

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

5.1 CONCLUSIONS

Since a conclusion was drawn for each research question, the following general conclusions for the study summarise the findings revealed in the study. Firstly, it was evident that the subjects' performance based on the think-aloud protocols and stimulated recall lent support to the auto-strategic language processing model proposed in the study. They were able to solve the cloze items using the automatic as well as the strategic modes of language processing. The automatic mode was operative more frequently for cloze without options and function word deletions. Secondly, a total of thirty-four strategies were observed or inferred to be employed by the subjects. It was noted that the Core Strategies constituted 58.8 % of these strategies; the Input Strategies constituted 26.5 %; and the Output Strategies constituted 14.7 %. These percentages indicate that the cloze technique encourages the use of more Input Strategies than Output Strategies. However, there were a few strategies that were unobserved or uninferred for either one of the cloze types. These "absent" strategies differed between the two cloze types. Thirdly, the comparisons among the four variables, namely, cloze with options, cloze without options, content word deletions, and function word deletions revealed that the choice of strategies was dictated by the cloze types and deletion types. The findings indicated that the cloze types were the more influential factor than the deletion types. Fourthly, second language students were observed to utilise some of the strategies that were identified during the interviews with the English language instructors. This reveals that language processing strategies can be learnt.

It was also observed that all the four subjects in the study had employed clusters of in solving any one item, namely, *referencing, inferencing, interpreting, deduction, induction, expression, morphology, substitution, testing*, etc. They had utilised clusters comprising of five to as many as fifteen different strategies in order to solve only one item. It was also observed that different subjects had used different clusters for certain items. This phenomena indicates that various language components are measured via the cloze technique. It also presents strong evidence to support the notion that the cloze technique is an 'integrative' method of assessment (Hale et.al. 1989:48) requiring high-level integration of language skills and linguistic abilities (Oller 1972:157), such as, reading comprehension, grammatical competency, and lexical knowledge. In other words, the cloze technique deals with several linguistic components simultaneously, focusing more on language use, and typically requiring reading and comprehension of a substantial amount of discourse (Hale et.al. 1989:48). Hence, the cloze technique cannot be considered as a 'discrete-point' testing device that deals with a single component of a language and a single skill at a time.

It was also evident that for both cloze types, the items assessed reading comprehension because the *pre-deletion and post-deletion* was manifested within the ultra high frequency range. However the comparison of the strategies between the two cloze types indicated that the cloze without options could be a more effective instrument for teaching and testing reading comprehension to a certain extent. This is seen from the subjects' use of more contextualised strategies (namely, referencing, inferencing, and interpreting) as well as reading longer stretches (that is, sentences before and after the blank, and between two adjacent paragraphs) of the text while solving the cloze without options. This unveils that the subjects read the text more thoroughly when they were solving the cloze without options. Conversely the subjects were concentrating on

selecting the most appropriate answer among the four options when solving the cloze with options. Consequently their reading was more localised and limited to shorter stretches of the text. On the other hand the findings of the study also clearly support the proposition stated by Schulz (1981:46) that the cloze is not strictly a test of reading comprehension. This is because "it measures not just recognition and contextual inference; it tests active recall and language production – which are not absolutely necessary for meaningful reading (Schulz 1981:46). This statement reflects the manner in which the cloze without options was solved. For instance, the subjects might be able to identify the deleted word in Mandarin or Malay, but not be able to supply its equivalent in English. Likewise they were not able to understand the meaning of the options provided and hence, failed to select the correct response. Therefore reading comprehension can only be considered as the prerequisite language skill that is fundamental to solving a cloze with options and without options.

5.2 IMPLICATIONS

The findings of the study have revealed how second language learners processed cloze with options and without options. This insight could apprise material writers, and test designers of what the cloze technique assesses. In addition, knowing now the nuances of cloze with options and without options, second language instructors may learn how to effectively teach learners solve cloze texts with or without options. Furthermore, syllabus designers can design language learning syllabus that will train learners how to apply language processing strategies. Each of these four aspects is discussed in the following sections.

5.2.1 Material Writers

The study has established that what is assessed or tested via the cloze technique depends on the task types (with options versus without options) and deletion types (content words versus function words). Hence material writers may begin rational cloze construction by defining the aim(s) of the cloze exercise. They can choose between the cloze types and control the word types being deleted in rational cloze.

Firstly, material writers should take note that the task type determines the types of language processing strategies utilised for both content word and function word deletions. This implies that material writers can predetermine the types of language processing strategies that the learners need to practise and then select the task type accordingly. If their intention is for learners to exercise more localised reading strategies and grammar focused strategies, such as, *referencing*, *morphology*, *expressions*, and *deduction* that occur at lexical, phrasal, clausal, or intrasentential level, they should select the cloze with options. On the other hand, they should adopt the cloze without options to induce learners to employ wider contextualised and semantics focused strategies, such as *interpreting*, and *referencing* between sentences or paragraphs as well as *induction*. In addition material writers could select options that can actuate certain related strategies. For example, options comprising verb forms generate the use of *morphology*, and *deduction*.

