusted "*practice makes perfect*" or "*repetition is the way*" because they had been taught through this approach routinely to master the sounds of the target language:

> *The teacher told us practice makes perfect…In class, repeating the target sentences loudly after the English teacher was like a class routine but it was also a good chance to practice spoken English…Moreover, repeating after the teacher seemed to be the only chance in previous school EFL classes to practice the pronunciation of new words through my own mouth… Anyway, I thought maybe oral repetition could help me improve spoken English more or less, even though I felt bored most of the time.* (LHD-S, S21, 23 April)

> *'Repeat after teacher loudly' was a frequent activity in my previous English study. I used to take the chance to hear and say English… I was not sure of the effect of this learning routine on my English abilities, but I used to believe that practice makes perfect. Repeating loudly should be a good way to practice oral abilities.* (LHD-S, S16, 23 April)

About thirty-seven participants also mentioned that they consciously used grammatical rules to analyze each text for understanding, particularly when listening to the teacher's explanation of grammatical rules. These grammar-focused teaching activities made these students accustomed to take grammatical rules as their priority when learning English:

> *I tried to comprehend the grammar rules that the teacher gave us by applying them.... Text analysis could help me understand these grammar rules and then make efficient choices in grammar tests or produce correct sentences when speaking or writing English.* (LHD-S, S42, 22 April)

> *The interpretation and practice of grammar rules was the 'must do' activity in my previous school English course, because grammar was considered as a very important aspect for English learning...In order to help students understand grammar rules, teachers used to show us how to analyze the sentences of each text through applying the relevant rules.* (LHD-S, S40, 23 April)

Because of the beliefs that 'practice makes perfect' and 'diligence compensates for stupidity' held by many local EFL teachers in Taiwan, 'doing exercises' has became a very common in-class activity in Taiwan to encourage students to have more practice with effort, determination, perseverance and patience. Generally, these exercises that EFL teachers bring into classroom are paper-and-pencil oriented with an emphasis on testing knowledge of vocabulary and grammar, or reading comprehension. Becoming accurate in test answers is the goal that most students pursue rather than fluency in using English.

About thirty-five students mentioned the important strategy, for getting correct answers to those assigned paper-and-pencil exercises during class time, was to use resource books frequently. These resource books were not outside readers but were special books purposely written by local teachers for supplementing the content of textbooks used by school EFL learners. Most participants claimed these resource books had been very helpful to their classroom learning to master the target materials in textbooks effectively:

> *As many classmates did, I bought many resource books, such as 101 Important English Structures, Key Grammar for Entrance Exams and A Guide Book to English (I) (II) (III). These books were supplementary materials to the content of school textbooks...Correct answers for exercises in school textbooks were included...These books were students' 'secret weapons'...I used to bring these books into school classes because I needed to check them for answers, and to look for explanations or examples during 'doing exercises' time.* (LHD-S, S47, 22 April)

> *During the class time of doing exercises, I used to find answers from personal resource*

*books...Because these resource books provided summaries and many examples of school learning materials, I checked them very often to make sure I could finish all exercises correctly...These resource books were really helpful for me to master each segment of textbooks.* (LHD-S, S35, 23 April)

From these entries, it is clear to see that these EFL students' use of major in-class strategies in their previous study was influenced by the instructional activities, such as explicit grammar teaching, repetition, and doing exercises.

### 8.1.2 Major out-of-class Language Learning Strategies

When examining participants' use of major out-of-class language learning strategies during their previous EFL study, six learning strategies, of which more than fifty per cent of the all participants claimed they were users, came out of the twenty-three identified strategies. As Table 8.2 indicates, the six strategies are based on Oxford's classification framework and include three kinds of cognitive and one type of metacognitive strategy. These cognitive strategies range from practicing by repeating, sending and receiving messages through resources, to using translation to help logical thinking. The main intelligences of these cognitive strategies are verbal-linguistic and logical-mathematical intelligences. As for the metacognitive strategy, it was employed by many participants to support and manage their language learning in terms of seeking practice opportunities. About forty-one students claimed their use of this strategy because of personal reflection on social expectations. These learners decided to go to cram schools, in which they could find more learning opportunities to be familiar with the types and items of English tests, and to understand the target learning materials (textbooks) better. Since these learners discerned personal needs and tried possible solutions, intrapersonal intelligence was triggered when they were implementing this strategy. In general, the six major out-of-class strategies are found to be closely related to the issue of test preparation.

#### 8.1.2.1 Language learning strategies and test preparation

The six major strategies frequently employed by many participants during their private study time were for test preparation. They explained they had used these strategies (see Table 8.2) to master the required English knowledge such as vocabulary and grammar, and then to pass the evaluation (e.g. school tests or official tests) imposed on them by teachers, school systems and the society. The following

diary extracts describe how two participants prepared for school English tests or the public English test (e.g. Joint College Entrance Exam), through the six widely reported strategies (the underlined ones) during their previous after-school study time:

> *During my high school life, I studied very hard, especially in English...In addition to school classes, I had extra English classes every day in a nearby cram school...School teachers assigned us many grammar exercises, and so did teachers in cram schools...I also bought many simulated tests to practice and resource books to read...I did not think I was a smart English learner, so I spent plenty of time in reading English with the help of equivalent Chinese translation scripts...I had a special notebook for practicing new words or difficult words...I believed practice makes perfect and my efforts should pay me back.... Fortunately, I passed all school English tests... However, I still cannot use English fluently, especially in communication.* (LHD-S, S50, 23 April)

> *In order to get a high score in college entrance exam, I bought many simulated tests to practice and relevant resource books to study... Every day, I spent fifteen minutes saying (loudly repeating) new words or phrases, twenty minutes checking my understanding of the target learning materials with equivalent Chinese translation scripts, thirty minutes reading resource books and one hour doing simulated tests or relevant grammar exercises... I also went to cram school with my classmates three times a week to advance my English grammar knowledge and improve reading comprehension skills.* (LHD-S, S23, 23 April)

Apparently, previous English learning for these participants was like a process of accumulating knowledge in order to get good performance in tests. Thus, the main strategies they employed during their after-school study time were mainly for test preparation.

### 8.1.3 EFL Learners' Reluctance to Use Different Language Learning Strategies in Previous English Learning

Based on the results of participants' previous use of language learning strategies, few of them reported their learning strategies for developing communicative abilities in prior EFL learning; however, numerous participants made frequent use of limited kinds of strategies for preparing and passing important tests to satisfy social expectations. Although some learners claimed their eagerness to master the knowledge and skills of English, most of them were not actively trying different strategies to achieve their goals or solve their learning problems. The reasons that made these learners reluctant to use a range of strategies should be explored. 'Did they enjoy or feel satisfied with using these restricted strategies?' or 'Did they have special reasons for their reluctance?' Questions like these need to be clarified.

In this section, the reasons that might have caused participants' reluctance to expand

or vary their strategies in their previous EFL learning are provided and discussed with supportive diary extracts and interview quotations.

First of all, a few participants explained their reluctant attitude to try other learning strategies was because they honored or respected teachers' decisions. The possible interpretation of this observable fact is the emphasis of traditional Chinese education on "maintaining a hierarchical but harmonious relation between teacher and student" (Hu, 2002: 98). Since these participants had grown up in this culture, with a great respect for and wish to maintain their teacher's face because of their authority in the society, it seemed impossible for them to actively challenge teachers' instructions when what teachers said and did helped them achieve social requirements.

The interviews with Celia and Wei-Chen noticeably reflect the critical effects of traditional instructional activities on EFL learners' choices of in-class learning strategies. These participants followed what classroom teachers wanted them to do without challenging their teachers' decisions:

> Celia, Lin (LHI-S): *Strategies to learn and use English? I just followed the ways teachers wanted me to do. To be a good student, you know, it is very important to follow what teachers say...Reading learning materials many times...doing many exercises to be familiar with the target materials and test types...all strategies were for tests... That was our goal teachers kept telling us...Communication strategies? No... I did not try.* (Interview I/ Part A: Q8, 23 April/ Stage1)

> Wei-Chen, Wu (LHI-S): *I think you can ask my high school English teachers because they know all strategies I used in class...Routine practice and routine strategies...Listening to teacher's analysis without making any noise was to be teacher's preferred student...Communication strategies? Are you kidding? Teachers used to complain school time was not enough for textbooks teaching and English tests preparation... How could we have time to do other things? ...How could I develop any communication strategies if the teacher did not give me opportunities or teach me how to do it? ...Taking risks is very dangerous...Students are students. What I did is obey and follow what teachers wanted me to do because they have more experiences than me.* (Interview I/ Part A: Q8, 23 April/ Stage1)

Next, two quotations are chosen to explicate how the exam-first trend, widely emphasized by school teaching in Taiwan, had influenced EFL learners' use of out-of-class learning strategies. Again, these participants were devoted to pursuing good test grades that their school teachers had expected them to achieve, without giving attention to the strategies of developing other practical English skills:

> *The out-of-class strategies I commonly employed for learning English were keeping on reviewing learning materials and learning new words through loudly repeating. These strategies, similar to the ways teachers taught us in the class, such as 'repeat after me'*

*and 'read aloud', were directly learned from my English teachers, because, for me, teachers are always good models to learn from... The original reason for using these strategies was to pass vocabulary quizzes and cloze tests. These tests were conducted by English teachers regularly during class time to check our English learning...When the importance of developing rich vocabulary knowledge and good reading comprehension abilities was continually emphasized by teachers because of the needs from public exams, these out-of-class strategies became even more popular among classmates than before.* (LHD-S, S12, 22 April)

Liang, Chao (LHI-S): *The out-of-class language learning strategies I used were similar to the ones I employed in the class. Learning new words through repeating, doing simulated tests and more grammar exercises are examples. I think all were for tests. Getting good scores was the only goal. You say did I use other strategies? No. How could I have time? I needed to prepare for endless English tests and I had many other subjects to study. My parents and teachers had high expectation of me, which gave me pressure. The society also uses grades to evaluate us. I had pressure in getting a satisfactory performance in important public exams. To be honest, all out-of-class strategies I used at home for learning English were simply for mastering the content of textbooks and getting good scores. The goal was very realistic. I did not have time to generate other thoughts. Following what teachers requested us to do was the safest way!* (Interview I/ Part A: Q9, 23 April)

Furthermore, opportunities, experiences, personal motivation and exam-pressure were other reasons to interpret their reluctance. Some participants mentioned their understanding about the disadvantage of employing non-communicative strategies during previous EFL learning. They knew these frequently used learning strategies could not help them acquire practical English abilities, but most of them still kept silent at that time without taking any further action. The underlying reasons were, firstly, they did not have opportunities to have their voices heard in a teacher-centered learning context; secondly, they knew the significance of developing practical English abilities but they did not have real experiences or strong personal motivation to push them along; and finally, the pressure from the entrance exam made them easily surrender to reality.

The interviews with Han-Yi and Chia-Ling are representative examples of the reasons for many participants' reluctance to develop more language learning strategies for practical (communicative) purposes, even though they already recognized the importance of expanding the range of language learning strategies:

Han-Yi, Hsiao (LHI-S): *Anyway, I do not think the strategies I told you, such as translation and grammar exercises, very traditional and boring could help me improve my practical English abilities. However, knowing is one thing and doing is another. In my previous EFL learning, I knew my problem but I did not get opportunities to tell teachers my problems and find solutions. You know, most teachers are quite dominant in students' English learning. Teachers' words are unchangeable rules for high school students and nobody dared to say 'no'. I think it was also my fault. I was not an active learner. I do not know why I did not have strong motivation to implement my awareness, to be an active*

*learner. Maybe I thought these traditional strategies were enough for me to prepare for and pass the English test in the college entrance exam, so I did not actively look for other possibilities. I think I was the one who easily surrendered to reality—exam-first culture. Anyway, in the EFL context, it seems impossible for me to acquire English successfully.* (Interview I/ Part A: Q9, 23 April)

Chia-Ling, Chu (LHI-S): *...I think English cannot be acquired through Taiwan's EFL education, very teacher-centered and boring. Most of the time, students are like 'helpless fish on the board'...I did not agree repetition and translation were enough for English acquisition because I had heard a lot from my relatives...They told me how important English communication abilities are, but I had no ideas about how to improve... I did hope I would have opportunities to know how to use some practical strategies to learn English... Well, I did not share my ideas with teachers because I did not get opportunities. They were always in high positions... Besides, the pressure from entrance exams made me give up lots of bizarre ideas or potential solutions! ...It seemed to be really unrealistic to invent something new, such as various strategies for developing native-like English proficiency for successful communication, especially when everyone, including my teachers, told me these things were not included in tests or could not guarantee my test scores! ...In short, reality is the main issue for all student learners in Taiwan, I think.* (Interview I/ Part B: Q10, 23 April)

In fact, a few learners reported that they had developed more strategies to approach their English learning because they had opportunities to learn English through 'different' teaching and learning activities (e.g. games, songs, movies, dialogue practice and newspaper reading). Even though these students were only a minority, all of them considered these activities as a special treat, like "*an oasis in the desert*" that made them feel grateful, entertained and occasionally enlightened. During the process of attending these activities, some claimed they felt encouraged to try different strategies to approach English:

*I really appreciate the creative English teacher Mr. Young I met in a cram school...He used funny gestures or jokes to strengthen our memory in the usage of idioms.... He used to come out with different ideas to teach us how to 'play' English. Taking his English class was like finding an oasis in the desert. I was really grateful to his enlightenment and humor. I have learned a lot from him, especially in memory skills.* (LHD-S, S9, 21 April)

*Under the pressure of entrance exam, junior high school learning was a nightmare... However, my third-year English teacher was good. I was enlightened a lot by the English songs she introduced... She taught us English songs twice a month.... I acquired many new words and sentences from singing those songs...I found English became easier when it was presented through music or songs. Since then, I have been encouraged to learn English through songs, music and melody.* (LHD-S, S2, 23 April)

Nevertheless, about four participants expressed their preference for employing restricted strategies, implied by traditional instructional activities, such as repetition and translation. The reason for their reluctance to invent different learning strategies was that they felt these simple and safe strategies were efficient for them to learn English, particularly when passing important tests or entrance exams was the main

issue. As one student wrote:

> *The strategies I employed to learn English were quite simple but safe…Listening to what teachers said carefully, especially in their grammar analysis and English-Chinese translation, was a helpful strategy… Doing more exercises at home was useful as well… When I was very diligent in executing these strategies, I used to get good grades in tests.* (LHD-S, S4, 23 April)

Another student pointed out:

> *My learning strategies were easy, safe and effective, like what the traditional Chinese teaching approaches suggest… 'Practice makes perfect'… Language learning is like developing another good skill through knowledge accumulation… The strategies I used commonly were, understanding the grammar rules in all target materials, doing more exercises and checking grammar books regularly. I like these ordinary strategies and think they are effective because they have helped me pass all English tests in the past.* (LHD-S, S18, 22 April)

Based on these quotations, it is clear to see that the reported reasons about EFL participants' reluctance to expand the range of strategy use in their previous English study can be summarized by four main points: (1) 'teacher was the authority', so students only followed the strategies that their teachers suggested them to do; (2) the pressure from entrance exams made them ignore the development of different strategies for improving practical English abilities; (3) they had few or no opportunities to try different strategies for developing practical English abilities in a teacher-centered learning context, and (4) they had low motivation to try new things when 'passing tests' was the priority.

## 8.2 EFL Learners' Strategy Use during the MI-based Intervention

Based upon the information collected from learning diaries, and from the interviews conducted after the intervention course, the initial findings reveal that sixty-two in-class and one hundred and twenty-six out-of-class strategies were employed by participants during the two-month MI-based intervention. Intended for further comparison and discussion, these strategies were defined and grouped under Oxford's typology of language learning strategies (Oxford, 1990) and Armstrong's summary of Gardner's eight intelligences (Armstrong, 2000). After being classified by Oxford's strategy system, these strategies, having different functions and purposes, are found to range quite broadly, from cognitive, memory, compensation, metacognitive, affective to social. Some of these strategies were taken by participants to accomplish specific learning tasks, others were used to improve or empower their language skills and

knowledge, and yet others were employed to promote personal learning motivation, and build positive learning attitude and experiences. The employment of multiple intelligences in these strategies also seemed to be very diverse. Instead of involving limited usage of intelligences, say, verbal-linguistic and logical-mathematical intelligences, other intelligences were triggered and developed as well, depending on the features of each strategy.

To understand the general trend of language learning strategy use during the MI-based intervention, the strategies mentioned by over half of the total participants were chosen and labeled as major strategies. Finally, thirty-one in-class strategies and thirty-eight out-of-class strategies emerged from the overall list. When exploring the influential factors on participants' in-class strategy use, the results show that instructional tasks/activities, and the involvement of the language teacher or their classmates affected their strategy choices. As for learners' employment of out-of-class strategies, instrumental purposes and learners' beliefs are discovered to be significant themes to guide their decisions.

These major strategies employed by participants, in class and out of class, during the MI-based intervention, are represented in Tables 8.3 and 8.4, with their corresponding strategy categories and main intelligence(s).

The discussions of these major in-class and out-of-class strategies used by participants during the MI-based intervention are provided in sections 8.2.1 and 8.2.2, respectively, with relevant diary extracts or interview quotations. Minority views with different ideas about language learning strategies during the MI-based intervention are included in section 8.2.3. The reasons for many learners' willingness to engage in the employment of various language learning strategies during the MI-based intervention are explored and explained in section 8.2.4.

**Table 8.3. Major in-class Language Learning Strategies used during the MI-based Intervention**

| Oxford's Strategy Group | Oxford's Strategy Subgroup | Language Learning Strategies | Main Intelligence(s) |
|---|---|---|---|
| **Cognitive** (Direct strategy) | **Practicing** -Formally practicing with sounds | *1. Use the phonics songs to practice the pronunciation of consonants* | Musical-rhythmic Verbal-linguistic |
| | -Recognizing and using formulas and patterns | *2. Use Jazz Chants to practice conventional patterns* | Musical-rhythmic Logical-mathematical Verbal-linguistic |
| | -Recombining | *3. Use English to write riddles* | Logical-mathematical Verbal-linguistic |
| | -Practicing naturalistically | *4. Learn English through educational technology (e.g. videotapes and internet)* | Visual-spatial Naturalist Verbal-linguistic Logical-mathematical |
| | -Practicing naturalistically | *5. Learn English through singing English songs* | Musical-rhythmic Verbal-linguistic |
| | **Receiving and sending messages** -Getting the idea quickly | *6. Search for main ideas through skimming* | Verbal-linguistic Logical-mathematical Intrapersonal |
| | -Getting the idea quickly | *7. Use preview questions to facilitate comprehension* | Verbal-linguistic Intrapersonal Logical-mathematical |
| | -Using resources for receiving and sending messages | *8. Look up a picture dictionary* | Visual-spatial Verbal-linguistic |
| | **Analyzing and reasoning** -Translating | *9. Use a Chinese-English translation machine* | Logical-mathematical Verbal-linguistic |
| **Memory** (Direct strategy) | **Employing actions** -Using physical response or sensation | *10. Use gestures and physical movements to remember the meanings of new verbal expressions* | Bodily-kinesthetic Verbal-linguistic |
| | -Using physical response or sensation | *11. Use hand gestures to remember the differences in English vowels* | Bodily-kinesthetic Verbal-linguistic |

| | | | |
|---|---|---|---|
| **Compensation** (Direct strategy) | **Guessing intelligently**<br>-Using linguistic clues | *12. Guess meanings of unfamiliar words through linguistic clues* | Verbal-linguistic<br>Intrapersonal<br>Logical-mathematical |
| | -Using other clues | *13. Guess meanings of target learning materials through nonlinguistic clues* | Verbal-linguistic<br>Intrapersonal<br>Visual-spatial |
| | **Overcoming limitations in speaking**<br>-Using mime and gestures | *14. Use drawing, gestures or surrounding objects to convey thoughts or ideas to others* | Bodily-kinesthetic<br>Visual-spatial<br>Naturalist |
| | -Adjusting or approximating the message | *15. Use simple words to express complicated ideas* | Intrapersonal<br>Verbal-linguistic |
| | -Using a circumlocution or synonym | *16. Express difficult concepts through description* | Intrapersonal<br>Verbal-linguistic |
| **Affective** (Indirect strategy) | **Lowering your anxiety**<br>-Using progressive relaxation, deep breathing or meditation | *17. Use deep breathing and easy exercises to restore the whole body* | Bodily-kinesthetic<br>Intrapersonal |
| | **Encouraging yourself**<br>-Taking risks wisely | *18. Encourage myself to try the target language regardless of the possibility of making mistakes* | Intrapersonal |
| **Metacognitive** (Indirect strategy) | **Centering your learning**<br>-Paying attention | *19. Pay attention to language teacher's lectures* | Intrapersonal<br>Verbal-linguistic<br>Logical-mathematical |
| | -Paying attention | *20. Pay attention to classmates' performance and learn from their strengths and mistakes* | Intrapersonal<br>Interpersonal<br>Logical-mathematical<br>Visual-spatial<br>Naturalist<br>Verbal-linguistic |
| | -Paying attention | *21. Listening comprehension with selective attention* | Intrapersonal<br>Verbal-linguistic<br>Logical-mathematical |
| **Social** (Indirect strategy) | **Asking questions**<br>-Asking for clarification or verification | *22. Ask partners for clarifications during conversation (e.g. what did you say?)* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic<br>Logical-mathematical |

| | | | |
|---|---|---|---|
| | **Cooperating with others**<br>-Cooperating with others | *23. English conversation practice (in puppet show or role-play) through cooperative experiences with group members* | Interpersonal<br>Intrapersonal<br>Bodily-kinesthetic<br>Verbal-linguistic<br>Visual-spatial<br>Musical-rhythmic |
| | -Cooperating with others | *24. Play 'mime and guess' games to learn new words with classmates* | Interpersonal<br>Bodily-kinesthetic<br>Visual-spatial<br>Naturalist<br>Verbal-linguistic |
| | -Cooperating with others | *25. Group members discuss the video content* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic<br>Visual-spatial |
| | -Cooperating with others | *26. Evaluate classmates' English performance through group negotiation* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | -Cooperating with others | *27. Discuss English learning materials (textbooks) with group members* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | -Cooperating with others | *28. Develop intercultural awareness through group discussion (after puppet show)* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | -Cooperating with proficient users of the new language | *29. Understand the talents of different classmates and find suitable ones to ask for help in different tasks/ topics* | Intrapersonal<br>Interpersonal |
| | **Empathizing with others**<br>-Developing cultural understanding | *30. Close observation on how native speakers use conversational skills and nonverbal languages for communication* | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Naturalist<br>Musical-rhythmic<br>Verbal-linguistic<br>Logical-mathematical<br>Bodily-kinesthetic |
| | -Becoming aware of others' thoughts and feelings | *31. Actively help others* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |

**Table 8.4: Major out-of-class language learning strategies used during the MI-based Intervention**

| Oxford's Strategy Group | Oxford's Strategy Subgroup | Language Learning Strategies | Main Intelligence(s) |
|---|---|---|---|
| **Cognitive** (Direct strategy) | **Practicing** -Repeating | *1. Read aloud good English articles or practical dialogues many times* | Verbal-linguistic |
| | -Recognizing and using formulas and patterns | *2. Understand the use of conventional utterances (canned dialogues)* | Verbal-linguistic Intrapersonal Logical-mathematical |
| | -Practicing naturalistically | *3. Learn English through singing English songs* | Musical-rhythmic Verbal-linguistic |
| | -Practicing naturalistically | *4. Learn English through websites surfing* | Visual-spatial Verbal-linguistic Logical-mathematical |
| | -Practicing naturalistically | *5. Learn English through field works or extracurricular activities* | Naturalist Interpersonal Verbal-linguistic Bodily-kinesthetic |
| | -Practicing naturalistically | *6. Extensive listening practice through radio broadcasting programs* | Verbal-linguistic Intrapersonal |
| | -Practicing naturalistically | *7. Learn English from the objects in the authentic world (e.g. traffic signs, advertisement and food packages)* | Naturalist Visual-spatial Verbal-linguistic |
| | -Practicing naturalistically | *8. Extensive reading (e.g. graded English readers and novels)* | Verbal-linguistic Intrapersonal |
| | **Receiving and sending messages** -Using resources for receiving and sending messages | *9. Look up monolingual/ bilingual dictionaries and grammar books for understanding the target learning materials* | Verbal-linguistic Logical-mathematical |
| | -Using resources for receiving and sending messages | *10. Look up picture dictionary* | Visual-spatial Verbal-linguistic |
| | -Using resources for receiving and sending messages | *11. Read vocabulary, idioms and sentence structure books for application* | Verbal-linguistic Logical-mathematical |

| | | | |
|---|---|---|---|
| **Cognitive** (Direct strategy) | **Analyzing and reasoning**<br>-Translating<br><br>-Translating | *12. Study bilingual newspapers or magazines*<br><br>*13. Use a Chinese-English translation machine* | Logical-mathematical<br>Verbal-linguistic<br><br>Verbal-linguistic<br>Logical-mathematical |
| **Memory** (Direct strategy) | **Reviewing well**<br>-Structured viewing | *14. Review new words through pocket vocabulary cards on a regular basis* | Verbal-linguistic<br>Intrapersonal |
| | **Employing actions**<br>-Using physical response or sensation<br><br>-Using physical response or sensation | *15. Use hand gestures to remember the differences in English vowels*<br><br>*16. Use personal gestures and physical movements to remember the meanings of new verbal expressions* | Bodily-kinesthetic<br>Verbal-linguistic<br><br>Bodily-kinesthetic<br>Verbal-linguistic |
| **Compensation** (Direct strategy) | **Overcoming limitations in speaking**<br>-Adjusting or approximating the message<br><br>-Use a circumlocution or synonym | *17. Use simple words to express complicated ideas*<br><br>*18. Express difficult concepts through description* | Verbal-linguistic<br>Intrapersonal<br><br>Verbal-linguistic<br>Intrapersonal |
| **Affective** (Indirect strategy) | **Lowering your anxiety**<br>-Using progressive relaxation, deep breathing or meditation<br><br>-Using music | *19. Use deep breathing and easy exercises to restore the whole body*<br><br>*20. Listening to radio channels of English songs, or listen to English songs on cassettes or CDs* | Bodily-kinesthetic<br>Intrapersonal<br><br>Musical-rhythmic<br>Intrapersonal |
| | **Encouraging yourself**<br>-Taking risks wisely | *21. Encourage myself to try the target language regardless of the possibility of making mistakes* | Intrapersonal |
| | **Taking your emotional temperature**<br>-Writing a language learning diary<br><br>-Discussing your feelings with someone else | *22. Keep a learning diary to write down feelings about the learning process*<br><br>*23. Discuss feelings or experiences of learning English with others (face- to -face sharing or class website chatting)* | Intrapersonal<br><br>Intrapersonal<br>Interpersonal |

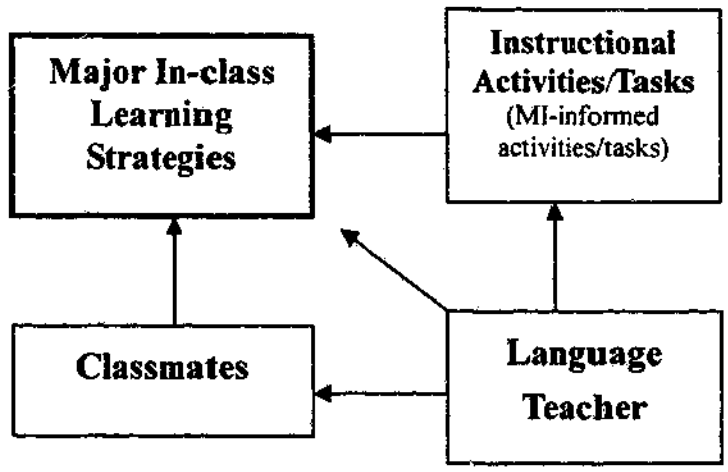
| | | | |
|---|---|---|---|
| **Metacognitive** (Indirect strategy) | **Centering your learning**<br>-Overview and linking with already known material | *24. Preview relevant vocabulary before English practice* | Intrapersonal<br>Verbal-linguistic<br>Logical-mathematical |
| | -Paying attention | *25. Listening comprehension through selective attention* | Intrapersonal<br>Verbal-linguistic<br>Logical-mathematical |
| | **Arranging and planning your learning**<br>-Finding out about language learning | *26. Read books about how to develop personal learning potential* | Intrapersonal |
| | -Setting goals and objectives | *27. Set up personal learning plans with clear goals* | Intrapersonal |
| | -Seeking practice opportunities | *28. Actively look for opportunities to use English* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | **Evaluating your learning**<br>-Self-monitoring | *29. Keep a learning diary for self-monitoring (e.g. discovering personal difficulties or tracking common errors)* | Intrapersonal |
| **Social** (indirect strategy) | **Asking questions**<br>-Asking for correction | *30. Keep asking fluent users for correction* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | **Cooperating with others**<br>-Cooperating with others | *31. Learning English through cooperative experiences with group members (in role-play, puppet show or final project)* | Interpersonal<br>Intrapersonal<br>Bodily-kinesthetic<br>Verbal-linguistic<br>Musical-rhythmic<br>Visual-spatial |
| | -Cooperating with others | *32. Peer conversation practice (based on textbook: Basic Conversation patterns)* | Interpersonal<br>Verbal-linguistic |
| | -Cooperating with others | *33. Discuss English learning materials (textbooks) with group members* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |
| | -Cooperating with others | *34. Group members discuss video content* | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic |
| | -Cooperating with proficient users of the new language | *35. Understand the talents of surrounding people (e.g. classmates, friends or community experts) and find suitable ones to ask for help in different topics/ tasks* | Intrapersonal<br>Interpersonal |

| | | | |
|---|---|---|---|
| **Social** (Indirect strategy) | **Empathizing with others**<br>-Developing cultural understanding | *36. Close observation on how native speakers use conversational skills and nonverbal languages for communication* | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Naturalist<br>Bodily-kinesthetic<br>Logical-mathematical<br>Musical-rhythmic<br>Verbal-linguistic |
| | -Developing cultural understanding | *37. Develop cross-cultural understanding through reading relevant books, surfing relevant websites or the help of others* | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic |
| | -Becoming aware of others' thoughts and feelings | *38. Teach classmates with English learning problems or help English speakers (foreigners in Taiwan)* | Interpersonal<br>Intrapersonal<br>Verbal-linguistic |

### 8.2.1 Major in-Class Language Learning Strategies

The thirty-one major in-class language learning strategies (Table 8.3), employed by more than half of the participants during the MI-based intervention, can be seen to increase in use and variety (types and intelligences), when compared with those of their previous classroom EFL learning. As Table 8.3 states, these strategies fall into six strategy groups with their own sub-themes (subgroups) proposed by Oxford, and can be featured through the different applications and combinations of eight intelligences implied by MI theory. Among the thirty-one in-class strategies, the most frequently reported by participants are cognitive and social strategies. The use of these two strategies also presents more variety than the other four types of strategy (affective, memory, compensation and metacognitive). In general, these widely employed in-class strategies are closely linked with two broad themes: Instructional tasks/ activities, and the involvement of significant others. Figure 8.2 visualizes the relationships between the employment of major in-class learning strategies and relevant factors.

**Figure 8.2. The Relationships between Major in-class Strategy Use and Relevant Factors during the MI-based Intervention**




**8.2.1.1 Language learning strategies and instructional tasks/activities**

After reviewing and analyzing learners' diary entries and interview information, a close relationship between instructional tasks/activities (MI-informed activities/tasks) and major in-class strategies emerged from the data. Many reported strategies are found either to be relevant to the nature of instructional tasks/activities or are developed by participants to carry out these tasks/activities. In other words, these instructional activities/tasks given to participants throughout the two-month intervention have influenced their choice of in-class language learning strategy. Also, all of these commonly used strategies, involving different applications and combinations of multiple intelligences, could be interpreted through the features of Oxford's six strategy groups (see Table 8.3).

Firstly, the widely used cognitive strategies were those directly suggested by in-class instructional tasks/activities. These strategies included using 'phonics songs' to practice sounds of English, using 'Jazz Chants' to recognize conventional patterns, recombining familiar English elements through 'writing riddles', and using 'educational technology' or 'singing English songs' to practice English naturalistically. There were also some cognitive strategies being applied by participants for carrying out different in-class activities/tasks efficiently. For example, many students used 'skimming or previewing questions' as their cognitive strategies to quickly make sense of the target learning materials provided by instructional activities, such as authentic listening practice. When preparing for routine group/class discussions, lots of participants 'looked up a picture dictionary' to find more relevant vocabulary to use

or they used 'a Chinese-English translation machine' to facilitate the comprehension of unfamiliar words.

Here are quotations drawn from learners' diaries to present a close connection between cognitive strategy use and in-class instructional tasks/activities. The first one is the use of the cognitive strategy 'recombining familiar English elements through riddle writing', which was suggested by the in-class activity 'Riddles Creation':

> *Today's class was like going on another adventurous journey, but it was quite practical and interesting... At the end of course, the teacher wanted us to create riddles related to today's topic 'travel'... The answer should be a country or a traveling problem.... I tried to put the words and grammar I knew together to imply the answer 'jet lag'... The final product is not bad... We got a lot of fun when guessing possible answers of fellow students' riddles.* (MID-S, S3, 20 May/ Stage2)

The second example is a student who reported how the cognitive strategy 'looking up a picture dictionary' was used to facilitate word comprehension and oral expression during class discussion:

> *I felt the Oxford's Picture Dictionary that the English teacher had brought to the class last week should be very useful for me to know how to say Life English, so I bought one yesterday in the university's bookstore... In today's class discussion, teacher asked us the symptoms of some health problems...I answered it with the help of this picture dictionary... I find the picture dictionary is very cool, I mean practical, because I can use matching pictures to quickly pick up unfamiliar/unknown words that I want to say and then express my ideas more smoothly.* (MID-S, S12, 27 May/ Stage2)

In addition to cognitive strategies, about thirty-four students claimed their use of one metacognitive strategy, 'centering their learning with selective attention', particularly when doing listening comprehension practice. More than half of the participants also stated that they used 'guessing meanings of unfamiliar words through linguistic or nonlinguistic clues' as their compensation strategies to assist their listening or reading comprehension of the target texts. Since different kinds of input were extensively provided through instructional activities, such as teaching and learning English through videos, authentic listening practice and reading in-class handouts, 'centering learning with selective attention' and 'guessing intelligently' became very popular strategies among participants to go through these in-class activities/tasks more efficiently.

Similar to the strategy choices of many fellow students in the course, Han-Yi said, during his final interview that, 'guessing intelligently' was frequently used by him as a compensation strategy to get an initial impression of authentic listening input or

infer the meanings of conversations in videos. He also employed 'selective attention', focusing on particular details each time, as a metacognitive strategy, to improve his English listening abilities:

> Han-Yi, Hsiao (MII-S): *...Guessing the meaning of target materials through clues is an effective learning strategy for me... Tones, background music, pictures, routine language patterns or key words all have been helpful clues for me to predict or confirm the main points of listening input from learning CDs or in learning videos ...When doing authentic listening practice in regular class time or when watching videos during tutorial session, instead of being very ambitious to understand everything, I have tried to narrow down my attention... In fact, I got the idea 'selective attention' from activities themselves... we were required to pay attention to some particular details, according to the work sheet... The focus could be career, time, and problems that had been mentioned during the conversations ... I find that a different focus each time can help me gradually understand the whole thing...*(Interview II/Part C: Q16, 26 June)

Furthermore, interaction, negotiation and discussion among participants had been the requirements of many in-class tasks/activities, such as 'jigsaw problem solving', and 'pair/group practice'; therefore, compensation strategies were widely taken by participants to overcome their communication barriers or breakdown. These commonly used compensation strategies included 'using gestures and drawing to convey ideas', 'choosing simple words to state complicated ideas' and 'expressing difficult concepts through description'. The following entry describes how classmates and the diarist resorted to compensation strategies during group activity time to achieve their goal:

> *My English conversation abilities are extremely poor, like many classmates.... Nevertheless, we still need to talk in English because many in-class activities/tasks encourage us to practice.... Today's class was very impressive because in my group, no one was a fluent English user. In order to finish this task—putting the scrambled conversations in correct order, we drew pictures, pointed to the surrounding objects, used body language and simple English words to communicate with one another ... The final result was very encouraging because our group answer was correct!* (MID-S, S24, 3 June/ Stage3)

The use of memory strategies did not occur as frequently as other strategy groups during MI-based classroom learning, but the most popular memory strategies, 'employing physical responses to remember the meaning of new verbal expressions' and 'using hand gestures to remember the differences in English vowels', were still found closely related to several instructional activities/tasks, such as 'mime and guess', 'teacher say' and 'prompt activity: learning English vowels through hand gestures'. Moreover, some students directly reported they had been encouraged or reminded to 'employ actions' to memorize new items because of classroom bodily (physical) and tactile activities. An interviewee, Shan-Jen, said:

Shan-Jen, Lee (MII-S): *I find employing actions is a very effective strategy for me to remember difficult English items... I have recognized the effectiveness of this strategy from observing other classmates' performance in several in-class activities, such as 'Teacher Say' ... My personal experience, a very unforgettable one in using physical responses as a learning strategy, is that I learned many new English words through the in-class game 'Mime and Guess'. It was funny, but I liked it... After that, I use this strategy quite often...both in class and out of class... Now, I understand why kids can learn new languages faster than adults because kids always use their whole body to think and play the target languages, instead of using their left-brain only.* (Interview II/Part C: Q16, 26 June)

Since cooperative activities had been extensively integrated into the intervention course, it is quite natural to discover that numerous participants described the social strategies they used during class time. Two social strategies employed by many learners were 'asking questions' and 'cooperating with group members'. Students drew on these social strategies to deal with different in-class cooperative activities/ tasks, such as 'intercultural issue discussion', 'puppet show' and 'group evaluation'. Several learners also directly indicated the great impact of those in-class cooperative activities on their strategy choice. One student, using the social strategy 'cooperating with others' very often, wrote in her diary:

*I really enjoy working with others because we can support and encourage one another...In today's puppet show performance, A-Yu, one of my group members, helped me resolve a very embarrassing situation—forgetting scripts in the real performance, through showing a big poster at the back of the classroom to remind me of the following scripts...I did not know she had prepared a big poster for me but I really appreciate her consideration...In fact, her English is better than mine. I had told her it was better to let her perform the show because my terrible English might influence the final group grade. However, during group preparation and practice, she kept teaching and encouraging me and other members to have a try without worries. Yesterday night, she promised me she would help me if any situation happened... Now, I realize that I have benefited a lot from working in a group... I feel grateful to the various group activities provided by the course because they gave me lots of opportunities to learn how to cooperate with others... I find I can improve my English abilities during the process of cooperation...I feel I am not an EFL loner any more and 'cooperating with others' is the best strategy for me to make progress in English.* (MID-S, S25, 22 May/ Stage2)

Another student mentioned his frequent use of the social strategy, 'asking questions', to seek clarification or check understanding during 'class group discussion':

*I find 'asking questions' is an effective strategy to facilitate group discussion... The useful question patterns I employ are "Do you mean that?", "Sorry, would you mind saying that again, please?" Because we have many opportunities in the course to discuss with classmates about different issues, how to make conversation go on smoothly without misunderstanding is very important. So far, I find 'asking questions' does help me clarify my thoughts and understand or confirm others' meanings.*
(MID-S, S27, 20 May/ Stage2)

Last but not least, many participants expressed that it was easy to feel nervous when learning and using English, but they found several affective strategies, recommended

by or demonstrated in warm-up activities, such as 'relaxation exercises', 'imagination practice', 'music therapy' and 'aromatherapy', did help them reduce learning or communication anxiety. The most popular affective strategy, employed by about thirty-seven students during class time when anxiety might be a problem, was 'using deep breathing and easy exercises to restore the whole body'. Shu-Jing, one of the twelve volunteer interviewees, talked about her personal experience in using this popular affective strategy to reduce English communication anxiety in her final interview:

> Shu-Jing, Liu (MII-S): *There are many things I like during the MI-based intervention.... Those warm-up activities, we call EQ time, are really good...I appreciate that our language teacher has tried to help students to lower anxiety.... As I mentioned before, I used to be an expert in taking English tests. However, my oral abilities have been poor for a long time...I have high expectation of my performance, so I feel anxious all the time when communication through English is necessary...I find I get many insights from several in-class warm-up activities...I feel it has been very helpful for me to use deep breathing to overcome nervous feelings before every talk... I also use easy exercises to adjust my body into a good condition before giving any performance.* (Interview II/Part C: Q15, 26 June)

As these entries and quotations show, instructional activities/tasks played important roles in influencing these EFL learners' choices of strategy. Because of the variety of instructional activities/tasks during the MI-based intervention, students were encouraged to use their multiple intelligences and then develop suitable strategies to meet personal needs as well as achieve different goals.

