CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Writing strategies are complex skills, and in order to understand the conditions that support or hinder its use, an understanding of the thought processes which accompany the use of such strategies would be valuable (Cohen, 1987; O'Malley and Chamot, 1990). However, very few studies on language learning strategies and writing strategies have been carried out on weak learners. Also, more in-depth information is needed on the strategies used and the difficulties faced by weak learners in completing a writing task. Since a qualitative case study research would allow for the elicitation of such in-depth insight, this design has been adopted in this study.

3.1 Setting

This study was conducted in Universiti Putra Malaysia (formerly known as Universiti Pertanian Malaysia). Participants of the study were students from the Faculty of Economics and Management who had enrolled for a compulsory course in business correspondence: BBI 2407 (Written Communication in Business). Students were required to fulfill three contact hours per week with an instructor for a period of fourteen weeks. The course schedule is given in Appendix A.
3.2 Data Collection Methods

Previous studies on writing processes and writing strategies have used a variety of data collection methods. Among them are observations (e.g. Zamel, 1983; Lee, 1990), interviews (e.g. Matsumoto, 1995), think-aloud procedures (e.g. Raimes, 1985, 1987; Wong, 1993; Vann and Abraham, 1990; Swain and Lapkin, 1995), and surveys (cited in Oxford and Crookall, 1989). However, some of these methods have their limitations in revealing valuable insights into the cognitive processes that dominate the process of writing and strategy use. For example, in a study on composing processes, Lee (1990) found that a large portion of the student’s composing behaviour is cognitive in nature and mere observation and inference from written products allow for very little depth in understanding such behaviour. The mental processes involved in pauses, for instance, were also not observable.

Since the purpose of this research is to describe the writing strategies used and the problems encountered by weak ESL learners by looking at their thought processes, think-aloud procedures and interviews were carried out for data collection. The think-aloud procedure, a concurrent introspective method, was chosen for its ability to elicit rich data on mental processes, which are not easily obtained using other methods. The use of interviews as a second method of data collection would allow for triangulation of the data, a measure often taken in qualitative research to ensure its reliability (Cohen and Manion, 1989).
3.3 Data Collection Procedures

The table below summarizes the procedures that are followed in this research. A brief explanation of each procedure is also given.

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3.3.1 Selection of Participants

Participants for this study were selected from the course *BBI 2407: Written Communication in Business* based on the following criteria:

i) Poor grades in their Sijil Pelajaran Malaysia (SPM) English examination. Students with P7, P8 or F9 grades for their SPM English paper (equivalent to "O" level) were chosen for this study. These students would have completed three courses, *BBI 2401, BBI 2402 and BBI 2403 (English for Academic Purposes I, II and III)* that focus on the development of reading, speaking and writing for academic purposes prior to their enrolment for *BBI 2407.*
ii) Course instructors’ observation. Course instructors were asked to identify students who had poor SPM English grades and who performed poorly in their course work.

iii) Students’ willingness to participate in the study. Students identified by their course instructors were asked to participate in the practice sessions on a voluntary basis. Students who felt comfortable with the research procedure were then asked to volunteer for the data collection sessions.

iv) Ability to think aloud in the practice sessions. This was determined by the richness of data obtained from the think-aloud protocols in the practise sessions.

### 3.3.2 Practice Sessions

Procedures for training students to think-aloud were adapted from procedures used in similar studies (e.g. Raimes, 1985, 1987; Swain and Lapkin, 1995). Students first received a worksheet followed by a brief explanation of the task. They were told that the researcher would like to know what they were thinking about while they were writing, and that they had to write in English but they could think aloud in Bahasa Malaysia. This procedure was demonstrated by the researcher on the first practice session while working on the first question on the worksheet. During the practice sessions, when students were silent, the researcher reminded them to think-aloud.

There were four practice sessions. These sessions were conducted in the language laboratory where the whole session was recorded, and the researcher
monitored the students from the monitor booth. The time allocated for each practice session was one hour. This duration is usually sufficient for students to complete the task given.

The worksheets used for the practice sessions were graded in order to help students practise thinking aloud. The task in Worksheet 1 focused on writing at the sentence level while Worksheet 2 allowed practice at the paragraph level and finally, worksheets 3 and 4 focused on the discourse level. The worksheets used in the think-aloud practise sessions are shown in Appendix B.

