EXPLORING SUMMARY WRITING BY INTROSPECTION

By

LUXIN YANG

B.A., Shandong Normal University, China, 1989
M.A., Beijing Second Institute of Foreign Languages, China, 1992

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

(Department of Language and Literacy Education)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

August 2001

© Luxin Yang, 2001
In presenting this thesis in partial fulfilment of the requirements for an advanced
degree at the University of British Columbia, I agree that the Library shall make it
freely available for reference and study. I further agree that permission for extensive
copying of this thesis for scholarly purposes may be granted by the head of my
department or by his or her representatives. It is understood that copying or
publication of this thesis for financial gain shall not be allowed without my written
permission.

Department of Language and Literacy Education

The University of British Columbia
Vancouver, Canada

Date August 14, 2001
ABSTRACT

In the past twenty years, there has been an emerging body of research on summary writing of university students. Few of these studies, however, have investigated how university students process course-related summary tasks. The present study explored the writing processes and strategies that first-year graduate students experienced in doing course-related summary tasks at a Canadian university.

Six first-year MBA students participated in the study: three Chinese ESL students and three NES students. Each participant wrote a course-related summary task while thinking aloud. In addition to the think-aloud protocols, retrospective interviews, questionnaires, written drafts and grade reports on the final products were collected to compare the summary writing processes and strategies of the participating ESL and NES students.

Three major findings emerged from the data analyses. First, similarities were found between the two groups. That is, both the ESL and NES graduate students were found to have devoted similar amount of attention to the writing processes of planning, composing, editing and commenting. Moving recursively rather than in a linear order, the participants planned carefully and referred to the source texts and lecture notes frequently for structure, themes and terminology. Second, the six participants were found to have displayed personal preferences to some specific writing strategies such as reading, commenting on the source texts and use of fist language as they planned what to write. Third, the study also found similarities across the ESL and NES groups. For example, two students, one ESL and one NES, were found to refer to the source texts
frequently. Another pair of ESL and NES students was found to edit the texts more than the others. A third group, two ESL and one NES students, was found to use the reading strategy more frequently than the other participants.

This study contributes to our understanding of the processes and challenges some first-year graduate students face when doing course-related summary tasks. It calls for and suggests appropriate curriculum and pedagogical methods to help students, especially second language writers, in dealing with the challenges in writing summaries and becoming confident learners in the academia.
# Table of Contents

Abstract .......................................................................................................................... ii
Table of Contents ........................................................................................................... iv
List of Tables ................................................................................................................... viii
List of Figures ................................................................................................................ ix
Acknowledgments ......................................................................................................... x

1. Introduction .................................................................................................................. 1
   1.1 Statement of the Problem ....................................................................................... 1
   1.2 Overview of Other Chapters .................................................................................. 4

2. Review of the Research Literature ............................................................................ 5
   2.1 Research on Summary Writing .............................................................................. 5
      2.1.1 Focus on Products ......................................................................................... 5
         2.1.1.1 Comparison of Experienced and Less Experienced L1 Writers .......... 5
         2.1.1.2 Comparison of L1 and L2 Writers ......................................................... 8
      2.1.2 Focus on Process .......................................................................................... 11
         2.1.2.1 Comparison of Experienced and Less Experienced L1 Writers ......... 11
         2.1.2.2 Comparison of L1 and L2 Writers ......................................................... 14
   2.1.3 Summary ....................................................................................................... 18
2.2 Research on L2 Writing Process .............................................19
  2.2.1 Focus on L2 Writing Process ............................................19
  2.2.2 Comparison of the Same Participants' L1 and L2 Writing Processes ...........................................24
  2.2.3 Summary .........................................................................26
  2.3 Research Questions ................................................................27

3. Methodology ........................................................................30
  3.1 Methods ...........................................................................30
  3.2 Context and Writing Tasks ..................................................35
  3.3 Participants .......................................................................36
    3.3.1 Nonnative-English-Speaking Participants .........................38
      3.3.1.1 Chin .......................................................................39
      3.3.1.2 Chong ....................................................................40
      3.3.1.3 Chen .....................................................................42
    3.3.2 Native-English-Speaking Participants .................................43
      3.3.2.1 Elizabeth .................................................................43
      3.3.2.2 Emma .................................................................44
      3.3.2.3 Elaine .................................................................45
  3.4 Data Collection Procedures ..................................................46
  3.5 Data Analyses ....................................................................48
  3.6 Summary ...........................................................................52
4. Results and Discussions ................................................................. 54

4.1 Results and Discussions for Research Question 1 .................... 54

4.2 Results and Discussions for Research Question 2 .................... 62

4.2.1 Chin ......................................................................................... 62

4.2.2 Chong .................................................................................. 66

4.2.3 Chen ..................................................................................... 72

4.2.4 Elizabeth ................................................................. 76

4.2.5 Emma ................................................................................. 82

4.2.6 Elaine ................................................................................. 87

4.3 Discussions of the Main Findings ............................................. 90

5. Conclusions ................................................................................. 96

5.1 Summary of the Findings ....................................................... 96

5.2 Implications for Future Research ............................................. 98

5.3 Implications for Teaching ....................................................... 100

References ....................................................................................... 103

Appendixes ....................................................................................... 109

A. Interview Questions ............................................................... 109

B. Questionnaire ........................................................................ 110

C. Transcription Conventions .................................................... 112

D. Retrospective Reports ............................................................ 113

E. Samples of Coded Think-aloud Protocols ................................ 120

F. Writing Samples .................................................................... 122
G. Frequency of Strategy Use.................................................................124

H. Group Comparison of Using the Strategies........................................125
List of Tables

Table 1 Profiles of Participants .................................................. 38
Table 2 Protocol Coding Scheme ............................................... 51
Table 3 Excerpt of Chin's Think-aloud Protocol .............................. 59
List of Figures

Figure 1  Group Comparison of Using Major Processes..............................54
Figure 2  Group Comparison of Using the Strategies.................................56
Figure 3  Comparisons of Individual Students’ Use of
Four Major Writing Processes.............................................................58
Figure 4  Chin’s Writing Strategies.......................................................62
Figure 5  Chong’s Writing Strategies....................................................66
Figure 6  Chen’s Writing Strategies.......................................................72
Figure 7  Elizabeth’s Writing Strategies...............................................76
Figure 8  Chin and Elizabeth...............................................................79
Figure 9  Emma’s Writing Strategies....................................................82
Figure 10 Chong and Emma.................................................................85
Figure 11 Elaine’s Writing Strategies....................................................87
Acknowledgments

I would like to acknowledge several people who have contributed to this study. First, I would like to thank the members of my supervisory committee – Dr. Ling Shi, Dr. Gulbahar H. Beckett, and Dr. Stephen Carey. I am very grateful to my advisor Dr. Ling Shi for her guidance. She led me into the field of Second Language Writing that I found very interesting. Most importantly, she helped me find my research focus and provided advice and encouragement throughout the research and writing process. Also, I am deeply indebted to Dr. Gulbahar H. Beckett, my committee member and friend. She gave her time generously in reading, commenting on, and offering suggestions for each draft of the thesis. Especially, she was always there to share my frustration as well as happiness. I also want to thank Dr. Stephen Carey for his valuable comments on my study. Without the insightful advice and continuous encouragement provided by the above people, I could not have completed this thesis.

Second, I would like to thank the Dean of Education, University of British Columbia for awarding me a research grant (#15R40807) in support of my study.

Third, I would like to extend my sincere appreciation to the students who volunteered to participate in the study. Without their participation, this study would not have been possible.

Fourth, I want to thank my friend Yan Guo, with whom I shared many ups and downs during the entire thesis writing process. I also want to thank my Tai Chi coach Guangzhou Lu for supervising my Tai Chi practice, which kept me healthy and energetic while writing the thesis.
Finally, my love and appreciation go to my parents for their belief in me, and my husband Jianhua Dong and my daughter Catherine Dong for making my life ever meaningful. Their love and support allowed me to work full-time on my thesis. Thank you all!
CHAPTER ONE
INTRODUCTION

1.1 Statement of the Problem

This study explored how university students do their course-related summary tasks in a Canadian university. Summary writing has become increasingly important in tertiary education due to a substantial portion of assignments involving summarization of content (Applebee, 1981, 1984; Campbell, 1990; Horowitz, 1986; Johns, 1985; Kirkland & Saunders, 1991; Taylor, 1983, 1984). Course assignments in the universities are most likely to manage information from other sources through skillful summaries, because “a main goal of advanced complex writing activities is the analysis, synthesis, and interpretation of information from a variety of sources” (Grabe & Kaplan, 1996, p. 344). The knowledge of how university students complete the summary tasks is very important for researchers and educators in order to understand the challenges that university students face in summary writing and to find appropriate methods to help university students accomplish academic writing tasks.

Although limited research has been done on the summary writing of native speakers of English, not much has been done on the summary writing of second language learners. Among the studies on the summary writing of native speakers of English, many focused on students in primary or secondary schools (Brown, Campione, & Day, 1981; Brown & Day, 1983; Brown, Day, Jones, 1983; Brown & Smiley, 1977; Coffman, 1994; Durst, 1989; Garner, 1985; Garner et al., 1985; Hare & Borchardt, 1984; Head, Readence, & Buss, 1989; Johnson, 1983; O’Mallan, Foley, &
Kewis, 1993; Rinehart, Stahl & Erickson, 1986; Stein & Kirby, 1992; Taylor, 1986; Taylor & Beach, 1984; Winograd, 1984), whereas relatively few studies have concentrated on university students. Among the limited number of studies on university students, most of them described the strategies used by native-English-speaking (NES) participants through examining their summary products (Brown & Day, 1983; Brown, Day, Jones, 1983; Johns, 1985; Sherrard, 1986; Winograd, 1984), and their summary writing processes (Garner, 1982b; Kennedy, 1985; Taylor, 1984). Few studies such as Campbell (1990) and Johns and Mayes (1990) examined the summarizing strategies of ESL students by analyzing their summary products. Researchers like Cumming (1989), Connor and Kramer (1995), Hu (2000), and Feng (2001) also explored the summary writing processes of ESL university students.

Research (Brown & Day, 1983; Brown, Day, Jones, 1983; Campbell, 1990; Johns, 1985; Johns & Mayes, 1990; Sherrard, 1986; Winograd, 1984) has found that summary writing in university context has been problematic to both native and nonnative speakers of English who all appear to have difficulties in integrating information into their own words. This impression came from a comparison of students' written products and source readings, rather than an examination of the writing processes. Studies on summary writing process, which I will review later, have shown that though both first language (L1) and second language (L2) writers used similar strategies during the process of working on summary tasks, the experienced and less experienced writers in L1 or L2 tended to employ different strategies. Most of the summary tasks referred to in these studies were designed by the researchers for research purposes, therefore, the findings of the existing studies might not represent actual performance of students in doing an authentic summary
task (i.e., a task required for a content course). Besides, most of the studies mentioned above focused on either L1 writers or L2 writers. Little attention has been given to comparison of L1 and L2 writers in doing the same authentic summary task. In other words, we are still not clear whether L1 and L2 writers employ similar or different strategies in the process of doing a summary task. Therefore, research on how university students process course-related summary tasks seems to be necessary for the development of a theoretical understanding of the nature of summary writing and the challenges it involves as the basis for relevant pedagogy (Campbell, 1990).

Inspired by the theoretical and practical needs for such knowledge, the lack of empirical evidence and also my personal interest as an ESL learner and practitioner, I conducted the present study to examine the summary writing processes of university students. The purpose of the present study was to explore the writing processes and strategies three Chinese ESL graduate students used in course-related summary tasks in comparison with those used by their three NES classmates. All the participants were first-year graduate students from Master of Business Administration Program (MBA) in a Canadian university. Each participant wrote a course-related summary task while thinking aloud. Right after completing the task, the participants were interviewed and asked to complete a questionnaire eliciting information on their educational backgrounds and work experiences, and their perceptions of their writing performance. The data collected for the study included think-aloud protocols, retrospective interviews, questionnaires, initial written products and grade reports given to the final products by the instructor. The data were analyzed to investigate 1) how Chinese ESL students and NES students processed the summary tasks; and 2)
whether there were similarities and/or differences among individual writers in their summary writing processes and use of strategies.

The significance of the study is two folds. Theoretically, this study generates knowledge of academic writing in general. Specifically, it expands our understanding of the writing strategies that university students, especially experienced ESL students, used in course-related summary tasks. Pedagogically, this knowledge may help us better understand the writing processes of experienced ESL writers and suggest appropriate approaches to second language writing instruction. Moreover, the knowledge of the writing strategies of experienced ESL writers may help less experienced ESL writers to learn some of the efficient strategies to improve their writing performance.

1.2 Overview of Other Chapters

Chapter 2 is a critical review of the literature on summary research and relevant second language (L2) composing process research. It includes empirical studies on summary writing and on second language writing processes. Chapter 3 discusses the research methodology used for this study, describing methods, context and writing tasks, individual profiles of the participants, data collection procedures and data analyses. Chapter 4 reports and discusses the findings for the two research questions. The final chapter summarizes the findings of the study and discusses the implications for future research and classroom application.
CHAPTER TWO
REVIEW OF THE RESEARCH LITERATURE

As mentioned in Chapter 1, the purpose of this study was to compare summary writing processes and strategies of ESL and NES graduate students. Thus, in this chapter, I review the literature that has a significant bearing upon my study. First, I review summary writing research on L1 and L2 university students, including research on summary products and summary writing processes to have a broad view of what summarizing strategies L1 and L2 university students tend to use. Then I review the relevant research on L2 composing process of university students. Finally I conclude with a brief account of major findings and the limitations of existing literature, which has helped me form my research questions.