#### 8.2.1.2 Language learning strategies and the involvement of significant others

Apart from the influence of instructional tasks/activities, the involvement of significant (helpful) others, particularly referring to the role of the language teacher and of the classmates, was another decisive theme to affect participants' employment of some major in-class learning strategies.

Three quotations below present the effects of myself, as their language teacher, on participants' choices of in-class strategy. Firstly, one student mentioned that she used two major in-class strategies during group discussion, 'expressing difficult concepts through description (compensation strategy)' and 'asking questions (social strategy)', because of my suggestion and demonstration:

> *Group discussion is not easy because most of us are not fluent English users... However, the language teacher gave us some good ideas when we were discussing today's video episode: The Stranger... Teacher encouraged us to express our opinions through*

*English...the teacher suggested to us, "I know all of you have good opinions and ideas... Try your best to speak out...difficult concepts could be expressed through description...give listeners more details...It is all right to use many words to communicate your profound message." I listened and accepted it, and many classmates did as well, I think... In addition, the teacher gave us some useful phrases for group discussion and taught us how to use them through demonstration...The teacher told us we could use these phrases to check if we have understood others correctly, and/or seek clarification from others... After that, I found many group members started to use these phrases to ask questions for clarification...Teacher's suggestion is very practical.* (MID-S, S42, 15 May/Stage 2)

Then, my explanation and encouragement of a particular strategy was also influential in participants' choice. The use of a metacognitive strategy, 'paying attention to classmates' performance', was an example. As one student wrote:

*I believe all classmates enjoy seeing group performance in the role-play and puppet show because it should be VERY funny and interesting. Most of the time, it is easy for us to be too excited to focus on the main content of their performance... I think the English teacher must have sensed this situation, so during today's tutorial session, she wanted us to pay attention to classmates' performances...Teacher gave us a list, in which many items such as, pronunciation, body language, fluency, are included for evaluation...The teacher clearly explained the temporary evaluation sheet (we may revise it later if we like!) and encouraged us to use it as a guide during observation and group evaluation. I find the teacher's idea is great... Many classmates agree that they become more serious in these activities without being distracted by other things because of the simple behavior 'purposeful attention'. Moreover, I find I have learned a lot from observing these performing classmates' strengths as well as getting lessons from their weakness through my concentration...* (MID-S, S47, 8 May/Stage 1)

Furthermore, Ya-Chun stated that she had been informed by me to try one of the major social strategies, 'a close observation on how native speakers use conversation skills and nonverbal languages for communication', during the 'video-watching' activity, to develop cultural understanding and to achieve effective communication:

Ya-Chun, Ku (MII-S): *Yes...one of the in-class strategies I have benefited from a lot is taking video-watching opportunities to closely observe how English native speakers communicate with different people.... I like watching videos (movies) but my focus is always around characters... If the actor is handsome or the actress is pretty and so on...However, instead of only concerning actors, actresses, story plot and background music/ songs, the language teacher kept telling us other important things we needed to focus on when watching videos in tutorial session. For example, observing how native speakers use conversation skills for effective communication, how they use their eye contact, gestures, distance, facial expressions and turn-taking in different contexts.... In addition, the intimacy, passion and commitment in American and Mexican romantic relationships presented in the series of videos are interesting to understand.... I agree what teacher told us "communication is a process, in which culture is presented and interpreted"... If I want to develop effective English communication abilities, cultural understanding and awareness is important.* (Interview II/Part C: Q16, 26 June)

As for the influence of classmates, two related extracts, one from learning diary entries and the other from the final interview data, have been chosen. In the first quotation, a student explained how 'actively helping others' had become a very

popular strategy in the course because of fellow learners' performance and recommendation:

> *I really appreciate several classmates, like Tom and Dale, because they have been very helpful to almost everyone in the course… their English oral abilities are better than most of us.... During last week's class break, many classmates asked them for learning tips and their conclusion was similar. They said, "The more you help others, the easier you make progress because you have more opportunities to practice." I believe many classmates have been really impressed by what they shared with us... In fact, I find what the two classmates recommended us to do is similar to the employment of interpersonal intelligence suggested by the MI workshop... This week, I can feel more classmates are willing to actively help others during class activity time... Now, what I want to say is I can gradually feel the reality of peer support in the class... Learning from helping (teaching) others is no longer a slogan because many classmates practice it and so do I.*
> (MID-S, S29, 10 May/Stage 1)

The second quotation is with reference to the use of one widely reported affective strategy, 'encouraging myself to take risks wisely regardless of the possibility of making mistakes'. Chia-Ling, during his final interview, described how he had been motivated by classmates to employ this strategy during class conversation practice:

> Chia-Ling, Chu (MII-S): *The support from classmates has been something in the course I like most. I really appreciate thick-faced Jim and monkey Lang's assistance… I was easily frustrated with my strong Taiwanese accent and terrible conversation skills…However, they kept encouraging me to communicate with them through English step by step without worrying about the possible mistakes I might make or the difficulties I might encounter… In the first month of the intervention, they tried to be my partners during group or pair conversation practice… to make me feel comfortable to express myself through English. Because of their encouragement and thoughtfulness, I dared take risks using English despite fear of losing face or failure…Now, I think I can speak a little bit of English and that is probably due to their friendship and support.*
> (InterviewII/Part C: Q15, 26 June)

Apparently, what I and their classmates said and demonstrated during class time was found to be an influential factor for many participants during the MI-based intervention to decide which strategy they should use and how to use it.

### 8.2.2 Major Out-of-class Language Learning Strategies

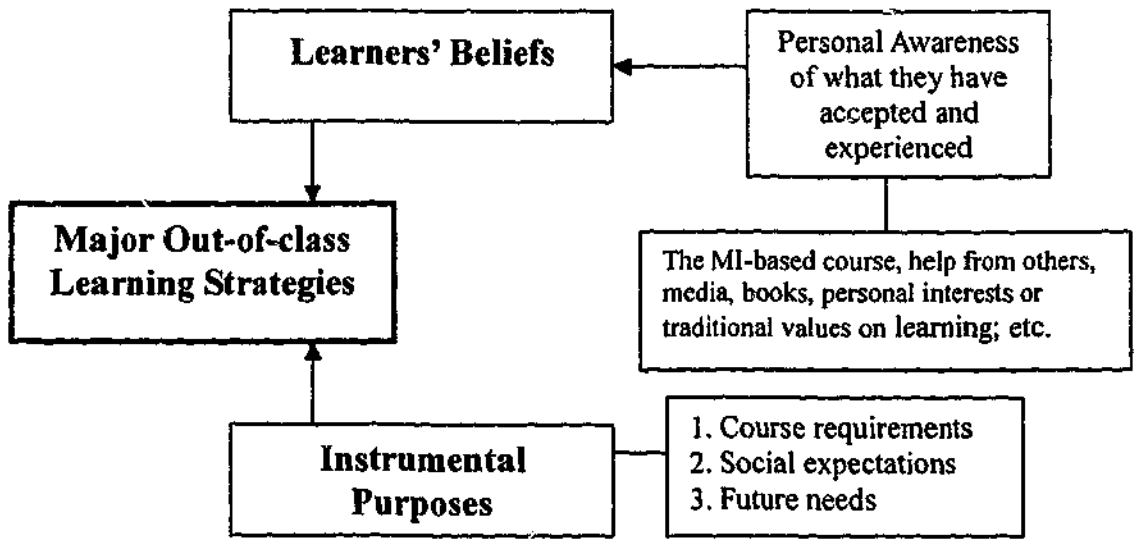
Among the one hundred and twenty-six out-of-class strategies undertaken by learners during the MI-based intervention, thirty-eight major strategies, claimed as being used by more than fifty per cent of the total participants, emerged from the data for further exploration and discussion. As Table 8.4 summarizes, these major strategies were spread over the six strategy groups with their accompanying sub-themes (subgroups) suggested by Oxford's model. On the whole, the use of cognitive and social strategies has been found more frequently reported than other types of strategies. The variety of major affective and metacognitive strategies has apparently increased, when

compared with those the students used during class time. Moreover, the employment of these strategies presents a rich application of multiple intelligences.

Close examination of these major out-of-class strategies makes it clear that the learning strategies used by these participants were linked to two emerging themes: Instrumental purposes and learners' beliefs.

Figure 8.3 presents the relationships between the employment of major out-of-class strategies and the two factors – instrumental purposes (e.g. course requirements and social expectations) and learners' beliefs (e.g. their awareness of and experiences about the use of language learning strategies) during the MI-based intervention.

**Figure 8.3. The Relationships between the Major out-of-class Strategy Use and Relevant Factors during the MI-based Intervention**




The detailed effects of the two themes on participants' employment of out-of-class strategies are discussed with examples from learning diaries or interview information in sections 8.2.2.1 and 8.2.2.2, respectively.

#### 8.2.2.1 Language learning strategies and instrumental purposes

Many major out-of-class strategies that participants employed in their private study time during the intervention period were for effectively improving oral abilities and achieving instrumental purposes. These goals were related to their practical concerns, such as successful presentations in authentic assessment tasks, passing the course, passing English tests (e.g. school English listening tests or official English tests),

getting a degree, applying successfully for an outstanding graduate school or finding a decent job in the future. Generally, the spread of these out-of-class strategies for instrumental purposes is quite broad, containing different combinations of Oxford's six strategy groups. Furthermore, the frequent use of multiple intelligences among these strategies is noticeable (see Table 8.4).

According to the research results, it is found that numerous participants reported they used a mix of those major out-of-class learning strategies for bettering their group or individual performance in those authentic assessment tasks required by the course; namely, a puppet show, a role-play, an audio-taped journal and final projects. In order to have a satisfactory performance and to ensure a good final grade for the course, many participants tried various strategies regularly to overcome the difficulties they met during the preparation process, as well as to improve their English abilities. Two quotations are presented below to interpret the close connection between out-of-class strategy use and participants' instrumental purposes, here specifically referring to accomplishing authentic assessment tasks effectively or efficiently.

In order to get ready for the puppet show performance, one student reported her use of three major out-of-class strategies, 'understanding the conventional utterances for use (cognitive strategy)', 'learning English through cooperative experiences with group members (social strategy)', and 'developing cross-cultural understanding through reading relevant books, internet surfing and the assistance of surrounding people (social strategy)'. The student was very ambitious to get an 'A+' for the course because she was planning to continue on to postgraduate study and the English grade would be very important to influence the result of her application. As she wrote:

> *There are many learning projects we need to finish for passing the course… These projects are not just for fun because our English teacher counts them into our credits. Our performances in these projects will influence our final grades. To make sure of the quality of our group performance in the puppet show, our members started our preparation earlier. We made plans and assigned each of us different jobs. For collecting information about our topic 'the differences between Chinese and American speaking practices', I have read many books related to the theme. Classmates and the English teacher also gave me some suggestions. Website surfing has been helpful as well. Because we need to write our own scripts for the show, Henna and I have collected many relevant canned dialogues for application. However, the process has not gone as smoothly as I expected. Some members are good friends but they are not ideal partners... I am a perfectionist so I have tried to push them very hard. It has not worked well so far, because some have different opinions. In order to cooperate with them effectively, I try to listen to them and not to be so aggressive, even though I really worry if our final performance will be good or not. I definitely want to get an 'A+' for the course because I want to continue my study*

*and the grade in the English subject is quite important for my school application.* (MID-S, S37, 3 June/Stage 3)

The next one is a student who described how she had been struggling with group members in the language and content of their final project, with the expectation that they could show their best part on the exhibition day to make up for their poor performance in school English listening tests. To achieve their goal, several major out-of-class strategies were used during their process of preparation. Four quotations drawn from the student's diary entries in four different days are presented below in order.

In the first entry about their group preparation for the final project, the student mentioned the use of a social strategy, 'asking fluent learners for correction':

> *(1) Since we decided to develop a comedy, a revised version of 'Sleeping Beauty', as our final project, we have met many problems...That three of us are not fluent English users is a problem, so we need to find someone for help...Fortunately, this morning, Tom promised me to help us improve our pronunciation problems... He has years of overseas study experiences.... I am very excited to get his help... I think we should take this final project opportunity to present a successful drama on the exhibition day; otherwise, we may not pass the course because of our poor performance in school English listening tests.* (MID-S, S4, 24 May/ Stage2)

Then, the student and her group members trialed another social strategy, 'learning English through cooperating with group members' to create the story plot of their project:

> *(2) Tonight, three of us tried to brainstorm the story plot ... The process was quite funny... So far, I feel satisfied with our progress... Now, I do believe three heads are better than one.* (MID-S, S4, 26 May/ Stage2)

Furthermore, to develop the conversation scripts for their project, they resorted to several strategies, such as 'using resources for sending messages (cognitive strategy)', 'cooperating with proficient users of the new language (social strategy)', 'using simple words to express complicated ideas (compensation strategy)' and 'learning English through cooperative experiences with group members (social strategy)':

> *(3) Today, we started to write our scripts, the hardest part... We kept looking up different resource books for ideas, such as vocabulary book, conversation patterns book, idioms book...It was very difficult for us to develop English dialogues, based on our own story plot...Sometimes, we called Tom for comments and he was very helpful...We e-mailed the English teacher for suggestions... We also posted our problems on class website to gather some good ideas from others... After group discussion, we decided to use simple words, the words we can pronounce properly and use naturally, to present our dialogues to reduce the 'stumbling' problem.* (MID-S, S4, 30 May/ Stage3)

During rehearsal time, these students also employed several strategies to make the process go smoothly and their practice effective. They tried to 'use music to lower anxiety (affective strategy)', 'employ actions to remember some dialogues (memory strategy)' and 'ask a fluent user for correction (social strategy)':

> *(4) We started to rehearse our comedy 'Finding a doctor for Sleeping Beauty' after today's dinner time... Before practice, Ching played A-May's songs [the songs sung by a popular Taiwanese female singer] to make us feel relaxed. He was very considerate... Because we forgot the prewritten dialogues easily, we used gestures to help us remember them...Tom and his native speaker friend came to see our practice and corrected some of our pronunciation.* (MID-S, S4, 9 June/ Stage3)

In addition to the motive of making a successful presentation in the authentic assessment tasks, other instrumental factors, which emerged as affecting the choice of out-of-class strategies were participants' expectation of passing English listening tests required by the course or recommended by the Ministry of Education, and their aspiration to improve English oral abilities for practical reasons, such as finding a better job in the future. In the final interviews, two participants, Hui-Shang and Hsin-Han, expressed that the use of several major out-of-class strategies were definitely for the purpose of passing English tests or improving oral abilities:

> Hui-Shang, Chu (MII-S): *Sure, I have discovered some strategies to understand spoken English. Because listening comprehension has been my weakest part, I have tried many strategies to help me improve listening abilities. You know, poor comprehension cannot make communication happen and it also means failure in school English listening tests. English is a very important school subject and an international language now, so I kept telling myself that I needed to study hard to pass school listening tests and develop my basic communication abilities. I am glad I have discovered some useful strategies during the two months with the help of the language teacher and classmates. The strategies I use in my private study time include two types, formal and informal. The formal skills are previewing relevant vocabulary before listening, searching main ideas, selective attention of the target input...noting down the difficulties I met and asking someone for help...The informal ones are extensive listening practice through some interesting radio programs...and doing oral practice with some classmates. These strategies sound simple but are useful to me.* (Interview II/Part C: Q16, 26 June)

> Hsin-Han, Chang (MII-S): *...I have tried to find useful strategies, really matching my multiple intelligences, to improve my oral abilities... I do hope I can be a fluent English user, find a good job in the future and then earn lots of money...Don't laugh at me...I am serious in my goals...Now, I try to do something I feel interested in through English...I study bilingual newspapers every day to find some topics I can talk with others in English ...I listen to Studio Classroom [a well-known English learning radio program in Taiwan] every night to improve my listening comprehension and conversation skills...I also seek opportunities to talk to foreigners [English speakers in Taiwan] without the fear of losing face...These strategies have helped me a lot... I think my English oral abilities are better than before, and I feel more confident to take GEPT test at the end of the year.* (Interview II/Part C: Q16, 26 June)

As can be seen from these quotations, these EFL students were active in using various

strategies during their after-school study time of the intervention period, in order to effectively achieve their instrumental purposes, such as accomplishing different learning tasks successfully (e.g. the course requirements) and improving their oral abilities for future needs (e.g. finding a decent job in the future).

#### 8.2.2.2 Language learning strategies and learners' beliefs

Analysis of the final interview data obtained in the study has highlighted that how or why the twelve volunteer participants employed which learning strategies to approach their after-school learning during the MI-based intervention was connected with learners' beliefs. Here, learners' beliefs are identified as what EFL learners consciously know (knowledge and information) about their language learning, particularly referring to the dimensions of language learning strategies.

On the basis of twelve interviewees' statements about their language learning strategy, eight explicit beliefs were identified, defined and categorized into three groups: variety, frequency and appropriateness. That is, the impact of variety, frequency and appropriateness on strategy effectiveness has been found to be the central issues that reflected their beliefs. In the following discussion, these beliefs that make up each group are explained with examples from twelve interviewees to reveal how these EFL learners' beliefs on language learning strategies can be important stimuli for their strategy decisions, behaviors and actions outside classroom learning.

**Group 1: Variety**

1. *The use of various strategies can make English learning more interesting and effective*

Participants who made this statement considered the variety (types and intelligences) of language learning strategy is fundamental to interesting and effective English learning. Having been encouraged by personal learning experiences in the MI-based course, two interviewees decided to try various strategies informed by these MI activities during their after-class EFL learning, and believed they could thereby have successful English learning because of their creativity and joyful learning experiences:

> Celia, Lin (MII-S): *The change and variety of learning strategy are essential for successful English learning, and the notion of multiple intelligences can be a useful*

*foundation to produce a range of strategies…It is important to use different strategies to enrich our English learning experiences…make our learning fun and much closer to our life… I find the more I feel interested in, the easier for me to make progress…Instead of only doing independent study by myself during after-school hours with those routine and boring strategies, such as writing new words many times, I have tried to understand my preferred intelligences and developed relevant learning strategies during the two months…In fact, I got many good ideas from my real learning experiences in the MI-based course.* (Interview II/Part B: Q12, 26 June)

Ya-Chun, Ku (MII-S): *I think learning strategy is also one of the factors for successful English learning. I mean a wide range of strategies, involving a rich application of multiple intelligences. As we know, life can be meaningful and joyful because of 'variety'. Likewise, it is impossible to make successful English learning happen if we only know and employ limited strategies and intelligences. The logic is very clear and the MI-based course has proved my thoughts. Based on the MI ideas, I have tried different strategies in my private study time to approach English learning. Singing English songs, listening to the channels of English songs and watching English TV programs are examples. Some strategies are even stretched beyond my personal strengths or previous experiences, such as keeping a diary for self-monitoring or discussing feelings or experiences with others. I think English learning is a process of using various strategies, and applying our multiple intelligences to practice the target language and deal with relevant learning problems. When abundant learning windows have been opened, I find learning English can be a very interesting and easy thing.* (Interview II/Part B: Q12, 26 June)

2. *The development of a variety of strategies can make learning easier because of wider choice*

The second statement stressed the significance of having a rich strategy repertoire to make English learning easier. According to personal experiences and observations or the information they accepted from surrounding contexts (e.g. books and media), a few interviewees felt that the development of a wide range of strategies can provide them with a wider choice to suit the needs of different learning situations. In other words, they believed that the expansion of strategy collection could make English learning more flexible and effective:

Han-Yi, Hsiao (MII-S): *You have to know a range of strategies to make English learning easier…or effective… The reason behind my statement is based on my experiences and observation during the two months learning…Similar to the Chinese saying, "You'd better be well prepared in case of rainy days", I find learners will be more confident to face different learning situations or tasks if they have already recognized the notion of multiple intelligences and generated a rich strategy collection in their mind…Choices are the key points…More knowledge in a range of learning strategies implied by multiple intelligences means more choices to approach learning…Having more choices to work for target learning tasks implies the success rate has been enlarged…That is why I have spent many after-class learning hours in knowing and developing various strategies informed by the eight intelligences for application.* (Interview II/Part B: Q12, 26 June)

Hsin-Han, Chang (MII-S): *I think rich knowledge in language learning strategy is also important for successful English learning…MI workshop is a good start… Moreover, I have got some ideas from reading books, such as "How to be a successful English learner"… Newspapers, magazines, TV have promoted different learning programs and*

*introduced various learning tools... All the information has been valuable for me to accumulate learning tips (strategies)... I feel good now because I can employ different strategies to achieve a set-up goal...I mean I have more choices to achieve my different goals... If I want to improve my English reading skill, I can employ different types of strategies with the help of multiple intelligences, such as studying bilingual magazines, reading graded readers, discussing with classmates... instead of only reading aloud the articles of textbooks many times or doing analytical work.* (Interview II/Part B: Q12, 26 June)

3. *Trying various strategies can help learners find their strengths and facilitate learning results*

The third statement emphasizes the need to try various strategies for discovering personal strengths. Based on learning experiences with the MI-based course, several participants felt that learners can better understand personal potential and then discover suitable strategies, when they are provided with opportunities to know and try an assortment of strategies. They believed a self-awareness of personal strengths in learning strategies could facilitate English learning:

Wei-Chen, Wu (MII-S): *I think if personal strengths have been understood and triggered, English learning should not be that difficult... However, few of my previous English teachers were aware of the issue... They thought failure is laziness... During the two-month MI-based intervention, I have gradually discovered my potential... I like hands-on activities; that is, learning by doing...In particular, I have enjoyed all extracurricular activities...I can name many examples... Attending different learning seminars, watching English learning videos in self-study center with classmates, doing campus survey, and visiting shopping malls... all are unforgettable learning experiences, and good opportunities for me to use my strengths to learn English beyond the classroom context...After trying these activities provided by the MI-based course, I have got some ideas about myself on how to acquire English effectively.* (Interview II/Part B: Q13, 26 June)

Celia, Lin (MII-S): *I find the use of various strategies can help me understand my strengths... or to discover my potential...My classroom learning experiences have made me feel that many strategies employed in the class can also be effective learning strategies outside classroom learning...For example, I find I can learn very fast through singing, joining group discussion and employing actions...I appreciate I have gradually discovered best ways for me to approach English learning effectively through different practice opportunities* (Interview II/Part C: Q16, 26 June)

**Group 2: Frequency**

1. *Good language learners use appropriate strategies frequently*

This view on 'using appropriate strategies as often as possible' was mentioned by several interviewees as one of the important factors for effective English learning. Having been influenced by reading relevant books, such as "How to learn English effectively" and "Seven Kinds of Smart", and by my encouragement, these

participants believed that a frequent use of strategies, which adequately reflected their learning needs or appropriately related to their preferences, is the common characteristic of good language learners:

> Hui-Shang, Chu (MII-S): *The learners that use strategies very often during self-study time should have better performance than rare users. I believe strategies are used to solve our learning problems, such as memory and self-regulation. Of course, these strategies should be appropriate for different individuals to efficiently deal with their learning situations just as the language teacher has encouraged us to do during the two months. I think finding our own ways is important. Many successful cases introduced in the book "Being a smart English learner" can prove this point. Because of my personal awareness of this issue, I try to be 'a good language learner'— using appropriate strategies as often as possible, particularly when learning and using English outside the classroom context.* (Interview II/Part B: Q11, 26 June)

> Shan-Jen, Lee (MII-S): *Many books tell us that good language learners use strategies frequently, especially during private study time. That is one of the key features to be an autonomous learner... They know how to use appropriate strategies regularly, not in a haphazard fashion... I think it is true, especially when the main concern is developing communication abilities.* (Interview II/Part B: Q11, 26 June)

2. *Successful English learning needs frequent exploration of effective strategies with experienced learners or users*

Having been influenced by the learning beliefs based on traditional Chinese proverbs, such as "Diligence compensates for stupidity", "Actively asking people for clarification without feeling shame" and "to grind an iron bar into a needle", a few participants believed that 'being frequent strategy explorers' is similar to the meaning of 'being diligent learners', who know how to get help from experienced learners or users on a regular basis:

> Chia-Ming, Chou (MII-S): *I believe successful English learners are active explorers in their out-of-class learning... No matter when, they keep seeking effective strategies for particular tasks at hand... They are very diligent... In fact, the characteristics of diligence have been reflected on many Chinese proverbs, such as "Actively asking people for clarification without feeling shame"... Because English is a foreign language, different from learning Mandarin or Taiwanese, successful English learning needs a frequent exploration of personal problems, strengths and possible solutions, with efforts and determination...You say 'How?' I think experienced English learners or users, such as classmates, community experts, language teachers and native speakers, are the important persons we can get help from.* (Interview II/Part B: Q11, 26 June)

> Yin, Ling (MII-S): *English can be acquired through efforts...I do not mean 'incompetent efforts'...It should be strategic but persistent efforts that can result in good results... For example, it is important for learners to actively and regularly ask experienced learners or users for ideas about efficient learning strategies...Frequent discussions with them do help... This kind of learning habit should be developed both in and out of classroom.* (Interview II/Part B: Q10, 26 June)

3. *Using effective strategies frequently can facilitate the internalization of English*

*knowledge or improve abilities to use English*

This statement reflects some participants' beliefs about the value of 'diligence and repetition' for effective learning. However, rather than being frequent users of many unsuitable strategies, they emphasized the significance of being diligent with 'effective' or 'deep' strategies. On account of personal learning experiences and beliefs, these participants thought that a regular use of effective strategies could be beneficial to the internalization of linguistic knowledge or improve the abilities to use English:

> Wei-Chen, Wu (MII-S): *I think the learning strategies or techniques that learners take to improve or enhance their learning are important factors to decide if English can be acquired or not...Particularly, I think effective strategies, those really reflecting my strengths and needs, are worthy of repeated use, such as listening to the English learning radio program, Studio Classroom, every day (because I am a radio program lover!)... Since I decided to use this out-of-class strategy to improve my listening abilities, I have kept telling myself I need to persist with my choice and believe I can benefit from the interesting program...It has been one month already now, I find I have improved my listening abilities because of my every day listening.* (Interview II/Part B: Q10, 26 June)

> Chia-Ming, Chou (MII-S): *I believe English can be acquired through frequent, systematic review of the target learning materials. It is like a meaningful repetition... to achieve deep rather than surface learning... Reviewing repeatedly is a good strategy for comprehension, memory and application... I find I can gain new insights from each review, so it seems to be a very effective strategy for me... In order to increase my English vocabulary foundation, I have frequently employed the out-of-class strategy, reviewing new words through pocket vocabulary cards on a regular basis... So far, the results have been very encouraging...I find it becomes easier for me to comprehend the target vocabulary and remember relevant meaning when I hear them... I believe that new English knowledge can be internalized through effective strategies. A systematic content review on a regular basis is only one of the strategies I have employed.* (Interview II/Part B: Q10, 26 June)

**Group 3: Appropriateness**

*1. Effective learning means developing appropriate strategies to fulfill external needs*

Because of personal learning experiences and observations during the MI-based intervention, many participants mentioned their awareness of, and actions for, developing appropriate strategies during their private study time in order to meet external needs (instrumental needs), such as accomplishing different learning tasks and improving specific English skills.

> Chia-Ling, Chu (MII-S): *I think using strategies frequently is important, but how to choose appropriate ones among the numerous kinds of strategies to fulfill the needs of different tasks and assignments is even more important...My experiences in recording an audiotaped journal has made me generate this kind of awareness...If I want to*

*accomplish the assignment successfully, I need to employ suitable strategies rather than only working hard independently without making any obvious progress... At last, I find 'asking helpful others for correction' can be one of the effective strategies to improve my pronunciation problems and increase the quality of my final product.* (Interview II/Part B: Q12, 26 June)

Liang, Chao (MII-S): *I believe the development of appropriate strategies is very important if specific English skills are to be improved... As you know, different language skills need the application of different intelligences. How these intelligences can be developed to become appropriate strategies is what learners should care about...For example, if I want to successfully perform a character in the role-play, I need to use my interpersonal and intrapersonal intelligences to improve my conversation skills; that is, I need to resort to various social strategies, such as seeking partners, working cooperatively and asking proficient users for correction, to achieve my goal. I cannot get the work done only through personal conversation practice without any interaction with others.* (Interview II/Part B: Q12, 26 June)

2. *Effective learning means employing appropriate strategies to satisfy internal needs*

This statement focuses on the notion of appropriate strategies in terms of personal needs. Either inspired by reading MI-related books or encouraged by MI learning experiences, many participants emphasized the necessity of discovering and developing suitable strategies to satisfy their inner needs. In other words, these strategies, appropriate to individuals, should reflect personal interests, strengths, goals or levels; namely, individual differences:

Shu-Jing, Liu (MII-S): *I find the best way to learn English effectively is that I must recognize personal needs and then develop suitable plans and relevant strategies. The plans and strategies should match personal strengths. In order to meet inner needs, I have tried to discover my multiple intelligences through reading several books recommended by the English teacher. I also try to evaluate my level of different English skills, with the help of the language teacher and classmates. All the information has helped me decide which strategies are appropriate for me to learn English. For example, it is easy for me to feel anxious when doing English listening practice. After several trials, I find 'meditation' and 'deep breathing' can calm down my uneasy emotion. I employ the two affective strategies to reduce anxiety before attempting any listening practice or listening tests. During after-class learning, I use conversation patterns practice with partners to improve my English speaking skills, instead of using free talking with native speakers or fluent users, because I know my level. I believe only the strategies suitable to personal needs are the effective ones.* (Interview II/Part B: Q16, 26 June)

Yin, Ling (MII-S): *The most effective way to learn English, I think, is using appropriate learning strategies. These strategies can reflect personal interests and strengths...that is, personal inner needs...I enjoy singing and I can play piano very well... Before taking the MI-based course, I have no ideas about the connection between English learning and my music talents... However, the teacher's encouragement has motivated me to build a link between my strengths and English learning during private study time... I used to hate English, a boring subject, and thought it was not my thing...However, I feel very comfortable to learn English now, because I gradually know how to use melody, chants and songs to approach and practice English.* (Interview II/Part B: Q12, 26 June)

According to these learners' perspectives, it is found that their beliefs on strategy use were mainly shaped by their self-awareness of what they accepted and experienced during the MI-based intervention, such as the impact of the MI-based course, the assistance from classmates, my suggestions, the input from relevant books or media, and the influence of traditional values on learning. These already formed or forming beliefs did have profound effects on the choice and use of their out-of-class strategies during the MI-based intervention. As the quotations show, these learners believed the importance of variety, frequency and appropriateness on strategy effectiveness, so they developed their out-of-class learning strategies based on these beliefs.

### 8.2.3 Dissenting Voices about Language Learning Strategies

In addition to those common patterns and themes related to their use of language learning strategies discussed above, some minority views can be found in the diary entries. Three typical examples are presented as follows to show their doubts and opinions about this issue:

The first example is about how the short intervention could not satisfy learners' needs:

> *I agree that developing suitable strategies is important, but it takes time. It is not something I can achieve easily after taking the course... "Multiple Intelligences" is an encouraging idea but its application to EFL learning is more difficult than what the language teacher expects. For me, I think it is impossible to develop many effective strategies, through only a few weeks of learning experiences with some MI-informed activities.* (MID-S, S21, 24 May/ Stage2)

The second one reflects disagreement with the idea that using plenty of practice with varied tasks to improve learning strategies could guarantee effective learning:

> *I cannot understand why some classmates have been crazy about trying various strategies during after-class time. I do not think that is right but do believe it wastes time. I think we must remember what we need to focus on now is 'language', and strategies only play a minor role to help us learn. I don't agree trying various strategies can guarantee success. It may make our learning become more chaotic than before. Appropriate and sufficient strategies will be enough.* (MID-S, S11, 29 May/ Stage3)

The third one is based on the belief that language can only be acquired through natural exposure:

> *I think 'frequent strategy user' does not mean she or he is also a good English user. A good user does not need to use a variety of strategies or employ strategies frequently because they already know how to speak the target language fluently and naturally most of the time... The situation is similar to the usage of our native tongue. We can learn and speak fluent Mandarin, Ming (a dialect widely used in southern Taiwan) and Haka (a dialect used in some areas of northern Taiwan) without using strategies very often or trying various strategies...I think maybe our English levels are very low and the learning environment is very bad, so the language teacher has encouraged us to develop and*

*employ strategies as often as possible to be good 'learners'. Honestly, I don't expect to be 'a good leaner'. What I want to achieve is to be 'a fluent user'. I think the influence of the learning environment is more important than the strategy issue... I believe total exposure in English speaking contexts is the best way to be a successful English user. My uncle's daughters are good examples. They have lived and studied in Canada for almost one year, and their English abilities have been improved a lot... Language can only be acquired in a natural context.* (MID-S, S1, 3 June/ Stage3)

These dissenting voices show that these EFL learners' experiences or beliefs made them have different perspectives about language learning strategies: (1) the short (two-month) intervention could not provide some learners with enough opportunities to develop effective strategies, (2) the target language should be the only focus in the language classroom, and (3) English language acquisition only happens in a natural context, such as English speaking countries.

### 8.2.4 EFL Learners' Willingness to Engage in the Usage of Various Learning Strategies during the MI-based Intervention

After understanding the language learning strategies most often employed, and the relevant themes that influenced participants' choices of these strategies, participants' willingness to discover, try, and use these strategies during the MI-based intervention should be clarified as well. Different from most participants' limited strategy use in previous EFL learning, the current data reveal that the willingness of many learners to expand and vary learning strategies during the MI-based intervention has obviously increased. The results can be traced from explicit statements by some participants in their diary entries and final interviews. Since these participants used to be passive learners and reluctant to try new things, the question, 'Why did they actively engage in the use of various language learning strategies during the intervention period?' is worthy to be understood.

As discussed above, there were several themes, functioning like triggers as well as facilitators, playing significant roles in affecting the strategy behaviors and actions of these learners during the intervention period. These themes are fellow learners, myself as their language teacher, the MI-based intervention (e.g. MI-informed activities and authentic assessment tasks) and learner's self-awareness (e.g. learners' beliefs). After a close examination of the data related to these influential themes, the results indicate that as these participants felt cognitively equipped and affectively ready, their willingness to engage in the practice and application of various language learning

strategies increased.

In this section, how these recurring themes influenced the affective and cognitive experiences of participants and then contributed to their willingness to engage in the use of various language learning strategies are discussed through relevant quotations from learning diaries and interviews.

First of all, fellow learners were mentioned by a few participants as important others to affect their feeling of belongingness or the sense of achievement during the learning process. Such supportive learning experiences with fellow learners were believed by these participants to benefit their English learning affectively and cognitively, and also became the motives to promote their engagement in different strategy use. Some learners mentioned their willingness to use a range of learning strategies was because their anxiety had been reduced when cooperating with group members; others pointed out their confidence to try new strategies was due to their classmates' help and encouragement. Two examples are given below to interpret the phenomenon.

One student wrote how a positive interaction relationship with fellow learners had helped him overcome the emotional fear and uneasiness of English learning. In addition, his poor cognitive processing abilities were thereby improved. As these learning barriers had been gradually removed, this student started to have a strong willingness to discover personal strengths and try different strategies to improve his English abilities:

> *Based on my previous learning experiences, English seemed to be the most anxiety-provoking subject... My nervousness and discomfort mostly came from the pressure of peer competition. However, this kind of anxiety seems to have been reduced gradually when taking the current English course... The positive cooperative relationship with classmates, both in and out of class, has been very harmonious, encouraging and anxiety-reducing. This kind of learning experience has helped me feel ready to face English learning...I have been really motivated to discover my strengths and use various strategies to improve my English learning without worrying about being ridiculed by classmates. Moreover, I find it has been easier for me to concentrate on my learning and to figure out which strategy is suitable for me to make progress, since I was not distracted by others' criticisms and comparison.* (MID-S, S16, 19 June/Stage 3)

Celia also expressed similar perceptions on how fellow learners, like language helpers and affective supporters, positively brought her to actively explore and apply learning

strategies:

> Celia, Lin (MII-S): *When preparing for the final project, the help and encouragement from group members or classmates have been like a 'magic power' to push me along...My attitude to myself and to my learning has been totally changed...I am glad to find classmates in the course who are supportive partners, rather than enemies...They not only listen to my difficulties but also provide me with concrete help, such as information sharing and pronunciation correction... Honestly, I am a person who really cares about my performance before others and is concerned with how others look at me, especially opinions and evaluation from my friends and classmates...Without competition and harsh criticism, I find cooperation with classmates, project members and regular partners during the two months have been wonderful learning experiences... 'Help', 'comfortable', and 'intellectual progress', are the words being associated with these fellow learners...Because of their lasting support in all aspects, I have a very strong willingness to give myself a try... For example, I have been motivated to look for appropriate strategies for my own learning and felt encouraged to use English for communication without the fear of losing face.* (Interview II/ Part C: Q15, 26 June)

Secondly, on the basis of qualitative data, the emerging trend shows that myself, as their language teacher, played a very important role in influencing many participants' willingness, both affective and cognitive, to expand and vary their learning strategies. In particular, my support or learners' trust in me was found to be a significant theme to interpret the impact of myself as their language teacher on these EFL learners. Generally, the support from me included two aspects: my involvement and my communication behaviors.

Several students appreciated that I, as their language teacher, was highly involved in their learning. The involvement was embodied in my taking time for students' concerns and needs, enjoying interaction with students, paying attention to students' emotions and dedicating useful resources to students. When these participants perceived me, their language teacher, to be interested, understanding and available (in case of need), they felt less evaluated and threatened, and could experience greater emotional and cognitive security. As a result, they showed more enthusiasm in their English learning.

