CHAPTER FIVE

CONCLUSION

5.1   Introduction

China is distinguished as one of the future powerful countries in light of her rapid economic development. Consequently, there has been a growing interest in learning the Chinese language from all walks of life worldwide. However, many believe that the Chinese language is not easy to learn due to the fact that the writing is orthographic, and it is a tonal language.

This study aims to provide an effective way to ease the perceived difficulties in learning the language, especially recognising the Chinese characters. Although there have been many studies on the association of phonological and morphological awareness of Chinese characters in reading, most of the studies were conducted on the primary or university native speakers of Chinese. The findings of those studies suggest that the phonological codes are helpful in the recognition and semantic retrieval of the Chinese characters. Similar studies on non-native speakers were rare, especially on secondary school students. Hence, the researcher of the current study attempts to replicate those studies which claim that the phonological and morphological features of the Chinese characters facilitate learning and mastering of the characters and vocabulary. The participants of this study are second language learners of Chinese from an international school, and they may be the first group of secondary school-aged learners to be studied.

The testing battery was selected from the IB Mandarin B past year examination papers. The first text and the questions accompanied the text were used to test the participants' reading comprehension ability. A total of ten reading comprehension tests were extracted from the year 2000 to 2004 May and November past year papers. The purpose of utilising the past year papers was to provide the participants the opportunity to be familiarised themselves with the format of the examination as well as to gauge the level of difficulty of the texts and the related vocabulary.

The present study focuses on six students who were in their first year study of the IB diploma program. Although generalisations should not be formed out of such a limited set of data as the number of participants is small, data collected in the forms of tests and interviews appear to display some useful information in relation to the learning of the Chinese language and the acquiring of the vocabulary.

5.2   Research Outcomes

The study began with a list of 100 vocabulary extracted from the ten reading comprehension texts. The pre- test of the 100-vocabulary was intended as a diagnostic assessment. It was anticipated that after four months of the treatment exercises, the results of the post-test of the 100-vocabulary would indicate an improvement in acquiring the vocabulary.

However, the results had shown that only five of the participants seemed to have made an improvement in recognising some of the new vocabulary in the 100-vocabulary test. One participant's result on the other hand, had declined after four months of the treatment exercises. An in depth analysis of the results of both the pre- and post-tests of

the 100-vocabulary, and through individual interviews and observations, such unusual findings may be concluded as below:

5.2.1   Research Question One- Do the awareness of learning the phonology and morphology of Chinese characters enable non-native learners to decode the meanings of Chinese characters through reading?

The participants had unanimously indicated that the phonological and morphological information from some Chinese characters were helpful in decoding the meanings. However, the findings have also implied that the meanings of some characters were harder to decode than others, as detected in the 100-vocabulary pre- and post-tests (see Appendix D).

The pictograms 水, 心, 人, also categorised as strokes, are amongst the first few Chinese characters introduced to beginning learners. These same characters are used as radicals to form other characters such as 清, 海, 冰, 情, 体 which belong to the pictophonetics. Thus, participants also found it easier to decode the meanings of vocabularies like 清朝, 海底, 冰河, 心情, but not when combined with the loan homonym, 验 (see Appendix D).

Although pictophonetics are generally considered easier to decode, participants of this study had difficulties understanding meanings of vocabulary which contained pictophonetics like 渡 as in 共渡, 度 as in 度过, 满 as in 摆满, 传 as in 宣传, 优 as in 优惠, 得 as in 得意. These results suggest that participants had not remembered 渡, 度, 满, 传, 优, 得 which are classified as higher level characters in the etymological dictionary *Xiàndài Shuōwén Jiězì* (现代说文解字) (Yang & Zhu, 1997). Furthermore,

meanings of more pictophonetics such as 览, 放, 行, 程, 疗, 疲, 抽, 奖, 痒, 摇, **晃,** 到, 纯, 锻, 炼, 摆, 营, 征, were also identified problematic to decode. This difficulty may be caused by the tones, the original form and the use of the characters. For example, when 晃 is pronounced with 3rd tone, it means "brightness". If the pronunciation is in 4th tone, then 晃 becomes "movement". This unique feature of the Chinese characters makes it more challenging to master than the alphabetical words.