2.1 Research on Summary Writing

2.1.1 Focus on Products

2.1.1.1 Comparison of Experienced and Less Experienced L1 Writers

Summary writing becomes increasingly important in tertiary education on account of the frequency of summary tasks (Applebee, 1981, 1984; Campbell, 1990; Horowitz, 1986; Johns, 1985; Kirkland & Saunders, 1991; Taylor, 1983, 1984). However, little information is available about how university students complete course-related assignments involving summary writing. Most of the existing studies examined how the students completed summary tasks designed by the researchers. For example, Brown, Day, and Jones (1983) conducted a study to compare the
summary products written by university students and primary or secondary school students. They found that the college students planned more and were more skillful in combining information across paragraphs and stating the gist in their own words than the primary and secondary school students. Likewise, Winograd (1984) found that university students had more combinations and inventions\(^1\) in their summaries of expository texts than those of secondary school students based on the analyses of their summary products. In other words, the participating university students performed better in integrating information into their own words than those secondary school students.

Brown and Day (1983) conducted a series of three studies to investigate how elementary and high school students, college students and graduate students used the five condensation rules in summarizing two expository texts. The five rules were 1) deletion of trivial information, 2) deletion of redundant information, 3) substitution or generalization of lists of items or actions, 4) selection of a topic sentence, and 5) invention of a topic sentence. Based on analyses of the summary texts, Brown and Day found that college students used more complex condensation rules such as substitution and invention, whereas the younger students relied heavily on a simple copy-delete strategy. However, graduate students outperformed college students in that they combined information across paragraphs more efficiently and used the difficult invention rule much more than college students.

Rather than comparing university students with school students in their summary writings, Johns (1985) and Sherrard (1986) focused on university students

---

\(^1\) In Winograd's (1984) coding scheme, combinations refer to combining two or more sentences of the original passage into one sentence in the summary product. Inventions mean that the writer produces individual sentences of conveying the meaning of a paragraph, several paragraphs or even the whole passage.
and investigated their summarizing strategies. Johns (1985) examined the summarizing skills of three groups of university students: 54 remedial undergraduates, 53 adept undergraduates and 21 graduate students. The participants read an excerpt from a freshman American history textbook and produced a summary of about 100 words in length without the requirement of time limit. The analyses of the summary products showed that graduate students included important information more from the source reading in their summaries than undergraduates did. Also, graduate students were far ahead in integrating two or more idea units into a single sentence and stating the gist of the reading in their own words, whereas undergraduates were most likely at the level of copying or paraphrasing one idea unit from the original.

Sherrard (1986) explored summarizing strategies of 10 undergraduates in a general social sciences degree course at an American university. The participants were asked to write summaries relating to seven expository texts assigned by the researcher. The researcher compared the summaries and the source texts and found that the strategy of simple omission and one-to-one mapping of source text sentences into summary sentences were used more frequently than combination. As well, the students seemed to frequently use the combination of two text sentences into a single summary sentence rather than combining three and four text sentences into a single summary sentence. The participants showed a strong tendency to preserve the original order of text sentences in the summaries. In short, these university students had not moved beyond the apparently simple strategies such as simple mapping and omissions. In other words, they appeared to be mid-way between the copy-delete strategy and the integration-invention strategy identified by Brown and Day (1983).

2.1.1.2 Comparison of L1 and L2 Writers

With the increasing number of ESL students in North American universities, researchers such as Campbell (1990) and Johns and Mayes (1990) investigated the summary writing strategies of L2 writers by examining their summary products. Campbell (1990) compared how ESL university students used information from a source text in comparison with their NES counterparts. Thirty undergraduate students were chosen randomly from various composition courses at an American university. They were given the same reading/writing assignment. The students first did their assigned reading, the first chapter of an undergraduate anthropology textbook, as homework, and then were given one class hour to write a summary of the chapter. The analyses of the summaries showed that all the students used significantly more information from the source text in the final paragraph than in the body paragraph of their summaries. The ESL university students, however, used significantly more information from the source text in the first paragraph than the NES university students. This suggested that the ESL university students relied more on the source
reading than the native speakers to start writing. The study also found that the NES university students received significantly higher holistic scores on their summaries than the ESL university students. It appeared that English language proficiency of the participants had an obvious effect on the smoothness of incorporating the source reading in their summary writings.

Johns and Mayes (1990), using the coding scheme of Johns (1985), compared the summary writings produced by 80 university ESL students with high and low levels of English proficiency. The participants were given a 588-word text chosen from a textbook for low-intermediate English for Business students and were asked to write their summaries within a 100-word limit in one class hour. The analyses of the summary products showed that the high-proficiency group, compared with the low-proficiency group, paraphrased the original text more frequently rather than copied directly from the original text. Also, the high-proficiency group was more skillful in combining information in paragraphs, though no significant differences were found between the two groups in providing a generalization about the entire text.

Campbell (1990) and Johns and Mayes (1990) found that English language proficiency affected the quality of ESL students' writing from sources. The high-proficiency ESL students performed better in condensing information of the original text and expressing them in their own words than the low-proficiency students. However, the two studies did not provide any specific information regarding the first languages and educational backgrounds of the participants, which might have had an impact on their writing competence. Future research needs to take into consideration of ESL participants' previous L1 educational backgrounds in interpreting their writing performance in L2. Besides, the participants of Campbell (1990) and Johns and
Mayes (1990) completed the summary writing tasks within the allotted one hour. As Campbell (1990) indicated, "Given time constraints and the physical constraints of a full classroom, most writers find it difficult to produce quality writing" (p. 221). In other words, the summaries done by the participants might not represent their actual writing ability. Further research needs to be conducted in a setting with no time constraints to identify the actual writing ability of the participants. In short, the implications drawn from the literature review for my present study are 1) to consider previous educational backgrounds of participants in interpreting their writing performance, 2) to select participants with the same or similar English language proficiency in order to find the similarities or differences in their writing strategies, 3) to create a setting with little time or physical constraints for the participants to perform their best.

The review of the above studies suggests that there is a need to know what strategies the participants actually use when writing course-related summary tasks. The writing strategies of the participants were mainly inferred from the analyses of their summary products rather than from the observation of their writing processes. Thus, we are still not clear about how these students came up with the final summaries, what strategies they used and what difficulties they experienced during their writing processes. It seems important to know the writing processes of the students if we want to find more appropriate and efficient approaches to help them. Research on summary writing process could help us gain access to the knowledge of the strategies that the students actually use and the challenges they face during the writing process.
2.1.2 Focus on Process

2.1.2.1 Comparison of Experienced and Less Experienced L1 Writers

To obtain detailed information on the summarizing strategies of participants, a few studies have been conducted to investigate their writing processes by using think-aloud method, retrospective protocols or interviews. For example, Garner (1982b) examined the strategies used by 20 undergraduate students who were categorized as expert readers by their instructor in a summary task designed by the researcher. The participants read and summarized an abbreviated 167-word, single-paragraph expository text with the text present while being each observed by one of the other 20 undergraduate students. This observed reading-summarizing phase lasted about 5 to 10 minutes. Half of the summary writers reported their thoughts and actions immediately afterwards; the other half reported two days later. Ten reading-summarizing strategies were reported more than once by the participants, which were listed in the order of frequency of mention, highest to lowest as following:

1. Looking back to the text, rereading it for key ideas or details;
2. Comparing the text and summary to see if ideas maintained or deleted were appropriately so;
3. Reading for key ideas and words;
4. Underlining main points and key words while reading;
5. Skimming to get the overall meaning first;
6. Substituting general phrases or words for more specific terms while summarizing;
7. Thinking about personal experience related to parts of the text;
8. Rereading the summary for a coherence check;
9. Looking in the summary for any redundancy – to eliminate it; and
10. Directing attention to the ("boring") text.

(Garner, 1982b, p. 164).

Most of the strategies listed above have been discussed in other studies (Brown and Day, 1983; Brown et al., 1983), but none of the students mentioned the strategy of invention, a strategy used by the students in Brown and Day (1983),
Brown et al. (1983), Johns (1985), Sherrard (1986) and Winograd (1984). In other words, the 20 undergraduates in Garner (1982b) seemed to have difficulty in using the strategy of invention.

Taylor (1984) videotaped 18 participants' processes of composing aloud. Among the 18 participants were nine professional adults who had done much writing in their respective careers, and nine inexperienced writers -- four from a community college and five from a high school. Each participant met individually with the researcher and wrote a short summary on a 750-word expository article without time constraint while thinking aloud. Taylor (1984) found that the professional writers and the inexperienced writers were different “in their reading processes, note taking, abstracting, monitoring, analyzing, and writing processes” (p. 698). The professional writers read the article more carefully and looked for structure and theme. They not only spent more time thinking before writing, but also tended to refer to the source text to verify the accuracy of their sentences. In addition, they generally remained objective and took the audience into consideration. In contrast, the student writers often read the text very quickly, spent less time thinking and began to write almost immediately. They were, therefore, more likely to make statements about the article without verifying their authenticity. In general, the student writers had some difficulty in integrating the detailed information into their own words as those less experienced college student writers in Brown and Day (1983), Brown et al. (1983), Garner (1982b), Johns (1985), Sherrard (1986) and Winograd (1984).

Kennedy (1985) asked six college students to think aloud while doing a task of writing from three articles on the topic of communication. The participants were distinguished as experienced writers and less experienced writers based on their
reading ability. She found that the participants engaged in six major processes: *reading sources, referencing sources, noting, writing, planning* and *general commenting*. Three major findings were drawn from the analyses of the think-aloud protocols. First, the six participants appeared not to approach the “writing from sources” in the same way. Second, they all read and reread sources in the reading-writing process. The experienced writers “did much more source rereading and notetaking at the post-reading/prewriting phase than at the writing phase” (p. 443). In contrast, the less experienced writers “did little rereading of the sources until the writing phase and at that point they reread the sources chiefly to incorporate direct quotations into their essays” (p. 443). The experienced writers also outperformed the less experienced writers in incorporating their notes into their essays. Third, the experienced writers did more planning than the less experienced writers through the entire writing processes. Generally, the participants did not proceed the writing in a linear fashion through reading, post-reading/prewriting, writing stages, but in the less predictable recursive manner.

Garner (1982b), Kennedy (1985) and Taylor (1984) observed the writing processes of experienced and less experienced native-speaking-English writers. They found that the less experienced undergraduate writers used the strategies similar to those of the experienced writers, such as note-taking, making an outline, referring to the source texts, planning, writing and revising. In general, the experienced writers (Kennedy, 1985, Taylor, 1984) used writing strategies more actively, and they especially did more planning than the less experienced writers. Most participating undergraduates appeared to have some difficulty in integrating information into their own words (Garner, 1982b; Taylor, 1984). Summarizing seems to be an interactive,
recursive process (Kennedy, 1985): the writers switched back and forth among the writing processes such as planning, composing and editing, rather than proceed in sequence through planning, composing and editing.

2.1.2.2 Comparison of L1 and L2 Writers

In addition to recent research on summary products of L2 writers (e.g. Campbell, 1990; Johns & Mayes, 1990), a few recent studies have been conducted to investigate ESL students' summary writing processes. For example, Cumming (1989) investigated the English writing processes of 23 Francophone college students on three tasks. One of them was a summary task, which was selected to "resemble an academic assignment, involving the integration of reading and writing, world knowledge and a fixed information source" (p. 90). Students were asked to write a short summary, without any indication of specific audience or purpose of the task. These 23 Francophone students were distinguished at three levels of writing expertise in their first language (professionally experienced writers, average student writers and basic writers) and two levels of ESL proficiency (intermediate and advanced level). Results showed that expert writers "shifted their attention between a more frequent level of local decision making about wording and specific thoughts and a less frequent, higher level of planning their overall gist in explicit units of discourse" (p. 112, 113). In contrast, less expert writers paid more attention to the language aspects and often used a what next strategy (Bereiter & Scardamalia, 1987) to plan what to write next.

Furthermore, in order to find what processes of thinking actually transfer across languages, Cumming et al. (1989) investigated the thinking processes of 14 Anglophone undergraduate students of French when performing summary tasks in
their first and second languages. Different from the participants in Cumming (1989), the second language of the participants was French instead of English. The participants were distinguished at three levels of writing expertise in their first language English (professional, average and basic writers) and two levels of French proficiency (beginning and intermediate level). They were asked to read two newspaper articles in English and in French respectively, and then at one week interval to write English summaries of the English text and French summaries of the French text while thinking aloud. The 28 think-aloud protocols were tape-recorded, transcribed and coded by using Cumming’s (1989) coding scheme to identify their decision-making behaviors. The researchers found that each participant’s strategies used in L1 and L2 summary writing appeared to be fundamentally similar, but the participants were different from one another in processing the L1 and L2 summary tasks on account of their L1 writing expertise and L2 proficiency. The more experienced writers tended to use more heuristic search strategies\(^2\) to solve the problem while performing summary tasks in both their first and second languages than the less experienced writers. In addition, the experienced writers referred to the overall framework of the source readings and evaluate the faithfulness of their statements more frequently. Participants’ L2 proficiency levels did not appear to affect substantially the use of problem solving strategies in their writing processes.

Connor and Kramer (1995) conducted a study to examine reading-writing relationships of ESL students in a graduate business school. They intended to compare the strategies in writing from sources among three ESL and two NES

\(^2\) Heuristic search strategies include “memory scan routines, directed translation across languages, generating and assessing alternatives, assessing in relation to a criterion, relating parts to a whole, or setting and adhering to a goal” (Cumming et al, 1989, p. 205).
graduate students. They all wrote a case report based on a business case reading totaling 20 pages. The three ESL students represented three different cultures – Belgium, Bolivia, and Korea. They drew data from students' written assignments and retrospective interviews. The Bolivian student, who had a TOEFL score of 637, performed like the American student. Both of them understood the requirement of the task quite well. They took notes, underlined the key points and made an outline while reading the case. In addition, both of them developed their rough drafts based on the outline, and refined language and content in each draft. The researchers also found that professional background may affect both the ESL and NES students' case report writing.