Han-Yi expressed his appreciation of my "*concern, patience, understanding and creativity*" towards students' learning. He believed that this kind of teacher involvement had not only motivated lots of learners but also positively guided them to know how to learn:

> Han-Yi, Hsiao (MII-S): *I like the course because I feel the teacher has taught us from her heart...Even after school, she has tried her best to have interaction with us and to satisfy our needs...Moreover, she has provided us with constructive suggestions and real*

*help... I find an understanding teacher can easily help students be aware of their problems and find solutions... I think I have been really enlightened by what the English teacher has said and done during the semester... Her concern, patience, understanding and creativity all have made many of us willing to open our minds to discuss our problems and brainstorm possible strategies with her together.* (Interview II/Part C: Q17, 26 June)

Another extract from a learner's diary reveals that the fact that I brought the MI ideas into the course, because of my understanding of students' needs, could profoundly influence the diarist's affective tendency and cognitive development:

*I really appreciate that the English teacher has cared about our different talents and brought the MI ideas into the course to enrich our learning materials...After reading the book Seven Kinds of Smart recommended by the English teacher and accepting several in-class activities based on Multiple Intelligences, I feel I have been really encouraged and motivated by these ideas and relevant strategies...The teacher has given me a good guide to reflect on my English learning. Now, I have courage to face my learning problems. I decide to develop my preferred learning ways (strategies) and then make an effective study plan for improving my English abilities.* (MID-S, S50, 21 May/Stage2)

Moreover, my communication styles (behaviors), verbal (e.g. using praise words) and nonverbal (e.g. smiles), were mentioned by some participants as important signals to minimize anxiety and increase their engagement in learning, such as the use of different language learning strategies. As Ya-Chun stated in her final interview:

Ya-Chun, Ku (MII-S): *The communication styles of the English teacher are something I like most...She has made each of us feel warm and joyful...She knows our names... She uses our first names... She smiles all the time...What's more, I have been encouraged by her caring eye contact and positive head nods...She likes to show her appreciation of our performance...very positive and encouraging. She is also available if we need her help... In addition, she understands our needs without severe criticism. What she has devoted to us is help and understanding...I think her style has made me feel emotionally secure...When my inner feelings about English learning have been sufficiently motivated, I am eager to open myself to face my problems and find solutions...I think it is her affection and concern that has encouraged me to become an active learner... to understand my strengths, try different strategies and find appropriate ones to improve my English abilities.* (Interview II/ Part C: Q15, 26 June)

In addition, students' acceptance and respect of their teacher, namely, learners' trust in me, could be felt in the statements of a few participants. Particularly, these learners believed "*university professors*" could give them more help than high school teachers in intellectual development and pursuing advanced knowledge. The inner respect and expectation of "*university professors*" also made some learners feel emotionally safe to follow what I recommended them to do in the course. In other words, the process of honoring their 'professor' also became a key motive to push these learners ahead in trying anything the 'professor' suggested without hesitation. This behavior can be interpreted as a transfer of the Confucian code of social conduct "Honor the hierarchy

first, your vision of the truth second" (Bond, 1992: 83). One representative example is given:

> *I believe university language professors (teachers) must be more knowledgeable and professional than high school English teachers. So far, my experiences with the course have proved that my intuition is right... I keep telling myself it is my opportunity to improve my English abilities...During the course, I pay attention to what my language professor (teacher) says...She gives us many new ideas about how to learn English through different ways... I feel very safe to follow her suggestion... Also, I have a lot of fun...* (MID-S, S39, 6 June/Stage3)

Thirdly, the affective and cognitive support from the MI-based course also provided a significant impetus to motivate learners to recognize and frequently try a wide range of strategies. Some learners claimed they were attracted to engage in strategy use because they had pleasant learning experiences with the course. Others expressed the view that they felt ready to vary and expand strategy use because much useful information and strategy samples had been provided by the course In the next extract, one student clearly expressed how he was very eager to "*give myself another try*" because of the affective and cognitive benefits from the MI-based course during the two-months of learning:

> *I think I have benefited a lot from taking the MI-based course... All in- class and out- of-class activities and tasks have been rewarding to my English learning... On the one hand, the course has made me discover the joy and have fun in English learning...I think variety, inclusion and maybe novelty has been the reasons to attract and interest me a lot...So far, I have felt very comfortable to do anything related to the course, such as, trying different strategies to work out my communication problems with classmates... On the other hand, the course is beyond interesting and pleasant, because it really let me learn something useful and meaningful for my whole life...During the two months, the language teacher has given us many opportunities to appreciate the value of individual differences and apply the notion to expand our learning strategies... Workshop, field work and many in-class activities all have been beautiful memories...All these positive experiences have strengthened my willingness to give myself another try...I have learned, and I am still learning how to understand my strengths and appreciate others' merits...seek appropriate strategies for different purposes...This is my final entry of the learning diary and I want to say something from my heart... I REALLY appreciate that I have the opportunity to join the project... The course has given me much happy learning time as well as useful learning information. All have been good, encouraging and useful!* (MID-S, S48, 21June/Stage3)

Finally, it is apparent that learners' self-awareness in English learning, a result of cognitive and affective struggling and growth through self-exploration and self-reflection, was another significant factor which influenced the extent of some participants' willingness to take control of their own learning. During the intervention, students were encouraged to understand themselves, and others, as well as the nature of effective language learning in terms of the MI workshop or MI-informed activities/tasks to develop appropriate learning strategies for use. Moreover, they were

asked to keep a learning diary to record their feelings and learning experiences, as reflective learners. The role of myself, as their language teacher, was that of a guide, a consultant and an opportunity provider, instead of being the authority. When these students were encouraged to be active explorers and free to try other possibilities to improve their learning, without a threat from their teacher, many of their attitudes and beliefs changed. In the final interview, when Celia was asked about the important factors for successful English learning, she mentioned the significance of the learner's self-awareness. Like some other participants, she believed self-awareness of personal preferences (strengths), needs and goals can reinforce learners' inner willingness to "*improve a situation or achieve a goal*" with their own "*strategies and plans*":

> Celia, Lin (MII-S): *I used to be aimless and have low motivation in learning English… I felt bored by everything related to English… Recently, I find self-awareness is very important for EFL learners… it is a process of constant self-exploration and self-reflection… Through self-exploration and self-reflection, I can understand myself better and develop suitable strategies and plans to make my progress become easier… I feel grateful to my language teacher and classmates because they have helped me understand myself …I think I have gradually discovered my strengths and developed some effective strategies during the period of time…Of course, I also have benefited a lot from diary writing. For me, every entry is a chance for self-reflection…discussion with classmates or language teacher could be helpful as well…I find the more I understand what I have, what I need and what I lack, the more I have motivation and ideas to improve a situation or achieve a goal…I think EFL learners cannot ignore the significance of self-exploration, self-reflection and self-awareness, because it is the raw power to push us ahead all the time…Being an EFL learner, I have gradually recognized the significance of being a responsible learner… I keep reminding myself that it is 'I' who need to do the learning and others only play the role of helpers.* (Interview II/ Part B: Q12, 26 June)

This quotation reveals that the process of achieving self-awareness did strengthen the inner willingness of some EFL learners to engage in the use of various strategies without hesitation.

As these quotations present, these EFL learners' affective tendency and cognitive (intellectual) needs were important indicators to decide their readiness for the use of various learning strategies. These positive affective and cognitive experiences of EFL learning, mainly caused by external (e.g. fellow learners and the MI-inspired assessment tasks) and internal (e.g. self-awareness) factors, became the motives to affect many learners' eagerness to expand or vary their use of language learning strategies during the MI-based intervention.

## 8.3 Discussion of EFL Learners' Strategy Development

After a comparison of the qualitative findings about the use of learning strategies, the differences became visible between participants' previous EFL study and their current tertiary EFL learning through the MI-based intervention. These differences are found to be related to the influence of individual (e.g. affective tendency or cognitive needs) and contextual (e.g. learning environment or teaching strategies) factors. These differences also shed some light on the reasons for the changes in these participants' use of language learning strategies. A closer look makes it clear that there were three aspects of change in language learning strategies after accepting the MI-based intervention. In this section, I first present and then account for these changes. After that, based on the research findings, I briefly justify how recent literature has imposed an over-generalized interpretation of Chinese EFL/ESL learners' passive and reticent behaviors during the learning process. Furthermore, I argue that the allegation of rote learning at the expense of understanding aimed at Chinese learners is a mistaken assumption.

### 8.3.1 The Changes of EFL Learners' Strategy Use in the Study

As indicated by the comparison of the results of the two different periods, there were three aspects of change in strategy use: attitudes, beliefs and employment. These changes are discussed here.

#### 8.3.1.1 EFL learners' attitude to the use of language learning strategy

In respect of strategy use in the two different periods, the attitudinal change of most participants is noticeable from their reluctance to use different strategies in their previous EFL learning, to their willingness to try a variety of learning strategies during the MI-based intervention.

The results reveal that many students were motivated by the MI-based course which provided them with a good preparation for instrumental purposes, such as improving speaking abilities, while also being intrinsically motivated by taking the course. After a closer examination, the particular reasons that caused many participants to become actively involved in varying or expanding strategy use are found to be closely related to their positive emotional reactions to the MI-informed activities/ tasks, and to the

support and encouragement from surrounding people (e.g. the language teacher and classmates). Because of such positive learning experiences, some learners' confidence about their personal abilities to learn the target language was thereby strengthened. Gradually, these participants were willing to take risks. In other words, as these learners had been provided with various practice and application opportunities that matched their needs and interests, and with suitable support and help from surrounding persons, most of them were motivated, both affectively and cognitively, to try and use a range of strategies without hesitation. Once these EFL learners had encouraging experiences with using a variety of strategies, it became easier for them to continue in discovering and developing personal strategies to effectively achieve different goals.

The results point out that, apart from cultural attributes (e.g. honoring the teacher's decision or exam-first culture), the situation-specific factors (e.g. significant others and teaching strategies) played influential roles to decide whether these Chinese EFL students (participants) could become active learners or not. As the study indicates, many of these Chinese EFL learners (participants) did have a strong desire to expand and vary their strategies in learning and using English, when they were given opportunities to know and try an assortment of strategies with support and encouragement. The findings obviously run counter to the common impression of 'passivity' and 'reticence' associated with the learning behaviors of Chinese students.

Consequently, language teachers, especially in the Taiwan context, should not characterize their learners as spoon-fed and incapable of deep thinking. It is shown that most learners in the study could and did adjust to active forms of learning when given various opportunities and substantial support. As these students felt cognitively ready and affectively satisfied, their reluctant attitude changed and they were motivated to be active explorers, frequent strategy users and autonomous learners.

#### 8.3.1.2 EFL learners' beliefs on the use of language learning strategy

As suggested by the study, the change of EFL learners' beliefs on strategy use did have a great impact on their strategic behaviors and actions. In previous school EFL learning, many participants stressed the importance of 'practice makes perfect' and 'repetition is the way' for effective English learning. They believed that grammar,

vocabulary and translation, the important aspects of English learning emphasized by school education, could be mastered through continuous practice, in which doing more simulated tests and going to cram schools were considered as effective strategies to serve these purposes. As a result, these beliefs about language learning strategies, either imposed externally or originated internally, had made many of them adhere rigidly to restricted language learning strategies. Few of them sought or created opportunities to use or practice English functionally. Even though a few learners had realistic beliefs about English learning, say, understanding the significance of improving oral abilities for communicative purposes, the school teaching approaches and the focus of most official English tests were not compatible with their beliefs. Finally, most of them surrendered to reality and employed restricted strategies to satisfy short-term goals, such as passing school tests, without fulfilling their beliefs.

However, the change in the beliefs of many participants about the use of language learning strategies became obvious after taking the MI-based course. These changes are particularly reflected in their self-awareness about the importance of variety, frequency and appropriateness of language learning strategies.

Many participants claimed that they were encouraged to re-examine and reflect on their original beliefs about strategy use during the MI-based intervention. In general, MI-informed activities and authentic assessment tasks, their diary-keeping experiences, formal or informal discussion with teachers or classmates, and reading relevant books, were the themes frequently mentioned by them which affected their beliefs. Gradually, many of them generated different but realistic opinions about effective strategy use with concrete reasons and examples, which are particularly demonstrated in the data from final interviews (see 8.2.2.2).

Therefore, it is evident that through these experiences of self-awareness during the MI-based intervention, many participants not only recognized the significance of forming positive and appropriate beliefs about strategy use, but also tried to intentionally improve their English learning by increasing or varying strategy use. For many participants, having suffered from the EFL learning problem, "How should I learn?" the change can be considered as great progress.

#### 8.3.1.3 EFL learenrs' employment of language learning strategeis

Based on the findings, noticeable differences can been seen in the content (types and intelligences) of the language learning strategies employed by participants between their previous school EFL study and their learning through the MI-based intervention.

According to most participants' reports, their previous EFL learning had been heavily influenced by traditional teaching activities and the Taiwanese exam-first culture. Most frequently used strategies, in and out of class, were cognition-oriented, with an emphasis on the use of verbal-linguistic and logical-mathematical intelligences. 'Repeating loudly', 'grammar analyses' and 'more practice on simulated tests' are specific examples. The most popular metacognitive strategy employed by about forty-one students in private study time was 'planning to find a suitable cram school', in which they could get extra lectures and practice with the content of school textbooks and then have better performances in English tests. In general, most learners in their previous EFL learning employed restricted strategies repeatedly to master the target language knowledge found in school textbooks.

However, the use of different types of strategies, encouraged by multiple intelligences, is found in many learners' verbal and written reports during the MI-based intervention. Despite using former strategies sometimes, these participants were keen to increase the application of different intelligences and therefore expand their strategy types. Most of them were motivated to try different cognitive strategies in and out of class to practice the target language. These widely reported cognitive strategies, different from those in previous learning, became more sophisticated and involved lots of strategies that can be categorized under the group 'practicing naturally'. Instead of only studying textbooks, these learners were encouraged to learn from other sources, such as English movies, preferred English TV programs, bilingual magazines and English radio broadcasting. Moreover, many tried to build up positive social relationships and cooperative experiences to facilitate learning through social strategies. Some used affective strategies to reduce learning anxiety to concentrate more on their learning. Furthermore, different types of metacognitive strategies were widely used by several participants during their private study time to manage their learning efficiently. These learners seemed to be more confident than before in planning and arranging their learning. With attempts to overcome communication breakdown or barriers, some

participants used compensation strategies frequently when doing conversation practice. Among these reported trategies, apart from the involvement of verbal-linguistic and logical-mathematical intelligences, interpersonal and intrapersonal intelligences were extensively used, which could be traced from their broad employment of social, affective and metacognitive strategies. In order to efficiently finish tasks at hand, achieve specific goals or satisfy personal needs, musical-rhythmic, visual-spatial, bodily-kinesthetic and naturalist intelligences were also triggered and developed during the intervention period by many learners through their use of different types of strategies.

In addition to a wide employment of different intelligences and various types of strategies, the introduction of an MI-based intervention had benefited learners in many aspects during their learning process. For example, several students claimed that English learning became easier because of greater choice. Some for whom improving English proficiency was their main concern felt more empowered than before, and the others found that English learning became a pleasant thing. On the one hand, the findings have shown the great impact on learners' strategy choices of integrating MI ideas into teaching, learning and assessment activities/tasks. The employment of language learning strategies by many participants is found to be closely linked with the features and requirements of such MI-based teaching strategies. On the other hand, the role of self and significant others also played an important role in influencing the results of the intervention. Many learners mentioned that the suggestions and encouragement from their language teacher and classmates, as well as their personal experiences and self-awareness during the intervention process, had a profound effect on their strategy choices. The findings suggest that the realities of EFL learning come from the complex interaction of participants with teaching strategies (i.e. teaching activities), with surrounding persons and with various aspects of the context. Consequently, language teachers need to be sensitive to local variables, where an innovation is introduced to their teaching for the purposes of improvement and evaluation.

### 8.3.2 The Myth of Chinese Students' Learning Behaviors and Actions

The widespread perceptions of Chinese students, as portrayed by western educators, are of rote learners and lovers of passive forms of learning (Kember, 2000; Kennedy,

2002). Chinese students are commonly perceived to receive all knowledge imparted by teachers, and to study hard in terms of painstaking memorization of each language item (Hird, 1995; Hu, 2002). These behaviors or actions are often interpreted as a reflection of Chinese traditional values about education and learning since Confucius (Cortazzi and Jin, 1996; Hu, 2002; Kennedy, 2002). However, are these statements true? In this section, I argue that this stereotyped image of Chinese learners can be over-generalized because the counter evidence found in this study shows that many Chinese students are not really passive and reticent EFL learners, and they do not prefer rote learning all the time. Moreover, situational and individual factors seem to play more critical roles than cultural attributes to influence the learning behaviors and actions of the Chinese students in the study.

#### 8.3.2.1 Are Chinese EFL learners really passive and reticent?

According to the investigation of Chinese learners' characteristics, researchers have reported that Chinese students are generally considered as reticent and passive learners (Cheng, 2000; Cortazzi and Jin, 1996; Flowerdew and Miller, 1995; Kennedy, 2002; Tsui, 1996). Some have even attributed this phenomenon of passivity or reticence that has been observed from Chinese learners to a certain cultural heritage of educational practice in Chinese society (Cortazzi and Jin, 1996; Flowerdew and Miller, 1995; Hu, 2002).

However, the study finds that most participants, categorized as passive and reluctant learners in previous school EFL study according to their own reports, gave no sign of reluctance to actively employ strategies for learning and using English, in and out of class, during the MI-based intervention. On the contrary, many of them expressed that they were receptive to new modes of learning, showed strong willingness to expand and vary strategy use, and welcomed various opportunities for more practice and application. The result contrasts sharply with the notion of passive or reticent roles associated with Chinese students.

When examining the underlying reasons that had influenced the different strategy behaviors of these participants in the two different periods, their affective orientations (e.g. anxiety or pleasure) and cognitive needs (e.g. communication needs or test preparation) stand out as the main indicators to interpret their learning approaches and

strategy actions during the learning process. The two indicators are found to be largely affected by several variables such as teaching strategies, learning environments, personal motivation, as well as instrumental purposes. As the research results suggest, Chinese EFL learners are not simply culturally predisposed to be passive in language learning, and most of them can be active and participative when suitable (e.g. interesting and meaningful) learning environments, and teaching and assessment activities are available. Based on this point, we may say that any particular observed or reported behavior can be caused by a combination of many factors, so language teachers should deal with any hearsay statement with caution.

#### 8.3.2.2 Do Chinese EFL learners prefer rote learning?

There is a common perception that Chinese students rely heavily upon rote or mechanical learning at the expense of understanding (Biggs, 1996; Kember, 2000). They memorize the learning material by heart so that it could be reproduced in examination (Biggs, 1996; Hu, 2002). In the field of language learning, especially, memorization is considered by Chinese learners as "a long established learning technique" (Hird 1995: 23) to make sure the output should be error-free.

The current study shows that the strategies commonly employed by most participants in previous school EFL learning were repetition, explicit analysis and practice (review). These strategies can be considered as part of traditional strategies influenced by the Chinese culture of learning[5] (Hu, 2002). However, the features of these reported strategies are not compatible with the concept that Chinese students heavily relying on mechanical learning for memorization at the expense of understanding. Many participants in the study mentioned that, in previous EFL learning, they used traditional strategies to acquire certain language knowledge without developing real communication abilities. Nevertheless, most of them also claimed that they had adopted these 'cognition-oriented' traditional strategies to understand and memorize the target language knowledge for test preparation (e.g. reading comprehension). Their purpose for using these strategies, understanding for memorization and memorization with understanding, is different from the notion that they simply

[5] According to Hu's interpretation (Hu, 2002), the learning strategies commonly practiced in the Chinese culture of learning include four R's (i.e. reception, repetition, review and reproduction) and four M's (i.e. meticulosity, memorization, mental activeness and mastery).

memorize the target learning materials without understanding. This result is also in agreement with the findings of recent studies on Chinese students' learning approaches, such as Watkins and Biggs (1996).

In addition, the study finds that the learning strategies most Chinese EFL learners (participants) hold were not as stable as thought. Even though they usually had preferred or predominant strategy behaviors or actions that might have been influenced by cultural attributes in some way, a closer examination of the major strategies they adopted demonstrates that these strategies were mainly affected by several interplaying factors, such as the nature of the course content and assessment, the teaching activities (approaches), and the student's perception of the relevance and interest of the course. For example, the degree and depth of participants' employing language learning strategies during the MI-based intervention are found to be markedly influenced by the course design and the way the course was delivered, rather than by the pre-set cultural reasons or stereotypes. It is common to see students switch among different strategies depending on the nature of the assignment or learning tasks during an MI-based intervention.

Findings from this study clearly indicate that the image (a stereotype) of rote-learners associated with Chinese students is an inappropriate way to explain their frequent use of traditional strategies when learning English. They also suggest that many Chinese students (in Taiwan) are indeed open to expand and vary their strategies for improving their English proficiency if a suitable learning environment, teaching strategies and various learning opportunities are available. Therefore, language teachers should be cautious about stereotypes associated with their students. More observation, exploration and reflection during the process of their language teaching are necessary before making any statement and decision.

## 8.4 Summary

In this chapter, the major language learning strategies taken by student participants in their previous EFL study and during the MI-based intervention have been discussed with examples. The results show that these EFL students employed more intelligences and learning strategies to learn and use English during the MI-based intervention than

they did in their prior EFL study. The rationale for their reluctance or willingness to vary and expand learning strategies in the two different periods has been explored and clarified. In order to give an overview of the findings about their strategy use, the main factors and reasons that explained these EFL learners' strategy development are summarized below.

**1. EFL Learners' *Strategy Use* in their *Previous* EFL Study (Research Aim 2-b):**

(1) The *major in-class strategies* these EFL learners employed were related to:

- *In-class teaching activities*, promoted by grammar translation method (structure-based) and audiolingualism (stimulus/response/reinforcement).

(2) The *major out-of-class strategies* these EFL learners employed were related to:

- *Test preparation* (focus on the knowledge of English grammar and vocabulary).

(3) The reasons for EFL learners' *reluctance* to use different strategies for developing communicative abilities were:

- *The teacher* was the authority. Students only followed the strategies that their teachers suggested.
- The pressure from *entrance exams* made them ignore the development of different/effective strategies for improving practical English abilities.
- They had few or no *opportunities* to try different strategies in a teacher-centered learning context for developing practical English abilities.
- They had low *motivation* to try new things when 'passing tests' was the priority.

**2. EFL Learners' *Strategy Use during* the MI-based Intervention (Research Aim 3-b):**

(1) The *major in-class strategies* these EFL learners employed were related to:

- *MI-informed instructional activities/tasks.*
- The involvement of *significant others*: what the *language teacher* and their *classmates* said and demonstrated during class time were influential for many EFL learners to decide which strategy they should use and how to use it.

(2) The *major out-of-class strategies* these EFL learners employed were related to:

- *Instrumental purposes*: course requirements (e.g. accomplishing different learning tasks successfully); social expectations (e.g. passing important English tests); and future needs (e.g. improving oral abilites for finding a decent job).
- *Learners' beliefs* about the importance of variety, frequency and appropriateness on strategy effectiveness for achieving successful EFL learning.

(3) The reasons for EFL learners' *willingness* to engage in the use of various learning strategies were:

- The *internal* factors: their self-exploration, self-reflection and self-awareness of personal strengths in, and beliefs about, strategy use and effective English learning.

- The *external* factors: positive affective and cognitive experiences with the language teacher, their fellow learners and the MI-based intervention.

At the end of this chapter, I also have argued that Chinese EFL learners (in Taiwan) are not passive and reticent, and they do not prefer rote or mechanical learning at the expense of understanding as portrayed by western educators. As the study shows, these Chinese EFL learners became active in their English learning as well as in their practice and application of various strategies for effective learning during the MI-based intervention, when suitable (e.g. interesting and meaningful) teaching and assessment activities/tasks, and a supportive learning environment were available.

# Chapter 9

## *EFL Learners' Responses to the Course with the MI-based intervention*

### 9.0 Introduction

In this chapter, EFL learners' responses to the course are explored through two questionnaires: *Evaluation of the MI-based Intervention* [1] *and A Feedback Questionnaire on the MI-informed activities/tasks* [2]. The results from the two questionnaires are mainly used to address the Research Aim 3: (a) EFL learners' affective experiences and (b) their strategy use. In addition, the information is used to cross-validate the findings from learning diaries and interviews (Chapters 7 and 8), and to give an overall picture of the effects of my teaching, with the MI-based intervention, on fifty-one student participants, in terms of learners' perspectives.

At the end of the MI-based course, all students were given a sheet entitled the *Evaluation of the MI-based Intervention,* aimed at assessing their progress. The questionnaire included two sections. There were seven questions in the first section of the evaluation sheet measured on a Likert scale. The results are shown in Tables 9.1 and 9.2. In addition, the participants were invited to self-evaluate their current English abilities and freely express personal perceptions about the intervention, in the two open-ended questions in the second section of the questionnaire. The results of their self-evaluation of English proficiency and their learning experiences and suggestions after taking the MI-based course are classified into Tables 9.3 and 9.4 respectively.

For the purpose of further understanding the EFL learning experiences that these participants had with the MI-informed activities/ tasks used in the course, the *Feedback Questionnaire on the MI-informed Activities/Tasks* was also conducted to elicit learners' responses. There were two parts in the questionnaire. In the first part,

[1] The *Evaluation of the MI-based Intervention* (see Appendix 6) was originally developed by me, but administered by the Center of Applied Foreign Languages at the end of the semester to survey anonymously fifty-one participants' general responses toward the use of the MI-based intervention as well as its possible effects on their English learning.

[2] The *Feedback Questionnaire on the MI-informed activities/tasks* (see Appendix 7) was designed by me but administered anonymously by the class mentor at the end of the semester for understanding to what extent these MI-based activities/tasks I employed in the course could help and affect EFL learners in their target language learning.

students were asked to circle the activities/tasks they considered as 'enjoyable or less enjoyable', and 'helpful or less helpful' for their English learning. The results from this questionnaire are shown in Tables 9.5 and 9.6. In the second part of this activity/task evaluation sheet, students were encouraged to state reasons for their choices or express comments on these activities/tasks. These summarized reasons are discussed together with the results from the first section of the questionnaire.

## 9.1 Findings and Discussion

The findings from the learners' responses to the *Evaluation of MI-based Intervention* questionnaire are discussed first. The numerical results from the seven Likert-scale questions in the evaluation questionnaire are presented to show the effects of the intervention on students' affective experiences, strategy use and learning outcomes. Then, the two topics of the open-ended questions, self-evaluation of current English proficiency and personal comments about the intervention, are explored with emerging patterns and themes. In addition, the data collected from the *Feedback Questionnaire on the MI-informed Activities/tasks* is later discussed to clarify, in detail, the students' feedback particularly concerning the theme 'MI-informed activities/tasks'.

### 9.1.1. Questionnaire 1: *Evaluation of the MI-based Intervention*

The information presented here is entirely based on the results of the *Evaluation of the MI-based Intervention* questionnaire. Learners' general attitude to and experience of the MI-based intervention are explored through both quantitative and qualitative data. The seven questions from the first part of the questionnaire were related to the three topics: affective experiences, strategy use and self-perceived learning outcomes. The rating results of the Likert-items are presented in Table 9.1. The frequencies and percentages of these items are organized in Table 9.2.

**Table 9.1. Rating Results from the Likert-Items: *Evaluation of the MI-based Intervention***

| Key Statements from the Seven Questions | Mean | SD |
|---|---|---|
| 1. My overall English abilities have been improved | 3.18 | 0.38 |
| 2. My English learning strategies have been improved | 4.41 | 0.79 |
| 3. The MI-based intervention has been helpful for understanding and developing my English learning potential | 4.63 | 0.59 |
| 4. My learning motivation to English has increased | 4.16 | 0.49 |
| 5. My English learning anxiety has been reduced | 3.61 | 0.91 |
| 6. My communication strategies in using English have been improved | 3.86 | 0.84 |
| 7. The MI-based intervention has been useful in helping me prepare to pass important English tests such as GEPT (General English Proficiency Test) | 4.57 | 0.57 |

**Table 9.2. Effects of the MI-based Intervention on Affective Experiences, Strategy Use and Learning Outcomes**

| Related Topics | Questions | Very useful | Useful | No opinion | Not useful | Not very useful |
|---|---|---|---|---|---|---|
| | | N=51 | N=51 | N=51 | N=51 | N=51 |
| Affective experiences | Q4: How much has your learning motivation to English increased as a result of the MI-based intervention? | 11 (22%) | 37 (73%) | 3 (6%) | 0 | 0 |
| | | 48 (95%) | | | | |
| | Q5: How much do you feel your English learning anxiety has been reduced as a result of the MI-based intervention? | 7 (14%) | 23 (45%) | 17 (33%) | 2 (4%) | 2 (4%) |
| | | 30 (59%) | | | 4 (8%) | |
| | Q3: How helpful do you think the MI-based intervention has been for understanding and developing your English learning potential? | 35(69%) | 13 (26%) | 3 (6%) | 0 | 0 |
| | | 48 (95%) | | | | |
| Strategy use | Q2: How much do you think your English learning strategies have been improved as a result of the MI-based intervention? | 29(57%) | 16(31%) | 4 (8%) | 2 (4%) | 0 |
| | | 45 (88%) | | | | |
| | Q6: How much do you think your communication strategies in using English have been improved as a result of the MI-based intervention? | 14(21%) | 17(33%) | 19 (37%) | 1 (2%) | 0 |
| | | 31 (54%) | | | | |
| Learning outcomes | Q1: How much do you feel that your overall English abilities as an EFL learner have been improved as a result of the MI-based intervention? | 0 | 9 (18%) | 42 (82%) | 0 | 0 |
| | Q7: How useful do you think the MI-based intervention has been in helping you prepare to pass important English tests, such as GEPT? | 31(61%) | 18(35%) | 2 (4%) | 0 | 0 |
| | | 49 (96%) | | | | |

Note: 'N=51' means 51 participants

In response to the three questions (Q3, Q4 and Q5) relevant to personal affective experiences, students' replies were positive on the whole. Forty-eight students (Q4, 95%) agreed that their learning motivation had increased, and thirty (59%) felt that their learning anxiety had been reduced because of the intervention. In addition, forty-

eight students (Q3, 95%) considered the MI-based intervention as 'very useful' or 'useful' in helping them understand and develop their English learning potential. Regarding their use of strategies (Q2 and Q6), the results were encouraging. More than half of the participants thought that the intervention was helpful in improving their learning strategies (Q2, 88%) as well as agreed on the positive effects of the intervention in developing their communication strategies (Q6, 54%). Only one student had a negative attitude to its usefulness in improving communication strategies (Q6, 2%), and two students had the same feeling with their learning strategies (Q2, 4%). Moreover, forty-nine students (Q7, 96%) agreed on its value for them to prepare for important English tests such as GEPT[3]. Nevertheless, forty-two students (Q1, 82%) were not sure if their overall English abilities had been improved or not as a result of the intervention. This possibly reflects their previous reliance on test scores, rather than self-perception of their own competency in the exam-first culture.

The opinions of the fifty-one students' opinions on the two open-ended questions of this questionnaire are organized into two tables. The first Table 9.3 summarizes the results of students' self-evaluation of their English abilities.

**Table 9.3. Student Self-assessment of their Current English Abilities**

| **English abilities** | **Making progress** (frequency and percentage) |
|---|---|
| Listening and speaking | 7 (14%) |
| Speaking | 16 (31%) |
| Listening | 6 (12%) |
| Writing and speaking | 2 (4%) |
| Others* | 20 (39%) |

Note: '*' refers to their motivation and attitudes

Table 9.3 above indicates that students' statements were consistent with their choices in Q1 of the first section, where forty-two students (Q1, 82%) presented their uncertainty about their overall English abilities being improved or not. Similarly, no student in the first open question stated any progress in their overall English abilities[4];

[3] General English Proficiency Test (GEPT), an important local test to assess English abilities of EFL learners in Taiwan, is developed by the Language Training and Testing Center in Taipei, and supported by Taiwan's Ministry of Education (see www.gept.org.tw for details).
[4] The overall English abilities refer to listening, speaking, reading and writing skills.

however, sixteen students (31%) agreed about their improvement in their English speaking abilities, seven (14%) thought they made progress in both listening and speaking abilities and six (12%) only in listening.

There were twenty students (39%) under the 'others' categories. These students were not sure if they made progress or not in their English language abilities, but they mentioned their changes in learning attitudes or motivation. As one student wrote:

> *My interest in learning English has increased but I do not know if I really have made progress in my English abilities within the two months.*

For several learners, overcoming psychological barriers was more meaningful for them than linguistic improvement. The first example is:

> *I am not sure whether my English proficiency has been improved or not but I feel excited to tell you I have gradually overcome an unconscious fear of English learning. Maybe it is my progress!*

And the other example is:

> *My progress is that I am not afraid of speaking English before others and I do not hate to go to English classes any more.*

Moreover, the results showed that two students seemed to be particularly satisfied with their progress in productive skills, writing and speaking. One of them appreciated his e-mail writing experience and he wrote:

> *I feel good sending e-mails in English now, which could be traced to Stella's[5] initial assistance. When I found she understood what I wrote and responded to me with encouragement, I decided to continue my practice. I think it has been a big gain for me.*

As for the reason that no student talked about the enhancement of reading skills, my explanation would be that the course focus, mainly emphasized the development of English listening and speaking abilities for achieving effective oral communication. In short, the findings drawn from students' responses to the first open-ended question demonstrated that all students claimed they made some progress after participating in the course with the MI-based intervention, though in different aspects.

The Table 9.4 presented below classifies the responses of students' perspectives to the MI-based intervention into four main themes (e.g. the whole class) with three content features (e.g. positive experiences).

[5] This is the teacher-researcher's English name.

**Table 9.4. Student Feedback to the Course *Practical English Training* with the MI-based intervention** (N=51)

| **Themes** that influence learners' experiences or perspectives | **Content feature:** Positive experiences (frequency/percentage) | **Content feature:** Need improvement (frequency/percentage) | **Content feature:** Suggestions (frequency/percentage) |
|---|---|---|---|
| **The Whole Course** | 20 (39%) | 0 | 5 (10%) |
| **The MI workshop** | 5 (10%) | 0 | 1 (2%) |
| **The Language Teacher** | 9 (18%) | 0 | 1 (2%) |
| **MI-based activities/ tasks** | 14 (27%) | 2 (4%) | 0 |

Note: 'Frequency' means the number of times the content feature was referred to by the participants. The maximum number of mentions possible for each of the themes is 51.

The four themes in Table 9.4 came from a data-driven development. I grouped all the free responses to the second open-ended question into related themes first (e.g. the whole course) and assigned their comments with obvious features (e.g. positive experiences) after frequent checking and reading.

The final results presented in Table 9.4 show that when students were asked to express their experiences or perspectives on the course with the MI-based intervention, twenty students (39%) obviously showed very positive attitudes or experiences to the whole course. However, most of their comments or reasons were very simple. They expressed their enjoyment or liking with short sentences such as "*I think the course is good and I wish we could have more class hours*", "*I have never felt sleepy in the course and I look forward to the course every day*", and "*the course is well planned*". Moreover, eight students appreciated the building-up of self-image in English learning by claiming, "*the course made me feel respected even though my English is very poor*", "*I think I have been really encouraged after taking the course*" and "*I am glad to gain some confidence from taking the course*". Several students also mentioned the issue about social interaction as their preferred reason. For example, one student wrote:

> *The course brings all classmates together. I find it is the only course in which we have a lot of after-class interaction and we really enjoy working together.*

Also, three students mentioned their self-awareness in learning strategies or intercultural competence. One student stated:

> *I like the course because it helps me be aware of a truth: learning English does not mean studying and analyzing the language but means a process of using the language through different ways to finish tasks.* (Awareness in learning strategies)

And the other one wrote:

> *The course let me understand English is not only for Americans because it is an international language. I need to know how to introduce my local cultures to people from other countries and understand theirs as well. I need to empower my cross-cultural knowledge to prepare myself to use English.* (Awareness in intercultural competence)

Another point worthy of mention was students' suggestions to the Center of Applied Foreign Languages (CAFL) for advancing the development of EFL courses in Ming-Hsin University of Science and Technology (MUST). Five students took the chance to report their ideas about how to enhance students' English abilities or upgrade learning environments. Their opinions are summarized as follows, accompanied by the English translation of their original statements:

1. Arranging an overseas exchange program:

> *After-class learning is good but an overseas exchange program is best to enrich our EFL learning. I hope the Center of Applied Foreign Languages (CAFL) can arrange this kind of program affiliated with the MI-based EFL course. That will be very practical!*

2. Purchasing more instructional or educational English language learning videos:

> *I like to watch Rebecca's Story with good friends in the Self-Access Center. The dramatic story plot has attracted us to watch everyday. I think the Center of Applied Foreign Languages (CAFL) should buy more English learning videos similar to this one, which our English teacher recommended us to watch in the course. It is very helpful for us to develop English conversation skills.*

3. Setting up e-mail exchange programs with students in English speaking countries:

> *My suggestion to the Center is we should have e-mail exchange programs with other university students in English speaking countries to push us to send e-mail in English as well as to learn some cultural things.*

4. Building more Self-access centers for out-of-class English learning:

> *I think the course is good but we need more self-access centers for out-of-class learning. One is not enough because more and more students like to use the service to improve their English learning.*

5. Setting up permanent websites for English learning, chatting and sharing for students in Ming- Hsin University of Science and Technology (MUST):

> *I sincerely hope the Center of Applied Foreign Languages (CAFL) can set up permanent official websites for English learning, sharing and chatting to benefit students in Ming-Hsin University of Science and Technology (MUST).*

From these students' suggestions, I could sense their strong motivation to improve their English, and their ideas were also quite constructive. It was a very positive result overall.

Furthermore, attending the MI workshop was particularly acknowledged by five students (10%) because they thought understanding the theory did help them recognize how to appreciate their strengths, do self-inquiry and exploration, and then develop their learning potential. The following extract is one example that described their self-awareness through the MI workshop and their suggestions about providing the MI workshop for other university students:

> *Many people think that university students are mature enough to know how to learn appropriately or efficiently. The truth is "no!" I like the MI workshop because it has stimulated my thinking to look at others and myself through different and positive ways. In the past years, I used to think I had no talents in learning English, because no matter how hard I studied English, my performance was still poor. I felt disappointed once I heard 'English classes'. I had kept imitating what 'good students' did in my class, but I had never valued myself and tried to find a way to suit me. I want to say thank you to our English teacher with my heart. The MI workshop should be regularly run to benefit all campus students in Ming- Hsin University of Science and Technology.*

Additionally, nine students (18%) showed their special gratitude to me as their language teacher when being asked to express their opinions of the course. My teacher's characteristics such as "*understanding*", "*friendly*", "*communication styles*", and "*patience and creativity*", were what they appreciated most and made them like the class or motivated them to learn English. One student even expressed his willingness to take this course once more as "*I like the course because the teacher is very friendly, understanding and helpful*". Students' perspectives confirm the significance of language teachers in a classroom context — they are not only the persons implementing teaching approaches and materials but also are influential in students' learning in all aspects (Dörnyei, 2001). Language teachers cannot consider themselves only as passive practitioners since how they perform definitely has great effects on learners.

Moreover, fourteen students (27%) pointed out their favorite MI-based activities/tasks in the course, ranging from English songs, dancing and bodily-kinesthetic activities, games and riddles, role-play, puppet show, field trips to final projects and so on. A student made a general claim about the advantage of taking these MI-based activities/tasks - learning by doing and cooperating with others:

> *MI-based activities/tasks in the course have kept us very busy, but I enjoy them. I think the main reason is the process of preparing learning tasks is very rewarding. I have learned a lot from classmates and the language teacher. In addition, I think I have made progress in oral abilities by constant exploration, discussion and practice.*

Other students gave different reasons for their choices among those MI-based activities/tasks because of personal strengths or preferences. One of them who favored

'puppet show' explained:

> *I like the puppet show a lot and think it is a good way for a timid person, like me, to practice speaking English in front of others through puppets.*

The only activity mentioned as an unpopular one here by students was the audiotaped journal. The reasons given by two students were "*the audiotaped journal takes me a lot of time to prepare. I still like face-to-face talk or test*" and "*I prefer face-to-face oral practice. If what the teacher is concerned about is insufficient time, then paired face-to-face talk with the teacher is an alternative to save half of the time*". In fact, I was not surprised to see some activities/tasks were not as popular as others because all students are different. What I wanted to know were their reasons and suggestions for future improvement, so I appreciated that the two students briefly described their feelings about the activity; one even gave a very good idea "*paired face-to-face talk with the teacher*" as a replacement.