In addition, meanings of characters which are categorised as associate transformations (申 and 电 were originally pictograms having the same meaning as lightning), semantics (奔, 展, 治, 劳, 宣, 赢, 过, 恒, 属, 保, 存, 条), strokeclusters (革, 命, 共, 于, 平, 业, 应, 申), logical aggregates (建, 设, 体, 弃, 览, 得, 惠, 意, 外, 获, 处**,** 充, 件), and loan homonyms (验, 然), were also found harder to decode (see Appendix D).

From the anecdotes documented during the individual conferences, vocabularies made up of those pictophonetics posed a greater challenge to second language learners especially when they have not mastered the radicals and the higher level of the 2500 common characters as catalogued in the etymological dictionary *Xiàndài Shuōwén Jiězì* (现代说文解字).

Referring to Table 4.3 (p.63), participant BD has acquired 77% new vocabularies in the course of 4 months; while participants AM and AA have learnt only 32% and 35% new vocabularies respectively. The results and feedback from participants AM and AA indicate that they had very limited character knowledge, hence, their level of morphological and phonological awareness were low as compared to participant BD. Participants EL and HR have mentioned repeatedly that the morphological knowledge

they possess helped them in decoding meanings of many vocabularies in the 100-vocabulary test. Participant SH, on the other hand, maintained that rote learning worked best for him.

Nonetheless, all the participants of the study seemed able to make meaningful guesses of some unknown vocabulary by applying their own strategies. Such strategies are further elaborated in the following section.

5.2.2   Research Question Two- What kinds of strategies are employed by the second language learners in comprehending Chinese texts?

This study has revealed some strategies that most of the participants have found useful in reading unfamiliar Chinese texts. Such reading strategies include the text-initiated and reader-initiated strategies which were found transferable between L1 and L2 reading (Kong, 2006). Text-initiated strategies involve "focusing on vocabulary, using text structure, summarizing, and utilizing pictures". Four participants in this study were able to understand unfamiliar Chinese texts using the text-initiated strategies as well as making connections using the title, type of questions, format and the genres of the texts.

Participants SH, BD, EL and HR had scored 60% or higher in the May 2000, November 2001, November 2003 and May 2004 papers as shown in Table 4.5a (p.69). Inferring to the 10 vocabularies extracted from the May 2000 text, participant AA had 7 errors whilst participant AM had 4 as indicated in the 100-vocabulary tests (see Appendix D, items 71 to 80). Participants BD and HR had only one mistake while SH and EL had perfect scores. The results shown in November 2001, November 2003 and May 2004 papers in Appendix D reveal the same pattern, i.e., participants AA and AM did not know as many vocabularies as their classmates. Based on these results, it is

assumed that participants AA and AM has lower morphological awareness in the Chinese characters compared to participants SH, BD, EL and HR.

Reader-initiated strategies entail evoking schema or "prior knowledge, predicting, evaluating, monitoring and translating" (Kong, 2006). During the testing sessions, all participants were observed to be making notes, high-lighting, underlining unfamiliar characters, scribbling on their test papers. Through interviews, participants AA and AM had mentioned that when there were too many new characters, it was difficult in comprehending the unfamiliar texts, thus, scoring low in May 2000, November 2001, November 2003, May 2004 , and November 2004 papers as shown in Table 4.5a (p.69).

However, participant AA was able to use prior knowledge of "dieting and Chinese tea" to obtain the highest score in the May 2003 test (refer to Table 4.5a, p.69) although he made 6 errors out of 10 vocabularies in the 100-vocabulary test (see Appendix D, items 61 to 70). In other words, participant AA had guessed meanings of the unknown vocabularies correctly in context.

Participants of this study had not demonstrated other strategies include predicting, evaluating, and monitoring. Participant HR had, in many test papers, translated some Chinese characters into Korean scripts. By doing so, participant HR found it helpful in completing the reading comprehension tests.

5.2.3 Research Question Three- Are lexical processing strategies useful for reading and understanding Chinese texts?

This study has indicated that the lexical processing strategies have been regarded as another useful technique to manage unfamiliar Chinese texts and to learn more

vocabulary. The "ignore, consult and infer" strategies suggested by Fraser (1999) can be adapted for reading Chinese texts. One participant had realised that sometimes it was helpful to ignore unknown characters while reading Chinese texts for comprehension. This particular participant had learnt to be less field independent and had attempted to try Kong's (2006) the top-down reading strategies (comprehension as a whole).