Hu (2000) investigated the academic writing processes and challenges of 15 Chinese ESL graduate students in completing course assignments required by their academic programs. He drew his data from multiple in-depth interviews with the individual students, supplemented by their writing samples and follow-up interviews with faculty. The results showed that integrating information into their own words was a great challenge to most of the participants in writing source-based assignments. Modified copying\(^3\) seemed to be a popular method for his participants to cope with writing source-based assignments. When composing their assignments, all the students tried to meet the expectations of the instructors, but they were not all very clear about what the expectations were. During the writing process, they had to use their first language as a means and back-up, "the students varied along a continuum from thinking entirely in Chinese to thinking entirely in English, depending on their English proficiency and other factors" (Hu, 2001, p. ii).

---

\(^3\) According to Hu (2001, p. 129), copying becomes *modified copying* when the source sentence is changed.
Feng (2001) asked six EFL Taiwanese graduate students to write an academic paper based on two source articles while thinking aloud. She aimed to examine the writing processes that the participants were engaged in and compare the writing processes of more skilled participants and less skilled participants. According to the analyses of the think-aloud protocols, four processes were identified: reading, planning, writing and evaluating. The results showed that all the participants wrote an outline prior to writing, but the more skilled group spent more time in their prewriting phase and went through more planning processes through the entire writing process than the less skilled group. The more skilled group also experienced more evaluating processes and revised more at the discourse level.

The studies on summary writing process cited above differ in data collecting methods, writing tasks and backgrounds of the participants. For example, Cumming (1989), Cumming et al. (1989) and Feng (2001) drew data mainly from the think-aloud protocols, whereas Connor and Kramer (1995) and Hu (2000) elicited data from the interviews. The participants were given a well-defined criterion for summary tasks in Cumming (1989), Cumming et al. (1989) and Feng (2001), while the participants in Connor and Kramer (1995) and Hu (2000) completed course-related summary tasks. Connor and Kramer (1995) compared the summary writing between L1 and L2 writers, but the three L2 writers were from three different L1 educational backgrounds. Cumming et al. (1989) compared the summary writings of Anglophone French learners in their L1 (English) and L2 (French). Cumming (1989), Feng (2001) and Hu (2000) involved homogenous groups of second language writers with various English proficiencies - Francophone ESL writers, Chinese EFL writers and Chinese ESL writers respectively. Together, these studies suggest that L2 writers appeared to
transfer their L1 writing strategies to their L2 writing (Cumming, 1989; Cumming et al., 1989). Experienced L2 writers did more planning, evaluating and revising (Connor and Kramer, 1995; Feng, 2001). Also, some L2 writers were found to switch their thinking between L1 and L2 during their L2 writing, depending on their L2 proficiency levels (Cumming, 1989; Cumming et al., 1989; Hu, 2000).

2.1.3 Summary

This section has reviewed the research on summary writing of both L1 and L2 university students. The studies cited here described the participants’ summarizing strategies by examining their summary products and processes. In general, the experienced writers used such strategies as complex summarization rules (e.g., combination and invention), referring to the source text, planning, writing and revising more actively than the less experienced writers. The thinking strategies in the writing process were noted to transfer across languages. The experienced L2 writers with high literacy level in L2 performed like L1 experienced writers. However, these findings were drawn from a limited number of studies on summary products and summary writing processes.

Although the studies on summary writing processes of L2 writers have increased recently, most of them focus on general summary writing processes. Less attention has been given to the detailed strategies L2 writers used in their summary writing for a specific course assignment. In order to know in detail how L2 writers process their summary writing, especially course-related summary tasks, it is necessary and important to know how L2 writers process other writing tasks in order to find whether they will transfer the writing strategies used in other writing tasks to
summary tasks. For this purpose, the next section will review the relevant literature on L2 composing process research.

2.2 Research on L2 Writing Process

2.2.1 Focus on L2 Writing Process

A number of studies have explored the writing processes of ESL writers. For example, Zamel (1982) examined the writing processes of eight proficient ESL writers who spoke five different first languages. Her data consisted of interviews with students and their course-related written assignments. Regarding the strategies used in course-related assignment, students all emphasized the importance of generating ideas and making an outline before starting to write. Then, once the actual writing begins, they may write some sketchy notes or fully articulated sentences and paragraphs. They also indicated that they needed a great deal of time not only to actually write, but also to leave their writing for a while and come back to reread it in order to move on. One student admitted that she first wrote in her own native language and then translated it into English. She felt she could keep the flow of her thought when she wrote in her own language without worrying about lacking a particular vocabulary. Zamel (1982) concluded that ESL writers composed their ideas by using the strategies similar to those used by L1 writers in Emig (1971), Perl (1980), and Sommer (1980), but there were individual preferences for what strategies to use. In short, the proficient ESL writers, like their NES counterparts, experienced writing as a process of discovering meaning.
In order to get a more detailed picture of ESL writers’ strategies, Zamel (1983) observed six advanced ESL students’ composing a course-related writing task. She interviewed them at the end of the study and collected all of the written materials. The six ESL students were chosen from her intermediate composition class, four being identified as ‘skilled’ writers and two as ‘unskilled’ writers. All the writers stated that ideas were most important in L2 writing, not grammar or any other aspects of the second language. They all reread what was already written in order to assess the form of expression and generate new ideas. They all processed writing in a recursive and generative manner. However, the skilled L2 writers planned and revised more than the unskilled L2 writers. The former writers appeared to have a clearer understanding of what composing required than the latter.

Lay (1982) examined the strategies that four Chinese ESL students used in completing a topic of their choice while thinking aloud. The analyses of their written products and think-aloud protocols indicated that the participants shared many of the NES writers’ (Perl, 1978) strategies. Lay also noticed that the use of L1 did facilitate L2 writing of her participants. Interestingly, the participants who had more L1/L2 switches in the protocols produced better compositions. Some participants translated the key words into Chinese (L1) to get a stronger impression and association of ideas for the essay. Lay (1982) further argued that the use of L1 in writing depends on the relations between the writer’s experience and the topics.

Raimes (1985) provided us with more information on the writing of the inexperienced ESL students. Eight students composed aloud on a narrative task. She found that the students’ writing competence did not seem to correspond with their second language proficiency (evaluated by using the Michigan Proficiency Test).
Similar to the advanced ESL students in Zamel (1983), the participants were more concerned about getting ideas down on the page rather than finding linguistic errors. They frequently read back over phrases and sentences they had just written and rehearsed their ideas during the writing process. She noticed that most of the inexperienced student writers did less planning\(^4\) before or during writing, a behavior previously observed among the inexperienced L1 and L2 writers (Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Taylor, 1984; Zamel, 1983). Despite the similarity in their writing processes revealed from their think-aloud protocols, Raimes (1985) still found it difficult to categorize the eight unskilled writers as a definable group.

Furthermore, Raimes (1987) examined the composing strategies of eight ESL writers at different levels (nonremedial and remedial) of instruction in responding to two expository writing assignments while thinking aloud. She found that ESL writers used strategies similar to those of the L1 writers in previous studies, but experienced writers (nonremedial group) were consistently involved in more planning, rehearsing, rescanning, revising and editing than the inexperienced writers (remedial group). The data also showed little correspondence between language proficiency and composing strategies (Raimes, 1985).

Bosher (1998) investigated the L2 writing processes of three Southeastern Asian ESL students with different educational backgrounds. They were all from an academic language bridge program for refugee/immigrant students at an American college. The students were asked to write an opinion on a local newspaper article within scheduled one hour (they could take more time if they needed to). Bosher drew

\(^4\) Planning refers to the discussions of how to proceed whether for the whole essay or for the next sentence here.
her data from interviews, retrospective protocols, pausing behavior, and written products. Cumming’s (1989) coding scheme was used to analyze the stimulated retrospective protocols. The results showed that one of the participants, who received a high score (78) for the essay, took notes during her reading process, planned what she was going to write and referred back to her overall plan throughout the writing process. In contrast, another participant, whose work received the lowest score did not plan before or during her writing.

Sasaki (2000) investigated the writing processes of 12 Japanese EFL learners in completing argumentative tasks. Based on their second language (L2) writing competence, the participants were divided into three groups: professional writers, more-skilled and less-skilled student writers. Professional writers were professors of applied linguistics and student writers were college freshmen majoring in British and American studies at a Japanese university. The data consisted of the participants’ written products, pausing behaviors while writing, stimulated retrospective protocols and analytic scores given to the written products. He found that both the professional writers and the student writers used a similar number of strategies. However, compared with the student writers, the expert writers made a detailed overall organization plan, wrote more and faster, and did much more rhetorical refining (i.e. refining the rhetorical aspect of an expression). The student groups resorted more to translating ideas conceptualized in L1 to L2 and made more local planning (i.e. planning what to write next) than the professional writers. There was little difference between two student groups, except that the more-skilled student writers used “rhetorical refining” more often than the less-skilled student writers. Also, the results
showed that there were greater individual differences among the professional writers than among the less experienced student writers.

The above studies on L2 writing process differ in how data were collected, what the writing tasks were, and how the participants varied in backgrounds. Lay (1982) and Raimes (1985, 1987) drew data mainly from think-aloud protocols, Bosher (1998) and Sasaki (2000) collected data from stimulated retrospective protocols, and Zamel (1982, 1983) elicited data mainly from interviews. Except those in Zamel (1982, 1983) who did course-related writing tasks and those in Lay (1982) who chose the topic by themselves, most of the participants of the above studies did various writing tasks designed by the researchers. For example, some of the participants did narrative tasks (Raimes, 1985), some did expository writing tasks (Raimes, 1987), and some did argumentative tasks (Bosher, 1998; Sasaki, 2000). Most of the participants were university students except the four professors in the study of Sasaki (2000). The participants in Bosher (1998), Raimes (1985, 1987) and Zamel (1982, 1983) had various L1s' educational backgrounds, while the participants in Lay (1982) and Sasaki (2000) were homogenous groups with Chinese and Japanese educational background respectively.

The above studies commonly found that the strategies used by second language writers of English were quite similar to those used by native writers of English in the previous L1 studies. The experienced L2 writers tended to plan more and revise more than the less experienced L2 writers. Individual differences were observed among L2 writers in approaching their writing tasks (Bosher, 1998; Raimes, 1985; Sasaki, 2000; Zamel, 1982). In addition, language proficiency and writing expertise were found to be independent factors in L2 writing (Raimes, 1985, 1987).
However, the limitations of the above studies lie in that their findings were based on the analyses of L2 writers' performance in reference to L1 writers' performance examined in other previous L1 studies. Further studies need to compare the processes of L1 and L2 writers in completing the same written task to find out the similarities and/or differences in their writing processes.

2.2.2 Comparison of the Same Participants' L1 and L2 Writing Processes

The above studies show that L2 writers used the strategies similar to those used by L1 writers. A few studies from the late 1980s on have been conducted to compare the same participants' L1 and L2 writing processes in order to find whether writing strategies were transferred across languages. For example, Arndt (1987) investigated writing processes of six Chinese post-graduate students in completing two expository tasks in their L1 (Chinese) and L2 (English) respectively. She drew data from think-aloud protocols, open-ended interviews and written products. The results showed that the composing activities of each individual writer remained consistent across languages, but the six writers processed the two tasks differently.

Jones and Tetroe (1987) examined whether L2 writers transferred planning strategies between L1 and L2 in doing researcher-designed narrative and argumentative tasks in both L1 and L2. Six Spanish-speaking ESL students who were preparing to enter graduate schools in North America participated in the study. The analyses of the think-aloud protocols showed that the six ESL students transferred their planning strategies from L1 to L2 writing. Second language proficiency seemed to constrain the effectiveness of the process and reduce the quantity of planning process, but it played little role in constraining the quality of planning. In other words,
it was the quality rather than the quantity of planning that was transferred from L1 to L2.

Uzawa (1996) compared second language learners' L1 writing, L2 writing, and translation from L1 into L2, focusing on writing and translating processes, attention patterns, and quality of language use. Twenty-two Japanese ESL students at a Canadian college did three writing tasks individually while thinking aloud in L1 with the presence of the researcher. The three tasks included writing a draft of descriptive exposition in Japanese and one in English and translating a magazine article from Japanese into English. The data consisted of think-aloud protocols, observation notes, interviews and the students' written products. Uzawa (1996) found that most students performed like inexperienced writers (Bereiter & Scardamalia, 1987), using a “what-next” approach both in the L1 and L2 writing tasks. Most of them did not have an overall plan before writing and did little revision during the writing process. Attention patterns were also found very similar in the L1 and L2 writing tasks. In a word, thinking processes were transferred across languages in doing the writing tasks.

Whalen and Ménard (1995) compared the composing processes of 12 second-year Anglophone undergraduates of French in writing an argumentative text in both L1 (English) and L2 (French). They examined the participants' planning, evaluation and revision strategies at three different levels of discourse (pragmatic, textual and linguistic). They found that the participants used similar strategies in both L1 and L2 writing tasks, but limited L2 competence did constrain the L2 writers from applying

---

5 Attention patterns are divided into metacognitive level attention, discourse level attention and linguistic level attention (see detail on p. 279, Uzawa, 1996).
planning, evaluation, and revision strategies at pragmatic and textual levels of L2 writing. All the participants used the translation strategy in their L2 writings. The more proficient writers used the translation strategy to achieve more effective pragmatic and textual goals, whereas the less proficient writers used the same strategy to generate acceptable linguistic structures.