Apart from the sixteen students (31%) who had expressed their perspectives on the MI-informed activities/tasks, most students did not give a clear description of the how and why of their choices. In order to understand the points of the view of the whole group (i.e. fifty-one students' perspectives and experiences of these core MI-informed activities/tasks used throughout the course), the *Feedback Questionnaire on the MI-informed activities/tasks* became an important tool to gain more detail. Further discussion regarding the theme 'the MI-informed activities/tasks', based on the results of this activity/task evaluation questionnaire, is explored in the next section.

### 9.1.2 Questionnaire 2: *A Feedback Questionnaire on the MI-informed Activities/ Tasks*

Learners' choices about 'enjoyable or less enjoyable' and 'helpful or less helpful' activities/tasks in the first part of the questionnaire are counted and listed in Table 9.5 and Table 9.6, in which the responses are presented with Activity/task Name, Focus Intelligence[6] and Number.

The items in Table 9.5 as shown below marked with an asterisk '*' and shading were

[6] Based on the main features of different activities/tasks, the focus intelligence(s) of each activity are suggested by the teacher-researcher. Certainly, the implementation of each activity in the real world may include other supporting or interplaying intelligences, depending on the contexts.

those considered as students' favorites, which more than half of the students (N=51) enjoyed and thought helpful for their English learning in the study.

**Table 9.5. Enjoyable and Helpful Activities/Tasks** (N=51)

| Activity/task | Focus Intelligence(s) | Number | Activity/task | Focus Intelligence(s) | Number |
|---|---|---|---|---|---|
| Reading Aloud | Verbal-Linguistic | 10/51 (20%) | *Tactile/bodily Activities | Bodily-kinesthetic | 36/51 (71%) |
| Class discussion/ brainstorming | Verbal-Linguistic, Interpersonal | 14/51 (27%) | *English Songs in Motion: Dancing | Bodily-kinesthetic Musical-rhythmic | 44/51 (86%) |
| Teacher-centered Lecturing | Verbal-Linguistic | 11/51 (22%) | *Role-play (Drama) | Bodily-kinesthetic Interpersonal Verbal-linguistic | 48/51 (94%) |
| Riddles creation | Verbal-Linguistic | 13/51 (25%) | *Music and English Songs Singing or Appreciation | Musical-rhythmic Verbal-linguistic | 43/51 (84%) |
| Drills practice | Verbal-Linguistic | 19/51 (37%) | Lyrics creation | Musical-rhythmic Verbal-linguistic | 25/51 (49%) |
| Audio-taped journal | Verbal-Linguistic, Intrapersonal | 24/51 (47%) | Oral practice through Jazz Chants | Musical-rhythmic Bodily-kinesthetic Verbal-linguistic | 24/51 (47%) |
| *Games | Verbal-Linguistic, Bodily-kinesthetic, Interpersonal | 32/51 (63%) | *Puppet Show: Intercultural issues discussion | Interpersonal Bodily-kinesthetic Verbal-linguistic | 38/51 (75%) |
| Authentic Listening Practice | Verbal-Linguistic | 14/51 (27%) | *Cooperative learning: students work together to finish a task | Interpersonal | 29/51 (57%) |
| Grammatical Rules | Logical-mathematical Verbal-linguistic | 19/51 (37%) | 'Ask E.T.': Interacting with English teacher through e-mail | Interpersonal Intrapersonal | 21/51 (41%) |
| *Team Jigsaw problem-solving | Logical-mathematical Interpersonal | 36/51 (71%) | *Final Projects | Interpersonal Intrapersonal | 39/51 (76%) |
| Thinking activities | Logical-mathematical | 13/51 (25%) | *Surfing English learning websites | Intrapersonal Visual-spatial | 37/51 (73%) |
| Imagination activities | Visual-spatial Intrapersonal | 23/51 (45%) | E.Q. Time | Intrapersonal | 20/51 (39%) |
| Mind-mapping Practice | Visual-spatial | 17/51 (33%) | *Independent study in Self-Study Center | Intrapersonal Interpersonal | 26/51 (51%) |
| Drawing Activities | Visual-spatial | 12/51 | *Learning Diary | Intrapersonal | 32/51 |

| | | | | | |
|---|---|---|---|---|---|
| | Bodily-kinesthetic | (24%) | Writing | | (63%) |
| *Visual Presentations | Visual-spatial | 27/51 (53%) | *Field Trip or extracurricular activities | Naturalist Interpersonal | 45/51 (88%) |
| *Video/Film Teaching and Learning | Visual-spatial Verbal-linguistic Naturalist | 50/51 (98%) | Observation and Classification Activities | Naturalist Logical-mathematical | 14/51 (27%) |

According to the data in Table 9.5, all MI-based activities/tasks used in the two months had somehow won supporters. After counting and closer inspection, I was interested to find that students' favorites were fairly distributed across the whole range of the eight intelligences without preference for particular categories (intelligences). The result does suggest the existence of individual differences. It also implies that all intelligences are important in EFL classroom and need to be nurtured for different EFL learners because they may facilitate language acquisition in their own ways. Based on the results, I also found that the top three activities/tasks, video/film teaching and learning (98%), role-play (94%), and field trip or extracurricular activities (88%), were those that could most help students learn and use English naturalistically. Therefore, I am reminded of the importance of connecting classroom English learning with the real world in my future course design.

Considering the reasons why students chose these favorite activities/tasks in the second part, I found that some students provided an explanation, but most of the time their answers were simple as well. Basically, their accounts were related to personal motivation and attitude (e.g. I like it because...), which was influenced by pleasant experiences (e.g. it is "*interesting*", "*relaxing*", "exciting" or "*funny*"), personal coping potential (e.g. it is "effective") and instrumental/personal needs (e.g. it is "*practical*", "*helpful*" or "*meaningful*"). In fact, the findings are consistent with other data sources from these students, their learning diaries and interview information that have been discussed in Chapters 7 and 8.

In addition to the positive responses discussed above, a few negative voices prevailed, but this is normal in a mixed-ability class because different persons have different reactions. The items in Table 9.6 indicated with the symbol '#' and shading were those 'less enjoyable and less helpful activities/tasks' nominated by the students.

**Table 9.6. Less Enjoyable and Less Helpful Activities/Tasks** (N=51)

| Activity/task | Focus Intelligence(s) | Number | Activity/task | Focus Intelligence(s) | Number |
|---|---|---|---|---|---|
| Reading Aloud | Verbal-Linguistic | 0/51 | #Tactile/bodily Activities | Bodily-kinesthetic | 6/51 (12%) |
| Class discussion or brainstorming | Verbal-Linguistic, Interpersonal | 0/51 | #English Songs in Motion: Dancing | Bodily-kinesthetic Musical-rhythmic | 4/51 (8%) |
| #Teacher-centered Lecturing | Verbal-Linguistic | 1/51 (2%) | Role-play (Drama) | Bodily-kinesthetic Interpersonal Verbal-linguistic | 0/51 |
| Riddles creation | Verbal-Linguistic | 0/51 | Music or English Songs Singing or Appreciation | Musical-rhythmic Verbal-linguistic | 0/51 |
| #Drills practice | Verbal-Linguistic | 4/51 (8%) | Lyrics creation | Musical-rhythmic Verbal-linguistic | 0/51 |
| #Audio-taped journal | Verbal-Linguistic, Intrapersonal | 12/51 (24%) | Oral practice through Jazz Chants | Musical-rhythmic Bodily-kinesthetic Verbal-linguistic | 0/51 |
| Games | Verbal-Linguistic, Bodily-kinesthetic, Interpersonal | 0/51 | Puppet Show: Intercultural issues discussion | Interpersonal Bodily-kinesthetic Verbal-linguistic | 0/51 |
| #Authentic Listening Practice | Verbal-Linguistic | 12/51 (24%) | Cooperative Work: partner or group practice | Interpersonal | 0/51 |
| #Grammatical Rules | Logical-mathematical Verbal-linguistic | 3/51 (6%) | 'Ask E.T.': Interacting with English teacher through e-mail | Interpersonal Intrapersonal | 0/51 |
| Team Jigsaw problem-solving | Logical-mathematical Interpersonal | 0/51 | Final Projects | Interpersonal Intrapersonal | 0/51 |
| Thinking activities | Logical-mathematical | 0/51 | Surfing English learning websites | Intrapersonal Visual-spatial | 0/51 |
| Imagination activities | Visual-spatial Intrapersonal | 0/51 | E.Q. Time | Intrapersonal | 0/51 |
| Mind-mapping Practice | Visual-spatial | 0/51 | Independent study in Self-Study Center | Intrapersonal Interpersonal | 0/51 |
| #Drawing Activities | Visual-spatial Bodily-kinesthetic | 3/51 (6%) | Learning Diary Writing | Intrapersonal | 0/51 |
| Visual Presentations | Visual-spatial | 0/51 | Field Trip or extracurricular activities | Naturalist Interpersonal | 0/51 |
| Video/Film | Visual-spatial | 0/51 | Observation and | Naturalist | 0/51 |

| | | | | | |
|---|---|---|---|---|---|
| Teaching and Learning | Verbal-linguistic Naturalist | | Classification Activities | Logical-mathematical | |

As the Table 9.6 shows, eight activities/ tasks were circled by some students as 'less enjoyable and less helpful' in their English learning. The relevant reasons are discussed here. Association with past depressing EFL learning experiences, activities such as 'teacher-centered lecturing', 'drill practice' and 'grammar rules teaching' might easily receive negative reactions. "*Boring*", "*sleepy*" and "*not useful*" were the common terms students used to describe their reasons for dislike. Also, particularly where losing face is an issue, EFL adult learners might find it was hard or "*childish*" to learn English through 'bodily-kinesthetic activities' such as dancing. Since different learners have different strengths, it could be recognized the main reason for three students circling 'drawing activities' as less enjoyable and helpful was because they were not good at drawing, and visual intelligence was not their preferred intelligence. As for the 'authentic listening practice', some students described it as a "*decontextualised*", "*too fast*" and "*boring*" activity, even though fourteen students liked the assignment. Moreover, the practical constraints in preparing the audiotaped journal became obstacles to the enjoyment of the activity for some students. Several students explained it was inconvenient to borrow a tape recorder or it was difficult to find a quiet place to record their audiotaped journals. Nevertheless, these students still found something interesting to trigger their language learning abilities in the MI-based course as they circled those unpopular activities/tasks. For example, a student wrote "*Drawing is not my thing, but there are still some in the course I like very much, such as learning in the supermarket where I can learn very fast!*"

## 9.2 Summary

In this chapter, I have discussed the findings of the two questionnaires: *Evaluation of the MI-based Intervention* and *A Feedback Questionnaire on the MI-informed activities/tasks*. The main results are summarized below:

**1. The Impact of the MI-based Intervention on EFL learners**

**(1) *Affective experiences* (Research Aim 3-a):**

- Almost all the students (95%) agreed that their English learning motivation had

increased.

- Over half the students (59%) felt that their English learning anxiety had been reduced, but four students (8%) did not agree on this point.
- Most students (95%) thought that the MI-based intervention was helpful for understanding and developing their personal English learning potential.

(2) ***Strategy use*** **(Research Aim 3-b):**

- Most students (88%) thought that their English learning strategies had been improved, but two students (4%) did not agree on this point.
- About half the students (54%) thought that their English communication strategies had been improved, but one student (2%) did not agree on this point.

(3) ***Learning outcomes*:**

- More than three-quarters of the students (82%) were not sure if their overall English abilities had been improved or not, and only nine students (18%) agreed that their overall English abilities had been improved.
- Almost all of the students (96%) thought that the MI-based intervention was helpful for them to prepare to pass important English tests, such as GEPT.

(4) ***Other feedback*:**

- All students claimed they made progress in the course in different aspects: (1) twenty (39%) in motivation or attitude to English learning; (2) sixteen (31%) in speaking; (3) seven (14%) in listening and speaking abilities; (4) six (12%) in listening; (5) two (4%) in writing and speaking.
- Students liked the MI-based course because: (1) they had pleasant learning experiences; (2) it was well planned; (3) it helped the building-up of self-image; (4) it stimulated positive social interactions with classmates; (5) it helped them develop self-awareness in strategy use and intercultural competence.
- Students' suggestions for future EFL courses in MUST: (1) arranging an overseas program; (2) purchasing more instructional or educational English language videos; (3) setting up e-mail exchange programs with students in English speaking countries; (4) building more self-access centers for out-of-class English learning; (5) setting up permanent websites for English learning.
- Students appreciated the value of the MI workshop - helping them develop their English learning potential.
- Students felt grateful to their language teacher because they thought that I was very understanding, friendly, helpful and creative.
- Students liked the MI-informed activities/tasks because they enjoyed the experiences – learning by doing and cooperating with others.

**2. Enjoyable and helpful MI-informed activities/tasks**

(1) **Students'** ***favorites*** (more than half of the fifty-one students circled them) **were:**

- Video-film teaching and learning (98%); role-play (94%); field trips or extracurricular activities (88%); dancing (86%); music and English songs singing and appreciation (84%); final projects (76%); puppet show (75%); surfing English learning websites (73%); tactile/bodily activities (71%); team jigsaw problem-solving (71%); learning diary writing (63%); games (63%); cooperative

learning (57%); visual presentations (53%); independent study in the self-access center (51%). These favorite activities/tasks include examples drawn from most of Gardner's intelligences.

**(2) Students' *reasons* for their choices were related to:**

- Personal preferences or strengths.
- Personal pleasant experiences (e.g. interesting, relaxing or exciting).
- Personal coping potential (e.g. effective).
- Instrumental/ personal needs (e.g. practical, helpful and meaningful).

**3. Less enjoyable and helpful MI-informed activities/tasks**

**(1) The eight '*less enjoyable and helpful*' activities/tasks nominated by students were:**

- Authentic listening practice (24%); audio-taped journal (24%); tactile/bodily activities (12%); drills practice (8%); grammatical rules (6%); drawing activities (6%); dancing (8%); teacher-centered lecturing (2%).

**(2) Students' *reasons* for their choices were related to:**

- Personal factors: previous learning experiences; personal preferences or strengths.
- Situational factors: contextual constraints (audio-taped journal); decontextualised content (authentic listening practice).

In general, the results from this chapter have confirmed the findings from Chapters 7 and 8. Most EFL learners agreed that they had positive affective experiences of English learning, and they expanded their repertoire of strategies for effective English learning and communication, during the MI-based intervention.

# Chapter 10

## *Conclusions, Implications and Recommendations*

### 10.0 Introduction

In this chapter, I present the results of this classroom research based on the findings discussed in chapters 6, 7, 8 and 9, and generate relevant pedagogical implications and recommendations. I intend to draw overall conclusions from the multiple data sources and the perspectives of participants, in response to the three research aims mentioned in Chapter 5. These three research aims were to:

1. Explore my own EFL teaching and identify what I have learned as a teacher-researcher.
2. Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system
(a) felt about their previous English learning (before attending an MI-based EFL course) and their reasons for these affective experiences; and
(b) went about their previous English learning (before attending an MI-based EFL course) and the reasons for their ways of learning.
3. Investigate how a group of university Chinese EFL learners in Taiwan's technological and vocational education (TVE) system
(a) felt about their English learning during the MI-based intervention and their reasons for these affective experiences; and
(b) went about their English learning during the MI-based intervention and the reasons for their ways of learning.

In the first part of this chapter, I interpret the impact of the MI-based intervention on EFL learners (Research Aims 2 and 3), through my teaching diary, through the comparative findings (their previous EFL learning and during the MI-based intervention) from the EFL learners' diaries and interviews, as well as from the results of the questionnaires. Then, based on the voices of the learners and myself throughout the intervention process, I explore my own teaching practices, and identify what I have learned as a teacher-researcher, after revisiting my earlier reflection (Research Aim 1). Drawn from these findings and conclusions, relevant implications are provided for language teachers. Following this is a brief discussion of the limitations of this study. Finally, recommendations, based on the results from this study, are generated for different educational parties in Taiwan.

## 10.1 The Impact of the MI-based Intervention on EFL Learners

After triangulating all data sources from student participants and myself, two main conclusions about these EFL learners in the study can be drawn. Firstly, these EFL learners had developed very positive affective experiences of English learning during the MI-based intervention. Secondly, their use of strategies for effective English learning and communication had been improved during the intervention period. A brief discussion of each point follows.

### 10.1.1 EFL Learners' Affective Experiences

The positive development of EFL learners' affective experiences during the MI-based intervention seemed to be obvious, particularly when comparing these with their previous EFL learning. The results have been confirmed not only from the viewpoints of most participants, but also from my own observation (the language teacher). Based on the belief that each student can learn English if their differences have been recognized and appreciated, I had tried to help my students overcome their emotional barriers to English learning through the Multiple Intelligences strategies. My preliminary evaluation after the intervention was "*I think my students enjoyed the course*". As many students mentioned in the diaries, interviews and questionnaires, they did feel they were encouraged to learn and use English through the MI-based intervention. On the other hand, the intervention was not the only reason. Many students claimed they had been motivated by my sensitivity to and interaction with them during the process of the intervention. They thought an understanding and creative teacher was important for them to face their English learning in positive ways, even though I felt that my performance was not totally satisfactory (see the description of my struggles and limitations in Chapter 6). Furthermore, most participants appreciated the support from their fellow learners as helpful and enjoyable during the process of the intervention, which was different from their previous EFL learning experiences. Apparently, these learners seemed to gradually overcome their fear and insecurity presented in the question "Can I learn?" after the MI-based EFL course.

### 10.1.2 EFL Learners' Strategy Use

According to the findings drawn from the learning diaries and interviews, it is easy to see the differences between the EFL learners' employment of learning strategies (including communication strategies) during the MI-based intervention and in their previous EFL study. Their responses on the MI-based course evaluation questionnaire, and my preliminary evaluation also supported the results. In addition to the employment of learning strategies, many participants changed their attitudes and beliefs about learning strategies. Instead of being reluctant learners, they showed eagerness (willingness) during the intervention to try various strategies to accomplish different tasks or projects. Their self-awareness on the significance of the variety, frequency and appropriateness of strategy use during the intervention also influenced their strategy behaviors and actions. In general, these changes in participants' strategy use could be traced to individual (e.g. affective and cognitive needs) and contextual (e.g. learning opportunities and teaching strategies) factors. These changes have shown that Chinese EFL learners (in Taiwan) can be active strategy users and creators rather than frequent inquirers of "How should I learn?" if the learning contexts and surrounding people provide them with suitable support and assistance.

## 10.2 Revisiting Reflection

After reviewing and revisiting all data sources collected in the study, my renewed reflection has led to some awareness of my EFL teaching practices as a result of the MI-based intervention. Moreover, the process of being a teacher-researcher has helped me make progress in my professional role as a teacher. In this section, I discuss my awareness and growth.

### 10.2.1 My Awareness Regarding My Teaching Practices

First of all, I believe that I have started to value my personal characteristics as an effective EFL teacher. I understand how my sensitivity to learners' needs and interests during the process of preparing and implementing my teaching practices with MI, motivated many learners to learn and use English. For example, I was willing to listen to learners' suggestions (e.g. arranging more opportunities for field-trip learning and including their recommended English songs) and I was flexible with the course design (e.g. integrating more cooperative learning activities/tasks into the course). I kept

reflecting on how to build a harmonious learning atmosphere (e.g. the use of students' native tongue) and how to encourage my learners' participation in various activities/tasks (e.g. introducing various MI-informed activities/tasks). I re-identified the relationship between teacher and students through constant interaction (e.g. e-mails and after-class conferences) and collaboration with students (e.g. developing intercultural awareness through the puppet show). I have realized that the ways (my personal styles based on my beliefs and principles) I adopted to face threatening experiences, overcome teaching problems, implement instructional activities and get along with students seemed to have a great impact on the learners in my study. Many students appreciated the kind of supportive learning atmosphere that I provided, the responsive decisions I made, and the understanding attitude I showed. They felt encouraged and motivated to learn and use English because of the concern I demonstrated and the ways I treated them. My awareness of personal characteristics, as mentioned by students, "*patient*", "*understanding*" and "*helpful*", have encouraged me greatly because students' responses have increased my self-confidence to be an effective EFL teacher, even though I am a non-native English speaker.

Secondly, I believe I have experienced the significance of reflective teaching. During the process of preparing and implementing the MI-based intervention, self-reflection through a teaching diary helped me greatly to turn my limitations (e.g. a lack of competence in cross-cultural understanding) and problems (e.g. a messy moment during group formation) to solutions. I used the diary as a self-monitoring tool to document my thoughts, decisions, feelings, strategies and reflections. I am amazed when re-reading my diary entries to understand how I had opened my mind to have more dialogues with myself, with students and people around me, and how I was enlightened by continuous interaction and collaboration with students, colleagues and relevant persons. I have found that many personal reflections and changes in my teaching practice, reported in my teaching diary, had played a fairly important role in enabling me to teach the course efficiently and confidently. For example, my decisions noted in frequent diary entries, such as introducing more cooperative learning activities and choosing the learning videos *Rebecca's Story* as supplementary materials, had won appreciation and support from many students. Therefore, I believe the process of reflective teaching was what enabled my teaching with the MI-based intervention to become so much fun, so challenging, so worthwhile and so hard, and

why I felt the teaching process was full of struggles, joyfulness, difficulties and satisfaction. However, I am glad to see my development through the process of being a reflective teacher, because I have learned how to improve myself to be an effective EFL teacher, through my thinking and actions (Allwright and Bailey, 2002; Gebhard and Oprandy, 1999; Richards and Lockhart, 1999).

Thirdly, I have developed some awareness of EFL learners. I find my trust in learners' learning potential (e.g. through introducing the MI-based intervention) and my enthusiasm to cooperate with them to improve the course (e.g. listening to their ideas and suggestions) had made both the teaching and learning process enjoyable. Many students in the study reported that they liked the MI-based course, as I did, because they felt they were recognized and respected by their classmates and by me. Therefore, they developed positive attitudes towards themselves, and towards their English learning as well. Their positive perspectives on the MI-based course confirmed the existence of individual differences, and it has reminded that I was correct to integrate 'individual differences' into my course design (teaching and assessment) through MI strategies (i.e. the MI-workshop, MI-informed instructional and assessment activities/tasks). The learners' progress in their affective experiences (e.g. motivation and attitudes), strategy use, and their impressive performances in the authentic assessment tasks have supported my belief about there being 'only learning differences, no learning disabilities'. Moreover, I have found that these differences among learners became valuable sources to benefit the development of the course (e.g. providing me with valuable information about other learners). Eventually, my teaching practices with MI encouraged me to appreciate (both teaching and assessing) my learners through different ways, and my students also enjoyed these experiences and claimed they had benefited from them. I believe this is the value of individual differences, which enriched the effects and effectiveness of my teaching and students' learning in this study. I have experienced the importance of individual differences after exploring and reflecting on my teaching and students' learning, and I do appreciate all my learners' efforts and contribution to the course because of their differences. The results have confirmed Gardner's views on the value of respecting individual differences, and the importance of creating opportunities for differential learning (Armstrong, 2000; Gardner, 1993a).

### 10.2.2 My Growth as a Teacher-Researcher

Being a teacher researcher has made me understand what quality teaching means. Through a process of observation, exploration, reflection, action, discovery and re-reflection, the quality of my teaching has improved. Instead of depending on hearsay suggestions and canned prescriptions, I have experienced how to solve my classroom problems through my own solutions (e.g. the MI-based intervention) and systematic investigation (e.g. extensive reading, questionnaires, interviews and teaching diary) (Gebhard and Oprandy, 1999; Richards and Lockhart, 1999).

After reviewing, analyzing and interpreting the data, I find I can understand my learners and myself more. It has been a growth that I could not have gained from reading many books, or only through personal observation and experiences. For example, my learners' detailed reports about their previous EFL learning have made me understand why they kept asking language teachers questions like "Can I learn?" and "How should I learn?" Most of the time, we, language teachers, misunderstand our students. It is not true that they are lazy, have no talents, or prefer grammar teaching. 'Opportunities' and 'understanding' are what learners need to help them make progress, because they really expect to be effective and autonomous English learners and users. Moreover, I came to understand that I was a very determined teacher. I persisted in finding solutions to the problems I met in order to fulfill my teaching beliefs (e.g. explaining my application of MI theory to my colleagues). During the process of examining the principles guiding my solutions, my 'high-esteem' emerged as the key reason to fight for my goals and values. After re-reflection, I recognize that high-esteem can motivate me to achieve my goals with effort, but unrealistic high-esteem may blind my visions and then reject others' views. Therefore, I am reminded that I should be cautious about my high-esteem when approaching my teaching role to make it operate in positive ways.

In addition, I have gained many insights from learners during the process of researching my teaching. Learners' perspectives or suggestions through e-mails (reported in my teaching diary), interviews, questionnaires and diary entries have helped me generate many insights for improving my teaching during the intervention or in the future. The first example is that my carelessness about calling on a student to undertake a physical performance, without understanding his difficulty had made the

student feel bad, but I was hardly aware of this. However, after his good friend told me the situation through e-mail, I was more aware of the significance of choosing the right (suitable) persons for different instructional activities/tasks. The second one is that I need to re-evaluate the use of an audiotaped journal as a learning activity for spoken practice because several students complained about it in the questionnaires and their diary entries. Personal preferences (e.g. preferring face-to-face practice) and contextual constraints (e.g. it is not convenient to borrow a tape recorder from others all the time) were their main reasons. Nevertheless, some of them gave me good ideas for future change. One student wrote, "*I prefer face-to-face practice. If what the teacher is concerned with is insufficient time, then paired face-to-face talk with the English teacher is an alternative to save half of the time*". Moreover, when diary keeping became an important activity for EFL learners' self-reflection during the intervention, a valuable suggestion like "*I believe more self-awareness in diary keeping could be raised through group sharing and discussion*" should be tried in a future class. Also, their suggestions, reported in the course evaluation questionnaire concerning the future development of EFL courses in Ming-Hsin University of Science and Technology, are very constructive. "*Setting up permanent websites for English learning, chatting and sharing*" is one of the examples (see Chapter 9 for details).

Furthermore, I have started to consider myself as a professional, not an amateur or textbook practitioner. I know I can bring about changes in my teaching and then examine relevant effects through systematic investigation to improve my students' learning and my own teaching. I have experienced that there are no prescriptions, no best methods or absolute answers, but being a teacher-researcher may help. For example, MI is a good theory with many implications, but if teachers are not able to be sensitive to learners and the surrounding social-cultural factors, and be reflective inquirers during the process of teaching, the application of MI theory may be in vain. Everything will become only lip service that cannot benefit foreign/second language teaching and learning. The findings have confirmed that the quality of language teaching cannot be assured by a magic method or approach, but reflective practices may help (Gebhard and Oprandy, 1999; Kumaravadivelu, 1994; Nunan, 1991a; Prabuhu, 1990; Richards, 2002; Richards and Lockhart, 1999).

Researching my teaching with multiple intelligences strategies through qualitative classroom research has been a rewarding experience for me and it has helped me to make significant progress in my teaching ability. I am sure that I will continue to be an exploratory and reflective teacher in the future because teaching is really a complex and ever-changing profession that needs life-long learning for on-going growth and development (Allwright and Bailety, 2002; Burns and Hood, 1995; Field 1997; Freeman and Richards, 1996; Nunan, 1989 b and 2001).

## 10.3 Pedagogical Implications for Language Teachers

Several points can be raised from the changes of EFL learners' affective experiences and strategy use in the study. These implications may be particularly useful and meaningful for those EFL or FL/SL teachers who believe the maintenance of positive affective experiences and the development of learning strategies can benefit students' language learning during their learning process.

### 10.3.1 The role of an EFL teacher

The research findings show that the 'authority' presented by students' former English teachers in their behaviors, such as blame, punishment and strict requirements, could not help EFL learners, whereas what they performed was perceived to reduce learners' motivation. As a result, students felt reluctant to try new things, such as using more learning strategies to improve their abilities to learn or use English. However, in contrast to their prior EFL learning experiences, I, as their language teacher during the MI-based intervention became one of the significant persons on whom many students believed they could rely for assistance to achieve their learning goals, and for personal support to satisfy their affective needs. These students claimed that my involvement, such as my active interaction with students and taking time for their needs, had motivated them to learn English and engage in strategy use during the intervention period. My support and encouragement thus influenced many students' attitudes, beliefs, behaviors and actions, including their use of learning strategies.

From the findings, it is clear to see that being a 'supportive' EFL teacher and building up a 'positive' interpersonal relationship with students are important for language teachers, since they exert a significant and determining socio-cultural influence on

student engagement. It seems that any 'well-designed teaching plans' or 'innovative teaching strategies', such as helping students develop effective learning strategies through Multiple Intelligences, cannot be successful without a cautious consideration of, and reflection on, the teacher's role(s). Consequently, apart from providing students with knowledge support, I think, we, language teachers, should pay special attention to our own attitude and behaviors, as well as to our interaction and relationship with students.

I believe that the issue about the role(s) of being a language teacher, as the study demonstrates, is of special importance in the Chinese setting, where the hierarchical social relationship places teachers in a high position of authority. The well-known Chinese saying, 'a teacher one day and a father the whole life', illustrates that a language teacher, like the father in the family of ancient Chinese society, is all-powerful in anything and to anybody in a classroom context. Therefore, most of the time, Chinese students consider their teachers as a source of threat, which in turn deters most of their enthusiasm to be active learners. Given that language teachers are regarded as a key variable for students' positive affect, language teachers, in similar socio-cultural contexts, should expand our roles to be facilitators, counselors, negotiators and resource providers, instead of being only imparters of knowledge. By doing so, EFL learners can be expected to increase their learning motivation as well as their willingness to expand and vary their strategy use for effective English learning.

### 10.3.2 Support and cooperation among EFL learners

The study reveals that the support of, or cooperation with, classmates (peers) was important to encourage the development of positive affective experiences and of strategy use. During the MI-based intervention, many participants stated how they had learned from their classmates' strengths, how learning partners had helped them solve problems and how they and group members encouraged one another to face other challenges, which were different from the inappropriate competition with classmates reported in their previous school EFL learning. The support and encouragement from classmates during the MI-based intervention had reduced their learning anxiety, increased their self-confidence, and made many of them willing to try various strategies for different learning and communication needs.

The possible interpretation of the change in attitudes is some influential notions emphasized through the MI-based course: 'everyone is smart in different ways' and 'you (students) can learn better by cooperating with your classmates'. In other words, as these learners were encouraged to develop positive attitudes to self and others, rather than engaging in a win-lose struggle, the cooperative and supportive relationship with classmates was built up easily within a harmonious learning climate.

The study also finds that the introduction of many in-class or out-of-class group activities/tasks, such as the group discussion and the puppet show, into the MI-based course, was important for students to experience cooperative learning and peer support. During the process of accomplishing learning tasks or creating projects, students expressed that they had benefited from constant interactions and negotiation with classmates, developing their interpersonal intelligence. These experiences not only made the EFL learners develop social skills, clarify difficult points and obtain real support from one another, but also helped them to learn how to trust, respect and appreciate classmates. Because of these positive learning experiences, peer support and cooperative learning became a trend among participants and then had a great impact on learners' affective experiences as well as on their strategy development during the MI-based intervention.

As a result of these findings, I think EFL teachers should help learners understand the value of peer support and cooperative learning, and create conditions to encourage students to work in groups. In this study, using a role-play, a puppet show and field trips during the MI-based course, were some of the examples to successfully promote peer relations by enhancing in-class and out-of-class interaction.

In short, I believe more practice and reflection on how to facilitate group development[1] and how to help students build up positive cooperative relations are important for EFL teachers, because the support and cooperation among fellow learners does play an influential role in determining whether EFL learners are motivated to learn and use English effectively or not.

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[1] Several practical suggestions proposed by Dörnyei and Malderez (1997: 76-79 and 1999:167-168) to facilitate group development can be helpful sources for language teachers to try and reflect on.

### 10.3.3 Learning strategies and teaching strategies

Based upon the participants' reports about their former teachers' attitude to their poor English performance, the findings indicate that few school EFL teachers had shown concern for the issue of strategy use. These teachers thought the main reasons for the EFL learners' lack of success were probably 'laziness' or 'they have no talent'. In fact, such comments have also confirmed my feelings after years of observation and discussion with local EFL teachers in Taiwan. Teachers believe students are accustomed to or prefer those traditional ways of teaching and learning, but in reality students find these cannot help them acquire English effectively. By the same token, the lack of strategies to employ inside and outside of class had caused many participants in this study to have problems in learning and using English during their previous school EFL learning.

In contrast, different views of teaching and learning emerged during the MI-based intervention. Firstly, many participants, after attending the MI workshop, said they were encouraged and enlightened by the notion of multiple intelligences, and felt informed by relevant strategies for application. Secondly, several students claimed that those MI-based learning activities and assessment tasks gave them more meaningful opportunities to employ different strategies to learn and use English both inside and outside of class. When closely examining how these participants prepared their learning tasks/ projects, and how they performed in various learning activities during the MI-based intervention, their progress in strategy use became visible. The increasing employment of cognitive, social, affective, metacognitive, memory, and compensation strategies, with a rich combination of multiple intelligences, was distinctive. Apparently, the incorporation of rich teaching strategies into the language classroom, implied from MI theory, had inspired many learners to actively apply and combine the use of various strategies (traditional and new) for solving learning problems, improving English proficiency, and accomplishing learning tasks effectively.

According to the research results, I find students only employed limited types of learning strategies when teachers instructed them in one way using traditional teaching strategies. However, once the teacher brought a broad range of teaching strategies into the course, such as during the MI-based intervention, many students

were motivated to try various strategies to learn and use English. This demonstrates that it is necessary for language teachers to introduce a wide variety of teaching strategies into a classroom to help students equip themselves with more strategies for effective learning. Because each student "is a whole person who uses intellectual, social, emotional, and physical resources" to learn (Oxford, 2002:128), language teachers cannot favor one or two types of strategy and a set of limited intelligences for teaching. In addition, integrating a broad range of teaching strategies into the ongoing process of each lesson seems to be a better choice than separate strategy training, because, as the study shows, this can make it easier for many learners to see the relevance of strategies and understand how to apply these to their learning.

To sum up, rather than rigidly adhering to traditional teaching strategies because of the excuse or misunderstanding of cultural heritage, I think EFL teachers, especially in Asian countries in Confucian influenced societies, should go beyond the traditional limited concept of learning, and actively expand teaching strategies to cover the needs of different individuals and enrich the development of students' learning strategies. Instead of considering all students as the same and ignoring the unique strengths of each individual, language teachers need to understand the significance of using a variety of teaching strategies for providing students with more learning opportunities to develop their full potential. Eventually, students will experience that using varied strategies can "make learning quicker, easier, more effective, and more fun" (Oxford 2002: 130) because they have gradually developed a better understanding of, and control over, their own learning.

### 10.3.4 Authentic assessment and autonomous learners

Based on many participants' verbal and written reports, authentic assessment, particularly referring to performance assessment in the study, was claimed to be one of the influential factors in learners' use and choice of learning strategy during the MI-based intervention. Students' participation in different assessment tasks, such as the role-play, the puppet show and final projects, had provided them with various personally meaningful opportunities to take responsibility for their learning. For example, participants needed to make decisions about their project topics, plan their projects, evaluate their oral progress, monitor their pronunciation problems, and assess their performance. During the process of preparing, implementing and

accomplishing their tasks, numerous strategies were triggered and developed to satisfy their needs and to achieve their goals. Obviously, these assessment tasks provided learners with an authentic context not only for language learning and use, but also for promoting learner autonomy. However, these experiences were different from their previous EFL learning where the emphasis was on tests or evaluation. Many participants stated they had suffered from conventional paper-and-pencil tests and test scoring methods associated with the standardized testing tradition throughout previous school years. Several students mentioned that they had lost confidence, or felt judged and compartmentalized, under this uniform system. As a result, many of them employed limited strategies for test preparation without exercising choice and creativity.

According to the research results, authentic assessment, different from traditional evaluation, could serve as a means of discovery, of arousing awareness, and of growth for many students during the MI-based intervention. Because of these merits, I think we, language teachers, need to integrate authentic assessment into our evaluation repertoire, in terms of offering meaningful and contextualised tasks that can thoroughly exercise learners' potential and responsibility. I believe that when students are preparing for authentic assessment tasks, their motivation and potential can be developed. Likewise, their employment of learning strategies can be expanded. While they are learning to take responsibility of their learning, they also learn how to be autonomous learners.

### 10.3.5 Multiple Intelligences and EFL teaching

The MI-based intervention did help learners have positive affective experiences of English learning because it could tap into EFL learners' creative and imaginative potential through various activities/tasks, such as drama and music, to satisfy their interests and needs. Moreover, it promoted students' self-expectation and made them feel valued because of its emphasis on appreciating individual differences. Similar to the purposes of many strategies-based instruction (SBI) or learner strategy training programs (Chamot, 1998; Cohen, 1998; Oxford, 2002; Oxford et al., 1990; Wenden, 1992), the MI-based intervention also helped many EFL learners in the study develop personal strategies for effective learning.

However, I have found that the dynamic interplay of the many variables that influenced affective experiences, strategy use and effective learning in EFL classroom instruction were not only limited to the impact of the MI-based intervention. Obviously, in the current study, the relations among all participants and my role as their language teacher were also decisive factors for their positive affective experiences and strategy development during the learning process. The findings show that my commitment and enthusiasm, as their language teacher, contributed significantly to a positive learning climate. The warm, supportive and trusting relationships both among students, and between the learners and me, were very influential in motivating EFL learning in the study. Consequently, I think it is necessary for language teachers to carefully consider and reflect on possible variables of teaching and learning (it could be related to people, contexts or events) before or during instruction, particularly when trying and evaluating a potential approach. Likewise, whether MI can lead EFL learners to positive affective experiences and effective strategy development, or not, is dependent on practicing teachers and their understanding of learners and local situations. I think language teachers should be reminded that MI is not a magic method that can solve all problems of EFL learning! However, it could be a valuable beginning orientation for foreign/second language teachers who care about their learners' subjective needs.

## 10.4 Limitations of the Study

In this study, the results show that EFL learners' affective experiences and strategy development with the MI-based intervention seemed to be positive. However, based on the results, it is still not clear whether these participants' English proficiency (overall English abilities) had really improved or not within the two months. In addition, the intervention time seemed to be too short for a few learners to become familiar with the theory for real application. Further longitudinal research is necessary to observe and examine if a longer exposure to an MI-based intervention can help EFL learners in Taiwan's technological and vocational education (TVE) system to experience and make substantial progress in developing their English communicative competence.

## 10.5 Recommendations

Based upon the research results, I propose several recommendations for different educational parties (e.g. educational officers or administrators, EFL teachers, and language researchers) in order to improve the future EFL education in Taiwan.

### 10.5.1 Professional Learning Opportunities for In-Service EFL Teachers

I think the Ministry of Education and School Teaching Units should provide in-service EFL teachers with more professional learning opportunities. I believe that Taiwan's Ministry of Education does not want a majority of 'experienced' school EFL teachers who only know how to teach and evaluate students through conventional ways, and who are unable to recognize the importance of being creative and reflective teachers. Since teaching involves life-long learning, in-service language teachers need opportunities to build their professional knowledge and skills in order to improve their teaching and help their students to learn more effectively. These learning opportunities may include attending workshops and conferences or participating in particular courses in teaching training programs. By doing so, in-service teachers can experience the reality of up-to-date teaching ideas, learning theories and assessment approaches through real practice and classroom research. EFL teachers can thus learn how to vary their teaching strategies to satisfy the needs of different learners, use multiple assessment tools to provide students with alternative ways to present their learning, as well as learn how to be reflective teachers to solve their own teaching problems. I believe this kind of learning can arouse in-service EFL teachers' enthusiasm for, and awareness of, their teaching practices and promote constant progress to benefit their EFL learners. In-service teachers will need to be provided with incentives and opportunities to be involved in formal and informal professional learning experiences.