3.3.3 Data Collection Sessions

For these sessions, each student was given a task sheet which explained the written task that was to be completed. The students completed them while thinking aloud within the duration of an hour. The researcher monitored the process and took field notes. When the students had completed the task, a retrospective interview (Appendix C) was conducted by the researcher to check on the problems encountered and the strategies used in the process of completing the task. The second data collection session was then scheduled after an interval of one week, and the above procedure was repeated.

3.4 Think-aloud Writing Tasks

The writing tasks used in this study (Appendix D) were similar to the type of writing tasks that the students were exposed to in the course. This was done to
eliminate unfamiliarity to the task and to avoid compounding the problems encountered.

Two writing tasks were selected for this study to enable more data to be elicited. The first writing task required the students to write a letter based on instructions given in a memo. The memo provided all the necessary information to be included in the letter, and it therefore renders this task simpler in nature.

The second writing task was a letter in reply to a letter of claim. To complete this task, the students were required to comprehend the situation involved and create the relevant information based on the situation given. In order to write an effective letter, they were required to consider the approaches taught in the course on how to compose such letters.

3.5 Data Analysis

Two types of verbal protocols were collected in this study, i.e. immediate retrospective protocols that were obtained from the post-session interview, and simultaneous introspection protocols which were gathered from the think-aloud procedure. Apart from these verbal protocols, the students’ written drafts and the researcher’s field notes were also collected for data analysis.
3.5.1 Analysis of Think-aloud Protocols

The think-aloud protocols of the participants were transcribed verbatim (Appendix E). Instances where writing and verbalizing co-existed were underlined and they were coded as transcribing. The think-aloud protocols were read through once to segment the process into main areas of concern. Then strategies used while writing the letters for each task were inferred from the think-aloud protocols and refined every time the researcher read through the protocols. Discrepancies and uncertainties over the classification of the strategies were resolved in consultation between the researcher and an expert in discourse analysis.

The definitions for the strategies identified were mainly adapted and refined for the purpose of this study from Chamot et al. (1988) cited in O’Malley and Chamot (1990). Some categories were added to this list of strategies while others were not identified in this study. For example, skimming, scanning, paraphrasing, drafting, answering and revising are additions made to this classification. “Elaboration” was reduced to making connections while “questioning elaboration” and “questioning for clarification” (cited in O’Malley and Chamot, 1990: p. 139) were defined as questioning self and questioning others in this study.
References were made from Cohen (1990), Rubin (1987), Raimes (1985, 1987) and Ting (1995) for adaptations of terms and definitions for strategies identified in this study. The complete list of definitions of these strategies is available in section 1.4.

Three classification flow charts (Figure 3, 4, and 5) were then developed to help the researcher chart specific features in order to determine the category of the strategies observed. These flow charts evolved from the process of identifying strategies and were refined each time the researcher went through the think-aloud protocols. In developing these flow charts, the think-aloud protocols, the researcher’s field notes and the participants’ written drafts were scrutinized to infer the strategies used. A summary of these flow charts is given in Figure 2.

To code the strategies from the think-aloud protocols, first, the dominant behaviour was determined. The dominant behaviour identified included reading, talking and writing. This was determined by observing the pace of the utterance, the content of what was said which was then matched with the researcher’s field notes (Appendix F) and the student’s written draft (Appendix H). Once this was confirmed, the researcher determined the reading materials read (i.e. dictionary, textbook, written product, or task sheet), the content and purpose of talk, and the situation when writing was done (see Figure 2).
Figure 2: Summary of Guidelines for Coding Writing Strategies (Think-aloud Protocols)

Observed Behaviour

- **Reading**
  - (what is read)
  - Reference Materials (Dictionary/Textbook)
  - Task sheet
  - Written Product

- **Talking**
  - (purpose and content of talk)
  - Ideas read
  - Ideas for writing
  - Decisions
  - Judgement and Assessment
  - Rehearsing Ideas
  - Rehearsing Structure
  - Monitoring Style
  - Making Connections
  - Deducing
  - Directing Self
  - Questioning Self
  - Questioning Others

- **Writing**
  - (when it is done)
  - Writing Drafting
  - Revising
  - Note-taking
  - Evaluating Comprehension
  - Evaluating Task
  - Evaluating Production
  - Evaluating Ability

* Refer to Figure 3, 4 and 5 for more details
For example, when reading was observed, the text read was then identified. Then the manner and the pace of reading were observed. The next step was the most complicated in the whole coding process, as some strategies tended to occur with other strategies. For instance, summarizing, translating, deducing, making connections and note taking often occurred with scanning when the student was found to read the task sheet. However, they were differentiated either by the manner of which scanning was done or by other behaviour which occurred at the same time.