Arndt (1987), Jones and Tetroe (1987), Uzawa (1996) and Whalen and Ménard (1995) all used the think-aloud protocol as main data sources and investigated the writing processes of homogenous groups of university students in L1 and L2. The participants did researcher-designed expository (Arndt, 1987; Uzawa, 1996), argumentative (Jones & Tetroe, 1987; Whalen & Ménard, 1995) and narrative writing tasks (Jones & Tetroe, 1987). The results showed that the participants transferred their writing strategies across languages. However, relatively limited L2 proficiency constrained the L2 writer from applying the L1 writing strategies efficiently to L2 writing (Jones & Tetroe, 1987; Whalen & Ménard, 1995). Individual differences were found in approaching the same tasks in both L1 and L2 among the same group (Arndt, 1987). Future research needs to verify the above findings with writing tasks using source texts.

2.2.3 Summary

This section has reviewed the empirical studies on second language writing process. Findings have shown that L2 writers used strategies similar to those of L1 writers, and they also used similar strategies while writing in L1 and L2. However, there were obvious individual differences within L2 groups (Arndt, 1987; Bosher, 1998; Raimes, 1985; Sasaki, 2000). This finding points to the need to compare the
strategies of L1 and L2 writers in writing the same course-related tasks. The findings will help researchers and practitioners to better understand the writing processes and the challenges students face.

2.3 Research Questions

As the literature review suggests, L1 and L2 writers processed writing tasks similarly in terms of using writing strategies. The differences, however, seem to exist between experienced and inexperienced writers. For example, the experienced writers concerned themselves primarily with ideas rather than grammar or expressions, and paid more attention to planning through the entire writing process. Compared to what we know about L2 writing strategies in general expository writing tasks, relatively little information is available on how L2 writers process their summary writing, especially course-related summary tasks. Most of the existing studies examined the summarizing strategies of the participants doing tasks designed by researchers. Results of these studies, therefore, might not represent how these writers would process course-related summary tasks.

Available information on L2 summarizing strategies is drawn from the studies of comparing homogenous L2 writers with different L2 proficiency levels (Cumming, 1989; Cumming et al., 1989; Feng, 2001), and from the studies of comparing heterogeneous L2 writers with different L2 proficiency levels (Campbell, 1990; Connor & Kramer, 1995; Johns & Mayes, 1990). Likewise, most of the L2 studies on composing I have reviewed investigated the writing strategies of either homogenous L2 writers (Lay, 1982; Sasaki, 2000) or heterogeneous L2 writers (Bosher, 1998;
Raimes, 1985, 1987; Zamel, 1982, 1983), or compared the writing strategies of homogenous L2 writers in doing both L1 and L2 writing (Arndt, 1987; Jones & Tetroe, 1987; Uzawa, 1996; Whalen & Ménard, 1995). Little research has been done to investigate the writing strategies by comparing L1 and L2 writers with similar educational backgrounds in doing course-related writing tasks, especially course-related summary tasks. A review of previous studies suggests that further research needs to explore how L1 writers and L2 writers process the same course-related summary tasks. With an increasing number of ESL students in North American universities, there is a practical need for research on their academic writing performance. The knowledge of how L2 writers perform the course-related tasks in an authentic setting will lead to appropriate pedagogy for second language writing in particular, and the relevant subject-course in general.

In order to address the limitations of the previous studies on summary writing the present study focuses on two course-related summary tasks. The reason for selecting authentic tasks was based on the recognition that most of the writing process studies mentioned earlier were conducted under controlled conditions. That is, the participants were asked to compose on topics designed by the researchers. The findings based on such tasks may not truly represent how the students process their course-related written assignments. Course-related assignments, as suggested by Freedman and Pringle (1980, p. 314), may “entail far more intense intellectual engagement” beyond the display of writing ability. In the course-related writing task, the students have a clear purpose (e.g., integrating the concepts discussed in the class into his writing, getting a better grade) and audience (e.g., the instructor) for their writing. Limited information is available about how the students process such course-
related assignments. The present study was an attempt to investigate how the ESL graduate students complete course-related summary tasks in comparison with their NES classmates. The following specific questions were used to guide the study:

1. How do the Chinese ESL and the NES graduate students process course-related summary tasks?

2. What are the similarities and / or differences among individual writers in their summary writing processes and use of strategies?
CHAPTER THREE

METHODOLOGY

This chapter documents the research methods used to conduct the study. I first describe the methods and introduce the context and the writing tasks used for the study. Then, I present individual profiles of the six participants and describe the procedures of data collection. Finally, I introduce the coding scheme for the think-aloud protocols and approaches to data analyses.

3.1 Methods

The objective of this study was to explore 1) how Chinese ESL students and NES students processed the summary tasks; and 2) whether there are similarities and/or differences among individual writers in their summary writing processes and use of strategies. In order to find the answers to the questions, multiple methods such as think-aloud method, retrospective interview, questionnaire and follow-up email were used for data collection. The purpose of using multiple methods in data collection, as suggested by Hayes and Flower (1983) and Garner (1985), was to obtain a whole picture of participants’ summary writing processes and gather convergent information on their summarizing strategies.

Among the multiple methods, think-aloud protocols were used as the major data source for the detailed description of the participants’ writing processes. While thinking aloud, the participants were asked not to explain their thinking but simply to verbalize as it happened. The purpose was to get an accurate and uninterrupted
account of the writing process (Ericsson & Simon, 1980; Swarts, Flower, & Hayes, 1984). Some doubts have been voiced about the persuasiveness of verbal protocols as an important source of information about cognitive processes (Cavanaugh & Perlmutter, 1982; Cooper & Holzman, 1983; Faigley & White, 1981; Nisbett & Wilson, 1977). Some researchers have pointed out that verbal protocols may slow down cognitive processing (Brand, 1987; Cooper & Holzman, 1983; Nisbett & Wilson, 1977; North, 1987). However, the empirical studies reviewed in Chapter 2 have amply shown that verbalizing thinking process in no way alters or distorts participants' natural processing (Arndt, 1987; Bosher, 1998; Cumming, 1989; Cumming et al., 1989; Feng, 2001; Jones & Tetroe, 1987; Kennedy, 1985; Lay, 1982; Raimes, 1985, 1987; Sasaki, 2000; Taylor, 1984; Uzawa, 1996; Whalen & Ménard, 1995). The above reviewed studies have shown that the participants responded well to composing aloud and the think-aloud protocols provided abundant information about the writing strategies used by the participants. The use of think-aloud protocols to investigate writing process during the last two decades has proved its value as a research tool for revealing the underlying process of writing. Hayes and Flower (1983) argue that think-aloud protocols can "detect processes that are invisible to other methods" and "provide direct evidence about processes" (p. 218). They further argue that:

It is interesting that verbal protocols are singled out for criticism on the grounds of incompleteness because protocols, although not complete, are characteristically more complete than most of the other methods with which they are compared. For example, a protocol of a writer in action typically provides us with many more clues and with clearer clues to writing process than does the most careful input-output analysis (e.g., analysis of the text that the writer produces). (p. 217)
In short, the think-aloud protocols provide us an opportunity to look into the locked room (Hayes & Flower, 1983) of the writer’s writing process, which cannot be discerned only from the written products. Previous studies, including a very limited number of studies on summary writing process (Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Taylor, 1984) suggest the possibility for me to use concurrent think-aloud method to obtain a detailed description of the participants’ summary writing processes.

The participants of my study were also asked to make retrospective reports on the summary writing strategies as part of the retrospective interviews. This procedure is important because it is possible to reveal any missing information in the think-aloud protocols. In other words, retrospective reports can supplement the thinking-aloud protocols (Ericsson & Simon, 1993). For example, the writers may stop thinking aloud when they encounter difficult problems in their writing (Flower, 1990; Green & Higgins, 1994). However, retrospective reports give the writers an opportunity to “explain and reflect on their decisions without interfering directly with their attention to the task, freeing a writer from the ‘cognitive load’ (Afflerbach & Johnston, 1984) that the concurrent verbalization of a think-aloud would require” (Green & Higgins, 1994, p. 118). Researchers such as Garner (1982b), Connor and Kramer (1995) and Hu (2000) have been successful in using retrospective data to explore the strategies that writers use in writing. Thus, the present study also used retrospective reports to gain insight into the participants’ strategies after they completed their writing. Ericsson and Simon (1980) and White (1980) particularly pointed out the importance of minimizing the processing-reporting distance. The participants for the present study, therefore, were asked to make retrospective reports on their writing strategies.
immediately after they completed their writings. My question was “Tell me all that you can remember about the strategies you have used in your summary writing”. This question was used to get an accurate portrait of the participants’ writing processes rather than misleading them to give a ‘right’ answer or demonstrate their competence (Cooper & Hozman, 1983). In a word, the present study used think-aloud protocols and retrospective reports simultaneously to obtain the detailed description of the participants’ summary writing strategies, because:

“their [the participants’] think-aloud protocols and retrospective reports can reveal in remarkable detail what information they are attending to while performing their tasks, and by retrieving this information, can provide an orderly picture of the exact way in which the tasks are being performed: the strategies employed, the inferences drawn from information, the accessing of memory by recognition.” (Ericsson & Simon, 1993, p. 220)

The participants were interviewed with semi-structured questions about their writing experiences. As Yin (1994) indicated, the interviewees can “provide important insights into a situation” (p. 85), helping the researcher to identify other relevant sources of evidence. For the present study, the interviews were used to help interpret the writing strategies revealed in the participants’ think-aloud protocols and retrospective reports of the participants.

Questionnaires were also used in the present study to obtain the participants’ background information, especially their language learning experience. Additionally, the follow-up emails were used to collect the grade reports given to the final products by the instructor. The grade reports were important because they allowed me to see whether there was a correlation between their writing processes and their final achievement evaluated by their professor.
The multiple methods used in the present study enabled me to collect convergent information on the participants' writing processes. Particularly, the combination of think-aloud protocols and retrospective reports allowed me to detect the underlying summary writing processes in detail. As reviewed in Chapter 2, previous studies on writing process used either think-aloud protocols (Arndt, 1987; Cumming, 1989; Cumming et al., 1989; Feng, 2001; Jones & Tetroe, 1987; Kennedy, 1985; Raimes, 1985, 1987; Taylor, 1984; Uzawa, 1996; Whalen & Ménard, 1995), retrospective interviews (Connor & Kramer, 1995; Garner, 1982; Hu, 2000; Zamel, 1982, 1983), or stimulated retrospective protocols (Bosher, 1998; Sasaki, 2000). Few studies have been conducted with the combination of think-aloud protocols and retrospective reports. The combination of think-aloud protocols and retrospective reports in the present study, therefore, provided me an opportunity to make contribution to research methodology in second language writing. The findings derived from the multiple sources of evidence are likely much more convincing and accurate than from a single source. Consequently, the findings may help educators and researchers better understand the processes and challenges in course-related summary tasks for university students in general and for second language writers in particular. In addition, the findings may help the participating students become conscious of their own writing strategies and deal with the challenge in course-related summary tasks.
3.2 Context and Writing Tasks

The study took place during March 2001 in an MBA program at a Canadian university. About half of MBA candidates in the participating university were Chinese ESL students. According to the result of participant recruitment (see details in 3.3), the course *Buyer Behavior*, focusing on an examination of theory and research concerning consumer behavior, was selected for the present study, because it had two written assignments involving summary writing. Specifically, students first needed to examine and summarize the buyer behavior issues involved in marketing research on *Ocean Spray Cranberries Inc.* and *Libb Pharmaceuticals* respectively and then to describe what they believed were the most important implications of the two cases for marketing strategy. For each written assignment, students were required to write a brief paper (two double-space pages). Among the six participants, two participants did Assignment 1 and four did Assignment 2. For the purpose of my study, I focused on the first part of the assignments involving summary writing.

The case of Ocean Spray Cranberries Inc. is about 34 pages, chosen from *Cases in Consumer Behavior* (DeBruicker & Ward, 1980). Ocean Spray Cranberries Inc. employed a "milking" strategy for their cranberry jelly and whole-berry sauce throughout the 1960's. However, in the late 1960's the corporation experienced an apparent decline in their sales of cranberry sauce. OSC, therefore, conducted extensive market research and psychographic research to determine market segments and how to target them. This was the required reading for Assignment 1.

The case of Libb Pharmaceuticals is about nine pages, selected from *Contemporary Cases in Consumer Behavior* (Blackwell et al., 1977). Libb
Pharmaceuticals became concerned since the market share of its Alive toothpaste declined from 15 percent to 10 percent. Its management team decided to conduct attitude research on the toothpaste market to determine how to best position itself against other toothpaste brands. This is the required reading for Assignment 2.

3.3 Participants

I first solicited the Chinese participants by posting a message to a list server for Chinese students at this university. Twelve students responded and showed their interest in my study. Then I asked the twelve students if they had any summary type of subject-related assignments and if they could recommend their classmates who were native English speakers as a comparison group. As a result, three native-English-speaking students were recommended and also agreed to participate in the study. I, therefore, invited only three Chinese students to match the number of the comparison group for my present study.

The six participants were the first-year MBA students and took the same six-week course called *Buyer Behavior* (Feb. 26 - Apr. 4, 2001), which required them to do two academic writing assignments based on the required readings. The students who volunteered for this research were motivated by the opportunity to do think-aloud composing and learn about their own writing. I contacted the participants via email or by telephone to inform them of the purpose and design of my research in detail and also to set the time and place (i.e. my office) to meet.

Before the participants did their assignments, we had a short casual talk about our previous experience. The purpose of having a casual talk was to make the
participants relax and build up mutual trust. After completing the writing task, the participants were interviewed (see Appendix A for interview questions) and were asked to complete a questionnaire about their educational background and their language(s) learning experience (see Appendix B for details).