### 10.5.2 Programs for Developing EFL Learners' Learning Potential

Within limited school learning hours, helping EFL learners know how to learn English (being self-directed learners) is as important as teaching them the knowledge and skills of English. It is one aspect of self-awareness and intrapersonal intelligence. Many participants in the study mentioned that they had benefited from the three-hour MI Workshop, and some students also suggested this kind of workshop should be

offered to all university students, because the latter definitely need to know how to learn English through their strengths. Normally, EFL teachers (in Taiwan) think their students know how to learn, especially adult learners, but in reality many of them do not. Therefore, I believe it is important to set up suitable programs for learners to develop their learning potential, such as an MI workshop or a strategy-based instruction, and to help them to learn English confidently and efficiently. My suggestion is that this kind of program should be included or integrated into the future EFL curriculum to benefit more EFL learners.

### 10.5.3 Public English Tests

The format and content of public English tests, particularly referring to entrance exams in Taiwan, should be modified if developing communicative competence is the goal of English language teaching. I really question whether multiple-choice tests, excluding oral and aural sections, can effectively assess EFL students' communicative competence or not. As the study shows, the test-driven teaching has been quite common in Taiwan's EFL education and has resulted in negative effects on many learners. In order to encourage school teachers to use more appropriate instruction and to guide their learners to develop their English proficiency effectively, I suggest the format and content of public English tests used to evaluate students' English proficiency should be modified. I recommend that Taiwan's EFL educators and the administrators in Taiwan's Ministry of Education think about this issue if they are really concerned with the improvement of students' English communicative competence. A special committee should be set up to work for the development of suitable assessment tools that may reflect practical needs and intelligence-fair principles to replace the current standardized paper-and-pencil tests such as the ubiquitous multiple choice tests.

### 10.5.4 Future EFL Education in Taiwan's TVE System

In Taiwan, the low English proficiency of students in the technological and vocational education (TVE) system has been a noticeable fact in the society. More attention to students in this group is necessary because the college graduates from the system have been, and will be, important human resources in the development, reinforcement and advancement of Taiwan's industry, economy and technology (Lee, 2000; Liou, 2000). This study suggests that students in the system are not really lazy or incapable EFL

learners. What they need are understanding and opportunities. Therefore, it is the responsibility of EFL teachers to reflect on how to become caring and capable teachers, and how to design suitable EFL courses to arouse students' interests and satisfy their practical needs. Moreover, how to build a well-rounded learning environment (e.g. building more self-study centers) and give learners more opportunities to use English (e.g. extracurricular activities) are important issues for teachers in the system to be concerned with and plan for.

### 10.5.5 Future Research for the Application of MI theory

The MI-based intervention used in the current study was short and only limited to one university classroom, but the findings are still encouraging. My suggestion for future research is to expand the application of MI theory to different school levels (e.g. primary and junior high schools) through a one or two-year project. I also recommend teamwork to conduct this kind of project because the current research has made me aware of the merits of individual differences and cooperation. I think multiple teacher-researchers in different school contexts, supporting each other, can provide useful information from different angles to help us understand the applicability of MI theory to EFL education in Taiwan's context. In addition to the perspectives of teachers and students, other voices such as parents and school administrators, are worthy of being included for deeper understanding. Moreover, students' feelings, behaviors and performances (e.g. English proficiency) should be observed, explored, recorded and interpreted through multiple research means to see how MI theory can support EFL learners of Taiwan's different school levels and why. I believe relevant findings will provide teacher educators, EFL teachers and administrators with valuable information that will enable the improvement of Taiwan's EFL education.

## 10.6 Epilogue

The process of solving my students' learning problems "Can I learn?" and "How should I learn?" has become a journey of my own learning to be an effective EFL teacher. My original goal was to help my students learn and use English confidently and effectively through Multiple Intelligences strategies, but eventually I have benefited through teaching and working with them. I feel grateful to these students in

the study because they have helped me realize the value of individual differences, cooperation and being a reflective teacher. After conducting this research, I am aware that (1) the more I know my students, the easier I can approach them, and (2) the better I understand myself, the more effective my teaching will be. In addition, throughout my journey of being a teacher-researcher, I have experienced that "research is not primarily a process of proving something, but a process of discovery and learning" (Freeman, 2000:88). If I want to make progress in my professional role as a teacher, it is necessary to have on-going exploratory and reflective teaching in and about my own classroom.

## Bibliography


Adelson-Goldstein, J., Shapiro, N. and Weiss R. (2000). *The Oxford picture dictionary.* Oxford: Oxford University Press.

Aiken, L.R. (2000). *Psychological testing and assessment*. MA: Allyn & Bacon.

Airasian, P. and Gullickson, A. (1997). *Teacher self-evaluation tool kit*. Corwin Press.

Allwright, D., and Bailey, K.M. (2002). *Focus on the language classroom*. Cambridge: Cambridge University Press.

Alpetkin, C. and Alpetkin, M. (1990). The question of culture: EFL teaching in non-English speaking countries. In: R. Rossner and R. Bolitho (Eds.), *Currents of change in English language teaching* (pp. 21-26). Oxford: Oxford University Press.

Altman, H. (1980). Foreign language teaching: focus on the learner. In: H. Altman and C.V. James (Eds.), *Foreign language teaching: Meeting individual needs*. Oxford: Pergamon Press Ltd.

Anderson, J. (1993). Is a communicative approach practical for teaching English in China? Pros and cons. *System*, 21, 471-480.

Armstrong, T. (1987). *In their own ways: Discovering and encouraging your child's personal learning style*. New York: St. Martin's Press.

Armstrong, T. (1988). Learning differences-not disabilities. *Principal*, 68 (1), 34-36.

Armstrong, T. (1999). *Seven kinds of smart: Identifying and developing your multiple intelligences*. New York: Plume/Penguin.

Armstrong, T. (2000). *Multiple Intelligences in the classroom* (2nd ed.). Arlington, VA: ASCD.

Armstrong, T. (2003). *The Multiple Intelligences of reading and writing: Making the words come alive.* Alexandria, VA: ASCD.

Arnold, J. (Ed.). (1999). *Affect in language learning*. Cambridge: Cambridge University Press.

Asher, J. (1977). *Learning another language through actions: The complete teacher's guide book.* Los Gatos, CA: Sky Oaks Productions.

Atkinson, D. (2002). Toward a sociocognitive approach to second language acquisition. *The Modern Language Journal,* 86(4), 525-545.

Ausbel, D.A. (1968). *Educational psychology: A cognitive view.* New York: Holt, Rinehart & Winston.

Bachman, L. F. (1990). *Fundamental considerations in language testing.* New York: Oxford University Press.

Bailey, K.M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In: H.W. Seliger and M.H. Long (Eds.), *Classroom-oriented research in SLA* (pp. 67-102). Rowley, MA: Newbury House.

Bailey, K.M. (1990). The use of diary studies in teacher education programs. In: J.C. Richards and D. Nunan (Eds.), *Second language teacher education* (pp.215-226). Cambridge: Cambridge University Press.

Bailey, K.M. (1991). Diary studies of classroom language learning: The doubting game and the believing game. In: E. Sadtons (Ed.), *Language acquisition and the second/foreign Language Classroom* (pp. 60-102). Singapore: SEAMEO, Regional Language Center.

Bailey, K.M. (2000). The best laid plans: teachers' in-class decisions to depart from

their lesson plans. In: K.M. Bailey and D. Nunan (Eds.), *Voices from the language classroom*. (pp.15-40). Cambridge: Cambridge University Press.

Bailey, K.M. and Nunan, D. (Eds.). (2000). *Voices from the language classroom*. Cambridge: Cambridge University Press.

Bailey, M.B. (1992). The process of innovation in language teacher education: What, why and how teachers change. In: J. Flowerdrew, M. Brock, and S. Hsia (Eds.), *Perspectives on second language teacher education*. Hong Kong: City Polytechnic of Hong Kong.

Barkhuizen, G.P. (1998). Discovering learners' perceptions of ESL classroom teaching/learning activities in South African context. *TESOL Quarterly*, 32 (1), 85-108.

Bartlett, L. (1990). Teacher development through reflective teaching. In: J.C. Richards and D. Nunan (Eds.), *Second language teacher education* (pp.202-214). Cambridge: Cambridge University Press.

Baudains, R. and Baudains, M. (1990). *Alternatives*. England: Longman.

Bax, S. (2003). The end of CLT: A content approach to language teaching. *ELT Journal*, 57 (3), 278-287.

Beale, J. (2002). Is communicative language teaching a thing of the past? *Babel*, 37(1), 12-16.

Bellanca, J., Chapman, C., and Swartz, B. (1995). *Multiple assessments for Multiple Intelligences*. Palatine, IL: IRI/Skylight.

Bennett, A.E. (2000). *Basic conversation patterns*. Taipei: The Crane Publisher.

Berman, M. (1998). *A Multiple Intelligences road to an ELT classroom*. UK: Crown House Publishing Ltd.

Bialystok, E. (1981). The role of conscious strategies in second language proficiency. *Modern Language Journal*, 65, 24-35.

Bidell,T.R. and Fischer, K.W. (1992). Beyond the stage debate: Action, structure, and variability in Piagetian theory and research. In: R.J. Sternberg and C.A. Berg (Eds.), *Intellectual development*. New York: Cambridge University Press.

Bigge, M.L. and Shermis, S.S. (1992). *Learning theories for teachers*. (5th ed.). New York: Harper Collins.

Biggs, J.B. (1996). Western misperception of the Confucian heritage learning culture. In D.A. Watkins and J.B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 147-167). Melbourne and Hong Kong: CERC and ACER.

Binet, A., Simon, T. (1916). *The development of intelligence in children* (trans E.S.Kite). Baltimore: Williams & Wilkins.

Blanck, G. (1990). Vygotsky: The man and his cause. In: L.C. Moll (Ed.), *Vygotsky and education*. New York: Cambridge University Press.

Block, D. (1994). A day in the life of a class: teacher/learner perception of task purpose in conflict. *System*, 22, 473-486.

Block, D. (1996). A window on the classroom: classroom events viewed from different angles. In: K. M. Bailey and D. Nunan (Eds.), *Voices from the language classroom* (pp.168-194). Cambridge: Cambridge University Press.

Blythe, T. and Gardner, H. (1990). A school for all intelligences. *Educational Leadership*, 47(7), 33-37.

Bodrova, E. and Leong, D. (1996). *Tools of the mind*. Columbus, OH: Merrill.

Bolanos, P.J. (1994). From theory to practice: Indianapolis' Key school applies Howard Gardner's Multiple Intelligences theory to the Classroom. *The School Administrator*, 51(1), 30-31.

Bond, M. (1992). *Beyond the Chinese face: Insights from psychology.* Hong Kong: Oxford University Press.

Brinton, D.M., and Master, P. (Eds.). (1997). *New ways in content-based instruction.* Alexandria, VA: TESOL, Inc.

Brinton, D.M., Snow, M.A. and Wesche, M.B. (1989). *Content-based second language instruction.* New York: Newbury House.

Brock, M.N., Yu, B. and Wong, M. (1992). "Journaling" together: collaborative diary-keeping and teacher development. In: J. Flower-dew, M. Brock, and S. Hsia (Eds.), *Perspectives on second language teacher education.* Hong Kong: City Polytechnic of Hong Kong.

Broday, E., and Kenning, M. (Eds.). (1996). *Promoting learner autonomy in university language teaching.* London: AFLS and CILT.

Brody, N. (2000). History of theories and measurements of intelligence. In: R.J. Sternberg (Ed.), *Handbook of intelligence* (pp.16-33). Cambridge: Cambridge University Press.

Brookes, A and Grundy, P. (Eds.). (1988). *Individualization and autonomy in language learning (ELT Documents 131).* The British Council: Modern English Publications.

Brown, C., Garver, P. and Sagers, S. (1996). Audiotaped dialogue journals: Lexical, grammatical and affective benefits. *ERIC Document Reproduction Service No. ED 394307.*

Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy.* Englewood Cliffs, N.J.: Prentice Hall Regents.

Brown, H. D. (2000). *Principles of language learning and teaching.* New York: Addison Wesley Longman.

Brown, H.D. (2001). *Strategies for success: A practical guide.* New York: Longman/Pearson Education.

Brown, H.D. (2002). English language teaching in the "post-method" era: Toward better diagnosis, treatment, and assessment. In: J.C. Richards and W.A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp.9-18). Cambridge: Cambridge University Press.

Brown, I. (1999). Internet treasure hunts – A treasure of an activity for students learning English. [Electronic version] *TESL Journal, 5(3).*

Brown, J. D. and Rodgers, T.S. (2002). *Doing second language research.* Oxford: Oxford University Press.

Brundage, D.H. and MacKeracher, D. (1980). *Adult learning principles and their application in program planning.* Toronto: Ontario Institute for Studies in Education.

Burke, K. (1999). *How to assess authentic learning* (Revised ed.). Melbourne, Australia: Hawker Brownlow Education.

Burnaby, B. and Sun, Y. (1989). Chinese teachers' views of Western language teaching: Context informs paradigm. *TESOL Quarterly,* 23, 219-238.

Burns, A. (1999). *Collaborative action research for English language teachers.* Cambridge: Cambridge University Press.

Burns, A. and Hood, S. (1995). *Teacher's voices: Exploring course design in a changing curriculum.* Sydney: Macquarie University.

Campbell, B. (1992). Multiple Intelligences in action. *Childhood Education,* 68(4), 197-200.

Campbell, B. (1994). *The Multiple Intelligences Handbook: Lesson plans and more.* Standwood, WA: Campbell and Associates.

Campbell, L. (1997). Variations on a theme: How teachers interpret MI theory. *Educational Leadership*, 55(11), 14-19.

Campbell, L. and Campbell, B. (1999). *Multiple Intelligences and student achievements: Success stories from six schools.* Alexandria, VA: ASCD.

Campbell, L., Campbell, B. and Dickinson, D. (1999). *Teaching and learning through Multiple Intelligences.* MA: Allyn & Bacon.

Canale, M. (1983). Communicative competence to communicative language pedagogy. In: J. Richards and R. Schmidt (Eds.), *Language and Communication* (pp. 2-27). London: Longman.

Canale, M. and Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics,* 1(1), 1-47.

Carroll, J.B. (1965). The contributions of psychological theory and educational research to the teaching of foreign languages. *Modern Language Journal,* 49, 273-281.

Carroll, J.B. (1981). Twenty-five years of research on second language aptitude. In: K.C. Diller (Ed.), *Individual differences and universals in language learning aptitude.* Rowley, MA: Newbury House.

Celce-Murcia, M. (1991a). Language teaching approaches: An overview. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp.3-10). Boston, MA: Heinle & Heinle.

Celce-Murcia, M. (1991b). Grammar pedagogy in second and foreign language teaching. *TESOL Quarterly,* 25, 459-480.

Chamot, A. U. (1998). Teaching learning strategies to language students: A report prepared for the Center for International Education, US Department of Education. *ERIC Clearinghouse on Language and Linguistics.* Service No.: ED 433719.

Chan, J. (2001). The changing model of intellectual abilities: Effects on schooling in Hong Kong. In: C. Chiu, F. Salili and Y. Hong (Eds.), *Multiple competencies and Self-regulated learning: Implications for multicultural education (Volume 2 in Research in Multicultural Education and International Perspectives).* Connecticut: Information Age Publishing.

Chang, T.M. (2000). On MI theory in Taiwan's school reform (a recommendation article written in Chinese). In: H. Gardner, *Intelligence reframed* (Chinese version) (pp. 15-27). Taipei: Yuan-Liou Publishing.

Chao, T.C. (1999). Advancing EFL learners' grammatical competence through MI-based Whole Language instruction. In: *Proceedings of the 8th International Symposium on English Teaching* (pp.147-157). Taipei: The Crane Publishing Co.

Chao, T.C. (2000a). Authentic assessment in the EFL school context: An MI-based model. In: *Proceedings of the Seventeenth Conference on English Teaching and Learning in Taiwan* (pp. 486-496). Taipei: The Crane Publishing Co.

Chao, T.C. (2000b). *The Impact of an MI-based whole language workshop on LEP learners.* Paper presented at the 35th RELC International Seminar: Language Curriculum and Instruction in Multicultural Societies, Singapore.

Chao, T.C. (2001a). *Teaching and learning English grammar through Multiple Intelligences* (Chinese version). Taipei: The Caves Educational Training Co

Chao, T.C. (2001b). Does washback exist? Traditional vs. MI-based assessme[illegible]e EFL classroom. In: *Proceedings of the 10th International Symposium on [illegible]sh Teaching* (pp. 236-248). Taipei: The Crane Publishing Co.

Chapman, C. (1993). *If the shoe fits..: How to develop Multiple Intelligences in the classroom.* Palatine, IL: IRI/Skylight Publishing , Inc.

Chapple, L and Curtis, A. (2000). Content-based instruction in Hong Kong: Student

responses to film. *System,* 28, 419-433.
Chastain, K. (1976). *Developing second-language skills: Theory to practice* (2nd ed.). Chicago: Rand McNally.
Chastain, K. (1988). *Developing second-language skills: Theory and practice* (3rd ed.). San Diego: Harcourt Brace Jovanovich.
Chau, L. and Chung, C. (1987). Diploma in education graduates' attitude towards communicative language teaching. *Chinese University Education Journal,* 15(2), 45-51.
Checkley, K. (1997). The first seven...and the eighth: A conversation with Howard Gardner. *Educational Leadership* (September), 8-13.
Chen, J.Q. and Gardner, H. (1994). Alternative assessment from a Multiple Intelligences perspective. In: B. Torff (Ed.), *Multiple Intelligences and assessment: A collection of articles* (pp.23-45). Melbourne, Australia: Hawker Brownlow Education.
Chen, L. M. (2002). Washback of a public exam on English teaching. *ERIC Document Reproduction,* Service No.: ED 472 167.
Chen, Z. and Siegler, R.S. (2000). Intellectual development in childhood. In R.J. Sternberg (Ed.), *Handbook of intelligence* (pp.92-116). Cambridge: Cambridge University Press.
Cheng, T. L. (2000). Developing each student's learning potential (a recommendation article written in Chinese). In: H. Gardner, *Intelligence reframed* (Chinese version) (pp. 11-13). Taipei: Yuan-Liou Publishing.
Cheng, X. (2000). Asian students' reticence revisited. *System,* 28, 435-446.
Chia, H.U., Johnson, R. Chia, H.L. and Olive F. (1999). English for college students in Taiwan: A study of perceptions of English needs in a medical context. *English for Specific Purposes,* 18(2), 107-119.
Chomsky, N. (1957). *Syntactic structures.* The Hague: Mouton.
Chomsky, N. (1965). *Aspects of the theory of syntax.* Cambridge, MA: M.I.T Press.
Chomsky, N. (1968). *Language and mind.* New York: Harcourt Brace and World.
Chomsky, N. (1986). *Knowledge of language: Its nature, origin and use.* New York: Praeger.
Chou, C. Y. (2003). Multiple Intelligences and Taiwan's educational reform (written in Chinese). In: C.Y. Chou (Ed.), *Taiwan's Educational Aspects* (pp. 90-96). Tainan, Taiwan: Shi-yi Publishing.
Christison, M.A. (1996a). Teaching and learning through Multiple Intelligences. *TESOL Journal,* 6 (1), 10-14.
Christison, M.A. (1996b). Multiple intelligences and second language learners. *The Journal of the Imagination in Language Learning,* 3, 8-13.
Christison, M.A. (1998a). Applying multiple intelligences theory in preservice and inservice TEFL education programs. *English Language Teaching Forum,* 36(2) (April-June), 2-13.
Christison, M.A. (1998b). An introduction to multiple intelligences theory and second language learning. In J.Reid (Ed.), *Understanding learning styles in the second language classroom.* Englewood Cliffs, NJ: Prentice Hall/Regents.
Christison, M.A. (1999). Multiple Intelligences: Teaching the whole student. *ESL Magazine,* 2(5) (September-October), 10-13.
Christison, M.A. and Kennedy, D. (1999). Multiple Intelligences: Theory and practice in adult ESL. *ERIC Digest.* Retrieved 26 April, 2003 from http://www.cal.org/ncle/DIGESTS/MI.htm
Chung, L.R. and Young, Y.F. (1996a). Remedial English Course in the TVE system:

Exploring the interaction between students and language teachers (Written in Chinese). In: *Proceedings of the 13th Conference on English Teaching and Learning* (pp. 123-132). Taipei: The Crane Publishing Co.

Chung, L.R. and Young, Y.F. (1996b). A perspective comparison between normal English learners and limited English proficiency learners: A reflection for future English education in five-year junior college (Written in Chinese). In: *Proceedings of the fifth International Symposium on English Teaching* (pp.45-54). Taipei: the Crane Publishing Co.

Cochran-Smith M. and Lytle S.L. (1993). *Inside and outside: Teacher research and knowledge.* New York: Teachers College Press.

Cohen, A. (1998). *Strategies in learning and using a second language.* New York: Addison Wesley Longman.

Collins, J. (1998). Seven kinds of smart: A hot concept aims to identify your child's hidden talents. *Time*, 152(16), 94-97.

Collis, H. (1996). *101 American English Riddles.* Passport Book.

Cook, V.J. (1988). *Chomsky's Universal Grammar: An introduction.* Oxford: Blackwell.

Cooper, R. Lavery, M. and Rinvolucri, M. (1991). *VIDEO.* Oxford: Oxford University Press.

Cornberg, D. (2000). Power languages: The effects of internationalization on Taiwan language use. *ERIC Document Reproduction*, Service No.: ED 462013.

Cortazzi, M. and Jin, L. (1996). Cultures of learning: language classrooms in China. In H. Coleman (Ed.), *Society and the language classroom* (pp.169-206). Cambridge: Cambridge University Press.

Cortazzi, M. and Jin, L. (2001). Language classes in China: 'Good' teachers and interaction. In: D.A. Watkins and J.B. Biggs (Eds.), *Teaching the Chinese learner: psychological and pedagogical perspectives* (pp. 175-134). Melbourne and Hong Kong: CERC and ACER.

Costa, A.L. (Ed.). (2000). *Teaching for intelligence II: A collection of articles.* Melbourne, Australia: Hawker Brownlow Education.

Creswell, J.W. and Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.

Curran, C.A. (1972). *Counseling-learning: A whole person model for education.* New York: Grune and Stratton.

Curran, C.A. (1976). *Counseling-learning in second languages.* Apple River, III: Apple River Press.

Darling-Hammond, L, Ancess, J. and Falk, B. (1995). *Authentic assessment in action: Studies of schools and students at work.* New York: Teachers College Press, Columbia University.

Davidson , J. E. and Downing, C.L. (2000). Contemporary models of intelligence. In In: R.J. Sternberg (Ed.), *Handbook of intelligence.* Cambridge: Cambridge University Press.

Davis, K. A. (1995). Qualitative theory and methods in applied linguistics research. *TESOL Quarterly,* 29(3), 427-453.

Denzin, N.K. and Lincoln, Y.S. (Eds.). (1994). *Handbook of Qualitative Research.* Thousand Oaks, CA: SAGE Publications, Inc.

Dickinson, L. (1994). *Self-instruction in language learning.* Cambridge: Cambridge University Press.

Doff, A. (1989). *Teach English: A training course for teachers.* Cambridge: Cambridge University Press.

Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly,* 29, 55-84.

Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom.* Cambridge: Cambridge University Press.

Dörnyei, Z., and Malderez, A. (1997). Group dynamics and foreign language teaching. *System*, 25(1), p65-81.

Dörnyei, Z. and Malderez, A. (1999). The role of group dynamics in foreign language learning and teaching. In: J. Arnold (Ed.), *Affect in language learning* (pp. 155-169). Cambridge: Cambridge University Press.

Ehrman, M. E. (1996). *Understanding second language learning difficulties.* Thousand Oaks, CA: Sage Publications, Inc.

Ehrman, M.E., Leaver, B.L. and Oxford, R.L. (2003). A brief review of individual differences in second language learning. *System,* 31, 313-330.

Ellis, G. (1994). *The Appropriateness of the communicative approach in Vietnam: An interview study in intercultural communication.* Unpublished master's thesis, La Trobe University, Bundoora, Australia.

Ellis, G. (1996). How culturally appropriate is the communicative approach? *ELT Journal*, 50, 213-218.

Ellis, R. (1990). *Instructed second language acquisition: Learning in the classroom.* Oxford: Oxford University Press.

Ellis, R. (1991). Second language learning and second language learners: Growth and diversity. In: R. Ellis (Ed.), *Second Language Acquisition and Language Pedagogy* (pp.194-212). Adelaide, Australia: Multilingual Matters Ltd.

Ellis, R. (1994). *Understanding second language acquisition.* Oxford: Oxford University Press.

Ellis, R. (1997). *Second language acquisition research and language teaching.* Oxford: Oxford University Press.

Ellis, R. (1999). *The study of second language acquisition.* Oxford: Oxford University Press.

Flowerdew, J. and Miller, L. (1995). On the notion of culture in L2 lectures. *TESOL Quarterly,* 29(2), 345-373.

Emig, V.B. (1997). A multiple intelligences inventory. *Educational Leadership,* 55(1), 47-50.

Eysenck, H. and Kamin, L. (1981). *The intelligence controversy.* New York: Wiley.

Fantini, A. E. (Ed.). (1997). *New ways in teaching culture.* Alexandria,VA: TESOL Publications.

Field, J. (1997). Key concepts in ELT: Classroom research. *ELT Journal,* 51(2), 192-193.

Finocchiaro, M. and Brumfit, C. (1983). *The Functional-notional approach: From theory to practice.* New York: Oxford University Press.

Flowerdew, J. and Millers, L. (1995). On the notion of culture in L2 lectures. *TESOL Quarterly,* 29(2), 345-373.

Fogarty, R., and Stoehr, J. (1996). *Integrating curricula with Multiple Intelligences.* Palatine, IL: IRI/Skylight Training and Publishing.

Fonseca Mora, C. (2000). Foreign language acquisition and melody singing. *ELT Journal,* 54(2), 146-152.

Freeman, D. (1996). "The unstudied problem": Research on teacher learning in language teaching. In: D. Freeman and J. Richards (Eds.), *Teacher learning in language teaching.* (pp.351-378). Cambridge: Cambridge University Press.

Freeman, D. (2000). Redefining the relationship between research and what teachers

know. In: K.M. Bailey and D. Nunan (Eds.), *Voices from the language classroom.* (pp. 88-115). Cambridge: Cambridge University Press.

Freeman, D. and Richards, J. (Eds.). (1996). *Teacher learning in language teaching.* Cambridge: Cambridge University Press.

Fried-Booth, D. (1986). *Project Work.* Oxford: Oxford University Press.

Fry, P.S. (Ed.). (1984). *Changing conceptions of intelligence and intellectual functioning.* Amsterdam: Elsevier.

Gardner, H. (1983). *Frames of mind: The theory of Multiple Intelligences.* New York: Basic Books.

Gardner, H. (1987). The theory of Multiple Intelligences. In: R. Fogarty and J. Bellanca (Eds.). (1995), *Multiple Intelligences: A collection* (pp.77-99). Melbourne: Hawker Brownlow Education.

Gardner, H. (1991). *The unschooled mind.* New York: Basic Books.

Gardner, H. (1993a). *Multiple Intelligences: The theory in practice.* New York: Basic Books.

Gardner, H. (1993b). *Creating minds.* New York: Basic Books.

Gardner, H. (1995a). *Leading minds.* New York: Basic Books.

Gardner, H. (1995b). Multiple Intelligences as a catalyst. *English Journal*, 84(8), 16-17.

Gardner, H. (1997). Multiple intelligences as a partner in school improvement. *Educational Leadership*, 55(1), 20-21.

Gardner, H. (1999). *Intelligences reframed.* New York: Basic Books.

Gardner, H. (2000). *The disciplined mind.* New York: Penguin Book.

Gardner, H and Hatch, T. (1989). Multiple Intelligences go to school: Educational implications of the theory of Multiple Intelligences. *Educational Researcher,* 18 (8), 4-10.

Gardner, R.C. (1985). *Social psychology and second language learning: The role of attitudes and motivation.* Ontario, Canada: Edward Arnold.

Gattengo, C. (1972). *Teaching foreign languages in schools: The Silent Way.* (2nd ed.). New York: Educational Solutions.

Gattegno, C. (1976). *The common sense of teaching foreign languages.* New York: Educational Solutions.

Gay, L.R. and Airasian, P. (2000). *Educational research: Competencies for analysis and application.* New Jersey: Prentice Hall, Inc.

Gebhard, J. G. and Oprandy, R. (1999). *Language teaching awareness: A guide to exploring beliefs and practices.* Cambridge: Cambridge University Press.

Genesse, F. (2000). Brain research: Implications for second language learning. *ERIC Clearinghouse on Language and Linguistics.* Service No.: ED 447727.

Genesse, F. and Upshur, J.A. (1996). *Classroom-based evaluation in second language education.* Cambridge: Cambridge University Press.

Gipps, C.V. (1994). *Beyond testing: Towards a theory of educational assessment.* London: the Falmer Press.

Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal* 51(4), 361-369.

Goodlad, J.I. (1984). *A place called school: Prospects for the future.* New York: McGraw-Hill.

Gould, S.J. (1981). *The mismeasure of man.* New York: Norton.

Graddol, D. (1999). The decline of the native speaker. In: D. Graddol and U. Meinhof (Eds.), *English in a changing world (AILA Review 13)* (pp. 57-68). United Kingdom.

Graham, C. (1993a). An excerpt from Jazz Chants. In: W. O. John. Jr. (Ed.), *Methods that work: Ideas for literacy and language teachers* (pp. 339-341). Boston, MA: Heinle and Heinle.

Graham, C. (1993b). *Grammarchants.* Oxford: Oxford University Press.

Green, J.M. and Oxford, R.L. (1995). A closer look at learning strategies, L2 proficiency and gender. *TESOL Quarterly,* 29, 261-297.

Griffiths, C. (2003). Patterns of language learning strategy usage. *System,* 31, 367-383.

Griffiths, C. and Parr, J.M. (2001). Language-learning strategies: Theory and perception. *ELT Journal,* 55(3), 247-254.

Grigorenko, E.L. (1998). Mastering tools of the mind in school (Trying out Vygotsky's ideas in classrooms). In: R.J. Sternberg and W.M. Williams (Eds.), *Intelligence, instruction and assessment: Theory into practice* (PP.201-231). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Guba, E.G. (1989). *Fourth generation evaluation.* Newbury Park, CA.: Sage.

Guba, E.G. (1990). The alternative paradigm dialog. In: E.G. Guba (Ed.), *The paradigm dialog* (pp.17-27). Newbury Park, CA: SAGE Publisher.

Guba, E.G. and Lincoln, Y.S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology,*30(4), 233-252.

Guba, E.G. and Lincoln, Y.S. (1989). *Fourth generation evaluation.* Newbury Park, CA: SAGE Publisher.

Guilford, J.P. (1967). *The nature of human intelligence.* New York: McGraw-Hill.

Hadley, A. O. (1993). *Teaching language in context* (2nd ed.). Boston, MA: Heinle & Heinle.

Halbach, A. (2000). Finding out about students' learning strategies by looking at their diaries: A case study. *System* 28, 85-96.

Haley, H.M. (2001). Understanding learner-centered instruction from the perspective of multiple intelligences. *Foreign Language Annals,* 34(4), 355-367.

Hall, D.R. and Hewings, A. (Eds.). (2001). *Innovations in English language teaching: A reader.* London: Routledge.

Halliday, M.A.K. (1975). *Learning how to mean: Explorations in the development of language.* London: Edward Arnold.

Hansen, L. (1984). Field dependence-independence language testing: Evidence from six pacific island cultures. *TESOL Quarterly,* 25, 375-406.

Herman, J. L., Aschbacher, P. R., and Winters, L. (1992). *A practical guide to alternative assessment.* Alexandria, VA: ASCD.

Harmer, J. (2003a). *The practice of English language teaching.* (3rd ed.). Longman: Pearson Education Limited.

Harmer, J. (2003b). Popular culture, methods and contexts. *ELT Journal,* 57(3), 288-294.

Henderson, J. G. (1996). *Reflective teaching.* Englewood cliffs, NJ: Prentice Hall.

Herrnstein, R and Murray, C. (1994). *The Bell Curve: Intelligence and class structure in American life.* New York: Free Press.

Hird, B. (1995). How communicative can English language teaching be in China? *Prospect,* 10(3), 21-27.

Hill, B. (1994). Self-managed learning. *Language Learning,* 27, 213-223.

Hoerr, T.R. 1992. How our school applied multiple intelligences theory. *Educational Leadership,* 50(2), 67-68.

Hoerr, T. R. (1998). Using Multiple Intelligences for students and faculty success. In: R. Bernhardt, G. Cattaro, C. N. Hedley and V. Svolopoulos (Eds.), *Curriculum*

*leadership: Rethinking schools for the 21st*. Cresskill, New Jersey: Hampton Press.

Holliday, A. (1997). *Appropriate methodology and social context.* Cambridge: Cambridge University Press.

Hong, C.S. (1996). Contextual factors and English teachers in vocational high schools. In: *Proceedings of the 13th Conference on English Teaching and Learning* (pp.41-50). Taipei: the Crane Publishing Co.

Horwitz, E.K. (1987). Surveying student beliefs about language learning. In: A. Wenden and J. Rubin (Eds.), *Learner strategies in language learning.* Englewood Cliffs, NJ: Prentice Hall International.

Hsu, G. O. (1998). *English teacher's resource book.* Taipei: Oversea Radio and Television Publisher.

Hu, G. (2002). Potential cultural resistance to pedagogical imports: The case of communicative language teaching in China. *Language, Culture and Curriculum,* 15(2), 93-105.

Hughes, A. (1995). *Testing for language teachers*. Cambridge: Cambridge University Press.

Hymes, D. (1972). On communicative competence. In: J.B. Pride, and J. Holmes (Eds.), *Sociolinguisitcs* (pp.269-293). Harmondsworth: Penguin.

Izzo,S. (1981). *Second language learning: A review of related studies*. Rosslyn,VA: National Clearing house for Bilingual Education.

Jacobs, B. and Schumann, J. (1992). Language acquisition and neuroscience: Towards a more integrative perspective. *Applied Linguistics*, 13(3), 282-301.

Jacobs, G. M. and Farrell, T. S. C. (2001). Paradigm shift: Understanding and implementing change in second language education. *TESL-EJ,* 5(1), 1-16. Retrieved May 6, 2003 from http://www-writing.berkeley.edu/TESL-EJ/ej17/al .html

Jansen, L. M. and Liddicoat A. J. (Eds.). (1998). *Lifting practice: Teachers as researchers in the language classroom.* Canberra: Australian National University.

Jensen, A. (1969). How much can we boost IQ and Scholastic Achievement? *Harvard Educational Review,* 39(1), 1-123.

Jensen, E. (1998). *Teaching with the brain in mind.* Alexandria, Virginia: ASCD.

Jick, T.D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly,* 24, 602-611.

Johnson, D., Johnson, R. and Holubec, E. (1994). *Cooperative learning in the classroom.* Alexandria, VA: Assocation for Supervision and Curriculum.

Kagan, L. (2000). *Multiple Intelligences: Structures and activities.* CA: Kagan Cooperative Learning.

Kagan, S. (1992). *Cooperative learning.* San Juan Capistrano, CA: Kagan Cooperative Learning.

Kagan, S. (1998). New cooperative learning, multiple intelligences, and inclusion. In: J.W. Putuam (Ed.), *Cooperative learning and strategies for inclusion: Celebrating diversity in the classroom.* Baltimore, Maryland: P.H. Brookes Publishing Co.

Kagan, S., and Kagan, M. (1998). *Multiple Intelligences: The complete MI book.* CA: Kagan Cooperative Learning.

Kalick, B. (1989). *Changing schools into communities for thinking.* Grand Forks, N.D.: University of North Dakota Press.

Kallenbach, S. and Veins, J. (Eds.). (2001). *Multiple Intelligences in practice: Teacher research reports from the adult Multiple Intelligences study.* Cambridge, MA: National Center for the Study of Adult Learning and Literacy (NCSALL).

Kallenbach, S. and Veins, J. (Eds.). (2002). *Open to interpretation: Multiple Intelligences theory in adult literacy education from the adult Multiple Intelligences study.* Cambridge, MA: National Center for the Study of Adult Learning and Literacy (NCSALL).

Katchen, J. (2002). English teaching in Taiwan. *ESL Magazine* (September/October), 26-28.

Katz, K. and Chard, S. (1989). *Engaging children's mind: The project approach.* Norwood, NJ: Ablex.

Kelly, L.G. (1976). *Twenty-five centuries of language teaching.* Rowley, MA: Newbury House.

Kember, D. (2000). Misconceptions about the learning approaches, motivation and study practices of Asian students. *Higher Education,* 40, 99-121.

Kennedy, P. (2002). Learning cultures and learning styles: Myths-understanding about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education,* 21(5), 430-445.

Kern, R.G. (1995). Learners' and teachers' beliefs about language learning. *Foreign Language Annuals,* 28(1), 71-92.

Kessler. C. (1992). (Ed.). *Cooperative language learning: A teacher's resource book.* New York: Prentice Hall.

Kezar, A. (2001). Theory of multiple intelligences: Implications for higher education. *Innovative Higher Education,* 26(2), 141-154.

Kirschenbaum, R.J. (1990). An interview with Howard Gardner. In: R. Fogarty and J. Bellanca (Eds.). (1995), *Multiple Intelligences: A collection* (pp.[illegible]-24). Melbourne, Australia: Hawker Brownlow Education.

Knight, P. (2001). The development of EFL methodology. In: C.N. Candlin and N. Mercer (Eds.), *English language teaching in its social context: A reader* (pp. 147-166). London: Routledge.

Kornhaber, M. and Gardner, H. (1993). Varieties of excellence: Identifying and assessing children's talents. In: R. Fogarty and J. Bellanca (Eds.). (1995), *Multiple Intelligences: A collection* (pp.101-142). Melbourne, Australia: Hawker Brownlow Education.

Kornhaber, M. and Fierros, E. (2000). *Project SUMIT* (Schools using Multiple Intelligences theory). Retrieved May 20, 2003 from http: pzweb/Harvard.edu/SUMIT/Default.htm.

Kornhaber, M., Fierros, E. and Veenema S. (2004). *Multiple Intelligences: Best ideas from research and practice.* Boston, MA: Pearson Allyn and Bacon.

Kramsch, C. and Sullivan P. (1996). Appropriate pedagogy. *ELT Journal,* 50(3), 199-212.

Krashen, S. (1982). *Principles and practices in second language acquisition.* Oxford: Pergamon.

Krashen, S. and Terrell, T.D. (1983). *The Natural Approach: Language acquisition in the classroom.* Oxford: Pergamon.

Krechevsky, M. (1991). Project Spectrum: An innovative assessment alternative. *Educational Leadership,* 48(5), 43-48.

Krechevsky, M. and Seidel, S. (1998). Minds at work: Applying multiple intelligences in the classroom. In: R.J. Sternberg and W.M. Williams (Eds.), *Intelligence, instruction and assessment: Theory into Practice* (pp.17-42). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Kumaravadivelu, B. (1991). Language learning tasks: teacher intention and learner interpretation. *ELT Journal,* 45(2), 98-107.

Kumaravadivelu, B. (1994). The postmethod condition: emerging strategies for second/foreign language teaching. *TESOL Quarterly,* 28(1), 27-48.