Secondly, material writers should be insightful of the fact that the deletion types also determine the strategies to a certain extent. This is particularly the case for cloze with options. For instance, they should delete function words to activate the use of *expressions*, and *morphology* while deleting content words to create opportunities for the learners to employ *semantics*, and *interpreting*. Suitable words to be deleted can be

discourse markers, anaphoric pronouns, and lexical substitutes/items acting cohesively if material writers target the exercise at establishing relationships between text propositions (Storey 1997:218). They should also take note not to delete words or terms that are repeated in the text. If they select these words, the automatic language processing would occur. Consequently, the material writers' aim of providing practice in the use of language processing strategies will not be realised. Hence, they should select more challenging lexical items to be deleted, such as, nouns, adjectives, adverbs, and prepositions.

5.2.2 Test Designers

It can be perceived that the cloze with options has a high construct validity. This is evident when lexical and grammatical items were tested as hypothesized by the researcher. Test designers should be aware of this intrinsic strength of the rational cloze with options as an effective means of assessing the general language proficiency of second language learners. It is also recommended that the high construct validity of this cloze type be continued to be capitalised upon in the national English language examinations from the primary to the tertiary level, that is, UPSR, PMR, SPM, STPM, and MUET. Test designers should also consider the objectivity and ease in marking this cloze type. These attributes render it an invaluable testing instrument in terms of cost effectiveness and reliability in scoring. Moreover second language learner's preference of this guided and less intimidating cloze type should be given priority when designing cloze tests.

The cloze without options does not exhibit similar degree of construct validity as the cloze with options. This is because the language proficiency components hypothesized by the deletion types were not be realized for some items. This occurrence could be due

to the absence of options which indicate what the deleted word might be. However, test designers should apprehend the integral strength of the rational cloze without options which apparently is a more natural test of proficiency. They can utilize this cloze type to test other language skills, such as, reading comprehension, and word retrieval.

Hence test designers can choose between these two cloze types depending on the purposes of the test. They should construct cloze tests by considering the inherent characteristics of the cloze with options and cloze without options.

5.2.3 English Language Instructors

It is ascertained from the think-aloud protocols and stimulated recall that the subjects were actively processing the second language as they were completing the cloze text. They were trying to solve the cloze text by using their reading skills, linguistic knowledge of the second and other languages (Mandarin and Malay), language processing strategies, and their schemata. The variety of strategies exhibited by the subjects provides the assurance that the language processing strategies can be taught. In other words second language instructors can teach the learners the language processing strategies and they can learn these strategies and apply them appropriately. If the language instructors could identify the learners' existing strategies, improve and enrich them with ones that are complementary, the learners would be able to assess the language task appropriately and control the necessary strategies for successful item solution (Black 1993:438).

The cloze technique is an essential exercise in enhancing reading comprehension. Training learners in solving cloze texts provides practice in utilising the language processing strategies that will improve reading skills or strategies, and enhance the learners' linguistic knowledge of the second language. Therefore language instructors

should focus on teaching reading skills, grammatical rules and their exceptions, as well as language processing strategies related to the cloze completion task. By doing so, the instructors would be able to guide their students better in realising their potentials in processing the second language.

In addition it is seen in the study that the subjects utilised both Mandarin and Malay languages besides the English language in solving the cloze texts. The application of the linguistic knowledge of the two former languages can interfere with the learning of the English language. Hence language instructors of ESL learners in Malaysia could informally compare and contrast the language or languages known by the learners and the English language when and as the opportunity or need arises. This contrastive analysis creates awareness and enhances sensitivity of the learners towards the similarities and differences between the languages they know and the language that they are learning. Consequently a positive transfer can be facilitated between the linguistic knowledge of the language or languages they possess to the language they are learning.

5.2.4 Syllabus Designers

The primary aim of an institutionalized ESL syllabus is to enable learners to achieve proficiency and competency of differing levels depending on their beginning level of proficiency. It is proposed that training in the use of language processing strategies should be included as a part of the ESL syllabus. The salient strategies to be considered are language, text, schema, task, and refinement oriented.

In addition cloze completion should be one of the activities stipulated in the syllabus. This is because it is an effective tool in providing practice of the language processing strategies in order to teach language learners to read more effectively. ESL learners

would benefit from instructions in developing language processing strategies by becoming more competent users of the language. They would be able to read with more accurate comprehension and at an increased pace.