The participants believed that the treatment exercise after each test helped in learning and expanding their vocabulary knowledge. The treatment exercise required the participants to consult dictionary for the pronunciation and the meaning of the vocabulary listed, and to further compile a list of relevant lexical. Most participants believed that consulting dictionary was an excellent way to create their own vocabulary repertoire.

Although all participants had used inferences as well as other reading strategies mentioned earlier to decode meanings of the unknown vocabulary in unfamiliar Chinese texts, data and results have shown that participants SH, BD, EL, HR except AA and AM, had scored more than 80% in the post test of 100-vocabulary (refer to Figure 4.1, p. 59). Consequently, it may be established that 4 out of 6 (67%) participants have higher morphological and phonological awareness at the conclusion of this study.

5.3   Limitations and Recommendations

There are several limitations found in this study. The materials selected were considered inappropriate when initial data was analysed. The main testing instrument used was from the past year IB examination papers. It was unfounded to assume that learners would improve their scores in the reading comprehension tests as the testing

sessions progressed with time (4 months). Hence, the emergence of the undulating pattern shown in the line graph (refer to Figure 4.2. p. 70). Nevertheless, participants of this study reported that the IB reading comprehension tests had provided them the opportunity to be familiarised with the format of the IB examination. It also enabled them to gauge the level of proficiency expected from the IBO. For the purpose of learning more Chinese characters and the associated lexical items, the participants suggested to continue with the same study for the following year.

Another limitation is the choice of vocabulary which made up the 100-vocabulary list. Based on the experience and information gathered from the participants, the researcher selected 10 anticipated new vocabularies from each reading text and complied into the 100-vocabulary list. The inadequacy of the list lies on the quantity and the quality of the characters appeared in the vocabularies. Firstly, the expectation for the participants to acquire 100 new vocabularies in 4 months was irrational. Secondly, the new vocabularies should be proportionately comprised of frequently to infrequently used characters in the 2500 common-word list. Thirdly, due to time constraint and the quantity of the new characters found in the vocabularies, information and characteristics of those unknown characters were not disseminated adequately as described in the *shíshū* categorisations. Therefore, if the study is to continue on as part of the classroom instruction activities, it is recommended that the vocabulary list is reduced to a manageable amount, and the reading comprehension tests also reduced accordingly.

The treatment exercise is not perceived as a limitation but can be improved on its effectiveness for its purpose, i.e. guided practice and monitoring is still necessary for high school aged-students like the participants of the study.

Manual documentation of reading strategies used by participants is a limitation. More information can be recorded by using recording device like MP3 for individual conferences and interviews. Questionnaires requesting specific information about phonology and morphology of target lexical items can be provided for the participants to fill out, at the end of each of the reading comprehension tests.

5.4   Concluding Statements

While morphological awareness in Chinese characters is reported useful in many of the related researches, the participants of the current study believe that there is a limit of usefulness when the text contains too many unfamiliar vocabularies.

The participants were enthusiastic being involved in the study and they had indicated that the emphasis of the character study was beneficial for their vocabulary repertoire.

In the short period of the study, participants who reviewed the newly learnt vocabulary regularly had shown an improvement in the results of the 100 vocabulary post-test as presented in Figure 4.1. As stated in the questionnaire that was conducted in the beginning of the study, most participants said that they learnt the Chinese characters by rote learning and memorisation. One participant in particular had mentioned that she broke up the characters to the basic parts and remembered them in that way. This is the participant who took part in the Chinese character project when she attended primary school in Korea. She also firmly believed that the best way to learn and to memorise the Chinese characters was to "know different components of character, not looking at one character as one big picture" (taken from her response in the questionnaire). At the

conclusion of the study, all the participants had also implied that the study did alleviate the anxiety of learning the Chinese language especially the characters.

In summary, the findings of this study support the claim that Yang and Zhu (1997) made regarding the usefulness of the phonological and morphological features in the Chinese characters. The participants in this study agreed that utilizing the etymological dictionary *Xiàndài Shuōwén Jiězì* (现代说文解字) published by Yang and Zhu (1997) facilitates significantly in learning the Chinese characters. In reading and comprehending Chinese texts, effective reading strategies play an important role in decoding the meanings of the unfamiliar vocabulary. Effective reading strategies include Fraser's (1999) lexical processing strategies, Kong's (2006) transfer of L1 reading strategies to L2, and second language learners' individual reading strategies.