Ladousse, G. P. (1988). *Role Play.* Oxford: Oxford University Press.

Ladousse, G. P. (1994). *Speaking personally: Quizzes and questionnaires for fluency practice.* Cambridge: Cambridge University Press.

Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning.* Oxford: Oxford University Press.

Larsen-Freeman, D. (1986). *Techniques and principles in language teaching.* New York: Oxford University Press.

Larsen-Freeman, D. (1993). Second language acquisition research: Staking out the territory. In: S. Silberstein (Ed.), *State of the art: TESOL essay— Celebrating 25 years of the discipline* (pp.133-168). Virginia, USA: TESOL, Inc.

Larsen-Freeman, D. (2001). *Techniques and principles in language teaching.* (2nd, ed.). New York: Oxford University Press.

Lave, J. (1988). *Cognition in practice.* New York: Cambridge University Press.

Lazear, D. (1994). *Seven pathways of learning: Teaching students and parents about Multiple Intelligences.* Tucson: Zephyr Press.

Lazear, D. (1995). *Multiple Intelligence approaches to assessment: Solving the assessment conundrum.* Tucson, AZ: Zephyr Press.

Lazear, D. (1999a). *Eight ways of knowing: Teaching for Multiple Intelligences.* Palatine, IL: IRI/Skylight

Lazear, D. (1999b). *Eight ways of teaching: The artistry of teaching with Multiple Intelligences.* Palatine, IL: IRI/Skylight.

Lazear, D. (2000). *The rubrics way: Using MI to assess understanding.* Tucson, AZ: Zephyr Press.

LeCompte, M.D. (2000). Analyzing qualitative data. *Theory into Practice,* 39(3), 146-154.

LeCompte, M.D. and Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research,* 52 (1), 31-60.

LeCompte, M.D. and Schensul, J.J. (1999). *Analyzing and interpreting ethnographic data.* Walnut Creek, CA: Altamira Press.

LeDoux, J.E. (1996). *The emotional brain.* New York: Simon and Schuster.

Lee, L.S. (2000). Current status and future prospects of upper-secondary vocational education in Taiwan. *ERIC Document Reproduction,* Service No.: ED 467595.

Lee, L.S. (2002). Technological and vocational education in Taiwan. *ERIC Document Reproduction*, Service No.: ED 441956.

Lewis, M. (Ed.). (1997). *New ways in teaching adults.* Alexandria, VA: TESOL Publications.

Li, D. (1998). It's always more difficult than you plan and imagine: Teachers' perceived difficulties in introducing the communicative approach in South Korea. *TESOL Quarterly*, 32(4), 677-703.

Lightbown, P.M. and Spada, N. (1999). *How Languages are Learned* (revised ed.). Oxford: Oxford University Press.

Lin, H. J. and Warden, C.A. (1998). Different attitudes among Non-English major students. [Electronic version]. *The Internet TESL Journal (October).* Retrieved June 27, 2003 from http://iteslj.org/Articles/Warden-Difference.

Lin, M.S. (1996). A comparative study of English education in Taiwan's senior and vocational high schools (written in Chinese). In: *the Proceedings of the 12th Conference on English Teaching and Learning* (pp. 57-99). Taipei: The Crane Publishing Co.

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Liou, C. R. (2000). The past and future of technological and vocational education in Taiwan. Retrieved October 15, 2003 from http: www// gopher.ntnu.edu.au.tw/gise/journal/2/issue-liou.htm.

Liou, H.C. (2001). Reflective practice in a pre-service teacher education program for high school English teachers in Taiwan, ROC. *System,* 29, 197-208.

Liou, H.C. (2002). A case documentation of English instruction at the elementary school level: the cross-cultural impact of native speaker teachers (written in Chinese). In: *Journal of English Teaching and Learning,* 27(1), 1-20. Taipei: National Taiwan Normal University.

Littlewood, W. (1981). *Communicative Language Teaching: An Introduction.* Cambridge: Cambridge University Press.

Littlewood, W. (1994). *Foreign and Second Language Learning.* Cambridge: Cambridge University Press.

Littlewood, W. (2000). Do Asian students really want to listen and obey? *ELT Journal,* 54(1), 31-35.

Liu, D. (1995). Sociocultural transfer and its effect on second language speakers' communication. *International Journal of Intercultural Relation,* 9(2), 253-265.

Long, M. (1983). Native-speaker/non-native speaker conversation and the negotiation of comprehensive input. *Applied Linguistics,* 4, 126-141.

Long, M. (1996). The role of the linguistic environment in second language acquisition. In: W.C. Ritchie and T.K. Bhatia (Eds.). (1996). *Handbook of second language acquisition.* San Diego: Academic Press.

Lozanov, G. (1978). *Suggestology and outlines of Suggestopedy.* New York: Gordon and Breach.

Lustig, M.W. and Koester, J. (1999). *Intercultural competence: Interpersonal communication across cultures.* (3rd ed.). New York: Longman.

Lynch, B.K. (1996). *Language program evaluation: theory and practice.* Cambridge: Cambridge University Press.

Macaro, E. (2001). *Learning strategies in foreign and second language classrooms.* New York: Continuum.

Markee, N. (1997). *Managing curricular innovation.* Cambridge: Cambridge University Press.

Martin, J. (2001). *Profiting from Multiple Intelligences in the workplace.* Gower Publishing Company.

Martin, P.Y. and Turner, B.A. (1986). Grounded theory and organizational research. *The Journal of Applied Behavioral Science,* 22(2), 141-157.

Maslow, A.H. (1970). *Motivation and Personality.* (2nd ed.). New York: Harper and Row.

Matsumoto, K. (1996). Helping L2 learners reflect on classroom learning. *ELT Journal,* 50 (2), 143-149.

Maxwell, J.A. (1996). *Qualitative research design: An interactive approach.* Thousand Oaks, CA: Sage.

Mayer, R.E. (2000). Intelligence and education. In: R.J. Sternberg (Ed.), *Handbook of intelligence* (pp.519-533). Cambridge: Cambridge University Press.

McDonough, J. and McDonough S. (1997). *Research methods for English language Teachers.* London: Arnold.

McDonough, S. (1999). Learner Strategies. *Language Teaching,* 32, 1-18.

McKay, S.L. (2002). *Teaching English as an international language: Rethinking goals and approaches.* Oxford: Oxford University Press.

McLaughlin, B. (1987). *Theories of second language Learning*. Baltimore: Arnold.
Mcln ney, D.M. and Mclnerney, V. (2002). *Educational psychology: Constructing learning* . (3rd ed.). NSW, Australia: Prentice Hall.
Merrefield, G.E. (1997). Three Billy Goats and Gardner. *Educational Leadership*, 55(1), 58-61.
Merriam, S.B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.
Miles, M.B. and Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Newbury Park, CA: Sage.
Mills, G. E. (2000). *Action Research: A guide for the teacher researcher.* New Jersey, Pearson Education: Prentice-Hall, Inc.
Morgan, H. (1992). *An analysis of Gardner's theory of Multiple Intelligences.* Paper presented at the meeting of Eastern Educational Research Association, Altanta, GA.
Moskowitz, G. (1978). *Caring and sharing in the foreign language class: A sourcebook on humanistic techniques.* Rowley, MA: Newbury House.
Murphy, R. (1997). *English grammar in use: A self-study reference and practice Book for Intermediate Students.* (2nd ed.). Cambridge: Cambridge University Press.
Murphy, T. (1996). *Music and song.* Oxford: Oxford University Press.
Naiman, N., Frohlich, M., Stern, H.H. and Todesco, A. (1978). *The good language learner.* Ontario: Ontario Institute for Studies in Education.
Nelson, G. (1995). Cultural differences in learning styles. In: J. Reid (Ed.), *Learning styles in the ESL/EFL classroom* (pp.3-18). Boston, MA: Heinle & Heinle Publisher.
Nunan, D. (1989a). *Designing tasks for the communicative classroom.* New York: Cambridge University Press.
Nunan, D. (1989b). *Understanding language classrooms.* London: Prentice Hall.
Nunan, D. (1991a). *Language teaching methodology: A textbook for teachers.* Englewood Cliffs, NJ: Prentice Hall Inc.
Nunan, D. (1991b). Communicative tasks and the language curriculum. *TESOL Quarterly*, 25, 279-295.
Nunan, D. (1995). Closing the gap between learning and instruction. *TESOL Quarterly*, 29(1), 133-158.
Nunan, D. (1999). *Second language teaching and learning.* Boston, MA: Heinle and Heinle Publisher.
Nunan, D. (2001). *Research methods in language learning.* Cambridge: Cambridge University Press.
Nunan, D. and Lamb, C. (1996). *The Self-directed Teacher: Managing the learning process.* Cambridge: Cambridge University Press.
O'Malley, J.M. and Chamot, A. (1990). *Learning strategies in second language acquisition.* Cambridge: Cambridge University Press.
O'Malley, J.M. and Valdez Pierce, L. (1996). *Authentic assessment for English language learners: Practical approaches for teachers.* USA: Addison-Wesley Publisher.
Osburg, B. (1995). Multiple intelligences: A new category of losers. *English Journal*, 84(8), 13-15.
Oxford, R. L. (1990). *Language learning strategies: What every teacher should know.* New York: Newbury House.
Oxford, R.L. (1996). New pathways of language learning motivation. In: R.L. Oxford (Ed.), *Language learning motivation: Pathways to the new century.* (pp.1-18).

Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.

Oxford, R. L. (2002). Language learning strategies in a nutshell: Update and ESL suggestions. In: J.C. Richards and W.A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp.124-132). Cambridge: Cambridge University Press.

Oxford, R.L., Crookall, D., Cohen, A.D., Lavine, R. Z., Nyikos, M., and Sutter, W. (1990). Strategy training for language learners: Six situational case studies and a training model. *Foreign Language Annals*, 22, 197-216.

Oxford, R. and Shearin, J. (1994). Language learning motivation: expanding the theoretical framework. *Modern Language Journal,* 78, 12-28.

Oxford, R and Burry-Stock, J.A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language learning (SILL). *System,* 23 (1), 1-23.

Palmer, H., and Palmer, D. (1959). *English through actions*. London: Longman.

Pennycook, A. (1985). Actions speak louder than words: Paralanguage, communication and education. *TESOL Quarterly*, 19(2), 259-282.

Perkins, D.N. (1998). Learnable intelligence and intelligent learning. In: R.J. Sternberg and W.M.Williams (Eds.), *Intelligence, instruction and assessment: Theory into practice* (pp. 67-94). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Piaget, J. (1952). *The origins of intelligence in children*. New York: International University Press.

Piaget, J. (1976). *The psychology of intelligence*. Totowa, NJ: Littlefield & Adams Co.

Pica, T. (1994). Research on negotiation: What does it reveal about second language acquisition? Conditions, processes, and outcomes. *Language Learning*, 44, 493-527.

Pica, T. (2000). Tradition and transition in English language teaching methodology. *System*, 28, 1-18.

Prabhu, N.S. (1990). There is no best method-why? *TESOL Quarterly*, 24(2), 161-176.

Putuam, J.W. (Ed.) (1998). *Cooperative learning and strategies for inclusion: Celebrating diversity in the classroom*. Baltimore, Maryland: Paul H. Brookes Publishing Co.

Ramírez, A.G. (1995). *Creating contexts for second language acquisition: Theory and methods.* Longman Publisher.

Rao, Z. (2002). Chinese students' perceptions of communicative and non-communicative activities in EFL classroom. *System* 30, 85-105.

Reid, J. (1987). Learning styles preferences of ESL students. *TESOL Quarterly,* 21, 87-112.

Reid, J. (Ed.). (1995). *Learning styles in the ESL/EFL classroom*. Boston, MA: Heinle &Heinle Publisher.

Reid, J. (Ed.). (1998). *Understanding learning styles in the second language classroom.* Englewood Cliffs, NJ: Prentice Hall/Regents.

Richard-Amato, P.A. (1996). *Making it happen: Interaction in the second language classroom.* (2nd ed.). NY: Longman.

Richards, J.C. (1998). *Beyond training.* Cambridge: Cambridge University Press.

Richards, J.C. (1999). *The language teaching matrix*. Cambridge: Cambridge University Press.

Richards, J.C. (2002). 30 years of TEFL/TESL: A personal reflection. In: *The Selected*

*Papers from the 11th International Symposium on English Teaching/4th Pan-Asian Conference* (pp. 141-161). Taipei: The Crane Publishing Co.

Richards, J.C. and Lockhart, C. (1999). *Reflective teaching in second language classrooms.* Cambridge: Cambridge University Press.

Richards, J. C. and Nunan, D. (1990). *Second language teacher education.* Cambridge: Cambridge University Press.

Richards, J.C. and Rodgers, T.S. (1986). *Approaches and methods in language learning*. Cambridge: Cambridge University Press.

Richards, J.C. and Rodgers, T.S. (2001). *Approaches and methods in language learning*. (2nd ed.). Cambridge: Cambridge University Press.

Rigg, P. (1991). Whole Language in TESOL. *TESOL Quarterly,* 25(3), 521-542.

Rivers, W. M. (Ed.). (1996). *Interactive language teaching.* Cambridge: Cambridge University Press.

Robbins, J. and MacNeill A. (2001). *Impact listening*: *2*. Longman/Pearson Education.

Rodgers, T.S. (2001). Language teaching methodology. *ERIC Clearinghouse on Language and Linguistics*. Service No.: ED 459628.

Rodrigues, R. J. and White, R.H. (1993). From role play to the real world. In: W. O. John. Jr. (Ed.), *Methods that work: Ideas for literacy and language teachers* (pp. 63-69). Boston, MA: Heinle and Heinle.

Rogoff, B. and Chavajay, P. (1995). What's become of the research on the cultural basis of cognitive development? *American Psychologist*, 50, 859-77.

Rosie, T. (2001). Teaching intelligently. *English Teaching Professional,* 20, 40-41.

Rossner, R. and Bolitho, R. (Eds.). (1990). *Currents of change in English language teaching.* Oxford: Oxford University Press.

Rubin, J. (1975). What a good language learner can teach us? *TESOL Quarterly,* 9, 41-61.

Rubin, J. (1987). Learner strategies: Theoretical assumptions, research history and typology. In: A. Wenden and J. Rubin (Eds.), *Leaner strategies and language learning.* (pp.15-29). Englewood Cliffs, NJ: Prentice Hall.

Sacks, O. (1995). *An anthropologist on Mars.* New York: Knopf.

Sano, M. Takahashi, M. and Yoneyama, A. (1984). Communicative language teaching and local needs. *ELT Journal*, 38, 170-177.

Sato, K. and Kleinsasser, R. C. (1999). Communicative language teaching (CLT): Practical understandings. *Modern Language Journal*, 83(4), 494-517.

Sauer, C. (1998). Developing a survey for multiple intelligences: A collaborative ESL class project. In: Reid, J. M. (Ed.), *Understanding learning styles in the second language classroom.* (pp.100-106). Englewood Cliffs, NJ: Prentice Hall/Regents.

Savignon, S. (1983). *Communicative competence: Theory and classroom practice.* Reading, MA: Addison-Wesley.

Savignon, S. (1991). Communicative language teaching: State of the art. *TESOL Quarterly,* 25, 261-277.

Savignon, S. (2002). Communicative English teaching in Asian contexts: The challenge for teacher education. In: *The Selected Papers from the 11th International Symposium on English Teaching/4th Pan-Asian Conference* (pp. 161-174). Taipei: The Crane Publishing Co.

Scarcella, R.C. and Oxford, R.L. (1992). *The tapestry of language learning: The individual in the communicative classroom.* Boston, MA: Heinle and Heinle Publishers.

Scherer, K.R. (1984). Emotion as a multi-component process: A model and some cross-cultural data. In: P. Shaver (Ed.), *Review of Personality and Social*

*Psychology: Vol.5. Emotions, relationships and health.* (pp.37-63). Beverly Hills, CA: Sage.

Schumann, J.H. (1994). Where is cognition? Emotion and cognition in second language acquisition. *SSLA*, 16, 231-242.

Schumann, J.H. (1997). *The neurobiology of affect in language*. Boston: Blackwell.

Schumann, J.H. (1999). A neurobiological perspective on affect and methodology in second language learning. In: J. Arnold (Ed.), *Affect in language learning* (pp. 28-42). Cambridge: Cambridge University Press.

Schumann, J.H. (2001). Appraisal psychology, neurobiology and language. *Annual Review of Applied Linguistics,* 21, 23-42.

Scovel, T. (1991). The effect of affect on foreign language learning: A review of the anxiety research. In: E. Horwitz and D. Young (Eds.), *Language anxiety: From theory and research to classroom implication* (pp.15-23). Englewood Cliffs, NJ: Prentice Hall.

Seaver, Jr. P.W. (1993). Pantomime as an L2 classroom strategy. In: W. O. John. Jr. (Ed.), *Methods that work: Ideas for literacy and language teachers* (pp. 342-351). Boston, MA: Heinle and Heinle.

Seliger, H.W. and Shohamy, E. (1995). *Second language research methods.* Oxford: Oxford University Press.

Sheerin, S. (1996). *Self-access*. Oxford: Oxford University Press.

Silver, H.F., Strong, R.W. and Perini, M.J. (2000). *So each may learn: Integrating learning styles and Multiple Intelligences.* Alexandria, VA: ASCD.

Simeone, W.F. (1995). Accommodating multiple intelligences in the English classroom. *English Journal*, 84(8), 60-62.

Simpson, J.M. (2000). Practicing multiple intelligences in an EFL class. *TESOL Journal* (Spring), 30-31.

Skinner, B.F. (1957). *Verbal behavior.* New York: Appleton-Century-Crofts.

Smagorinsky, P. (1995). Multiple intelligences in the English class: An overview. *English Journal,* 84(8), 19-27.

Spearman, C. E. (1927). *The abilities of man.* London. Macmillan.

Sperling, D. (1998). *Dave Sperling's internet guide.* New York: Prentice Hall Regents.

Spratt, M. (1999). How good are we at knowing what learners like? *System*, 27, 141-155.

Stage, F., Muller, P., Kinzie, J., and Simmons, A. (1998). *Creating Learning Centered Classrooms: What Does Learning Theory Have to Say?* 26 (4). Washington, DC: ASHE-ERIC Higher Education Report Series.

Stern, H. H. (1996). *Fundamental concepts of language teaching.* London: Oxford University Press.

Stern, L.S. (1993). Why drama works: A psycholinguistic perspective. In: W. O. John. Jr. (Ed.), *Methods that Work: Ideas for literacy and language teachers* (pp. 70-83). Boston, MA: Heinle and Heinle.

Sternberg, R.J. (1982). Who's intelligent? *Psychology Today,* 16, 30-39.

Sternberg, R.J. (1984). A contextualist view of intelligence. In: P.S. Fry (Ed.), *Changing conceptions of intelligence and intellectual functioning*. Amsterdam: Elsevier.

Sternberg, R.J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York: Cambridge University Press.

Sternberg, R.J. (1986). *Intelligence applied: Understanding and increasing your own intellectual skills.* New York: Harcourt Brace Jovanovich.

Sternberg, R. J. (1996). *Successful intelligence*. New York: Simon & Schuster.

Sternberg, R.J. (1997). What does it mean to be smart? *Educational Leadership*, 54(6), 20-24.

Sternberg, R.J. (1998). Applying the triarchic theory of human intelligence in the classroom. In: R.J. Sternberg and W.M. Williams (Eds.), *Intelligence, instruction and assessment: Theory into practice* (pp.1-15). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Sternberg, R.J. (Ed). (2000a). *Handbook of intelligence.* Cambridge: Cambridge University Press.

Sternberg, R.J. (2000b). The concept of intelligence. In: R.J. Sternberg (Ed.), *Handbook of intelligence* (pp.3-15). Cambridge: Cambridge University Press.

Sternberg, R. J., Conway, B.E., Ketron, J.L. and Bernstein, M. (1981). People's conceptions of intelligence. *Journal of Personality and Social Psychology: Attitudes and Social Cognition,* 41, 37-55.

Sternberg, R.J., Torff, B. and Grigorenko, E. (1998). Teaching for successful intelligence raises school achievement. *Phi Delta Kappan*, 79(9), 667-669.

Sternberg, R. J., Wagner, R., Williams, W. and Horvath, J. (1995). Testing common sense. *American Psychologist*, 50 (11), 912-927.

Sternberg, R.J. and Williams, W.M. (Eds.). (1998). *Intelligence, instruction and assessment: Theory into practice.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Stevick, E.W. (1980). *Teaching languages: A way and ways.* Rowley, MA: Newbury House.

Stevick, E.W. (1982). *Teaching and learning languages.* Cambridge: Cambridge University Press.

Stevick, E.W. (1990). *Humanism in language teaching.* Oxford: Oxford University Press.

Stevick, E.W. (1996). *Memory, meaning and method: A review of language teaching.* Boston, MA: Heinle & Heinle.

Stevick, E.W. (1999). Affect in learning and memory: from alchemy to chemistry. In: J. Arnold (Ed.), *Affect in language learning* (pp. 43-57). Cambridge: Cambridge University Press.

Strauss, A. and Corbin J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: SAGE Publications, Inc.

Sutherland, P. (1992). *Cognitive development today: Piaget and his critics.* London: Paul Chapman.

Sweet, S.S. (1998). A lesson learned about multiple intelligences. *Educational Leadership*, 56(3), 50-51.

Sylwester, R. (1995). *A celebration of neurons: An educator's guide to the human brain.* Alexandria, VA: ASCD.

Sylwester, R. (Ed.). (1998). *Student brains, school issues: A collection of articles.* Melbourne, Australia: Hawker Brownlow Education.

Tarone, E. (1983). Some thoughts on the notion of 'communication strategy'. In: C. Faerch and G. Kasper (Eds.), *Strategies in interlanguage communication.* (pp.61-74). London: Longman.

Tarone, E and Yule, G. (1991). *Focus on the language learner.* Oxford: Oxford University Press.

Teele, S. (2000). *Rainbow of intelligence: Exploring how students learn.* Thousand Oaks, CA: Corwin Press.

Terman, L.M., and Merrill, M.A. (1973). *Standford-Binet intelligence scale: 1972*

*norms edition.* Boston: Houghton Mifflin.
Terrell, T.D. (1977). A natural approach to second language acquisition and learning. *Modern Language Journal,* 61, 325-336.
Terrell, T.D. (1982). The natural approach to language teaching: An update. *Modern Language Journal,* 66, 121-132.
Thornbury, S. (1997). *About language: Tasks for teachers of English.* Cambridge: Cambridge University Press.
Thurstone, L.L. (1938). *Primary mental abilities.* Chicago: University of Chicago Press.
Tomalin, B. and Stempleski, S. (1993). *Cultural awareness.* Oxford: Oxford University Press.
Tsai, C. M. (1993). Preface (written in Chinese). In: H. Gardner, *Multiple Intelligences: the theory in practice* (Chinese version). (pp. 7-9). Taipei: Hsin-Yi Publications.
Tsui, A. (1996). Reticence and anxiety in second language learning. In: K. Bailey and D. Nunan (Eds.), *Voices from the language classroom* (PP.145-167). Cambridge: Cambridge University Press.
Tudor, I. (1996). *Learner-centredness as language education.* Cambridge: Cambridge University Press.
Tudor, I. (2001). *The dynamics of the language classroom.* Cambridge: Cambridge University Press.
Usher, R. (1996). A critique of the neglected epistemological assumptions of educational research. In: D. Scott and R. Usher (Eds.), *Understanding educational research* (pp.9-32). London: Routledge.
van Lier, L. (1988). *The classroom and the language learner.* London, England: Longman.
van Lier. L. (1989). Ethnography: Bandaid, bandwagon or contraband? In: C. Burmfit and R. Mitchell (Eds.), *Research in the language classroom, ELT Documents 133* (pp.33-50). London: Modern English Publications in association with the British Council.
van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy and authenticity.* London: Longman.
Vann, R.J. and Abraham, R.G. (1990). Strategies for unsuccessful language learners. *TESOL Quarterly,* 24, 177-198.
Vialle, W and Perry, J. (1995). *Nurturing Multiple Intelligences in the Australian classroom.* Melbourne, Australia: Hawker Brownlow Education.
Vialle, W., Lysaght, P. and Verenikina, I. (2002). *Handbook of child development.* NSW, Australia: Social Science Press.
Vygotsky, L. (1962). *Thought and language.* Cambridge, MA: MIT Press.
Vygotsky, L. (1978). *Mind in society.* Cambridge, MA: Harvard University Press.
Wallace, M.J. (1998). *Action research for language teachers.* Cambridge: Cambridge University Press.
Warden, C.A. and Lin, H.J. (2000). Existence of integrative motivation in an Asian EFL setting. *Foreign Language Annals,* 33(5), 535-547.
Warschauer, M. (1995). *E-mail for English teaching.* Alexandria, VA: TESOL Publications.
Waters, J. and Gardner, H. (1995). The development and education of intelligences. In: R. Fogarty and J. Bellanca (Eds.), *Multiple Intelligences: A collection* (pp.51-76). Melbourne: Hawker Brownlow Education.
Watkins, D.A. and Biggs, J.B. (Eds.) (1996). *The Chinese Learner: Cultural,*

*psychological and contextual Influences.* Melbourne and Hong Kong: CERC and ACER.

Watson-Gegeo, K.A. (1988). Ethnography in ESL: Defining the essentials. *TESOL Quarterly,* 22(4), 575-592.

Wechsler, D. (1981). *WAIS-R manual.* New York: The Psychological Corporation.

Wenden, A. (1986). Helping language learners think about learning. *ELT Journal,* 40 (1), 3-12.

Wenden, A. and Rubin, J. (1987). *Learner strategies in language learning.* Englewood Cliffs, NJ: Prentice-Hall Regents.

Wenden, A. (1992). *Learner strategies for learner autonomy.* Englewood Cliffs, NJ: Prentice-Hall Regents.

Wenden, A. (2002). Learner development in language learning. *Applied Linguistics,* 23 (1), 32-55.

Wessels, C. (1995). *Drama.* Oxford: Oxford University Press.

White, N., Blythe, T. and Gardner, H. (1992). Multiple Intelligences theory: Creating the thoughtful classroom. In: A.L. Costa and R. Fogarty (Eds.), *If Minds Matter (Volume2)* (pp.127-134). Melbourne, Australia: Hawker Brownlow Education.

Widdowson, H.G. (1990). *Aspects of language teaching.* Oxford: Oxford University Press.

Widdowson, H.G. (1996). Authenticity and autonomy in ELT. *ELT Journal,* 50, 67-68.

Wigdor, A. and Garner, W. (Eds.). (1982). *Ability testing: Uses, consequences and controversies.* WA: National Academy Press.

Wiggins, G. (1997). Practicing what we preach in designing authentic assessments. *Educational Leadership,* 54 (4), 18-26.

Wilkins, D.A. (1976). *National syllabuses.* Oxford: Oxford University Press.

Williams, M. and Burden, R.L. (2001). *Psychology for language teachers.* Cambridge: Cambridge University Press.

Williams, R. B. (2002). *Multiple Intelligences for differentiated learning.* Melbourne, Australia: Hawker Brownlow Education.

Willing, K. (1988). *Learning styles in adult education.* Adelaide, South Australia: National Curriculum Resource Centre Adult Migrant Education Program.

Willis, J. (1996). A flexible framework for task-based learning. In: J. Willis, and D. Willis (Eds.), *Challenge and change in language teaching* (pp. 52-62). Oxford: Heineman.

Wolcott, H.F. (1990). *Writing up qualitative research.* Newbury Park, CA: Sage.

Wood, D., Bruner, J.S., and Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, and Allied Disciplines,* 17, 89-100.

Wright, A., Betteridge, D. and Buckby, M. (1992). *Games for language learning.* Cambride: Cambridge University Press.

Wright, A. (1997). *1000+ Pictures for Teachers to Copy.* Nelson.

Wu, G. G. (2001). Learning, working and living with your multiple intelligences (a recommendation article written in Chinese). In: T. Armstrong, *Seven kinds of smart* (Chinese version). (pp.10-18). Taipei: Yuan-Liou Publishing Co.

Yang, N.D. (1996). Effective awareness-raising in language learning strategy instruction. In: R.L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 205-210). Honolulu: University of Hawii Press.

Yang, S. K. (2001). Dilemmas of education reform in Taiwan: Internationalization or localization? *ERIC Document Reproduction,* Service No.: ED 453 137.

## Appendix 1

*Ms. Tzu-chia Chao*
*Dr. Margaret Gearon*
*Faculty of Education*
*Monash University*
*Clayton, Victoria 3168, Australia*

# Explanatory Statement

**For EFL Students in Ming-Hsin University of Science and Technology**

Date: 24 February 2002

## Project Title

**Teaching and Learning English through Multiple Intelligences: A Study in Taiwan**

(English Version)

My name is Tzu-chia Chao, and I am a senior lecturer at Ming-Hsin University of Science and Technology. I am hoping to integrate a theory of cognitive psychology called Multiple Intelligences into the current English course and understand its effects. The focus of the study is students' perspectives when participating in an MI-based university English as a Foreign Language (EFL) course. I hope the findings of this research project can help EFL teachers better understand the possible effects of the intervention of multiple intelligences strategies on learners' English learning and generate some pedagogical suggestions for future university EFL course design.

I will be working under supervision of Dr. Margaret Gearon, a senior lecturer in the department of Education towards a PhD at Monash University.

I am seeking one class who are willing to be in the project (participating in an MI-based EFL course) for 8-10 weeks. In addition to regular course and tutoring hours, the students in the class will be asked to attend a 2-3 hour Multiple Intelligences workshop, keep a learning diary, and fill out relevant questionnaires.

All students in the project are encouraged to keep a learning diary (see the attached handout: A Guide for the Language Learning Diary) and give at least three entries each week. Their diaries are used for later analysis and discussion.

The questionnaires are given at the end of the course. Each of them will take approximately 20 or 40 minutes to complete and will be done at the weekly mentor-students meeting time under the supervision of your class mentor or other on-site colleagues in the Center of Applied Foreign Languages.

Moreover, I need several volunteer students in the class who are willing to accept further interviews for deeper data collection. The interviews for the volunteer

students will be taken during the school lunch time by researcher' colleagues.

No finding, which could identify any individual participant, will be published. Only the combined results of all participants will be published and you will be identified by a pseudonym (a false name) or a code number, so you will remain anonymous. Only my supervisor and I will have access to all data which will be stored for at least five years as prescribed by the university regulations.

Participation in the research is entirely voluntary. If you have any unhappy experiences or get any questions, you are encouraged to tell us. You may withdraw your consent at anytime by informing your class mentor or me. Non-participation in the research will not disadvantage your final grade in any way.

I will send a copy of the report/thesis to the appropriate person in the class when it is finished. I would be happy to send a summary of the results of my research to anyone who is interested if they let me know before I leave the class.

If you have any queries or would like to be informed of the aggregate research findings, please contact [redacted]

You can complain about the study if you do not like something about it. To complain about the study, you need to phone 9905 2052(Australia). You can then ask to speak to the secretary of the Human Ethics Committee and tell him or her that the number of the project is 2002/196. You could also write to the secretary. The person address is:

The Secretary
The Standing Committee on Ethics in Research Involving Humans
PO Box No3A
Monash University
Victoria 3800
[redacted]

PS. The explanatory statement given to university students at Ming-Hsin University of Science and Technology was a Chinese translation version.

**Appendix 2**

# Informed Consent Form

**(For Group)**

**Project Title:** Teaching and Learning English through Multiple Intelligences: A Study in Taiwan

We agree to take part in the above Monash University research project. We have had the project explained to us and are willing to:

- Accept workshop and instruction based on Multiple Intelligences (MI) during this semester.
- Allow the class to be observed and taped by two teachers.
- Participate in all activities/tasks/tests in the course.
- Complete related questionnaires in the study.
- Write a language learning diary on a regular basis (at least three entries a week).
- Allow the researcher to access our learning diaries and performance records in the course for research purposes.

We understand that any information we provide is confidential, and that no information that could lead to identification of any individual will be disclosed in any report on the project, or to any other party. We also understand that our participation is voluntary, that each of us can choose not to participate in part or all of the project, and can withdraw at any stage of the project without being penalized or disadvantaged in any way.

**Signatures** from students in the class:

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Date_____

PS. The Informed Consent Form given to student participants in the study was a Chinese translation version.

**Appendix 3**

# Informed Consent Form

**(For Individual)**

**Project Title:** Teaching and Learning English through Multiple Intelligences: A Study in Taiwan

I agree to take part in the above Monash University research project and be one of the volunteer students. I have had the project explained to me, and that I am willing to:

- Accept workshop and instruction based on Multiple Intelligences (MI) during this semester.
- Participate in all activities/tasks/tests in the course.
- Allow my performances in the class to be closely observed by two teachers.
- Complete the questionnaires.
- Allow the researcher to access my performance records in the course for research purposes.
- Be interviewed by the researcher or other teachers if necessary.
- Allow the interview to be taped.
- Make myself available for a further interview should that be required.
- Write a language learning diary on a regular basis (at least three entries a week).
- Allow the researcher to use my language learning diary without individual identification for research purposes after the course.

I understand that any information I provide is confidential, and that no information that could lead to identification of any individual will be disclosed in any reports on the project, or to any other party. I also understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and I can withdraw at any stage of the project without being penalized or disadvantaged in any way.

Signature_____Date_____

PS. The Informed Consent Form given to volunteer students in the study was a Chinese translation version.

## Appendix 4

# A Guide for
# The Language Learning Diary

Dear Students,

Language learning diary is a good place to record your learning and introspect or retrospect your English learning experience. The content can include a report about your feelings and attitudes when learning English, and your strategies in learning and using the target language both in class and out of class. You may want to note down effective and interesting events that bring you into contact with English, both in and out of class. Also, you can write down activities you dislike and explain why. Consequently, the diary entries will allow your teacher to understand your learning and the effect of the course on you to provide further improvement in course design and teaching approaches.

Before you express your perspectives about your learning experiences with the intervention of multiple intelligences, you are first encouraged to retrospect 'how you felt about English learning', 'what you believed about your English proficiency', and 'how you went about English learning in class and out of class' based on your past English learning experiences. That is, you are required to give a report of your learning history during the first-week entries. The content can be concrete examples or description of important events. It is believed that the valuable information you provide can help the English teacher understand your background and relevant issues better.

What you need to prepare now is a bound notebook with loose paper leaves and a pen. You are encouraged to provide three entries a week. Remember to write down the date after each entry and feel comfortable writing in Chinese, English or both. If you have questions, please contact me. My office number is [redacted]

Cheers,
Your English Teacher
Tzu-chia Chao

PS. The guide for language learning diary given to student participants in the study was a Chinese translation version.

## Appendix 5

# Interview Questions

**Part A: Questions about Previous Learning Experiences**
(These questions are asked in Chinese before the MI-based intervention)

1. How long have you been learning English?
2. What was the purpose for you to learn English?
3. Where did you learn English in the past? In your experience, where was the best place to learn English? Why?
4. According to your experience and observation, what was the best way to learn English? Why?
5. Have you ever experienced a conflict in teaching and learning approaches with an English teacher? If so, what approaches were involved, how did you feel, and how did you manage the conflict?
6. What was a really good or bad experience you had in learning English (in classroom or elsewhere)?
7. How did you feel about learning English? Why?
8. What strategies did you use in class to learn English? Why?
9. What strategies did you use at home/out of class to learn and use English? Why?

**Part B: Questions about English Learning**
(These questions are asked in Chinese before and after the MI-based intervention)

10. How can a foreign language (e.g. English) be acquired? Do you think that foreign languages, such as English, are learned mainly through imitation and rote learning? What are your reasons for your answer?
11. What kind of learner can learn a foreign language (e.g. English) successfully? Do you agree that people with a high IQ are good English language learners? Why?
12. According to your points of view, what are the most important factors for successful/effective English learning? Why?
13. Do you think English is difficult to learn? Do you have confidence in mastering English as an international language? Why? or Why not?
14. Could you tell me what level you believe your English abilities (e.g. listening, speaking, reading, writing, grammar and vocabulary) are (Excellent, Good, Fair, Poor, Worst)? Explain how you have made this judgment.

**Part C: Questions about MI-based English Learning Experience**
(These questions are asked in Chinese after the MI-based intervention)

15. What do you like or dislike during the MI-based intervention? Why?
16. Have you discovered your strategies or employed any strategies to learn or use English? Are they (in-class and out-of-class) effective or not? Why?
17. How do you feel or think about the MI workshop and MI-based course? What advice, suggestions or words do you want to give your language teacher, future language teachers and future EFL learners?

**Appendix 6**

# Evaluation of the MI-based Intervention

Dear Students,

Please complete the evaluation with honest and thoughtful answers. Your opinions and suggestions will be used to improve university EFL courses for the benefit of future students. Thanks for your cooperation!

Center of Applied Foreign Languages
Division of General Education
Ming-Hsin University of Science and Technology

**The scale is explained as follows:**
**5-Very useful**
**4-Useful**
**3-OK (no opinion)**
**2-Not useful**
**1-Not very useful**

## Section 1

1. How much do you feel that your overall English abilities as an EFL learner have been improved as a result of the MI-based intervention?

   5 4 3 2 1

2. How much do you think your English learning strategies have been improved as a result of the MI-based intervention?

   5 4 3 2 1

3. How helpful do you think the MI-based intervention has been for understanding and developing your English learning potential?

   5 4 3 2 1

4. How much has your learning motivation to English increased as a result of the MI-based intervention?

5 4 3 2 1

5. How much do you feel your English learning anxiety has been reduced as a result of the MI-based intervention?

5 4 3 2 1

6. How much do you think your communication strategies in using English have been improved as a result of the MI-based intervention?

5 4 3 2 1

7. How useful do you think the MI-based intervention has been in helping you prepare to pass important English tests such as GEPT (General English Proficiency Test)?

5 4 3 2 1

## Section 2

1. Self-assess your current English proficiency and English learning abilities. Do you think you have made progress? Why or why not? And what kind of progress?

2. Your feedback and suggestion about the course *Practical English Training* with the MI-based intervention (MI workshop, MI-informed activities/tasks and MI-inspired authentic assessment tasks).

PS. The questionnaire given to student participants was a Chinese translation version.

## Appendix 7

### A Feedback Questionnaire on the MI-informed Activities/Tasks

Dear Students,

Thanks for your hard work and cooperation in the course. At the end of the semester, I want to know your opinions about the MI-informed teaching and learning activities/tasks. All activities/tasks used during the two-month intervention are listed in the first section for your convenience. Please take time to think which activity/task you consider enjoyable (or less enjoyable) and helpful (or less helpful) for English learning; then circle it with symbols 'o' (enjoyable and helpful) or 'x' (less enjoyable and less helpful). You are also welcome to write your reasons and comments at the second section. If you have questions when answering the questionnaire, please feel free to raise your hand to ask the administering teacher. Your information will be highly appreciated, as well as be used for improving future university EFL teaching and learning activities/tasks. Thank you!