In order to preserve the anonymity of the six participants, I substituted their names with pseudonyms. For easy recognition, the Chinese group was given names starting with ‘Ch’, and the English group was given names beginning with ‘E’. In the Chinese group, there was one female student named Chin, a common Chinese female name, and there were two male students named as Chong and Chen, which were common Chinese male names. The English group consisted of all females who were given popular English female names -- Emma, Elizabeth and Elaine.

I summarize the information obtained from the questionnaires in Table 1, which is divided into two major parts: Chinese ESL students and Native-English-speaking students. Included in Table 1 is information about each participant’s gender, age group, self-evaluation of English proficiency, and when they started to write in English. Information was also solicited about number of publications in English, attitudes toward English writing and types of English writing practice. For three Chinese participants, Table 1 also provides information about the number of years of English studying in China, length of stay in Canada, self-reported TOEFL (Test of English as a Foreign Language) scores, attitudes toward Chinese writing, and types of Chinese writing practice. The following profiles of the six participants are based on the information obtained from the interviews. Each profile consists of each participant’s brief prior educational and work background, especially writing experience prior to the enrollment in the graduate program.
Table 1 Profiles of Participants

<table>
<thead>
<tr>
<th>Categories</th>
<th>Chinese ESL students</th>
<th>Native-English-speaking students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chin</td>
<td>Chong</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Age group</td>
<td>26-30</td>
<td>31-35</td>
</tr>
<tr>
<td>Years of studying English in China</td>
<td>10 years</td>
<td>10 years</td>
</tr>
<tr>
<td>Length of stay in Canada</td>
<td>8 month</td>
<td>17 month</td>
</tr>
<tr>
<td>Self-evaluation of English proficiency</td>
<td>Advanced</td>
<td>High-intermediate</td>
</tr>
<tr>
<td>Time started to write in English</td>
<td>1st year in the university</td>
<td>MBA program</td>
</tr>
<tr>
<td>Publishing in English</td>
<td>Articles in Newsletter at the workplace</td>
<td>N/A</td>
</tr>
<tr>
<td>TOEFL scores</td>
<td>612</td>
<td>600</td>
</tr>
<tr>
<td>Publishing in Chinese</td>
<td>Articles in Chinese newspaper</td>
<td>N/A</td>
</tr>
<tr>
<td>Attitudes toward writing</td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Sometimes like to write</td>
<td>Write only when necessary</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Sometimes like to write</td>
<td>Write only when necessary</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Term papers articles for newspaper</td>
<td>Term papers</td>
</tr>
</tbody>
</table>

3.3.1 Nonnative-English-Speaking Participants

The three Chinese graduate students were all from Mainland China and had a TOEFL score of 600 or over. Chin and Chen belonged to the age group of 26-30; Chong was in the age group of 31-35. All of them had over five years of experience in business in China before they became MBA candidates. All had learned English in schools and universities for a total of ten years in China. Both Chin and Chen believed that their English proficiency had reached an advanced level, whereas Chong thought his English proficiency was at a high-intermediate level. Among the three Chinese
students, only Chin had formal training in English writing from a Chinese university where she majored in English. In the present study, Chin did Assignment 1 whereas Chong and Chen did Assignment 2.

3.3.1.1 Chin

“If I can choose, I prefer English writing.” (Chin, March 10, 2001)

Chin held a Bachelor of Arts (B.A.) degree in English Language and Literature from a university in China and worked as a market researcher in a foreign-invested company in Shanghai, China for over five years. During these five years, she did a lot of marketing research and planning. Due to this experience, she grew a strong desire to improve herself in this area and decided to enroll in graduate school. She had only been in Canada less than a year at the time of my data collection, but she was fluent in oral English. She was also very confident about her English writing competence and satisfied with her current performance in the MBA program. For all the assignments that she had completed so far, she received either an A or A+.

She thought she was a better English writer than a Chinese writer, although she frequently wrote in English for the newsletters of her previous company and in Chinese for local newspapers when she was in Shanghai. As an English major, she received intensive training in English writing in the university, though mostly in creative writing. However, she believed that she gained basic summarizing skills from her high school education by writing main ideas for each essay in the Chinese class. She said she had very strong impression on the organization of an essay (i.e., opening, supporting, and ending) emphasized by her Chinese teacher. In her opinion, expository writing in Chinese and English used similar organization structures. She
also indicated that she improved her English summary writing mainly by reading cases in the MBA program and writing memos (almost once per week) in the first semester of the program.

When asked to self-evaluate her present writing performance, Chin was satisfied with the grades she received for her assignments. But she stated that she should not be content with her writing performance personally, as she still felt that it was somewhat difficult to summarize information from various sources. She found it a great challenge to make decisions on selecting and deleting information. Sometimes she struggled with finding a proper word to express herself just like what she did when writing in Chinese. However, she stated that she was much more confident in English writing than in Chinese writing, because she tended to use more colloquial words in her Chinese writing. When she learned new words of English, she was trained to remember whether they were formal or informal and how they were used in various contexts.

When asked about what a good summary was, she indicated that a good summary should be concise and should have a clear structure with supporting evidences. Also she claimed that summarizing was a very important skill in the MBA program and could be an indicator of a person’s analytical skills.

3.3.1.2 Chong

“I think writing is a common sense, just follow your instinct.”
(Chong, March 16, 2001)

Chong obtained his Bachelor of Science (B.Sc.) and Master in Computer Science (M.Sc.) degrees from a very prestigious university in China. Before he came
to Canada, he worked as a general manager for a Hong Kong company in Beijing. He had been in Canada about one year and a half when he participated in the study.

He said he was the best student in Chinese writing during his school years. His good performance in Chinese writing should probably be credited to his parents who required him to write something every day from his early childhood. But he did not think that he used any special methods in writing besides following his instinct. He believed that good writers were those who were able to express themselves accurately and clearly. The important thing for a writer was that he should have something interesting to write about. The great challenge for him to write in English was not lack of ideas but lack of vocabulary. He was not very confident in selecting proper words, which was evident in his think-aloud protocol. Actually, he was the only one who looked up the words in an electronic bilingual dictionary and did the most of rhetorical planning in his writing. He thought he could only transfer 10% of his Chinese writing skills into his English writing. He believed that these transferable skills were organizational skills and logical thinking.

He started academic writing in English only after he was enrolled in the MBA program. He said he was weak in English writing in comparison with his other skills, such as presentation, communication, mathematics and teamwork. However, he stated that his English writing competence was average among the whole MBA class and better than the writing competence of some of his Chinese classmates.

Similar to Chin, Chong emphasized that summarizing was an essential skill for MBA candidates. Usually there were many cases to read each week, some of which had hundreds of pages. Thus, it was very important for the students to grasp the
main ideas about the cases within a very limited period of time and present the key points in their own words.

3.3.1.3 Chen

"I think the most important thing (in the academic writing) is content and thinking. If I have ideas, I'm fine." (Chen, March 19, 2001)

Chen specialized in Printing Engineering as an undergraduate at a university in China. He was a general manager of a very large computer company in Nanjing, China before he came to Canada. Having been a manager for many years, he had developed a skill in perceiving a clear and whole picture of a matter without being distracted by some details. This skill was also transferred to his writing as he attempted to grasp the overall structure of the essay in his mind before starting to write.

Although Chen started writing in English two years ago for the preparation of TOEFL and GMAT (Graduate Management Admission Test), he only began English academic writing since he entered the MBA program. He had written over thirty pieces of summaries and case analyses at the time of my data collection. As presented in Table 1, he received the highest score in TOEFL among the three Chinese participants. During the interview he showed great confidence in his English. To him, the most crucial parts were ideas and logic rather than the English language itself. In comparison with his NES peers, he stated that he might lack some good expressions in his writing and spend longer time in completing an assignment. However, he could have a deep understanding of the concepts discussed in the class and the issues discussed in the required case readings due to his previous background in business. In general, he could always come up with some good ideas in his assignments.
Like Chin, Chen also stated that he was not good at Chinese writing. According to him, writing was not important for a science student, so he did not take any Chinese writing course and practiced Chinese writing when he was an undergraduate student in China. Similar to Chong, he did not have any publications either in Chinese or English yet. The main types of English writing he had done so far were written assignments required by the program, including term papers, case summaries and research projects.

3.3.2 Native-English-Speaking Participants

The three female native-English-speaking participants all completed their school and university education in Canada. They all fell into the age group of 26-30 and had similar writing experiences. They all started their English writing from elementary school and took English writing courses at secondary school, though they had not taken any specific course on summary writing. In this study, Emma did Assignment 1 whereas Elizabeth and Elaine did Assignment 2. Following is a detailed description of educational and employment backgrounds as well as the writing experiences of the three NES students.

3.3.2.1 Elizabeth

“I think I’m always wanting to learn to write better, more concisely, and I think I can always improve; but I’m reasonably satisfied.” (Elizabeth, March 19, 2001)

Elizabeth obtained her Bachelor of Arts degree in Political Science and East Asian Studies from a Canadian university. Then she worked for a Japanese company in Tokyo for three years as a sales supporter. Her main duty was to help all sales between Europe, United States of America and Japan. Her working languages were
English, Japanese and French. She wrote a lot of case reports when she worked in Tokyo. Later she came back to Canada and worked about four years for a company to develop senior housing in Vancouver. She was in charge of conducting market research and developing all the marketing campaigns for sales. She prepared marketing materials and wrote many news releases.

Elizabeth learned how to write reports and how to do research during her undergraduate education and got better doing them during her employment. She stated she was a pretty efficient writer. In general, when she finished a draft, it was almost done. She would just do a spell check and a little revision after the first draft. Compared with other participants, she spent the least time (about 50 minutes) on the assignment used for the present study.

The challenge for her in this MBA program was to make her writing shorter and more concise. She stated that the MBA program aimed to train MBA candidates to think clearly and write concisely, because business people had no time to read long reports. Previously she did not think much about the length of her writing, as they would not be marked. But in the MBA program, she was told not only what to write, but also how long she should write. Though the writing assignments were more difficult than work reports, she said she liked the challenge.

3.3.2.2 Emma

“The more I write, the more I realize there is so much room for improvement. ...That’s sort of problem, dilemma.” (Emma, March 11, 2001)

Emma obtained her three degrees in a consecutive way, Bachelor of Arts degree in Classical History, Master of Arts degree in Classical Archaeology, Master of Arts
degree in Conservation. She was working on her third graduate degree, Master of Business Administration (MBA), at the time of data collection. She only worked for two years as an arts conservator in an American museum before she entered the MBA program.

As an arts conservator she repaired the objects for display in the museum and then wrote lab reports on her restoration work. She did a lot of traveling for the museum and cooperated with many people in her field. In contrast to the lab reports she wrote at work, most of the written assignments in this MBA program were based on the case readings. The students were required to summarize what the companies did in the past and suggest what they should do in the future using the concepts discussed in the class. Although she had published a couple of articles on scientific investigation of pottery manufacturing in relevant journals, she found the academic writing required in the MBA program a new challenge for her.

She said she had several problems in writing summaries. First, she had difficulties in selecting proper words, as she often used spoken words in her academic writing. Second, she could not complete the required readings within the time assigned. Third, she did not have enough time to plan and revise her writings due to the intensive MBA program.

3.3.2.3 Elaine

"... probably I’m a very strong writer. I had a job, I used to write a lot of reports, and always do well on English." (Elaine, March 19, 2001)

Elaine held a Bachelor of Science degree in Occupational Therapy from a Canadian university. It took her six years to complete her undergraduate education. She worked in the Workers Compensation Board in Vancouver as an occupational
therapist for four years. Based on her experience of writing many reports on her clients’ health situations, she was very confident and did not mention any challenges she had for her academic writing.

She took some English writing courses in high school and university where she practiced report and summary writing. She stated that a good summary should be a ‘crisp’ writing, which was clear, logical, and to the point.

3.4 Data Collection Procedures

I met each participant individually either in my office or at their apartments. The participants were asked to complete their required readings and make notes if necessary prior to our meetings, so they could focus on writing in their think-aloud protocols. They first received think-aloud training for about ten minutes, using an arithmetic problem and two practice problems suggested by Ericsson and Simon (1993, p. 375-379). They were asked to think aloud in the language they were currently thinking in during the training and writing sessions.

The participants were told that they could refer to the texts and notes as many times as they wished during writing, because it was the summarization skill, not retention and retrieval of information that was of interest for the present study (Garner, 1982a). They were given as much time as they required to complete their assignments, because I believed that “subjects need time to plan and develop their ideas and to shape the structure of their texts” (Humes, 1983, p. 213).

The participants were instructed to verbalize everything that went through their minds during writing. Then they wrote their assignments on the computer
directly while thinking aloud. The processes were tape-recorded with the participants’ permission. A note of reminding writers to keep talking was put in front of them on the table. As some of them said they could speak out only when they were alone in the room, I waited outside the room during the entire writing processes of all the participants.

The participants were required to write two pages, double spaced, for the assignments. They spent about 80 to 120 minutes in completing the initial drafts while thinking aloud. The final revisions were done later at home, which I did not follow. For the purpose of my study, I only examined the strategies they used in the summary parts of their initial drafts.

Right after they completed their writings, the participants were interviewed about 15 to 30 minutes with semi-structured questions (see appendix A). I asked them to recall the strategies they had just used in writing. During the retrospective interviews, the participants were also asked to reflect on their experiences in both summary writing and general writing in English as well as in Chinese (for Chinese participants). They also completed a questionnaire for background information (see Appendix B for questionnaire) after the interviews. They gave me the disc copies of their initial drafts right after they completed them. Then they emailed me the grades given to their final versions by the instructor. The participants’ reflections on the writing experience, questionnaires, initial drafts and grades for the final drafts were used to help interpret the writing strategies revealed in their think-aloud protocols and retrospective reports.
3.4 Data Analyses

I transcribed the tape-recorded interviews (about three hours) and think-aloud protocols (approximately 12 hours) (see Appendix C for transcribing conventions and Appendix D for a sample of the protocols). All of the interviews were transcribed. The transcription of the think-aloud protocols, following Cumming (1989), was "selective but systematic" (p. 90). That is, only the verbalizations of participants' writing and revising processes on the first part of the assignment (summary part) were transcribed. The verbalization of the writing and revising processes on the second part of the assignments (Implications or recommendation for the future marketing strategies) were not transcribed as they were not directly related to the present study.