When verbalizing in Malay followed scanning, translation was inferred and when verbalizing involved some form of synthesis or summary, summarizing was inferred. Similarly, when reasoning followed scanning, deducing was inferred if the reasoning illustrated a top-down logic, while making connections was inferred if a bottom-up logic was observed in the reasoning (see Figure 3).

Likewise, when talking was observed, the researcher had to identify the content and purpose of talk (i.e. talking about ideas read, talking about ideas to be written, talking about decisions on what to do, and talking about one’s judgement or assessment of the situation). Then other concerns, which appeared, were taken into account before assigning a particular code to that strategy (see Figure 4).
FIGURE 3: GUIDELINES FOR CODING WRITING STRATEGIES 1
(Think-aloud Protocols)

- writing → Resourcing (Rs)
  + writing → Note-taking (Nt)
  + scanning → Resourcing (Rs)
  + skimming → Resourcing (Rs)
  + verbalizing in Malay → Translating (Tr)
  + scanning → Monitoring Production (Mp)
  + editing → Revising (Rv)
  + repeating words or phrases → Repeating (Rp)

summer...summer...summer (flipping of dictionary)... summer...
musim panas
reply... reply (flipping of dictionary)... membalas...membalas
ensure the customer has received competition usually mentioned
before discussion. Stress what can be done...
(Flipping of text)
Like... you... like you know, seperti yang kamu tahu... like you know
repair your... your... vacuum cleaner...
However if you need to repair your vacuum cleaner...
saya minta maaf seb... buku cerita dalam bahasa inggeris dan
italy... that you want... you want...
Like... you... like you know, seperti yang kamu tahu... like you know

Key: 
...underlined text pauses
bold text talking and writing simultaneously
an example of the strategy within, its surrounding context (when possible)
Figure 3 (continued)

Skimming (Sk)
- reading quickly
  + synthesis

Summarizing (Su)
+ synthesis

Scanning (Sc)
- reading carefully
  + top-down reasoning
  + bottom up reasoning
  + verbalizing in Malay
  + synthesis

Translation (T)

Deducing (De)

Making Connections (Cc)

Note-taking (Nt)

Repeating (Rp)

... he ask about story books... tell him they're out of stock... will be publishing...

Ah... (flipping text) second paragraph ini just... ah cerita dua punya trouble with the machine... ah and then dengan last ni vacuum ni little more than a year...

So surat ini dia nak balas. Write a suitable reply to this letter. so dia punya... er.. buat surat...

' + rewording

Paraphrasing (PaPH) tulis surat.. balas surat ini.

this vacuum cleaner is little more than a year old... pun dah setahun dah... ah...

Ah.. today.. surat dia.. may 6.. kita buat may 7, 1997

I purchased a vacuum cleaner pada 30 April 1995. Sekarang ni May 6, 1996... oh setahun...

so surat ini dia nak balas.. Write a suitable reply to this letter. So dia punya... er... buat surat.. write a letter.. write.. write reply letter

tell him they're out of stock... tell him... stock at the moment... out of stock at the moment...
Figure 4: Guidelines for Coding Writing Strategies II
(Think-aloud Protocols)

- + synthesis → Summarizing (Su)
  - second paragraph ini just... ah..cerita
dia punya trouble with the machine kan.

- + monitoring → Monitoring
  Comprehension (Mc)
  - Please type a reply. Oh.. reply to rosalind wood..
  Address dah tulis kat sini

- + top-down reasoning → Deducing (De)
  - ah dia sepautunya tak boleh menuntut... menuntut gantirugi
itu sebab... sebab vakum cleanernya tu dah lebih dari satu tahun

- + bottom-up reasoning → Guessing
  Meaning (Gu)
  - expect? apa expext? she cannot expectation... she cannot
tafsirkan the guarantee to be applied

- about words or
  content read

- about ideas
to be written

- Talking

- + concern for
  sentence structure
  → Rehearsing Structure (RHS)
  - The.. is ah..eh.. Harga macam mana? Now we had a new
vacuum that is better in quality than before.. ah.. it's ah.. good..
ah.. it's guarantee period.. The guarantee period..