Cheers,

Your English Teacher

Tzu-chia Chao

**Section One: Circle the activity(s) you enjoy most (or less enjoyable) and think helpful (or less helpful) for your English learning (You can circle as many as you can!)**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Mind mapping Practice | Keeping a Learner Diary | Oral practice through Jazz Chants | Lyrics Creation | Grammatical Rules/ analysis | Games | Drills practice | Riddles Creation |
| English Songs in Motion: Dancing | Surfing English Learning Websites | Final Projects: personal or group | 'Ask E.T.': interacting with English teacher through e-mail | Thinking Activities | Role-Play (Drama) | Independent learning in. Self-access center | Puppet Show: intercultural issues discussion |
| Music and English Songs : learning and Appreciation | Authentic Listening Practice | Cooperative Work: pair or group practice | E. Q. Time or personal reflection time | Observation and Classification Activities | Imagination Activities | Drawing Activities | Field Trips or extracurricular activities |
| Visual Presentations (e.g. flash cards) | Video/Film teaching and learning | Team Jigsaw Problem Solving | Teacher-centered Lecturing | Class brainstorming and discussion | Tactile or bodily Activities such as miming | Reading Aloud: pair or whole class | Audiotaped journal for Speaking Practice |

**Section Two: Tell me your reasons for your choices or express your comments about these activities/tasks**

(The original questionnaire was written in Chinese)

## Appendix 8

# Lesson Plans
**(Examples)**

**Week 12/ Theme: Travel (unit11)**

| Regular Classes/Monday (1:10-3:00 p.m.) | Tutorial Session/Wednesday (1:10-3:00p.m.) |
|---|---|
| **Class1**<br><br>***Awaken and Amplify stages:** Feeling the theme through 'Singing, moving and brainstorming'<br>**-English songs in motion:** dancing and singing 'The Wheels on the Bus' and 'Yellow Submarine'<br>**-Cooperative learning:** pair brainstorms transport vehicles for traveling, the difficulties that people can have when traveling, and things people should prepare for traveling…<br>**-Whole Class discussion + visual presentations** | **Class1**<br><br>**-Video teaching and learning:** Rebecca's Story (selective episodes/episode 8: The Stranger)<br>**-Role-play performance:** 2 groups (5-6 Ss each group)<br>**-Group Evaluation and discussion** |
| ***Amplify stage:** Exploring background vocabulary in airport and airplane<br>**-Visual presentations + cooperative learning:** matching pictures with correct sentences (e.g. fasten your seat belt matches picture I)<br><br>***Break Time** | ***Break Time** |
| **Class2**<br><br>***Teach stage:** Empowering Ss oral abilities<br>**-Authentic listening practice + imagination activities:** Unit11/ vocabulary and listening tasks<br>**-Teacher-centered lecturing + drill practices:** focus on previous listening tasks | **Class2**<br><br>**-Puppet Show performance:** 3 groups (3-4 Ss each group)<br>**-Group Evaluation and discussion**<br>**-Relevant websites introduction and demonstration** |
| ***Transfer stage:** Reviewing what we have learned today<br>**-Bodily/kinesthetic activities for volunteers or lucky numbers:** Listen and tap (using a fly-swat) the English words (on the whiteboard) that teacher says, and perform their meanings<br>**-Read aloud + bodily/kinesthetic activities + cooperative learning:** Each pair pulls out a dialogue sheet (from a box) that they have heard in listening task. 'Lucky' students (in pair) are called out to read aloud with body languages. | |
| **[After-class activities]**<br>**-Website surfing** : English websites of travel agents and airplanes, English learning websites<br>**-Impact Listening:** Real World Listening and Language Awareness (homework)<br>**-Rebecca's story Episodes 13-18** (Self-access Center)<br>**- Campus survey:** Using English to ask campus students or teachers 'which countries do they like to visit? And Why?' (Thursday lunch hour)<br>**-E-mail exchange**<br>**-Basic Conversation Patterns** (Self-Study: unit 17 and 18).<br>**-Preparation for 'Role-play', 'Puppet Show' and 'Audiotaped journal'.**<br>**-Learning diary** | |

**Week 13/ Theme: Travel (unit11)**

| Regular Classes/Monday (1:10-3:00 p.m.) | Tutorial Session/Wednesday (1:10-3:00 p.m.) |
|---|---|
| **Class1**<br><br>***Awaken and Amplify stages:** Feeling and discussing different Countries in the world<br>**-Songs appreciation + cooperative learning:** T plays 10 world children songs (sung in different languages) for students to guess 'which language has been spoken in the song?'<br>**-Class discussion +Visual presentations:** Checking answers together + pointing out where these countries are on the world map.<br>**-Thinking activities + cooperative learning:** Ss analyze the results (find the countries campus teachers and students like to visit and why) from Campus Survey<br>***Break Time** | **Class1**<br><br>**-Video teaching and learning:** Rebecca's Story (selective episodes/episode 11: Photos and Farewells)<br>**-Role-play performance:** 2 groups (5-6 Ss each group)<br>**-Group Evaluation and discussion**<br><br>***Break Time** |
| **Class2**<br><br>***Teach stage:** improving Listening abilities<br>**-E.Q. time + teacher-centered lecturing:** T tells students how to reduce listening anxiety through deep-breathing and visualization-relaxation<br>**-Authentic Listening practice:** (unit11/real world listening/predict/guess and discuss)<br>**-Observation activity:** noting down reduced forms from the Listening Task (unit11)<br>**-Thinking activities + cooperative learning +teacher-centered lecturing:** exploring rules for reduced forms from Language Awareness and Listening Task (unit11: 29).<br><br>***Transfer stage:** Applying what we have learned today<br>**-Riddles creation + cooperative learning:** Students are encouraged to create their riddles that are related to today's topic. The answers should be a county or a traveling problem.<br>**-Whole class discussion:** Sharing by turns | **Class2**<br><br>**-Puppet Show performance:** 3 groups (3-4 Ss each group)<br>**-Group Evaluation and discussion**<br>**-Relevant websites introduction and demonstration** |
| **[After-class activities]**<br>**-Website surfing**: English websites that introduce different countries, English learning websites<br>**-Impact Listening:** Preview unit 17 (homework)<br>**-Rebecca's story Episodes 19-24** (Self-access Center)<br>**-English novels/readers Book Fair in HsinChu Elite Bookstore**<br>**-E-mail exchange**<br>**-Basic Conversation Patterns** (Self-Study: unit 20 and 23).<br>**-Preparation for 'Role-play', 'Puppet Show' and 'Audiotaped journal'.**<br>**-Learning diary**<br>**-Start to prepare for final projects** | |

**Appendix 9**

# Role-Play Evaluation Sheet

| Group Number: | Date: |
|---|---|
| Theme (Episode): | |
| **1. Participation:**<br>**2. Creativity:**<br>**3. Language communication:**<br>Fluency-<br><br>Body language-<br><br>Intelligibility-<br><br>Grammar-<br><br>Interaction-<br><br>Usage of words-<br><br>**4. Content:**<br><br>**5. Others/Comments:**<br>(Write your own words) | **Suggestions for evaluation:**<br><br>Good- 3, OK-2, Needs improvement-1<br><br>1. **Participation** (Cooperation): Each member of the group has actively contributed his/her part to the performance<br><br>2. **Creativity:** Their performance is very creative (interesting and attractive, e.g. music and costumes)<br><br>3. **Language communication:** The way they communicate with one another in the play is clear, appropriate and natural<br><br>4. **Content:** They have performed the target content successfully |
| Sign your name: | |

**Appendix 10**

# Final Projects List

Dear students,

Do you want to use other modes to demonstrate your English abilities in addition to the paper and pencil tests? At the end of the course, you will get the opportunities to show what you have learned in the semester through your preferred ways. For your convenience, the final projects list is suggested below. Each of you needs to choose at least one for final exhibition. If your have other ideas or any questions, please contact me without hesitation. My e-mail address is [redacted] and phone number [redacted] Thanks for your cooperation and I look forward to your performance!

1. Create an English broadcasting program (1~3 Ss): Design a script and tape-record your broadcasting.
2. Create an English picture book introducing new words or idioms that have been taught in the semester (1~2 Ss).
3. Group performance through songs and dances (2~4 Ss): The content should be related the topic(s) in the semester.
4. Big Poster(s) design for the topics discussed in the semester (1~2 Ss).
5. Group performance through musical opera or drama (2~4 Ss): The content should be related the topic(s) in the semester.
6. Multimedia design (1~2 Ss): The content should be related the topic(s) in the semester.
7. Sing your favorite English song(s) and explain why in English (Individual performance): you can create your own, choose one that has been introduced in the semester or related to the topic(s) of the semester.
8. Create an English album: Collect, classify and summarize the English reports from websites, newspapers or magazines related to the topic(s) in the semester.
9. Others……..

Cheers,
English Teacher
Tzu-chia Chao

**Appendix 11**

## A Cross-Cultural Event for Discussion

(A preparation activity for puppet-show)

***Background:** The Chinese student in the following story had been in the United States for more than 2 years when the incident happened.

## *Read and Think*

*She was stopped by the police while making a left turn from the right lane. When the police gave her a citation, she refused to accept it, proclaiming that she was a good person and had never broken a traffic rule before. When her argument failed to convince the policeman, she added, "you don't have a good heart. Policeman should have a good heart and help people, but you don't." The policeman was at a loss to understand what she was saying and told her that if she would not accept the ticket, she could go to the court. When she still refused to sign it, the policeman then told her that if she defied the law, she would be sent to jail. She answered, "No way, jail not for me. Jail is for bad people." Seeing it meaningless to talk to her, the policeman finally gave up and called his superior for help.* (Liu, 1995: 259)

## *Questions*

1. Why did the communication breakdown?
2. Do you think socio-cultural values are underlying our languages? How? Examples.

**Source:** Liu, D. (1995). Socio-cultural transfer and its effect on second language speakers' communication. *International Journal of Intercultural Relations,* 19(22), 253-265.

## Appendix 12

### The Description of Stimulus Evaluation Checks

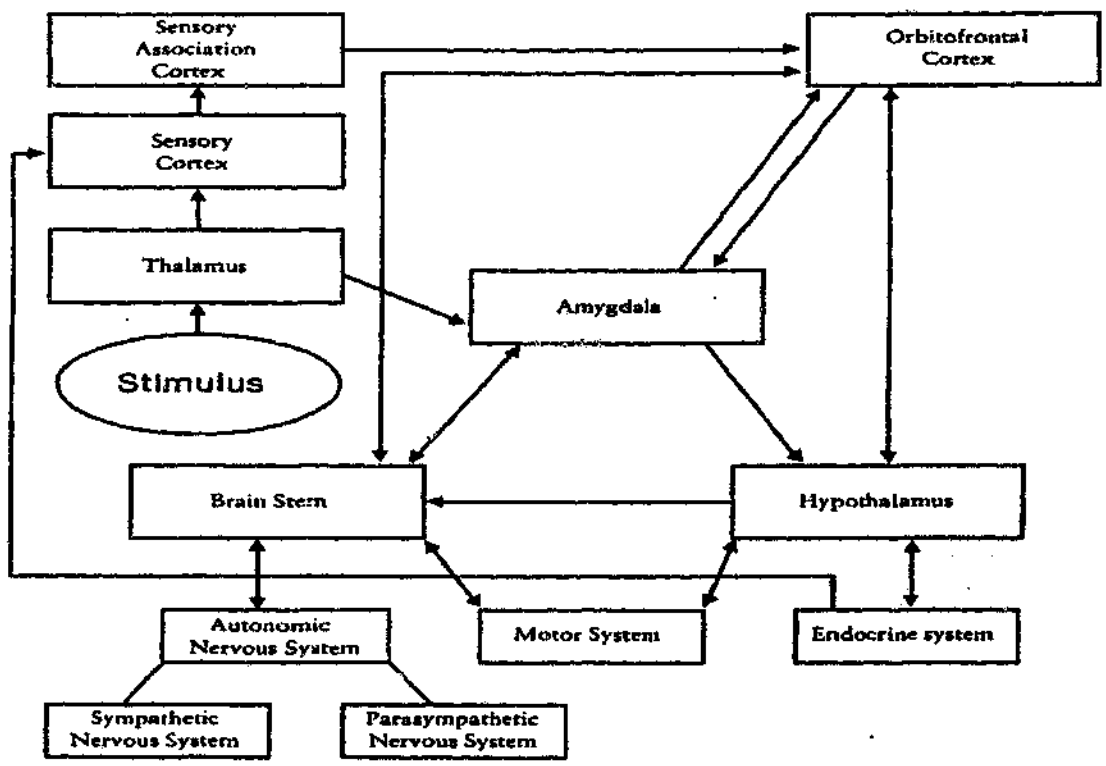
A. The Description of **Stimulus Evaluation Checks**
(Scherer, 1984: 38-39; Schumann, 1999: 30):

1. **Novelty check:** decides whether internal or external stimulation contains unexpected or familiar patterns.
2. **Intrinsic pleasantness check:** decides whether a stimulus event is pleasant and thus induces approach tendencies or unpleasant and induces avoidance tendencies.
3. **Goal/need significance check:** decides the degree to which a stimulus event is relevant to, consistent with or conducive to satisfying or achieving important goals and needs of the individual.
4. **Coping potential:** decides the degree of personal control over and power to change or avoid a stimulus event and its consequences.
5. **Norm/self compatibility check:** decides whether the event (action) matches social norms, cultural values or expectations of significant others and whether it is consistent with internalized standards as part of self-concept.

B. Based on the description of Stimulus Evaluation Checks, the **general rules** (Guide) used in the study for data analysis of affective features are listed as follows:

1. **Novelty evaluation:** if the stimulus (theme) contains unexpected patterns.
2. **Familiarity evaluation:** if the stimulus (theme) contains familiar patterns.
3. **Variety evaluation:** if the stimulus (theme) contains the patterns of diversity.
4. **Pleasantness evaluation:** if the stimulus (theme) is appealing and thus fosters approach, or if it is unappealing and promotes avoidance.
5. **Goal/need evaluation:** the degree to which the stimulus (theme) is conducive to satisfying the individual's needs or achieving his/her goal.
6. **Coping potential evaluation:** if the stimulus (theme) can help the person develop coping potential or if the person has abilities to cope with the stimulus (theme).
7. **Self and social image evaluation:** the compatibility of the stimulus (theme) with social and cultural values, or with the expectation of significant others (proper or improper by others), the compatibility of the stimulus (theme) with the individual self-concept or ideal self (self-confidence or self-esteem).

# Appendix 13




**The Neural Mechanism for Stimulus Appraisal (Based On Schumann, 1999: 29)**

PS. The mechanism for stimulus appraisal involved in the neural system of the brain consists of the amygdala (located in the temporal lobes), the orbitofrontal cortex (located in the front of the brain above the orbits of eyes), and parts of the peripheral nervous system (i.e. the autonomic nervous system, the endocrine system and the motor system) in the body proper. This Figure, the Neural Mechanism for Stimulus Appraisal, shows how the amygdala and the orbitofrontal cortex are connected to the peripheral nervous system, how they cooperate to assess the emotional relevance and motivational significance of stimuli and then generate an emotion (appraisal) communicated back to the brain (Schumann, 1997, 1999 and 2001).

## Appendix 14

## Coded Examples: Affective Experiences

### Example 1—Affective Experiences of Previous EFL Learning:

| Extract from a Learner's Diary | Data Analysis<br>Affective Themes (bold)<br>Affective Features (*Italic*) |
|---|---|
| When I was in junior high school, I was punished physically quite often because I could not achieve the goal my English teachers set up for me. Since then, I have hated English. English has become a subject that keeps reminding me of my weakness and inability. In five-year College, the situation was worse than before. My low scores in English tests caused many heart-aching criticisms from teachers, such as "lazy worm" and "fool". The verbal insults made my heart bleed. I did not know what I should do at that time. I knew I was not an ideal learner because I used to fail in English tests. However, the result was not what I wanted. I feel sad to tell you I was deeply hurt by learning English, the language. How could I, a language idiot, have the motivation and abilities to learn English? | **English teachers (physical punishment)**<br>*Learner's goal (-)*<br>*Pleasant (-)*<br>*Personal coping potential (-)*<br>**English tests (poor performances)/ English teacher (verbal blame)**<br>*Self image (-)*<br>*Personal coping potential (-)*<br><br>*Pleasant (-)*<br>**The self-concept of being an effective EFL learner**<br>*Personal coping potential (-)* |
| Punishments, blame and ridicule had been like nightmares in my previous school life. Until now, once I hear English, I feel sick. I still remember the awful days in the last year of my five-year College study. My teachers, parents, classmates and elder brothers blamed and looked down on me without listening to my inner voices, because I did not want to attend the basic level test of GEPT for degree evaluation. I was considered as a naughty student without hope. At the graduation ceremony of the five-year College, my only wish was for no more English classes in the future. No English! Please! I think I am a language idiot. I do not have any talent. I am a loser. I cannot perform well in tests and I cannot even use English to write a memo. Right now, you know how bad my English abilities are. Do you still want to teach me? Or do you want to give me up!<br><br>(S6/ 22 April) | **Teachers/ parents/ classmates/ family members(blame and no understanding)**<br>Pleasant (-)<br>*Self and social image (-)*<br><br>**English tests (level evaluation)**<br>*Self and social image (-)*<br><br>**The self-concept of being an effective EFL learner**<br>*Personal coping potential (-)*<br>*Self and social image (-)* |

**Example 2—Affective Experiences during the MI-based Intervention**

| **Extracts from a Learner's Diary** | **Data Analysis**<br>Affective Themes (**bold**)<br>Affective Features (*Italic*) |
|---|---|
| Last week, Bill and Ho told us that the English teacher did reply to them when they e-mailed her. They told me the English teacher was very friendly. I think it's really good because I do not like to talk to schoolteachers face to face. I am very shy. Yesterday, I e-mailed the English teacher about my difficulties and some ideas about the course. This morning, I was very excited to get her reply. She e-mailed me many self-study websites for English learning and gave me some suggestions about my difficulties. I think she must be a very experienced English teacher. It is incredible in my school life to meet a language teacher so close and helpful to me, like a friend that cares about my feelings, efforts and progress in learning English. I find I am motivated to pick up English, the language I have given up for a long time.<br><br>(S32, 2 May/ Stage1) | **English teacher (friendly/ helpful)**<br>*Pleasant (+)*<br>*Learner's needs (+)*<br><br>*Pleasant(+)*<br><br>*Learner's needs(+)*<br><br>*Self-image (+)* |
| I am surprised to see the riddles our group created last week are posted on the bulletin board. For me, it is the first time my English work has been appreciated by my English teacher. I feel proud of my 'minor achievement' even though I am only one of the group members who created the final products. This morning, my class mentor told me and my group members, 'Your English writing is good and the riddles are very creative' He invited us to write some English riddles for our department newsletters for fun. I was speechless at his praises and invitation but I was really happy to let people know I am not English idiot. I can use English to do some practical things. Anyway, I feel proud of our work and am thankful for the English teacher's 'sharp eyes'. English is an interesting language, isn't it?<br><br>(S32, 28 May/ Stage2) | **English teacher (publication of students' works)**<br>*Pleasant (+)*<br><br>*Self and social image* (+)<br><br>*Self and social image (+)*<br><br>*Pleasant (+)*<br>*Personal coping potential (+)*<br><br>*Pleasant (+)* |

| | |
|---|---|
| The final project of our three-person group is to record a radio broadcasting program. The story title is 'Escape!' The process of recording our tape has been an unforgettable experience. I really enjoy cooperating with my best friends. So far, we have learned a lot from each other. The encouraging thing is that the English teacher helped us review all scripts with constructive suggestions before our final product is done. She even arranged time to see our rehearsal last week. Since we only have three persons, each of us needs to play different characters. I play four characters, so I have spent much time in figuring out how to use different voices to present each character. However, I have got many suggestions and good ideas from classmates and group members. It has been very funny and interesting to have this kind of experience, to become other people and to speak English with different voices. It took us two weeks to finish recording our project. The project is meaningful to the three of us because it has made us understand we can use English to express our creative ideas successfully. We will keep the tape forever and I will not forget the wonderful learning experience.<br><br>(S32, 21 June/ Stage 3) | **Authentic assessment (final project)**<br>*Novelty (+)*<br>**Fellow learners (learning from one another)**<br>*Pleasant (+)*<br>*Learners' needs (+)*<br>**English teacher (assistance)**<br>*Learners' needs(+)*<br><br>**Authentic assessment (final project)**<br>*Personal coping potential (+)*<br>**Fellow learners (assistance)**<br>*Learners' needs (+)*<br>*Pleasant (+)*<br>*Novelty (+)*<br><br>*Personal coping potential (+)*<br><br>*Pleasant (+)* |

**Example 3—Affective Experiences of Previous EFL Learning:**

| **Extracts from Interview Transcripts** | **Data Analysis**<br>Affective themes (**bold**)<br>Affective features (*Italic*) |
|---|---|
| Celia, Lin: I feel embarrassed to talk about my current English abilities because I do not know how to express myself through English. My English is terrible. My listening abilities are extremely poor, beyond your imagination. Although what high school teachers taught could help me pass entrance exams, I find my practical English abilities are still poor. I am still like a beginner. I feel lost when I need to study English independently because I don't know how to learn. I cannot read English newspapers and understand English broadcasting after seven years of learning. It is really a shame. The worst is I am terribly afraid of seeing native speakers even when | **Self-concept of being an effective EFL learner**<br><br>*Personal coping potential* (-)<br><br>*Self-image*(-)<br><br>*Personal coping potential* (-)<br><br>*Pleasant* (-) |

| | |
|---|---|
| chances are available. I think I have tried to avoid English if possible. Two months ago, I saw a foreign guy (Blue eyes and brown hair) in an Italian restaurant at Taipei SOGO Mall. He had problems with his meal order because of communication difficulties with waiters. I tried to ignore him although I hoped I could have helped him. I knew being a foreigner in a different country is not easy. A very guilty feeling came to my mind at that time and I could not help sighing, "The seven-year English learning is completely in vain!"<br>(Interview I/Part B: Q14, 23 April) | **Communication/application opportunities**<br><br>*Personal coping potential* (-)<br>*Learner's goal* (-)<br><br>*Pleasant* (-)<br>*Self-image* (-) |
| Chia-Ling, Chu: I did not enjoy learning English. I think my problem was that I had met many 'terrible' English teachers. They did not really care about the needs of students. They only cared about grades and money. In senior high school, my English teacher used to make students lose face in the class, especially those did not attend special English course at his place. He opened his own cram school. He wanted to emphasize how bad our English was and the need for extra classes to make up, so that we would go to his 'cram school'. He told us the payment would be cheaper than that of others because we were his students. If we brought our friends to 'his school', we could get discount. It was really disgusting.<br><br>(Interview I/Part A: Q7, 23 April) | **English teachers**<br>*Pleasant* (-)<br>*Learners' needs* (-)<br><br>*Self and social image* (-)<br>**Cram school**<br><br>*Personal coping potential* (-)<br><br>*Pleasant* (-) |

**Example 4—Affective Experiences during the MI-based Intervention:**

| **Extracts from Interview Transcripts** | **Data Analysis**<br>Affective themes (**bold**)<br>Affective features (*Italic*) |
|---|---|
| Shu-Jing, Liu: I used to study alone and get good grades in important tests. I thought my English was good because of my excellent test performances. I looked down on others; especially those with low grades. I did not talk to them because I unconsciously felt they were inferior to me. However, this course let me find that my English is poor because speaking and listening abilities are the focus of evaluation. I felt shocked when I knew we had alternative assessment tasks. No grammar tests! I was disappointed first and felt helpless later. I did not how to become a fluent English user within a very short time to | **English tests**<br>*Personal coping potential (+)*<br><br>*Self and social image (+)*<br><br>**Authentic assessment**<br>*Personal coping potential (-)*<br><br>*Pleasant (-)* |

| | |
|---|---|
| impress my English teacher. I was sad because I could not be the top student of the course. However, I have got a lot of help from classmates, even though many of their previous English grades were lower than mine. They can speak English fluently without interruption. They are helpful and joyful, unlike me, a very self-centered girl. They are really good because they have helped me become a communicative learner finally. Now, I do believe everyone has his/ her own strengths when learning English and I need to be a humble learner.<br><br>(Interview II/Part B: Q11, 26 June) | *Self and social image (-)*<br>**Fellow learners**<br><br>*Learners' needs (+)*<br>*Pleasant (+)*<br><br>*Personal coping potential (+)* |
| Han-Yi, Hsiao: I like the course because I can feel the teacher has taught us from her heart. She really cared about our difficulties and needs. She has tried her best to have interaction with us and help us. She even borrowed her son's toys as realia to impress us. I sincerely hope all school English teachers in Taiwan can understand EFL learners' difficulties and needs. Knowledge transmitting is not enough because what many EFL learners need is affective support and encouragement. I find an understanding teacher can help students be aware of their problems and find solutions easily. After taking the course, I am reminded that communicative English abilities cannot be improved by extensive paper-and-pencil practice. Practice does not make perfect. Active learning through my strengths should be one of the good strategies to bring me to success. I think I have been really enlightened by what the English teacher has said and done during the semester. Her patience and creativity have made many of us willing to open our minds to discuss our problems and to brainstorm possible strategies together.<br><br>(Interview II/Part C: Q 17, 26 June) | **Language teacher**<br><br>*Learners' needs (+)*<br><br>*Pleasant (+)*<br><br>*Personal coping potential (+)*<br><br>*Self-image (+)* |

## Appendix 15

### The Categories of Language Learning Strategies (Oxford, 1990)

**A.** "Learning Strategy" is defined as the specific actions, behaviors, steps or techniques employed by learners (intentionally) to make learning and using the target language "easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations." (Oxford, 1990:8)

**B.** The following descriptions of six strategies are guiding rules used in the study for data analysis of strategies.

| Categories | Descriptions | Examples |
|---|---|---|
| **Memory strategy** (Direct strategy) Code: M/D | The strategy students use to help them remember new language items effectively | Groupings, imagery, rhyming and structured review |
| **Cognitive strategy** (Direct strategy) Code: C/D | The strategy students use to think about and understand (mental process) the new language | Reasoning, analysing, summarizing and general practice |
| **Metacognitive strategy** (Indirect strategy) Code: M/I | The strategy students use to organize and evaluate their own learning | Pay attention, consciously searching for opportunities, monitoring errors, plan for language tasks, self-evaluating personal progress |
| **Compensation strategy** (Direct strategy) Code: P/D | The strategy students use to help them compensate for a lack of knowledge (for missing or limited knowledge) | Guessing, using synonyms and using gestures |
| **Affective strategy** (Indirect strategy) Code: A/I | The strategy students use to manage their emotions during the learning process | Anxiety reduction, self-encouragement and self-award |
| **Social strategy** (Indirect strategy) Code: S/I | The strategy used by students to involve interaction with other people | Asking questions, cooperation with others (e.g. proficient users), being culturally aware |

# Appendix 16

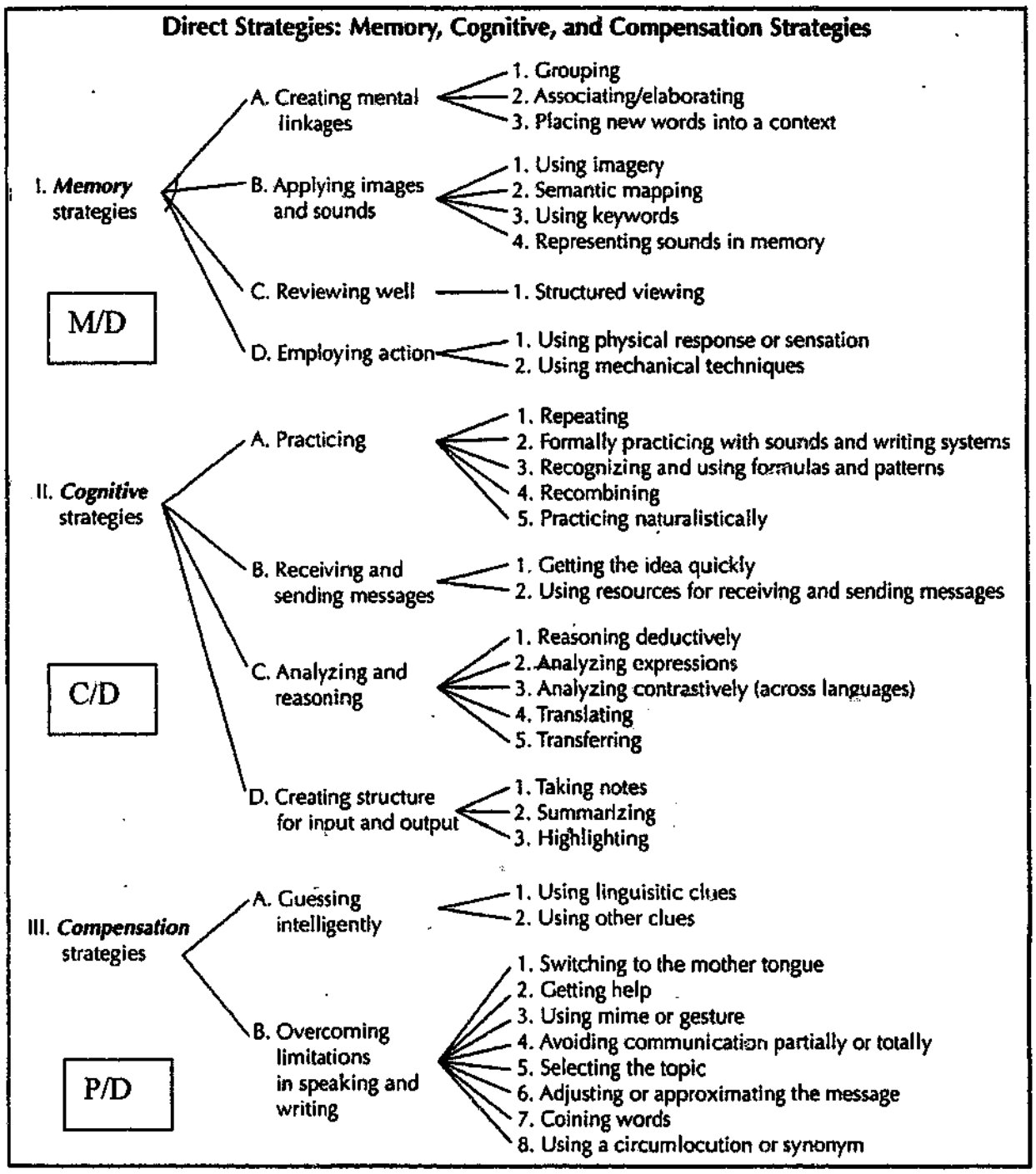



**Figure1: Oxford's Diagram of the Strategy System: Direct Strategies (Oxford, 1990)**

*All major direct strategies reported by student participants in the study were analysed through the scheme. For example, the strategy 'using mother tongue to overcome communication barrier' was assigned the code "P/D-B-1". The strategy "Using hand gestures to remember the differences in English vowels" was assigned the code "M/D-D-1".

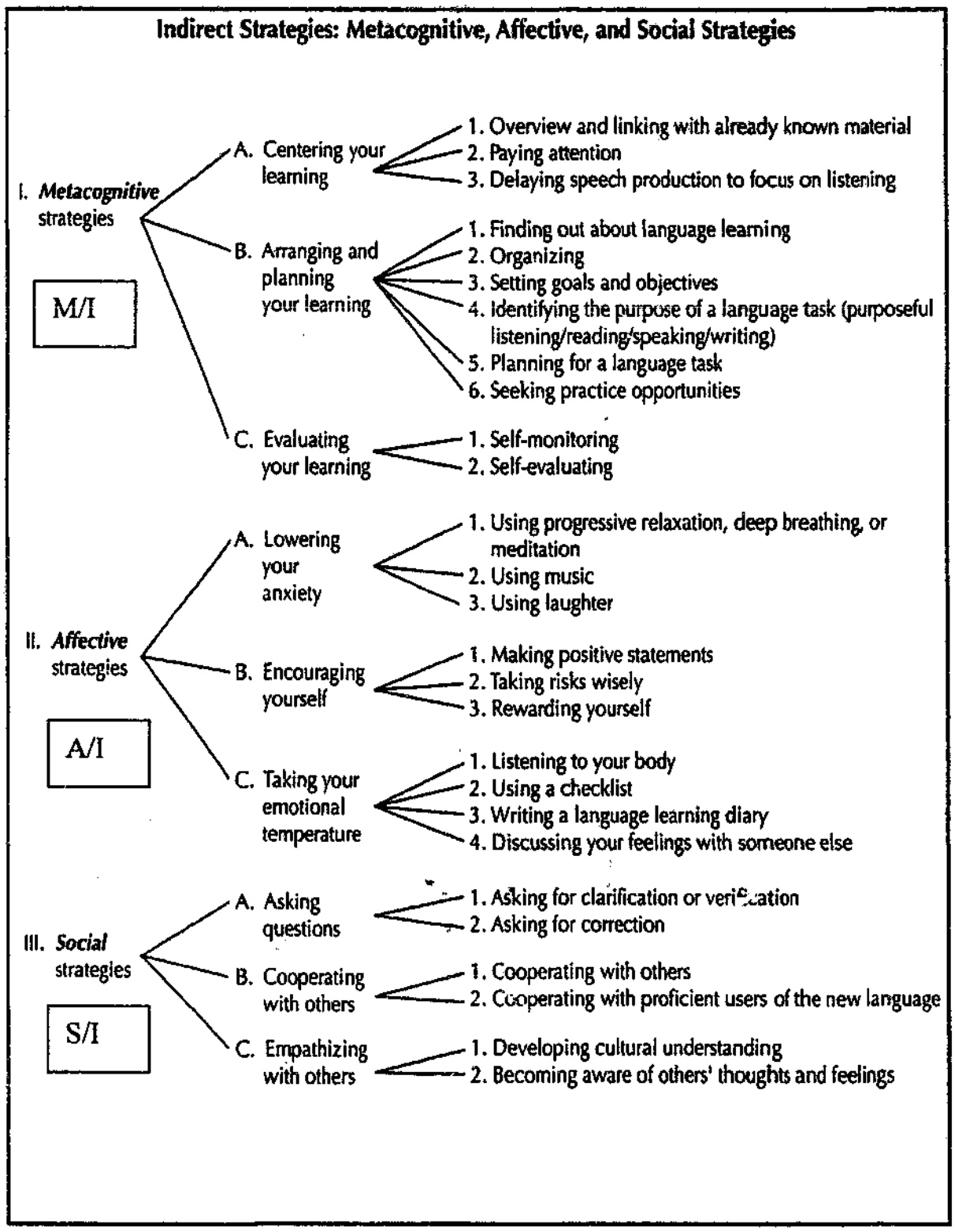



**Figure 2: Oxford's Diagram of the Strategy System: Indirect Strategies (Oxford, 1990)**

*All major indirect strategies reported by student participants in the study were analysed through the scheme. For example, the strategy "keeping a learning diary to write down feelings of learning process" was assigned the code "A/I-C-3". The strategy "Group members discussing the content of English learning videos" was assigned the code "S/I-B-1".

## Appendix 17

### Armstrong's Summary of Multiple Intelligences

A. "Intelligence" is defined as "a bio-psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner, 1999: 33-34).

B. Based on Armstrong's summary of Multiple Intelligences theory (Armstrong, 2000), the following descriptions of eight intelligences are guiding rules for data analysis of involved intelligences of each reported strategy in the study.

| Intelligences | Descriptions | Examples |
|---|---|---|
| **Verbal-Linguistic** (Language-arts-based) (Word Smart) | People are sensitive to sounds, structures, meanings, and functions of words and language | Activities related to speaking, reading, writing and listening |
| **Logical-mathematical** (Cognitive-patterns-based) (Logic Smart) | People have the sensitivity to, and capacity to discern patterns, numbers, numerical data, causes and effects, objective and quantitative reasoning. | Finding patterns, forming and testing hypothesis, and deductive and inductive reasoning |
| **Spatial-visual** (Image-based) (Picture Smart) | People are sensitive to colors, shapes, visual puzzles, symmetry, lines and images. They have the capacity to perceive the visual-spatial world accurately and to perform transformations on those perceptions. | Creating mental images, drawing and sketching, representing ideas visually (e.g. posters and graphics) |
| **Bodily-kinesthetic** (Performance-based) (Body Smart) | People are capable of expressing self, processing information and solving problems through doing (touching/hands) and moving | Hands-on activities, and physical activities that requiring strength, flexibility, hand-eye coordination and |

| | | |
|---|---|---|
| | (physical movement/the whole body). | balance |
| **Musical-rhythmic** (Audio-based) (Music Smart) | People have the ability to appreciate and produce rhythm (beat and tempo), melody, pitch, tone and sound. | Singing, playing an instrument, listening, creating music |
| **Interpersonal** (Relation-based) (People Smart) | People are sensitive to body languages, feelings, moods and voices. They have the capacity to discern and respond appropriately to the needs, moods and temperaments of other persons. | Working (interacting or cooperating) with people, helping people |
| **Intrapersonal** (Psychological-based) (Self Smart) | People have the ability to understand their strengths, weakness, goals and desires | Assessing personal abilities, monitoring one's own thinking, and Activities related to self-inquiry and self-reflection. |
| **Naturalist** (Environment-based) (Nature Smart) | People have capacity to recognize, distinguish and classify natural objects, plants, animals, and naturally occurring patterns. They are sensitive to ecological issues. | Learning from living things, working in natural settings, and analyzing ecological and natural situations and data |

## Appendix 18

# An MI Inventory for Adults*

(English Version)

**Directions**

This MI Questionnaire is for you to explore and understand your current intellectual spectrum. You will find the following items are statements that apply in 8 intelligences. Please read each statement carefully, intuitively select a number based on the following scale (1, 2, 3, 4 or 5) and put it on the left blank.

*1- Strongly disagree*
*2- Disagree*
*3- No opinion*
*4- Agree*
*5- Strongly agree*

1_____Books are very important to me.
2_____I can hear words in my head before I read, speak, or write them down.
3_____I get more out of listening to the radio or a spoken-word cassette than I do from television or films.
4_____I enjoy word games like Scrabble, Anagrams, or Password.
5_____I enjoy entertaining myself or others with tongue twisters, nonsense rhymes, or puns.
6_____Other people sometimes have to stop and ask me to explain the meaning of the words I use in my writing and speaking.
7_____English, social studies, and history were easier for me in school than math and science.
8_____Learning to speak or read another language (e.g., French, Spanish, German) has been relatively easy for me.
9_____My conversation includes frequent references to things that I've read or heard.
10_____I've written something recently that I was particularly proud of or that earned me recognition from others.
11_____I can easily compute numbers in my head.
12_____Math and/or science were among my favorite subjects in school.
13_____I enjoy playing games or solving brainteasers that require logical thinking.
14_____I like to set up little "what if" experiments (for example, "What if I double the amount of water I give to my rosebush each week?")
15_____My mind searches for patterns, regularities, or logical sequences in things.
16_____ I'm interested in new developments in science.
17_____I believe that almost everything has a rational explanation.
18_____I sometimes think in clear, abstract, wordless, imageless concepts.
19_____I like finding logical flaws in things that people say and do at home and work.
20_____I feel more comfortable when something has been measured, categorized, analyzed, or quantified in some way.

21_____I often see clear visual images when I close my eyes.
22_____ I'm sensitive to color.
23_____I frequently use a camera or camcorder to record what I see around me.
24_____I enjoy doing jigsaw puzzles, mazes, and other visual puzzles.
25_____I have vivid dreams at night.
26_____I can generally find my way around unfamiliar territory.
27_____I like to draw or doodle.
28_____Geometry was easier for me than algebra in school.
29_____I can comfortably imagine how something might appear if it were looked down on from directly above in a bird's-eye view.
30_____I prefer looking at reading material that is heavily illustrated.
31_____I engage in at least one sport or physical activity on a regular basis.
32_____I find it difficult to sit still for long periods of time.
33_____I like working with my hands at concrete activities such as sewing, weaving, carving, carpentry, or model building.
34_____My best ideas often come to me when I'm out for a long walk or a jog, or when I'm engaging in some other kind of physical activity.
35_____I often like to spend my free time outdoors.
36_____I frequently use hand gestures or other forms of body language when conversing with someone.
37_____I need to touch things in order to learn more about them.
38_____I enjoy daredevil amusement rides or similar thrilling physical experiences.
39_____I would describe myself as well coordinated.
40_____I need to practice a new skill rather than simply reading about it or seeing a video that describes it.
41_____I have a pleasant singing voice.
42_____I can tell when a musical note is off-key.
43_____I frequently listen to music on radio, records, cassettes, or compact discs.
44_____I play a musical instrument.
45_____My life would be poorer if there were no music in it.
46_____I sometimes catch myself walking down the street with a television jingle or other tune running through my mind.
47_____I can easily keep time to a piece of music with a simple percussion instrument.
48_____I know the tunes to many different songs or musical pieces.
49_____If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately.
50_____I often make tapping sounds or sing little melodies while working, studying, or learning something new.
51_____ I'm the sort of person that people come to for advice and counsel at work or in my neighborhood.
52_____I prefer group sports like badminton, volleyball, or softball to solo sports such as swimming and jogging.
53_____When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own.
54_____I have at least three close friends.
55_____I favor social pastimes such as Monopoly or bridge over individual recreations such as video games and solitaire.
56_____I enjoy the challenge of teaching another person, or groups of people, what I know how to do.