The interview data were grouped according to the five interview questions. As mentioned earlier, the data drawn from the first interview question were served as retrospective reports (see Appendix D), in which the participants summarized the writing strategies they used in doing the assignments. The retrospective reports were used to support and/or supplement the writing strategies revealed in the think-aloud protocols. The data drawn from the other four interview questions were used as extra data to help interpret the think-aloud protocols and retrospective reports.

A coding scheme was developed to analyze the protocol data based on the Hayes--Flower model (1980) of cognitive process writing. Following the Hayes--Flower model (1980), I first identified planning, composing and editing as three of the major categories in my coding scheme. Then I read and reread the verbal protocols many times to determine the recurring patterns of participants' writing behaviors. As a result, I added commenting and unrelated remarks as two other
major categories. The current coding scheme, therefore, included five major categories characterizing the writing processes of the participants -- planning, composing, editing, commenting and unrelated remarks, and each category, except the last one, had several subcategories or specific strategies (see Table 2 for definitions and examples). This coding scheme attempted to represent the strategies occurred in participants’ processes of summary writing.

**Planning** refers to the strategies used to generate content, organize source information, set up the procedures for writing and deliberate on the rhetorical aspects such as word choice or grammar. It consists of five subcategories: organization planning, text planning, format planning, rhetorical planning and reviewing the requirements. According to Hayes and Flower’s (1983) observation, planning process goes through the entire writing process and may sometimes not be fully articulated.

**Composing** is a process of putting ideas into words. It includes five subcategories: referring, reading, verbalizing writing, explaining and using dictionary. As Hayes and Flower (1980, 1983) indicate, when writers move from planning stage to composing stage, it does not mean that writers have shaped their ideas completely so that they simply express them in words. While putting these ideas into words, the writers are most likely to develop, clarify, and refine them simultaneously. In that sense, the act of composing often brings writers back to planning. As Hayes and Flower (1983) observed, “often these processes alternate with each other from one minute to the next” (p. 209).

**Editing** is a process of reviewing what has been written and evaluating them for further revision. Editing can be in the midst or at the end of the composing process.
Some of the participants do editing in the midst; some do at the end. The act of editing frequently leads to new cycles of planning and composing. The participants in the present study have mainly used four strategies during the process, namely, **summarizing, reviewing, evaluating** and **modifying**.

*Commenting* refers to various comments made by the writers on the task or their performance of the task during the writing process. According to the foci of their comments, *commenting* is subcategorized as *commenting on the course*, *commenting on the assignment*, *commenting on sources* and *commenting on their own performance*. Similar to the other categories mentioned above, commenting is embedded in the planning, composing and editing stages during the entire writing process. The category of **unrelated remarks** refers to the utterances that are unrelated to the writing task.

Table 2 gives the definitions and examples for the subcategories or strategies under *planning, composing, editing, and commenting*. The number sign in each example represents the order of the segmented utterance in the think-aloud protocol of the individual participant. The utterances between the number signs and single quotation marks were originally spoken in Chinese (see Appendix C Transcription Convention for explanation of other symbols).
Table 2  Protocol Coding Scheme

<table>
<thead>
<tr>
<th>Major category/processes</th>
<th>Subcategories / strategies</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization planning</td>
<td>Plan for organizing the structure of the essay and/or paragraph</td>
<td>I list two big parts first (Chen, #2)</td>
<td></td>
</tr>
<tr>
<td>Text planning</td>
<td>Plan how to carry out the writing task, i.e. generating ideas/content, procedures for writing</td>
<td>I have to think about what I’m going to write (Chin, #16)</td>
<td></td>
</tr>
<tr>
<td>Format planning</td>
<td>Plan how to format the text, e.g. margin, space, font size, font, bold, spelling check, saving the file etc.</td>
<td>I need to double space (Chen, #6)</td>
<td></td>
</tr>
<tr>
<td>Rhetorical planning</td>
<td>Plan on choice of words and style</td>
<td>I have to think about a word to describe this (Chin, #23)</td>
<td></td>
</tr>
<tr>
<td>Reviewing the requirements</td>
<td>Review the task requirements, e.g. length, content</td>
<td>It requires two parts… (Chin, #1)</td>
<td></td>
</tr>
<tr>
<td>Referring</td>
<td>Refer to the source e.g. case readings, textbook, and notes.</td>
<td>I have to go back to the case to see if what's exactly there (Chin, #43)</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>Read the written text</td>
<td>&lt;Alive toothpaste is positioned as an all-in-one...) (Elaine, #43)</td>
<td></td>
</tr>
<tr>
<td>Verbalizing writing</td>
<td>Verbalize what one is writing</td>
<td>“The methodology, me-tho-do-logy of the research...” (Chong, #20)</td>
<td></td>
</tr>
<tr>
<td>Explaining</td>
<td>Explain why writing a certain sentence or paragraph is being written.</td>
<td>... because this is a key word for the value ... (Chin, #68)</td>
<td></td>
</tr>
<tr>
<td>Using dictionary</td>
<td>Look up the meaning of words</td>
<td>#what’s the meaning of# decay? (Chong, #47)</td>
<td></td>
</tr>
<tr>
<td>Summarizing</td>
<td>Summarize what one has written so far.</td>
<td>I summarize basically the issues... (Elizabeth, #110)</td>
<td></td>
</tr>
<tr>
<td>Reviewing</td>
<td>Review what one has written</td>
<td>Now I refer back to what I have written up to now (Chin, #110)</td>
<td></td>
</tr>
<tr>
<td>Evaluating</td>
<td>Evaluate what has been written.</td>
<td>Now in this case, is that make sense? (Elaine, #93)</td>
<td></td>
</tr>
<tr>
<td>Modifying</td>
<td>Revise the written text</td>
<td>I just restructure to make it more flow (Chin, #162)</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Comment on the course Buyer Behavior</td>
<td>#I’m thinking the market research is nonsense...# (Chong, #69)</td>
<td></td>
</tr>
<tr>
<td>Assignment</td>
<td>Comment on the requirements of the assignments</td>
<td>...hard to understand what they want from us... (Elaine, #24)</td>
<td></td>
</tr>
<tr>
<td>Sources</td>
<td>Comment on the sources (e.g. case readings, notes, texts)</td>
<td>...the key thing is that they found out that the model works... (Elizabeth, #77)</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>Comment on what one is performing or has performed</td>
<td>...maybe I write too detail... (Chin, #77)</td>
<td></td>
</tr>
<tr>
<td>Unrelated remarks</td>
<td>Comments unrelated to the written task</td>
<td>I’m singing to myself, (Emma, #211)</td>
<td></td>
</tr>
</tbody>
</table>

In order to assess the reliability of the above coding scheme, a protocol of one participant was randomly selected. A second researcher and I each segmented the selected sample into units based on the themes (i.e., the strategies displayed in the utterances) and we reached 100% agreement. All the segments were numbered in the order of their occurrences. For instance, the following two segments from Chin’s think-aloud protocol were coded under the strategy of text planning.
no, I don't want to repeat the key points. (Chin, #82)

so, but which, where should I add? Is this personality or is this value? Different people have different values. Different kind of people have certain value about fun-, about uh hedonic needs? Maybe needs. Uh, perception perception, function, uh. (Chin, #93)

We then coded the segments of the sample separately using the current coding scheme. Each segment represented the strategy that participants used during their writing at that moment. We reached 91% agreement on the codings. The differences between us were then resolved through discussions. Then I imported the verbal data into QSR NUD*IST system, where I segmented and coded the rest of the data and made a report for each strategy. QSR NUD*IST, standing for Non-numerical Unstructured Data Indexing Searching and Theorizing, is a software product designed to help users handle non-numerical and unstructured data in qualitative analysis. I then counted the words used by each participant under each strategy and calculated the percentage of the words articulated by the participants for each category in his or her entire writing process for various analyses and comparisons (see Appendix G - Frequency of Strategy Use).

3.6 Summary

In this chapter, I have described multiple methods chosen for the present study to obtain convergent information on the summary writing processes and strategies of the participants. A total of six participants, three Chinese ESL and three NES students, participated in the present study. The two written assignments for the MBA course Buyer Behavior were selected. The data included think-aloud protocols, retrospective
reports, interviews, questionnaires, grade reports and initial written drafts. A coding scheme was developed to analyze the think-aloud protocols. Both think-aloud protocols and retrospective reports were used to identify the writing strategies. Information from interviews, questionnaires, grade reports and the initial written drafts were used as extra data to interpret the writing strategies. The next chapter will report and discuss the findings for the two research questions.
CHAPTER FOUR
RESULTS AND DISCUSSIONS

This chapter reports and discusses the findings for the two research questions. The findings derived mainly from the analyses of the think-aloud protocols and retrospective reports. Findings and discussions focus on the similarities between the ESL group and the NES group in their summary writing processes for Research Question 1 and on individual differences in using the writing strategies for Research Question 2. Finally, further discussions are provided on some of the major findings.

4.1 Results and Discussions for Research Question 1

This section reports and discusses the findings for Research Question 1 on how Chinese ESL and NES graduate students process course-related summary tasks.

![Figure 1: Group Comparison of Using Major Processes](image)
To answer Research Question 1, I examined the reports on Frequency of Strategy Use for the six participants (see Appendix G) derived from QSR NUD*IST strategy reports. I added up the articulated words of the three Chinese ESL participants and the three NES participants under each strategy respectively (see Appendix H). Then I calculated the words articulated by two groups for each process into percentage. As shown in Figure 1, the two groups had similar frequencies in the use of four major writing processes planning, composing, editing, and commenting. Among the four processes, composing process accounted for the largest portion of the two groups' writing processes (Mean frequencies of 56.72% for ESL group and 47.64% for NES group). This means both groups paid more attention to putting their ideas into words. Planning and editing were the next frequently used processes for both groups (Mean frequencies of 20.04% and 19.52% respectively for ESL group; Mean frequencies of 21.47% and 18.41% respectively for NES group). In other words, both groups had the same summary writing processes—planning what to write, putting the plan into words, and editing the written products.

This similarity was also reflected in the specific strategies that both groups used under the four main processes. Figure 2 illustrates occurrences of the strategies of the two groups during the entire writing process based on Appendix H. It seems that the two groups shared most of the writing strategies, which also had similar frequencies. For example, for both groups, text planning (Mean frequencies of 11.46% for ESL group and 15.41% for NES group), verbalizing writing (Mean frequencies of 31.45% for ESL group and 26.65% for NES group) and reviewing (Mean frequencies of 9.68% for ESL group and 10.21% for NES group) occurred with the highest frequencies in planning, composing and editing process respectively.
In other words, *text planning, verbalizing writing* and *reviewing* were the main strategies that both groups used in *planning, composing* and *editing* process respectively. This implies that both ESL and NES writers planned more and reviewed the written texts quite often through the entire writing process.

Figure 2 also illustrates that both groups appeared to do little *organization planning* (Mean frequencies of 0.45% for ESL group and 0.80% for NES group). One possible reason was that the participants were all informed beforehand that they should prepare very well before they did composing aloud. For the reason that the focus of this study was on writing process rather than on reading process, they were required to read the case materials, relevant lecture notes and the chapter of textbook in advance. In the interviews, all the participants stated that they underlined the key
points, took notes and made an outline while reading the cases. When composing, they frequently referred to the outline or notes they had prepared. This possibility accounts for the fact that they did not do much organization planning while composing aloud.

Furthermore, the similarity in the writing process between the ESL and NES groups can also be found when we look at individual writers. Figure 3 illustrates the occurrences of major processes used by the six participants. It seems that Chin, Chen, Elizabeth and Elaine paid significantly more attention to composing with over 50% occurrence during the entire writing process. Chen obviously had the highest portion (81.64%) of using composing strategies among the whole group. Elizabeth had the highest frequency (61.01%) among the NES group. Chin and Elaine were close to each other in using composing with the percentage of just over 50%. Compared to the above four participants, Chong and Emma had quite even distribution (around 30%) in using planning, composing and editing strategies.