5.3 LIMITATIONS

It was noted that there were instances when the subjects read aloud and processed the information in the text simultaneously. Consequently not all language processing strategies may be captured in the think-aloud protocol. For instance, there could have been more data pertaining to comprehension monitoring. The number of language processing strategies that were actually verbalised in the think-aloud protocol may only be a partial representation of all the strategies employed. This still remains as a limiting factor in the study although the stimulated recall helped to unveil the non-verbalised strategies to a great extent.

In addition the small number of subjects in the study would most probably make it difficult to generalise the findings of the research to larger population. Furthermore the study is limited by its generally homogeneous sample of subjects comprising four female students of similar proficiency level, ethnic background, age, and educational experience. These variables were intentionally kept as constant as possible in the study for the purpose of comparing only the selected variables of cloze design. However these limitations also indicate important directions for future research as proposed in the following section.

5.4 FURTHER RESEARCH

The study has examined and compared the language processing strategies employed to solve content word and function word deletions in two different types of cloze design, that is, cloze with options and cloze without options. There are three areas of the study which further research could yield more enriching and insightful information on language processing strategies and the cloze technique. They include variations in the cloze design, and sample of subjects as well as the effects of teaching language processing strategies.

To obtain further evidence to support the findings of the study, alterations could be made to the cloze design and the research technique. A proposed cloze design would be to provide options for only the content word deletions while it would be free response (without any options provided) for the function word deletions. These conditions would be reversed for the second cloze text. This would require two different texts from the same source, that is, the same writer and topic. In other words, the texts could be two halves of a long text. There could also be a combination of providing the options for 50 percent of the content word deletions and the function word deletions while not providing the options for the remaining 50 percent of the content word deletions and function word deletions. This design would involve a single text of considerable length. These two types of cloze design could be implemented in one study. If the results of both cloze designs were similar, it would reinforce the hypothesis that cloze design exerts a considerable influence on the choice of language processing strategies. In other words, the deletion types and cloze designs play a vital role in determining the choice of language processing strategies. Alternatively a cloze text with content word deletions and function word deletions without options would be given to the subjects. After a

lapse of three to six months, the same subjects would be required to solve the same cloze text with the same deletions but with options provided. In this case the only variable would be the cloze design. Since all other factors remain constant, any resulting variations in the utilisation of language processing strategies would be due to the different cloze design. The duration of time elapsed between the two tasks would play an important role in determining the extent of the subjects' schemata or memory interfering with the manner in which the subjects would process the cloze text.

To further investigate the influence of cloze design on the utilisation of the language processing strategies, future research could compare the language processing strategies employed in solving random cloze and rational cloze. Another aspect that may be of interest would be investigating the effects (if any) of the text type or genre on the choice of language processing strategies employed. In other words, do learners change their strategies according to the text type or genre? In addition the question whether a suitable title given to the cloze text would assist the learners in solving the cloze text by helping them focus on the topic. If the findings support this hypothesis, cloze designers should include a relevant title for cloze text. The research could be conducted by requesting learners to solve a cloze text with a suitable title provided. If learners refer to the title while solving the cloze text, the hypothesis would be affirmative. As a form of reinforcement, the next step would be to provide an unsuitable or irrelevant title for the cloze text. If learners referred to the title and appeared to be confused (due to the mismatch between the title and the contents of the cloze text), the hypothesis would also be affirmative. Secondly, similar research could be conducted for a larger number of subjects to enable the generalisation of the findings. The sample could also be heterogeneous in terms of their proficiency levels in the second language, ethnic group, education background as well as other biological variables such as gender and age. The

research would focus on how these learner variables affect the utilisation of language processing strategies in solving cloze texts.

The effectiveness of teaching language processing strategies in solving cloze texts could also be determined through another technique. The research technique would involve two groups of subjects, that is, the experimental group and the control group. The former would be taught the language processing strategies in solving cloze texts but not the latter group. At the end of a suitable period, both groups would be required to solve the same cloze text. If the experimental group scored higher than the control group, it would be advisable for language instructors to impart the language processing strategies to the learners. Last but not least, the translation and analysis of the data could involve another personnel who is more proficient in the languages used by the subjects, and also more efficient in identifying the covert strategies than the researcher. In addition a tape-recording of two subjects discussing how they arrived at their answers during or after the task could further enhance the accuracy of the strategies inferred. The recording would provide evidence of the strategies employed and hence reduces the subjectivity and ambiguity in identifying the strategies.

The proposals for future research have been discussed in detail. It is hoped that these proposals would be implemented to establish new insights into how second language learners process the language while they solve a cloze text. In addition cloze designers would be able to design cloze tasks in accordance with the test purposes. Furthermore second language instructors would also benefit from findings on how effective the teaching of language processing strategies in solving cloze texts would be. They would be able to make informed choices when instructing second language learners.