57_____I consider myself a leader (or others have called me that).
58_____I feel comfortable in the midst of a crowd.
59_____I like to get involved in social activities connected with my work, church, or community.
60_____I would rather spend my evenings at a lively party than stay at home alone.
61_____I regularly spend time alone meditating, reflecting, or thinking about important life questions
62_____I have attended counseling sessions or personal growth seminars to learn more about myself.
63_____I am able to respond to setbacks with resilience.
64_____I have a special hobby or interest that I keep pretty much to myself.
65_____I have some important goals for my life that I think about on a regular basis.
66_____I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources).
67_____I would prefer to spend a weekend alone in a cabin in the woods rather than at a fancy resort with lots of people around.
68_____I consider myself to be strong willed or independent minded.
69_____I keep a personal diary or journal to record the events of my inner life.
70_____I am self-employed or have at least thought seriously about starting my own business.
71_____I like to spend time backpacking, hiking, or just walking in nature.
72_____I belong to some kind of volunteer organization related to nature (e.g., Sierra Club), and I'm concerned about helping to save nature from further destruction.
73_____I thrive on having animals around the house.
74_____I'm involved in a hobby that involves nature in some way (e.g., bird watching).
75_____I've enrolled in courses relating to nature at community centers or colleges (e.g., botany, zoology).
76_____I'm quite good at telling the difference between different kinds of trees, dogs, birds, or other types of flora of fauna.
77_____I like to read books and magazines, or watch television shows or movies that feature nature in some way.
78_____When on vacation, I prefer to go off to a natural setting (park, campground, hiking trail) rather than to a hotel/resort or city/cultural location.
79_____I love to visit zoos, aquariums, or other places where the natural world is studied.
80_____I have a garden and enjoy working regularly in it.

* The questionnaire is adopted from Armstrong's An MI Inventory for Adults in his book *Multiple Intelligences in the Classroom* (2000), published by the Association for Supervision and Curriculum Development (USA).

* The questionnaire used during the MI workshop was a Chinese translation version.

# MI Work Sheet

**Name:**

**Date:**

1. **Linguistic Intelligence**

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |

2. **Logical-Mathematical Intelligence**

| | | | | |
|---|---|---|---|---|
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |

3. **Spatial Intelligence**

| | | | | |
|---|---|---|---|---|
| 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 |

4. **Bodily-Kinesthetic Intelligence**

| | | | | |
|---|---|---|---|---|
| 31 | 32 | 33 | 34 | 35 |
| 36 | 37 | 38 | 39 | 40 |

5. **Musical Intelligence**

| | | | | |
|---|---|---|---|---|
| 41 | 42 | 43 | 44 | 45 |
| 46 | 47 | 48 | 49 | 50 |

6. **Interpersonal Intelligence**

| | | | | |
|---|---|---|---|---|
| 51 | 52 | 53 | 54 | 55 |
| 56 | 57 | 58 | 59 | 60 |

7. **Intrapersonal Intelligence**

| | | | | |
|---|---|---|---|---|
| 61 | 62 | 63 | 64 | 65 |
| 66 | 67 | 68 | 69 | 70 |

8. **Naturalist Intelligence**

| | | | | |
|---|---|---|---|---|
| 71 | 72 | 73 | 74 | 75 |
| 76 | 77 | 78 | 79 | 80 |

## Appendix 19

## Coded Examples: Strategy Use

### Example 1: Strategy Use in Previous EFL Learning

| Extracts from Learners' Diaries | Data Analysis<br>Themes: **(bold)**<br>Types of strategy: (<u>**underlined**</u>)<br>Multiple intelligences: (*Italic*) |
|---|---|
| (In-Class Strategies)<br><br>During class time, I kept noting down the teacher's translation of each word and sentence in Chinese. I felt uneasy if I did not catch the Chinese meaning of the target learning materials. Sometimes, I wrote down the difficult pronunciations of unfamiliar words in zu-ying phonic symbols. In fact, most classmates did the same thing. Catching the Chinese meaning of main texts and learning how to pronounce new words through zu-ying symbols were very popular strategies employed by students when teachers were lecturing. A bilingual translation machine was very helpful for me to fill in some missing translation because of my absent mindedness during class time.<br><br>(S3, 22April) | **Teacher's lecturing (translation)**<br>Take notes in native tongue (creating structure for input)/ <u>cognitive strategy</u> (Strategy Code: C/D-D-1)<br>*(Verbal-linguistic, logical-mathematical)*<br><br>Note down the difficult pronunciations of unfamiliar words in zu-ying symbols (transferring from L1 phonic system)/ <u>cognitive strategy</u> (Strategy Code:C/D-C-5)<br>*(Verbal-linguistic, musical-rhythmic)*<br><br>Using a translation machine (translation)/ <u>cognitive strategy</u><br>(Strategy Code:C/D-C-4)<br>*(Verbal-linguistic, logical-mathematical)* |
| (In-Class Strategies)<br><br>Teachers told us practice makes perfect. They wanted us to read repeatedly and loudly. In class, repeating the target sentences loudly after the English teacher was like a class routine but it was also a good chance to practice spoken English. I believed repeating loudly could help me be familiar with the target sounds. Moreover, repeating after the teacher seemed to be the only chance in previous school EFL classes to practice the pronunciation of new words with my own mouth. Therefore, I did cherish these opportunities. Anyway, I thought maybe oral repetition could help me improve spoken English more or less, even though I felt bored most of the time.<br>(S21, 23 April) | **Traditional beliefs on language learning**: "practice makes perfect" and "repetition is the way"<br><br>Repeat after teacher loudly (practicing/repeating)/ <u>cognitive strategy.</u> (Strategy Code: C/D-A-1)<br>*(Verbal-linguistic)* |

| | |
|---|---|
| (In-Class Strategies)<br>The interpretation and practice of grammar rules was the 'must do' activity in my previous school English course, because grammar was considered as a very important aspect for English learning. Most important English tests included a section of testing grammar knowledge. In order to help students understand grammar rules, teachers used to show us how to analyze sentences from each text through applying the relevant rules. Most of the time, English learning became learning English grammar<br>(S40, 23 April) | **Grammar-focus teaching activities**<br>Consciously use grammatical rules to analyze each text (reasoning deductively)/ cognitive strategy (Strategy Code: C/D-C-1) *(Verbal-linguistic, logical-mathematical)* |
| (In-Class Strategies)<br>As many classmates did, I bought many resource books, such as 101 Important English Structures, Key Grammars for Entrance Exams and A Guide Book to English (I) (II) (III). These books were supplementary materials to the content of school textbooks. Clear summaries of the main points for tests and detailed explanation of grammar rules were provided. Moreover, correct answers for exercises in school textbooks were included in their appendixes. These books were students' 'secret weapons' to do homework or prepare for tests. I used to bring these books into school classes because I needed to check them for answers, and to look for explanations or examples during 'doing exercises' time.<br>(S47, 22 April) | **Mastering the target learning materials in textbooks** (e.g. the exercises assigned during in-class activity "doing exercises")<br>Use resource books (receiving the messages quickly)/ cognitive strategy. (Strategy Code: C/D-B-2) *(Verbal-linguistic, logical-mathematical)* |
| (Out-of-Class Strategies)<br>During my high school life, I studied very hard, especially in English. I knew if I wanted to enter an ideal university, my English test score must be good. In addition to school classes, I had extra English classes every day in a nearby cram school. I was busy and tired every day. Schoolteachers assigned us many grammar | **Test preparation**<br>-Get extra lessons in cram schools to have better performance in English tests (seeking practice opportunities)/ metacognitive strategy *(Intrapersonal)* (Strategy code:M/I-B-6)<br>-Do many exercises of grammatical rules |

| | |
|---|---|
| exercises, and so did teachers in cram schools. I believed 'no pain, no gain', so I had no complaints. I also bought many simulation tests to practice and resource books to read. I was a very diligent English learner. I did not think I was a smart English learner, so I spent plenty of time in reading English with the help of equivalent Chinese translation scripts and a translation machine. I had a special notebook for practicing new words or difficult words. In addition, I reviewed idiom or vocabulary books regularly to expand my lexical knowledge. I believed practice makes perfect and my efforts should pay me back. These were the ways I learned English during my previous after-school hours. Fortunately, I passed all school English tests because of my hard working. However, I still cannot use English fluently, especially in communication.<br><br>(S50, 23 April) | (practicing/repeating)/ cognitive strategy (Strategy Code: C/D-A-1) *(Verbal-linguistic, logical-mathematical)*<br>-Use simulation tests (practicing/ repeating)/ cognitive strategy (Strategy Code: C/D/-A-1) *(Verbal-linguistic, logical-mathematical)*<br>-Use resource books (supplementing the content of textbooks)/ cognitive strategy (Strategy Code: C/D-B-2) *(Verbal-linguistic, logical-mathematical)*<br>-Understand Chinese meaning of each segment in textbooks (translating)/ cognitive strategy. (Strategy Code: C/D-C-4) *(Verbal-linguistic, logical-mathematical)*<br>-Write new words many times (practicing/repeating)/ cognitive strategy (Strategy Code: C/D-A-1) *(Verbal-linguistic)*<br>-Structured reviewing/ memory strategy (Strategy Code: M/D-C-1) *(Verbal-linguistic, intrapersonal)* |

**Example 2—Strategy Use during the MI-based Intervention**

| **Extracts from Learners' Diaries** | **Data Analysis**<br>Themes: **(bold)**<br>Types of strategy: (underlined)<br>Multiple intelligences: (*Italic*) |
|---|---|
| (In-Class Strategies)<br>I believe all classmates enjoy seeing group performances in the role-play and puppet show because it is VERY funny and interesting. Most of the time, it is easy for us to be too excited to focus on the main content of their performance. We may get a lot of fun from observation but still behave like outsiders. I think the English teacher must have sensed this situation, so during today's tutorial session, she wanted us to pay attention to classmates' performances, their use of English and body language. The teacher gave us a list, in which many items, such as pronunciation, body language, fluency, and content, are included for evaluation. It was like a simple guideline for me to understand how to be an effective English user. The teacher clearly explained the temporary evaluation sheet (we may revise it later if we like!) and encouraged us to use it as a guide during observation and group evaluation. I find the | **Teacher's explanation and encouragement**<br><br>Pay attention to classmates' performances (centering your learning/pay attention)/ metacognitive strategy (Strategy Code: M/I-A-2) *(Interpersonal, intrapersonal logical-mathematical, visual-spatial, naturalist and verbal-linguistic)* |

| | |
|---|---|
| teacher's idea is great because it is quite helpful for me to know which part I need to focus on when evaluating others' performances. Many classmates agree that they take these activities more seriously without being distracted by other things because of the simple behaviour of 'purposeful paying attention'. Moreover, I find I have learned a lot from observing my classmates' strengths when they perform, as well as learning from their weakness. I am happy I have made progress through this way.<br>(S47, 8 May/Stage 1) | |
| (In-Class Strategies)<br>I really appreciate several classmates, like Tim and David, because they have been very helpful to almost everyone in the course. They are like 'emergency' English tutors available to us at any time. As we know, their English oral abilities are better than most of us. However, they are very humble, joyful, humorous and helpful. During last week's class break, many classmates asked them their learning tips and their conclusion was similar. They said, "the more you help others, the easier you make progress because you have more opportunities to practice." I believe many classmates have been really impressed by what they shared with us. Their words tell me that learning through doing will be more beneficial than independent learning. In fact, I find what the two classmates recommended us to do is similar to the employment of interpersonal intelligence suggested by the MI workshop. Knowing how to use what I know to help others is quite important to help myself make progress. This week, I can feel more classmates are willing to actively help others during class activity time. They are not like my former classmates in high schools, very selfish and ignorant. Now, what I want to say is that I can gradually feel the reality of peer support in the class. I can see many classmates starting to be interested in helping others. Learning from helping (teaching) others is no longer a slogan because many classmates practice it and so do I.<br>(S29, 10 May/Stage 1) | **Fellow learners' performance and recommendation**<br><br>Actively helping others / <u>social strategy</u><br>(Strategy Code: S/I-C-2)<br>*(Interpersonal, verbal-linguistic, and intrapersonal)* |
| (In-Class Strategies)<br>I find 'asking questions' is an effective strategy to facilitate group discussion. It is like a starter to show | **Class group discussion** |

| | |
|---|---|
| my interests in other conversation partners. The useful question patterns I employ are "Do you mean that?", "Sorry, would you mind saying that again, please?" Because we have many opportunities in the course to discuss with classmates about different issues, how to make a conversation go smoothly without misunderstanding is very important. So far, I find 'Asking questions' does help me clarify my thoughts and understand or confirm others' meanings.<br><br>(S27, 20 May/ Stage2) | Asking partners questions to seek clarifications or check understanding/ social strategy (Strategy Code:S/I-A-1) *(Interpersonal, intrapersonal, logical-mathematical and verbal-linguistic)* |
| (In-Class Strategies)<br><br>My English conversation abilities are extremely poor, like many classmates in the course. We cannot express our ideas smoothly and we are short of vocabulary. Nevertheless, we still need to talk in English because many in-class activities/tasks encourage us to practice English and use it to finish different tasks. Today's class was very impressive because in my group, no one was a fluent English user. In order to finish this task—putting the scrambled conversations in correct order, we drew pictures, pointed to the surrounding objects, used body language and simple English words to communicate with one another. It was quite funny but useful. The final result was very encouraging because our group answer was correct!<br><br>(S24, 3 June/ Stage3) | **Overcome communication barriers**<br><br>-Use drawing to convey ideas/ compensation strategy (Strategy Code: P/D-B-3) *(Visual-spatial and bodily-kinesthetic)*<br>-Use gestures/ compensation strategy (Strategy Code: P/D-B-3) *(bodily-kinesthetic and naturalist)*<br>-Use simple words to state complicated ideas/ compensation strategy (Strategy Code: P/D-B-6) *(Verbal-linguistic and intrapersonal)* |
| (Out-of-Class Strategies)<br><br>There are many learning projects we need to finish to pass the course. The puppet show and role play are the projects I find everyone in the course has been busy with. These projects are not just for fun because our English teacher counts them in our credits. Our performances in these projects will influence our final grades. To make sure the quality of our group performance in the puppet show is high, our members started our preparation earlier. We made plans and assigned each of us different jobs. To collect information about our topic 'the differences between Chinese and American speaking practices', I have read many books related to the theme. Classmates and the English teacher also gave me some suggestions. Website surfing has been helpful | **Instrumental purpose** (authentic assessment tasks/course requirement)<br><br>-Plan for a language learning task / metacognitive strategy (Strategy Code: M/I-B-5) *(Intrapersonal and interpersonal)*<br><br>-Develop cross-cultural understanding through reading relevant books, internet surfing and the assistance of others / social strategy (Strategy Code: S/I-C-1) *(Verbal-linguistic,* |

| | |
|---|---|
| as well. Because we need to write our own scripts for the show, Henna and I have collected many relevant canned dialogues to use. However, the process has not gone as smoothly as I expected. Some members are good friends but they are not ideal partners. I think they have not contributed their best to the project. I am a perfectionist so I have tried to push them very hard. It has not worked well so far, because some have different opinions. In order to cooperate with them effectively, I try to listen to them and not to be so aggressive, even though I really worry if our final performance can be good or not. I definitely want to get 'A+' for the course because I want to continue my study and the grade in English is quite important for school application. I hope all my group members can work as hard as I do.<br><br>(S37, 3 June/Stage 3) | *interpersonal, intrapersonal and visual-spatial)*<br>-Understand the conventional utterances (canned dialogues)and use them/ cognitive strategy (Strategy Code: C/D-A-3) *(Verbal-linguistic, intrapersonal and logical-mathematical)*<br><br>-Learning English through cooperative experiences with group members/ social strategy (Strategy Code: S/I-B-1) *(Verbal-linguistic, interpersonal, intrapersonal)* |

**Example 3 — Strategy Use in Previous EFL Learning**

| **Extracts from Interview Transcripts** | **Data Analysis**<br>Themes: (**bold**)<br>Types of strategy: (underlined)<br>Multiple intelligences: (*Italic*) |
|---|---|
| (Learning Strategies)<br><br>Liang, Chao: The out-of-class language learning strategies I used were similar to the ones I employed in the class. Learning new words through repetition, doing simulation tests and more grammar exercises are examples. I think all were for tests. Getting good scores was the only goal. You say did I use other strategies? No. How could I have time? I needed to prepare for endless English tests and I had many other subjects to study. My parents and teachers had high expectation of me, which gave me pressure. Society also uses grades to evaluate us. I had pressure to get a satisfactory performance in important public exams. To be honest, all out-of-class strategies I used at home for learning English were simply for mastering the content of textbooks and getting good scores. The goal was very realistic. I did not have time to generate other thoughts. Following what teachers requested us to do was the safest way!<br><br>(Interview I/ Part A: Q9, 23 April) | **School English teaching/test preparation**<br>-Repetition/cognitive strategy (Strategy Code: C/D-A-1) (*verbal-linguistic*)<br>-Use simulation tests/ cognitive strategy (Strategy Code: C/D-A-1) (*Verbal-linguistic, logical-mathematical*)<br>-Do grammar exercises/ cognitive strategy (Strategy Code: C/D-A-1) (*Verbal-linguistic, logical-mathematical*)<br><br>**English tests/ exam-first culture**<br>**English teacher** |

| | |
|---|---|
| (Learning Strategies)<br>Han-Yi, Hsiao: Anyway, I do not think the strategies I have told you about, such as translation and grammar exercises, which are very traditional and boring, could help me improve my practical English abilities. However, knowing is one thing and doing is another. In my previous EFL learning, I knew my problem but I did not get opportunities to tell teachers my problems and find solutions. You know, most teachers are quite dominant in students' English learning. Teachers' words are unchangeable rules for high school students and no body dared to say 'no'. I think it was also my fault. I was not an active learner. I do not know why I did not have strong motivation to implement my awareness, to be an active learner. Maybe I thought these traditional strategies were enough for me to prepare for and pass the English test in the college entrance exam, so I did not actively look for other possibilities. I think I was the one who easily surrendered to reality—exam-first culture. Anyway, in EFL context, it seems impossible for me to acquire English successfully.<br>(Interview I/ Part A: Q9, 23 April) | -Understand the Chinese meaning of each segment in textbooks (translating) /cognitive strategy (Strategy Code: C/D-C-4) *(Verbal-linguistic, logical-mathematical)*<br>-Do grammar exercises (repeating)/ cognitive strategy (Strategy Code: C/D-A-1) *(verbal-linguistic, logical-mathematical)*<br>**English teacher**<br><br>**English tests/ social expectation** |

**Example 4 — Strategy Use during MI-based Intervention**

| **Extracts from Interview Transcripts** | **Data Analysis**<br>Themes: (**bold**)<br>Types of strategy: (underlined)<br>Multiple intelligences: (*Italic*) |
|---|---|
| (Learning Strategies)<br>Shu-Jing, Liu: I find the best way to learn English effectively is that I must recognize personal needs and then develop suitable plans and relevant strategies. The plans and strategies should match personal strengths. In order to meet inner needs, I have tried to discover my multiple intelligences through reading several books recommended by English teacher. I also try to evaluate my level of different English skills, with the help of the language teacher and classmates. All the information has helped me decide which strategies are appropriate for me to learn English. For example, it is easy for me to feel anxious when doing English listening practice. After several trials, I find 'meditation' and 'deep breathing' can calm down my uneasy emotion. I employ the two affective strategies to reduce anxiety before attempting any listening practice or listening tests. During after-class learning, I use conversation patterns practice with partners to improve my English speaking skills, instead of using free talking with native speakers or fluent users, because I know my level. I believe only the strategies suited to personal needs are the | **Learner's belief**<br>-Set up personal learning plans (arranging and planning learning)/ metacognitive strategy (Strategy Code: M/I-B-3)*(Intrapersonal)*<br>**English teacher**<br>-Read books about English learning/ metacognitive strategy (Strategy Code: M/I-B-1) *(intrapersonal)*<br>**English teacher and classmates**<br>-Self-evaluating personal English proficiency with the help of others/ metacognitive and social strategies (Strategy Codes: M/I-C-2 & S/I-B-2) *(intrapersonal, interpersonal, logical-mathematical and verbal-linguistic)*<br>-Mediation and deep breathing/ affective strategies (Strategy Code: A/I-A-1) *(Intrapersonal, bodily-kinesthetic, and* |

| | |
|---|---|
| effective ones.<br><br>(Interview II/Part B: Q12, 26 June) | *visual-spatial)*<br>-Use conversation patterns and practice English with partners / cognitive and social strategies (Strategy Code: C/D-A-3 & S/I-B-1) *(Verbal-linguistic, intrapersonal, logical-mathematical, interpersonal)* |
| (Learning Strategies)<br>Ya-Chun, Ku: I think learning strategy is also one of the factors for successful English learning. I mean a wide range of strategies, involving a rich application of multiple intelligences. As we know, life can be meaningful and joyful because of 'variety'. Likewise, it is impossible to make successful English learning happen if we only know and employ limited strategies and intelligences. This logic is very clear and the MI-based course has proved my ideas. Based on the MI ideas, I have tried different strategies in my private study time to approach English learning. Singing English songs, listening to the channels of English songs and watching English TV programs are examples. Some strategies are even stretched beyond my personal strengths or previous experiences, such as keeping a diary for self-monitoring or discussing feelings or experiences with others. I think English learning is a process of using various strategies, and applying our multiple intelligences to practice the target language and deal with relevant learning problems. When abundant learning windows have been opened, I find learning English can be a very interesting and easy thing.<br><br>(Interview II/Part B: Q12, 26 June) | **Learner's belief**<br><br>**MI-based course**<br>-Sing English songs and listening to the channels of English songs cognitive and affective strategies/ (Strategy Codes: C/D-A-5 & A/I-A-2) *(Musical-rhythmic, intrapersonal, verbal-linguistic)*<br>-Watch English TV programs/ cognitive strategy (Strategy Code: C/D-A-5) *(verbal-linguistic and visual-spatial)*<br>-Keeping a learning diary for self-monitoring/ metacognitive strategy (Strategy Code: M/I-C-1) *(intrapersonal)*<br>-Discuss feelings or experiences with others/ affective strategy (Strategy Code: A/I-C-4) *(Intrapersonal and interpersonal)* |

## Appendix 20

Transcripts of Interviews: An Example[1]

***Interview I**
**(Student Name:** Hui-Shang, Chu, **Date:** 23 April)

***Interviewer:*** *How long have you been learning English?*

***Hui-Shang:*** About seven years. It included three years in a junior high school, three years in a vocational high school and one year in a two-year college of technology.

***Interviewer:*** *What was your purpose to learn English?*

***Hui-Shang:*** I think passing exams and getting a school to study were the main reasons.

***Interviewer:*** *In your experience, where was the best place to learn English?*

***Hui-Shang:*** Best place? No! I have not found a good place to learn English so far.

***Interviewer:*** *Can you explain it?*

***Hui-Shang:*** In Taiwan, learning English is like learning another subject, such as mathematics. It is not learning, it is stuffing and suffering. Best places should be in English-speaking countries.

***Interviewer:*** *What is the best way to learn English?*

***Hui-Shang:*** Extensive reading and listening are important. However, I think the best way is getting several understanding English-speaking friends around me every day. I am afraid of losing face. I need considerate and patient friends. They can help me and practice English with me. However, it seems difficult to find this kind of learning partners. No wonder my English has been poor for a long time. I mean my English communication abilities.

***Interviewer:*** *Have you ever experienced a conflict in teaching and learning approaches with an English teacher?*

***Hui-Shang:*** Conflicts? No. I have not thought about the issue. Most of the time, I followed the ways teachers taught me without conflicts.

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[1] Hui-Shang Chu (pseudonym) was one of the twelve volunteer students in the study who accepted two interviews. Two complete transcripts of interviews with Hui-Shang, conducted before and after the MI-based intervention, are provided here as a reference/example to present how the interview had been processed based on the pre-prepared interview questions. The interview transcripts (originally in Chinese) quoted here was an English translation version. In order to facilitate comprehension, the ideas or comments that appeared in incomplete forms or had been interrupted by interviewer have been rewritten as complete sentences, and the fillers during interview have been omitted. However, the words used by the interviewee to express her meanings or ideas have not been changed.

***Interviewer:*** *How did you feel about English learning?*

***Hui-Shang:*** I did not like.

***Interviewer:*** *Why?*

***Hui-Shang:*** I could not perform well on school tests, even though I had studied very hard. My tongue used to twist together once teachers wanted me to read English loudly. I could not remember English grammar and vocabulary effectively. English is very difficult. I felt disappointed with my English learning abilities.

***Interviewer:*** *So, you think English is a difficult language?*

***Hui-Shang:*** Yes. It is a foreign language, quite difficult.

***Interviewer:*** *Have you ever thought that you may master English one day?*

***Hui-Shang:*** No. I have not. It is impossible. I don't want to be a daydreamer. I think I do not have talent in English, and I am too old as well.

***Interviewer:*** *So, What kind of learner do you think can learn English successfully?*

***Hui-Shang:*** A learner who has foreign language talent and opportunities. If a gifted student grows up in a rich family, the probability of success becomes higher. The family can send her/him to study in English speaking countries or hire the best private tutors to teach her/him.

***Interviewer:*** *What was a really good or bad experience you had in learning English?*

***Hui-Shang:*** Did I have good English learning experiences in schools? No! But yes, I did in a cram school. I met an excellent student in a cram school during my last year in vocational high school study. Her name was Sue. Her English was great. She taught me many English idioms and invited me to watch English movies at her home. However, our friendship only lasted for three months because finally she immigrated to Canada with her family. She was the learner with talent and family support. I think the study time with Sue was the best experience I had in learning English.

***Interviewer:*** *What strategies did you use in class to learn English?*

***Hui-shang:*** Paying attention to teacher's lecturing, taking notes and using a translation machine were the strategies I used in class. I think taking notes was very important because these in-class notes were key points of each lesson. These notes could help me pass quizzes easily.

***Interviewer:*** *What strategies did you use at home or out of class to learn and use English?*

***Hui-Shang:*** I studied English for passing tests, so the strategies I used at home were remembering English vocabulary, phrases and grammar through extensive simulation exercises.

***Interviewer:*** *How about the strategies you employed to use English outside of classroom?*

***Hui-Shang:*** No! I did not have chances to use English, so I have no idea.

***Interviewer:*** *Could you please tell me what level you believe your English abilities are? I mean the four skills, listening, speaking, reading and writing. You can make your judgment based on the scale: excellent, good, fair, poor and worst.*

***Hui-Shang:*** I think my reading ability is ok (fair) but the other three skills are poor or you may say the worst.

***Interview II**
**(Student name:** Hui-Shang, Chu, **Date:** 26 June)

***Interviewer:*** *What kind of learner do you think can learn English successfully?*

***Hui-Shang:*** My previous learning experiences made me believe students with foreign language talent were lucky learners because they had excellent innate abilities to learn English. I used to think the world was not fair. However, my inner questions have been gradually clarified during the two months. I have asked several classmates with good English abilities if they agree that my opinions or not. After several talks with these classmates, I find determination and strategies are more important than foreign language talent. The learners who use strategies very often during self-study time should have better performance than rare users. I believe strategies are used to solve our learning problems, such as memory and self-regulation. Of course, these strategies should be appropriate for different individuals to efficiently deal with their learning situations as the language teacher has encouraged us to do during these two months. I think finding our own ways is important. Many successful cases introduced in the book "Being a smart English learner" can prove this point. Because of my personal awareness in this issue, I try to be 'a good language learner'— using appropriate strategies as often as possible, particularly when learning and using English outside the classroom context. Moreover, the surrounding people, especially friends, can play influential roles. This kind of awareness has helped me a lot. Now, I want to say I really feel thankful to my classmates. Their patience and encouragement let me feel

more confident on the way to acquiring this important international language.

***Interviewer:*** *Do you think English is difficult to learn?*

***Hui-Shang:*** It is not like a nightmare anymore but I still feel it is not easy. I need time to readjust my learning strategies and see if I can make improvement.

***Interviewer:*** *Do you have confidence to master English one day?*

***Hui-Shang:*** Yes. I do. I think I have confidence to master English one day. Now, I am using some strategies to solve my learning problems and hope it will not be far away to be an effective English learner and user.

***Interviewer:*** *How do you feel about the MI-based intervention? Do you like it?*

***Hui-Shang:*** I really enjoy the course. I feel encouraged to discover that I still have hope in English learning after taking the course. It has really been a big gain for me since I entered this university. In particular, I like to work with classmates because I find the more I provide others help, the more help I get. I have benefited a lot from group work. I do not think the reason that I have enjoyed group work so much is because I am afraid of losing face. In fact, I am a very independent girl. I can deal with things by myself most of the time. However, after taking the course, I have learned to appreciate the talents of different classmates. I think it has been valuable and interesting to work with classmates different from me and learn their merits during the process of cooperation. I think maybe that is why I have enjoyed the course so much.

***Interviewer:*** *Have you discovered some effective strategies to learn English during the MI-based intervention?*

***Hui-Shang:*** Yes, a lot.

***Interviewer:*** *Would you like to share some strategies with me?*

***Hui-Shang:*** Sure. I have discovered some strategies to understand spoken English. Because listening comprehension has been my weakest part, I have tried many strategies to help me improve listening abilities .You know, poor comprehension cannot make communication happen and it also means failure in school English listening tests. English is a very important school subject and an international language now, so I keep telling myself that I need to study hard to pass school listening tests and develop my basic communication abilities. I am glad I have discovered some useful strategies during the two months with the help of the language teacher and classmates. The strategies I use in my private study time include two types, formal and informal. The formal skills are previewing relevant vocabulary

before listening, searching main ideas, selective attention to the target input, using preview questions, noting down the difficulties I met and asking someone for help. The informal ones are extensive listening practice through some interesting radio programs, learning English through watching videos with English subtitles and doing oral practice with some classmates. These strategies sound simple but are useful for me.

***Interviewer:*** *How do you think about the MI-based intervention? The workshop? Instructional activities? Assessment tasks?*

***Hui-Shang:*** I like the ways my English teacher has taught and assessed us. It is quite fair to let us have various opportunities to present what we have learned. The MI workshop is really good. I think three hours are too short. I think it should be a one-semester course to help us know how to be effective English learners. I like all activities the English teacher have brought to the course. They have made my English learning during the two months full of joy and hope.

***Interviewer:*** *Could you please tell me what level you believe your English abilities are? I mean the four skills, listening, speaking, reading and writing. You can make your judgment based on the scale: excellent, good, fair, poor and worst.*

***Hui-Shang:*** I think my speaking and listening abilities have been improved a little bit. However, I am not sure if my overall English abilities (English proficiency) have made progress or not. At least, I have started to use English. My learning experiences in role-play and the puppet show have helped me to be an English user.

***Interviewer:*** *Do you have any suggestions or advice you want to give your English teacher, future English teachers or future English learners?*

***Hui-Shang:*** I feel grateful to my English teacher. She has encouraged us to keep discovering our own learning ways. I find meeting a right teacher is very important to influence how we look at ourselves and face our future. I hope future English teachers can understand students' needs and help them learn English through constructive ways. I think all students do not want to be abandoned. They may not want teachers' 'sympathy', such as 'giving me a pass'. I think what students need is how to use tools, skills and strategies effectively when learning and using English. I believe everyone in Taiwan expects to become a fluent English user, so we need English teachers' concern and guidance, as well as our own efforts.

**Appendix 21**

**Original copies of learners' diaries**

**{Example 1}**

我從國小畢業就開始學英文了，一直學五年
業，考完二技，可是還是學的很差，跟完全不會差不多。我從
學英文就是一直死背單字，由於不會KK英標，也就不會說，所
我就是死背單字，不會聽也不會說，可是每每都是背完就忘
，就是記不起來，所以我的英文非常的差，且由於不會說，
不會聽，所以每次別人說的都聽不懂，所以老師你上次上
時說的我完全聽不懂老師你在說什麼。

現在讀二技原文書是完全看不懂，考試前都是找同學借中文筆
懂的，放學回家後要努力打工賺錢，賺學費養自己，所以也沒
麼時間可以做自己的事。

我自己也曾想把英文學好，但因我自己的個性，三分鐘熱度的
性，每次都學一會兒就放棄了，也因此我的英文到現在都學不
好，一樣的爛。

**{Example 2}**

第一次接觸英文是在國小時期，也忘了是幾年級，只記得是和妹妹一起去補習。說實在的，那時的課程內容已經完全沒有印象了，記憶中只剩下那無窮盡的考試。自那時開始，妹妹的英文就比我好很多很多了。

接下來是國中時期，也不曉得是什麼原因，要背的單字，不論背多久，總是在放下單字的後十秒離我而去。而我的英文自開始學起，從未及格過。

再來是高職時期，選擇高職也是因為英文太破而沒考上高中。不過，就算是選了高職，我的英文依然還是最破的那個人。爾後，算是放棄了英文。除了考單字時會背單字，其餘的考試就只寫選擇題了。

在二專、二技的考試，就真的是祈求老天爺幫忙了。

自我介紹～

知道自己個性中的缺點，但改不過來，但繼續努力中。

高職同學常說，我是個奇怪的人，一個英文極差這樣的人，還可以寫程式，真是奇哉、怪哉。

一開始想這個問題時，自己也覺得怪，後來覺得應該是領域不同吧！程式中沒有所謂的過去式、現在式、未來式，也沒有祈使句、疑問句、肯定句。先不談我程式寫得如何，但我覺得程式就是程式，不會今天寫是這樣，隔天就變成了「過去式」。只要邏輯判斷正確就ok。

**{Example 3}**

5/3 老師上課時介紹了很多英文相關網站，感覺上很丰富。之前有去 Gostudy 網站去 Download 螢幕保護程式，也是一天一小東西，可是這網站後來就沒在更新，所以也就沒再用了。不然我也覺得這似乎也是可不錯的學習，不多也不少而且有發音例句。

網址 ⇒ http://english.gostudy.com.tw/

5/7 今天老師上課方式很有互動性，一開始些職業卡，以為會像在讀書會那樣，雖然與讀書會比較人比較多，不能大家都可以開口說自己抽到的職業，但却比讀書會中學到更多的職業。很喜歡這樣互動的方式上課，在玩樂中學習比較輕鬆。

5/14 雖然剩下到12次上課，但是對於全英文式的上課方式還是很喜歡的。
對於期末考的部份，我相信大家應該都會有精彩的演出與表現。當然不妙準備。

5/21 讀書會今天進行的部份也是蜻蜓點水，與老師上課的進度剛好的，在進行與同學對話時，一開始大家都照講義念了是記不下來，等到不如我們全看是否可以很順的對話，記不下來等到把它多少背下來，感覺對我們比較有用。
補充方面，對於 Sorry 與 Excuse me 也劃分出來是怎麼一回事，原來之前認定是錯的。
另語方面：out of（用光耗盡），sold out（賣光）

**{Example 4}**

5/14 老師發給同學一份 Job Skill 的圖文表，裡面的職業百羅萬象，包括 assemble components、take care of children、wait on customers ....等，接下來抽點了數位同學上去玩遊戲，當老師唸到某一項職業，代表的同學就要做出相對應的動作，才玩沒多久就有三位同學出局了...台下看表演的同學更是笑得東倒西歪，這種教學方法很不錯，不但能加深同學們記憶的印象，還很有趣呢！

5/10

期末專題報告，和自己的好友三人同組，最後討論出的結果，我們選取廣播劇，題目是「Escape ~~From~~ Alcatraz」逃出惡魔島，錄製的過程，真是個愉快的回憶呀～哈～由於一人必須分飾多角，我就分配到4個人物，分別須以不同的聲音去詮釋，哈～頻頻NG笑場...真的很有趣！花了好一段時間才錄製完畢...將第一次嘗試錄製廣播劇的美麗經驗燒錄到光碟中，這片光碟對我們而言，可是意義非凡滴～一定会好好珍藏保存！

這一堂課玩了很多遊戲，全班同學的互動情況更是極佳，每個人的背後都貼有一張職業的小便條，利用手上玩具的顏色去尋找 partner，兩人就得利用英文對話的方式，猜出自己的職業...

Do I work outdoors or indoors?

What are the benefits (or advantages) of this job?

Do I make a high salary or a low salary?

Would you like to have this job?

利用這四個問句來猜出答案真的很不容易，剛未還得運用自己的英文基礎想出許多問句～才總算找出正確答案，這個遊戲給我有机会和同學以英文對話，真的很好，可以增加說英文的訓練！

**Appendix 22**

## Original copies of my teaching diary

6/3 2002 ☀

今天的课，有 Jigsaw problem solving，学生需要把打散的对话，排成正确的顺序。有一组同学，动作特别快，一下子就完成了，但他们卻用很聊得来的笑话 哭 — 他们的确影响到别的同学，因为笑的太大声了，国开都说要到了。为了不让他们影响别人，我告诉他们我需要他们到别组帮忙，这4個同学也真的是我所选的，Joined different groups!!

当所有groups完成工作，我改变了我原先教学计划，— asking each team to read aloud the conversation，让我知道所有同学都要聽那4位同学讲笑话。我邀请那4位同学告诉我们他们刚才讲的jokes，"You see, no seat, if see, stand see" and "two cars Bom, and A-Yi came". 我跟大家笑的东倒西歪，这真多亏这一些。我希望此机会向同学解释会造成用意语表达是很重要的，以免再惹麻烦的笑话。

我通过用表格时间和同学讨论 incomplete English abilities 的缺点，如何造成沒会及发刻。学生

**{Example 2}**

6/3.(续)

意也整切的讨论起来。我~~是比较[illegible]~~觉得
许多同学的时候，有位说"她告诉过一个故事，发生
在意国，他是错用freeze这个词了，结果被射死，
所以此结论，记住收集单字，部首，动，要注意
语境，他意思是说如何使用单字，合适，比较重要！(yes!)
还有位同学说，学用法使用语法重要，有助于语境
的理解进行，掌握在多数意思，而不是文法知识，
一天到晚总做文法练习，是不对的，特别是对英文
使用。还有同学提到，如何使用单字，句子，
及肢体语言和相关文化的了解语法很重要。
所以了解别人的文化很重要，未不会失礼及误
解，它好像我们在 puppet show 中所表演的。
还有一位同学提到使用 monolingual 字典的重要。
她觉得 monolingual 字典比较翻译机会用，因
为它时有一个单字有详细的解释及例句，学生
不单只知道意义，且明白如何用！—

哇！我发现我今天真是做了一件很有收 enjoy 的
topic，也例如，感觉到 incomplete English 的缺点，也例
如出了一些收获的点子，未来的教学如何使用英语，我今
天真是受益良多，我要就在你也有相同 feeling 吧！