In short, the above analyses show that the Chinese ESL group and the NES group performed in a similar manner when completing the course-related summary tasks in terms of the writing processes and the use of the writing strategies. The finding corresponded with the results of previous studies where the experienced L2 writers with high literate expertise performed like the experienced L1 writers (Connor & Kramer, 1995; Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Raimes, 1987; Sasaki, 2000; Taylor, 1984; Zamel, 1982, 1983).
Moreover, the recursiveness in their summary writing processes was identified among all the participants. The writing strategies used by the participants were not fixed in a linear order, but were recursively embedded within each other. For example, the following excerpt of Chin's think-aloud protocol suggests the complexity of her writing process even at the beginning of her writing.
<table>
<thead>
<tr>
<th>Main process</th>
<th>Strategies</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Reviewing requirement</td>
<td>1. It requires two parts, first part is Buyer Behavior Issues, and second part, second part, uh, second part is, I have to list the most important Implications Implications for marketing strategies.</td>
</tr>
<tr>
<td></td>
<td>Organization planning</td>
<td>2. So I list the first two, I list two big parts first. Then write write each part separately.</td>
</tr>
<tr>
<td></td>
<td>Text planning</td>
<td>3. The first part is Buyer Behavior Issues.</td>
</tr>
<tr>
<td>Composing</td>
<td>Referring</td>
<td>4. In this, according to my reading in this case, in this case, uh, the consumers perception of the products are different, so I write</td>
</tr>
<tr>
<td></td>
<td>Verbalizing writing</td>
<td>5. &quot;in the Ocean Spray, OSC, in the OSC case, consumers consumers’ perception of the Cranberry Cranberry Sauce are so different, are different based on their, based on their psychographics characteristic, characteristics and, and their age, and their age and social class&quot;.</td>
</tr>
<tr>
<td>Commenting</td>
<td>Commenting on the source</td>
<td>6. Actually I find psychographics characteristics and age social class are part of the cultural, are part of the consumer culture that influences the older consumers’ perception.</td>
</tr>
<tr>
<td>Composing</td>
<td>Verbalizing writing</td>
<td>7. &quot; to be specific,&quot;</td>
</tr>
<tr>
<td>Planning</td>
<td>Text planning</td>
<td>8. I have to, because I am going to explain what’s psychographics characteristics, 9. and I will talk about different characteristics uh separately.</td>
</tr>
<tr>
<td>Composing</td>
<td>Reading</td>
<td>10. So&lt;to be specific to be specific,&gt;</td>
</tr>
<tr>
<td></td>
<td>Verbalizing writing</td>
<td>11. &quot;consumers consumers’ perception to be specific to be specific uh consumers consumers’ value consumers’ value and belief, their personalities their personalities and lifestyle play uh play an important role in deciding their perceptions their perceptions of products of of cranberry source.”</td>
</tr>
<tr>
<td>Planning</td>
<td>Text planning</td>
<td>12. And then I will talk about the characteristics separately. 13. So I just type the title.</td>
</tr>
<tr>
<td>Composing</td>
<td>Verbalizing writing</td>
<td>14. “Number one Number one is consumers’ value or belief, consumers’ value or belief.”</td>
</tr>
<tr>
<td>Planning</td>
<td>Format planning</td>
<td>15. I have to adjust the format first.</td>
</tr>
<tr>
<td></td>
<td>Text planning</td>
<td>16. Uh. The consumer Cranberry Sauce, uh, I have to think about what I am going to write, value and belief.</td>
</tr>
<tr>
<td>Composing</td>
<td>Referring</td>
<td>17. Uh, maybe I could refer back to the case. 18. So I find uh, I find in this case, uh, consumers value and belief deciding their perceptions about the products.</td>
</tr>
<tr>
<td></td>
<td>Verbalizing writing</td>
<td>19. “ in this case, uh, values show western culture,”</td>
</tr>
<tr>
<td>Editing</td>
<td>Evaluating</td>
<td>20. are they important?</td>
</tr>
<tr>
<td>Composing</td>
<td>Verbalizing writing</td>
<td>21. Uh. “ some some values, some values”</td>
</tr>
<tr>
<td>Planning</td>
<td>Text planning</td>
<td>22. so some values it’s not western cultures.</td>
</tr>
<tr>
<td></td>
<td>Rhetorical planning</td>
<td>23. Some values, I have to think about a word to describe this.</td>
</tr>
<tr>
<td>Composing</td>
<td>Verbalizing writing</td>
<td>24. “Some values, uh. ((appraised)), some values obey,”</td>
</tr>
</tbody>
</table>

Note: numbers (e.g. 1, 2, 3…) represent the order of segments.
Table 3 shows that Chin started her writing with three planning strategies (e.g. reviewing requirement #1, organization planning #2, text planning #3). She moved on the composing process by using referring (#4) and verbalizing writing (#5) consecutively. She stopped composing and commented (#6) on the phrases “psychographics characteristics”, “age” and “social class” she had just written. She then went back to verbalizing writing (#7) of composing process. After typing “to be specific”, she paused and did text planning (#8, #9) and read what she just wrote, “to be specific” (#10). At that moment, she seemed to be ready for producing a new sentence (#11). She completed the new sentence, returned to the use of text planning (#12, #13), and then continued composing by using the strategy of verbalizing writing (#14). Next, she stopped and decided to adjust the format of her writing (#15). She planned the new text (#16) and referred to the source reading (#17, #18) in order to produce a new sentence (#19). After she verbalized part of the new sentence (#19), she paused and used the strategy of evaluating by asking herself “are they important?” (#20) before she continued composing (#21). At the end of the excerpt, she shifted back to the planning process (#22, #23) for producing a new sentence (#24).

As shown in the excerpt of Chin’s think-aloud protocol, the writers kept switching back and forth among the four major writing processes - planning, composing, editing and commenting, performing like expert writers (Bereiter & Scardamalia, 1987; Hayes & Flower, 1980). Obviously, most of the time they shifted between planning and composing, which appeared to complement each other rather than going on in a one-way direction (Bereiter & Scardamalia, 1987). They all appeared to be concerned primarily with ideas just as the experienced writers did in previous studies (Cumming, 1989; Cumming et al., 1989; Kennedy, 1985; Raimes,
1987; Zamel, 1983). Their writing behaviors support Perl's (1979) observation, "at one moment students were writing, moving their ideas and their discourse forward; at the next [moment] they were backtracking, rereading, and digesting what had been written" (p. 330). The protocol analysis also shows that much of the planning takes place during writing rather than before it, as observed by Hayes and Flower (1980). In a word, these strategies communicate among themselves, sending information to each other for the selection of the coming strategy. These strategies are like "tools in a tool kit" (Hayes & Flower, 1983) for the writer to choose when the writing task demands. These phenomena indicate that summarizing is not a linear process but an interactive and recursive process like the other writing activities (Kirkland & Saunders, 1991).
4.2 Results and Discussions for Research Question 2

This section reports and discusses the findings for Research Question 2, identifying the similarities and differences among individual writers in their summary writing processes and use of strategies. The analyses of data show that each participant seemed to have his or her preference for the use of some of the strategies in their writing processes. In this section of the chapter, the writing process of each individual participant will be reported. The report will begin with the ESL group in the order of Chin, Chong and Chen, followed by the NES group in the order of Elizabeth, Emma and Elaine. A further discussion of the major finding will be presented in the last section.

4.2.1 Chin

Figure 4  Chin's writing strategies
Figure 4 shows the distribution of strategies that Chin used in her summary writing process based on the percentage of the words articulated for each strategy in her think-aloud protocol. Chin appeared to use mainly three strategies: verbalizing writing (32.53%), text planning (24.07%), and referring (13.11%). Verbalizing writing took place most often during her entire writing process, which means she spent more time in putting her ideas into words. She also had the highest frequency of using text-planning strategy among the whole group. Her think-aloud protocol shows that she carefully planned what and how to write. When she planned the text, she referred to the source texts. Actually, she had the highest frequency of using referring among Chinese group. The following excerpt from her think-aloud protocol shows how Chin completed Sentence 5 “Most consumers associates Cranberry Sauce with tradition and festivals like Thanksgiving, Christmas and Turkeys” by using text planning, referring and verbalizing writing.

Text planning 34. So in all the Product Attributes I am going to write specifically what uh what’s chara- uh what’s influence consumers’ perception to product attributes? What’s kind of uh consumers’ characteristics determine their perception of the product attributes.

Text planning 35. So first of all I write uh different values consumers held.

Text planning 36. Uh, I continue with my first paragraph, the value and belief,

Referring 37. in this case on values of western culture are very important, such as time, family and health.

Verbalizing writing 38. “cranberry cranberry sauce is viewed as associat- associated”.

Text planning 39. Uh, I forgot how to brands consumers, what determine consumers consumers’ values.

Referring 40. Maybe in this case- no,

Referring 41. because it’s only two places in terms of value consumers.

Verbalizing writing 42. “cranberry sauces are associated with tradition with tradition,”

Referring 43. uh I have to go back to the case to see if what’s exactly there.
Referring 44. Uh, understanding, customer behavior. Cranberry cranberry cranberry Sauce. The second part is the most- refer to back to one.

Text planning 45. Uh. Most consumers saw-, I rewrite this sentence again.

Verbalizing writing 46. "Most consumers consider cranberry sauce, Most consumers associate, associates cranberry sauce with tradition, with tradition and festivals like Thanksgiving, Thanksgiving, and Christmas, Christmas."

Text planning 47. I’m trying to refer- reminding myself what else. And also turkey, Thanksgiving, Christmas and turkey meals,

Verbalizing writing 48. “Christmas and turkey, turkeys”.

Note: the numbers here refer to the numbers of segments.

As the above excerpt shows, Chin first planned generally for the section of Product Attributes (#34). She then presented what she was planning to write first – “different values consumers held” (#35). She indicated that the new sentence was part of the first paragraph (#36) and went back to the source reading to find the “values of western culture” (#37). By then, she was ready to produce the text (#38). She then stopped writing Sentence 5 and thought that she needed to write about “what determine consumers’ values” (#39). She decided that she did not need to write about “what determine consumers’ values” as the consumers’ values were only mentioned twice in the case reading (#40, #41). Then she clarified her ideas and continued writing Sentence 5 (#42). Again she stopped, as she felt she needed to refer to the case reading to see what tradition was discussed exactly (#43, #44). She decided to rewrite this sentence (#45). She changed “consider” into “associate” while repeating “most consumers”, “associate”, “with tradition”, “Thanksgiving” and “Christmas” while she was typing Sentence 5 (#46). As she mentioned in her retrospective report, repeating the words or phrases she just wrote was one of her methods to select a proper word, get a consistent flow of thought and generate the new ideas. While she was repeating
“Thanksgiving” and “Christmas”, she did more text planning and recalled “turkey” (#47). As a result, she added “turkey” and completed Sentence 5. The analysis of the above excerpt suggested that Chin was a careful “planner” before she wrote down any word or phrase. While she was repeating what she had written, she changed the words or phrases and/or came up with new ideas.

Chin received the highest mark (9/10) for this assignment. Her good written performance may be related to the three main strategies she used - text planning, referring and verbalizing writing. As shown in the previous studies, the experienced writers usually did a great deal of text planning and referred to the source texts frequently when writing from sources (Connor & Kramer, 1995; Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Raimes, 1987; Sasaki, 2000; Taylor, 1984; Zamel, 1982, 1983). Besides, Chin’s writing competence may be related to her previous educational background and work experience. She was the only Chinese participant who majored in English and received intensive formal training in English writing in China. As mentioned earlier, during her previous work, she often wrote in English for newsletters. She did little writing from sources in English when she was in China, but she acquired the basic summarizing skills from her high school Chinese education. In fact, she learned how to write summaries in English in the first semester of the MBA program by doing over thirty pieces of case summaries and case analyses. All these factors contributed to her writing performance in doing Assignment 1.
4.2.2 Chong

Figure 5 illustrates the distribution of the strategies that Chong used in his summary writing process based on the percentage of the words articulated for each strategy in his think-aloud protocol. He appeared to distribute the strategies more evenly than Chin. Among the 18 strategies he used, he had five frequently used strategies with over 10% occurrence, which were text planning (13.54%), referring (10.85%), verbalizing writing (14.63%), reviewing (15.60%), and modifying (11.89%). When I transcribed his think-aloud protocol, I found that Chong, unlike Chin, switched frequently between English and Chinese. Most of the time he spoke in Chinese, mixing with some English words from the case reading or lecture notes. The following excerpt gives us a glimpse of his writing process by showing how he wrote Sentence 1, "Libb conduct a market research after their market share declined from 15% to 10% and Libb realized that understanding consumer is crucial to their
business". The utterances between the number signs and single quotation marks (# 'x') were originally spoken in Chinese.

<table>
<thead>
<tr>
<th>Action</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referring</td>
<td>5. # 'This case is mainly talking' # target market, market research. #</td>
</tr>
<tr>
<td>Text planning</td>
<td>6. # 'so first I write a' # brief, brief introduction.</td>
</tr>
<tr>
<td>Text planning</td>
<td>7. # 'At the beginning I write something generalized, then I’m going to write something about this case itself, for example,' #</td>
</tr>
<tr>
<td>Verbalizing writing</td>
<td>8. &quot;this case concentrate the marketing research of L-i-b-b after they realize that that understanding their customer is crucial to their business.&quot;</td>
</tr>
<tr>
<td>Referring</td>
<td>9. # 'because this case article mentions that it, or' # market share, # 'declined from 15% to 10%, so they want to know the reasons.' #</td>
</tr>
</tbody>
</table>

Note: # 'x' #— English translation of Chinese utterances, “x”: text verbalized and typed, the numbers (e.g. 5, 6, 7, 8, 9) refer to the utterances being segmented.

The above excerpt shows that Chong switched between Chinese and English when using text planning and referring. He referred to the case using a mixed code of Chinese and English (#5). Then he planned what to write in mainly Chinese (#6, #7). He verbalized and typed Sentence 1 while spelling out the name of the company (#8). He then referred to the case again to verify his summarized sentence using mainly Chinese (#9). From this excerpt we can see that Chong used Chinese to plan the text and generate ideas (#6, #7). When he was referring to the case reading, he spoke some key words in English such as “target market research” (#5) and “market share” (#9).

In short, Chong resorted to his first language for planning the text and referring to the source reading. This observation seems to support Jones and Tetroe’s (1987) study in which one student was found to do most of her planning, generate sentences or phrases in her first language. Researchers such as Cumming (1989) and Cumming et al. (1989) also reported the similar findings that some L2 writers often resorted to their first language in planning what to write next. Besides, Chong translated part of
the original text from English into Chinese such as "declined from 15% to 10%" (#9) and then provided his understanding about the declining fact "so they want to know the reasons" (#9) in Chinese. This was consistent with what he explained in his retrospective report. Chong's translation behavior seemed to support Lay's (1982) finding that the Chinese ESL participants translated the key words into their first language to "get a stronger impression and association of ideas for the essay" (p. 406).