- + checking ideas
  against guidelines
  → Monitoring Style (Ms)
  - kita tak boleh cakap.. ah.. ak secara direct.. sebab..
secara direct.. sebab kita tidak sebab.. out of stock ni..

- + bottom-up
  reasoning
  → Making Connection (Cc)
  - Dia beli 30 April 1995. Surat ini bulan may 1996
Jadi dah lebih saya rasa dari tempoh setahun..

- + top-down reasoning
  → Deducing (De)
  - surat dia may 6. Kita buat may 7
Figure 4 (continued)

- about what to do
  - affirmative statement → Directing Self (Ds) mula sekali alamat
  - Interrogative → Questioning Self (Qs) for your information... penutup dia... apa nak cakap?
  - involving others → Questioning Others (Qo) our company... as soon as possible
    Sekarang ni kita nak balas macam mana?

- about own judgement or assessment
  - of comprehension → Evaluating Comprehension (Vc) The guarantee period expired... although she claim
    the problem... oh so I see... dia mesti after I refer to
    your receipt dated 30th April 1995
  - of task → Evaluating Task (Vt) susah
  - of ideas or written product → Evaluating Production (Vp) hmm.. oklah..
  - of own ability → Monitoring Ability (Vab) Itu saja yang boleh saya buat

Key:
- underlined text = pauses
- bold text = talking and writing simultaneously
- an example of the strategy within its surrounding context (when possible)
Figure 5: Guidelines for Coding Writing Strategies III
(Think-aloud Protocols)

Writing

- before or after rehearsing → Transcribing (W)
  I refer as I refer... refer... refer... refer...
  I refer to... I referred to your... to your receipt
  .... receipt... receipt

- while rehearsing → + with very little interruption → Drafting
  thanks... beritahu dia tentang buku in english
dan italian... beritahu mereka berkenaan... hmm
Thanks for ordering... ordered. Thanks for ordering
Now I would... to tell you... about the...
about the... story... in english and italian...
italian... out of stock... at the moment.

- with other strategies to elicit salient points → Note-taking (Nt)
  so dia punya isi Sarah Barnard managing director
  Sarah Barnard managing director

- with editing → Revising (Rv)
  bermakna dia punya kandungan index dia...
  content dia... content...

Key:
... underlined text
pauses
talking and writing simultaneously

bold text
an example of the strategy within its surrounding context (when possible)
Figure 3, 4 and 5, which are extensions of Figure 2, are deemed useful guidelines for coding strategies in the think-aloud protocols. To enable the researcher to get a holistic view of the strategies used in the process of writing business letters, a frequency count of each identified strategy was then undertaken. Each occurrence of a particular strategy was counted as one instance regardless of its duration. When interrupted and resumed, the particular strategy was counted twice, as done in Ting (1995: p. 70). An overview of the strategies used is available in section 4.1 while a detailed description is found in section 4.3.

3.5.2 Analysis of Interview Protocols

The interview protocols were also transcribed verbatim for analysis (Appendix G). "Language-related episodes" were then identified in these protocols as done in Swain and Lapkin (1995: p. 378). Each episode would correspond to a problem encountered by the student. The interview protocols were also gleaned for support on the use of particular strategies in the writing process. These findings were used to support the description of the problem faced by students while writing and the writing strategies employed. A description of the problems identified is presented in Section 4.2.
3.5.3 Analysis of Written Drafts

The students' written drafts (Appendix H) were analyzed to support findings from the earlier two analyses to identify how strategy use had affected the writing of business letters. The written drafts were ranked from one to six, one for the best letter and six for the worst from the six letters written for each task. Another course instructor acted as inter-rater and a reliability rate of 0.83 was obtained (section 4.4). The strategies used were then analysed closely to elicit differences in strategy use among the students. Effective and ineffective use of specific strategies were then identified for discussion.