In the interview, Chong expressed that thinking in English would slow down his thinking process because of his English proficiency. Similarly, Zamel (1982) reported that one of her students planned her writing in her first language in order not to lose her thread of thought. As mentioned in Chapter 3, Chong was the only Chinese participant who self evaluated his English proficiency at a high-intermediate level. As he expressed in the interview, he preferred to think in Chinese while writing, not only because he felt more comfortable in his planning process but also because he could use more efficiently his logical thinking skills developed in his Chinese writing. In other words, the use of first language may allow more sophisticated thinking on the writing topic and assist in the development of content and organization.

Chong had the highest frequency of using the strategy of reviewing among the Chinese group and the strategy of modifying among the whole group. Probably his attention to reviewing and modifying was his way to overcome his limitation in English vocabulary. After he wrote down all his ideas, he appeared to review his written text very carefully and make revisions or modifications when necessary. The following excerpt of his think-aloud protocol shows how he edited Sentence 1 after he completed all the writing.

172. Ok. <This case concentrate the market research Libb realized that understanding the customer is crucial to their business. > Uh, after after...
As the above excerpt shows, he first reviewed what he had written about Sentence 1 (#172). While he was reading it, he felt that he needed to refer to the source text to verify the sentence (#173). He reread Sentence 1 (#174) and found he needed to know when the research was done (#175). He then decided not to use the verb “concentrate” (#176) and planned to modify the sentence by adding some facts (#177). While doing so (#178), he repeated phrases such as “conduct a market research”, “after their market share” and “consumer” and spelled the words “market research m-a-r-k-e-t r-e-s-e-a-r-c-h”, “their e-i-r” and “consumer, c-o-n-s-u-m-e-r”. Finally he read the modified sentence to see if it fulfilled his intention (#179).
Besides the above most frequently used strategies, he also had the highest frequency of using the strategy of *rhetorical planning* (7.83%) among the six participants. His attention to the use of *rhetorical planning* was most likely due to his less confidence in his knowledge of English vocabulary. As he explained in the interview, the great challenge for him to write in English was not English grammar or lack of ideas, but proper expressions. *Using dictionary* may be one of his methods to solve the problem of lacking proper expression. He was the only participant who used an electronic bilingual dictionary (Chinese and English) installed in his notebook to look up the usage of a word when needed.

Moreover, Chong was the only one who used all the four *commenting* strategies among the whole group. In particular, he was the only participant who made comments on the course among the whole group. For example,

# 'now I am thinking the market research is nonsense, I just learn English, learn some new definitions of the words, those native speakers of English also learn some new definitions of the words, it is not interesting, it's just some common sense, cheat ourselves'. # (Chong, # 69).

He expressed the same negative opinion in the interview. He stated that he did not learn anything new in the *Buyer Behavior* course except some new terms. For him, all the buyer behavior issues were common sense, probably because he already had many years of ‘field’ marketing experience as a general manager of a foreign-invested company in China. As he explained in the interview, he had no interest in this course but did try his best to perform well, just to see how far he could go when he tried to learn something that he was not interested in.

He was also the only Chinese participant who commented on the difficulty of writing the assignment. For instance,
This information was in agreement with his self-evaluation of his English proficiency at a high-intermediate level. In his words, he was weak in English writing in comparison with his other skills such as mathematics. In the questionnaire, he mentioned that he only started to write in English academically since he enrolled in the MBA program. As a student of computer science at a Chinese university, he did not have formal training in English writing. This may be one possible reason that he was relatively weak in English writing. He also told me that there was no specific business-writing course offered for ESL students in the MBA program. According to Chong, every student in MBA program was treated equally. Before he started the formal MBA program in September 2000, he attended a pre-core program for international ESL students in the summer. He was told that it would prepare him well for the coming intensive MBA program, especially for the heavy written assignments. However, he was very disappointed at the pre-core program:

"...they cannot understand, from the (perspective of) native English speaker, what the Chinese students' difficulties are. They cannot define the course requirements more clearly, so they just want your money and your time. (You) stay there and attend the lecture, and they tell you nothing... Basically it is just waste of time and money. ... You can never expect the native English speakers to have a wonderful lecture on teaching you how to write articles..." (from Chong’s interview, March 16, 2001)

In his opinion, the pre-core program did not teach him any writing skills that he needed. He had to learn by writing the assignments and getting the feedback from the instructors after he entered the program.

Chong, like Chin, used organization planning least in the planning process.

But in his retrospective protocol, Chong reported his prewriting strategies. First, he
went over the lecture notes prior to reading the case. Then, he highlighted the
information related to the concepts discussed in the class while reading. Thus, when
referring to the source in the writing he could concentrate on the highlighted parts to
integrate the concepts in his writing.

4.2.3 Chen

Figure 6 illustrates the distribution of the strategies that Chen used in his
summary writing based on the percentage of the words articulated for each strategy in
his think-aloud protocol. As mentioned earlier, Chen had the highest occurrence
(81.64%) of using composing strategies among the whole group. Figure 6 shows that
Chen primarily used verbalizing writing and reading in the composing process with
the highest frequencies of 45.44% and 36.20% respectively among the whole group.
These two strategies also accounted for the largest portion of his entire writing
process. His think-aloud protocol mainly consisted of verbalizing and reading of the
written text. For example, the following excerpt from his think-aloud protocol shows how he completed Sentence 2, "As a leading player in the toothpaste industry, LP held a portion of the market share, but the recent decline of Alive's market share really concerns the management"

As the above excerpt shows, Chen first read Sentence 1 to keep his train of thought (#7). Then he verbalized and typed Sentence 2 while repeating the words and spelling the words such as "leading player" and the abbreviation of the company "LP" (#8). Then he stopped and read what he had written (#9). He seemed to know what he was going to write. He verbalized and typed Sentence 2 (#10), while repeating the words or phrases such as "a portion", "market share" and "recent decline" and spelled the words such as "share", "recent decline", "alive" and "market share". He then
reread Sentence 1 to try to complete Sentence 2 (#11). He repeated “really concerns” and spelled the words “concern” and “management” as he wrote the sentence (#12).

The analysis of the above excerpt shows that Chen tended to read what he had written before he wrote a new sentence. It seems that reading was his method to keep the flow of his thought and plan the text as he wrote. He seemed to repeat the words or phrases more frequently than Chin and Chong. Like Chong, Chen also appeared to spell the words as much as he could when verbalizing and typing his written text.

The analysis of the think-aloud protocol also showed that Chen did little planning. Jones and Tetroe (1987) also found that one participant in their study did no planning. They found it difficult to believe it but could not find any evidence to show that she did planning. In contrast, in the present study, I found evidence to show Chen did planning from his retrospective report. In his retrospective report, Chen did not mention any strategies shown in his think-aloud protocol but emphasized that he had a clear structure prior to his writing. He read the requirements carefully, took notes and made an outline during his reading/prewriting process. As he said in his interview, he had organization skills developed from his many years of being a manager. These organization skills were transferred to his writing in that he tended to have a clear outline in his mind prior to his writing. In the interview, Chen specifically emphasized that ideas were the most important part in his L2 writing. He also said that his previous business background helped him understand the concepts deeply and inspired him with good ideas for his assignments. As he tended to do planning before writing, he appeared not to use planning strategies much in his thinking aloud protocol. The present findings indicate the advantage of combining think-aloud
protocols and retrospective reports in the same study, as the latter could supplement the former.

As mentioned previously, Chen had the highest TOEFL scores (640) among the Chinese group. In the interview, he showed great confidence in his English proficiency. He said he started to practice English writing when he prepared for TOEFL two years before he came to Canada. However, he only started English academic writing after he entered the MBA program. At the time of my data collection, he had written over thirty pieces of case summaries and case analyses. He thought he was good at doing this kind of assignment.

He used the commenting strategies least among the whole group, which might be related to his confidence in his English and the facilitative role of his previous working experience mentioned earlier and it might also be related to his personality. He told me that he was a very generous boss in his previous company. His generosity was also displayed in his attitude toward the MBA program. Unlike Chong, he did not complain that the Buyer Behavior course was common sense and the assignment was difficult. Neither did he complain about the pre-core MBA program for ESL students. Instead, he emphasized the role of personal practice in the improvement of English academic writing competence. He said:

*It depends on individual performance. If you really want to write, to improve your writing, I think it should be helpful by doing this kind of assignment.... You just write by yourself and get feedback, and then you improve. If you really want to improve, I think you can make some progress....* (from Chen’s interview, March 19, 2001)
4.2.4 Elizabeth

Figure 7 illustrates the distribution of the strategies that Elizabeth used in her summary writing based on the percentage of the words articulated for each strategy in her think-aloud protocol. From Figure 7, we can see that Elizabeth had four strategies that she used frequently, which were text planning (18.86%), referring (20.78%), verbalizing writing (38.44%), and commenting on the sources (13.99). She had the highest frequency of using the strategy of text planning among the NES group. Her use of referring and commenting on the sources topped the whole group. Like Chin, she made a detailed text planning and referred to the source quite often before she put ideas into words. The following excerpt shows how she wrote Sentence 1, "In the 1970’s, Libb Pharmaceutical (Libb) was concerned since the market share of its Alive toothpaste had declined from 15 to 10% and undertook attitude research to determine how to best position itself against other toothpaste brands."
4. Ok. So Just reading through here, first paragraph, it's uh,

"management"

6. I'm typing, even notes, of, goal of management,

"of pharmaceutical pharmaceutical uh was concerned that uh the market share market share of its products Alive toothpaste uh had declined from 15 percent to 10 percent,"

8. Let's see. For how many years that happen then? That's it. It looks like the case takes place in 1977, I am assuming nineteen nine hundreds, 1985, end of World War II.

9. Uh, OK, if the case was definitely in 1977. Uh, ((emphasize)) indeed, yeah, that's speak of the date of publication. ((I'm looking at)) the date referred to in the questionnaire on the case itself. And- uh, it's not ok. So let's assume it's nineteen seventy-seven.

10. "So in nineteen seventy-seven, nineteen seventies, in nineteen nineteen seventies the Libb Pharmaceutical management was concerned, since the market share of its product Alive toothpaste had declined from 15 to 10 percent."

11. It doesn't say which, oh, how how many periods it had declined, so I am going to leave that.

12. Uh, OK, so that's the main concern...

13. And "Therefore, the company, there- therefore the Pharmaceutical Ph-ar-ma-ceu-ti-cal was considering uh undertaking undertaking attitudinal, attitude, let's see, it's attitude research on the toothpaste market to determine-

14. Let's see. Ok. It's taking-,

15. just reading the paragraph here to look at the Pharmaceutical, why it is taking, undertaking attitude research.

16. I got a couple of questions here, so to determine whether I am going to paraphrase,

17. "whether the consumers attitudes towards brand predict that the consumer preference, and what, perceptions consumers have Alive toothpaste and preferences and perceptions of other major brands and how can Alive position itself under this attitude information". Ok.
From the excerpt above, we can see that Elizabeth first referred to the source text for generating ideas (#4). As she mentioned in her retrospective report, she first skimmed through the main paragraph, picking up the key points and writing them down. Then, she started to write down the key words (#5) while commenting on what she was doing (#6). She continued to write down the key points (#7) of the original text (i.e., “Management of Libb Pharmaceuticals became quite concerned when the market share of Alive toothpaste declined from about 15 percent to the present 10 percent.”). Then she referred to the source case again to find when the case happened (#8). As the source reading did not mention exactly when the Libb case happened, she commented on the information available and tried to infer when the case happened (#9). She added the information of when the case happened and reorganized the sentence (#10). Then she decided that she did not need to describe the process of sales decline in detail as no relevant information was provided in the source reading (#11). She referred to the source text again (i.e., “At a meeting of the product management team it was concluded that the firm should undertake some attitude research on the toothpaste market.”) (#12). She wrote down the key points (#13) and wondered about the purpose of conducting attitudinal research. She then planned the text (#14) and referred to the source reading once more (#15). She tried to figure out whether she should paraphrase the research questions mentioned in the source reading to articulate the purpose of undertaking attitude research (#16). Finally, she put ideas into words and completed the sentence (#17). From the analysis of the above excerpt, we can see that Elizabeth, like Chin, mainly used text planning, verbalizing writing, and referring to complete a sentence.
Both Chin and Elizabeth received the highest marks on their assignments (A+. 9/10), which might have some significance to the strategies they used. Figure 8 shows that both of them had similar frequency of using *text planning*, *verbalizing writing* and *referring* during their writing processes.

![Figure 8 Chin and Elizabeth](image)

The analysis of their think-aloud protocols has shown that both Chin and Elizabeth planned more and referred to the source reading more frequently than the other participants did. The strategies they used seem to be the same as those by the experienced writers found in previous studies (Bosher, 1998; Cumming, 1989; Cumming et al., 1989; Connor & Kramer, 1995; Feng, 2001; Garner, 1982b; Kennedy, 1985; Raimes, 1987; Taylor, 1984; Zamel, 1983). These experienced writers not only planned more prior to and during their writing, but also referred to the sources frequently.

Besides, their writing performances may relate to their previous educational backgrounds and work experiences. Like Chin, Elizabeth was also majoring in a foreign language as an undergraduate student. She learned Japanese as part of the requirement for the program of Political Science and East Asian Studies. In the interview, she stated that she was a very efficient language learner. She used English,
French and Japanese as her working languages when she worked in Japan. As mentioned earlier, she learned how to write reports and do research as an undergraduate and became more skillful in doing them during her employment which involved writing many reports. In a word, both Chin and Elizabeth were efficient language learners and did a great deal of writing in their previous jobs. That is one possible reason why both of them outperformed the other four experienced writers.

Elizabeth was the only participant who did not use the planning strategies of *rhetorical planning* and *reviewing the requirement* and the editing strategies of *reviewing* and *modifying* among the whole group. As she expressed in the interview, she understood the requirements of the assignment very well. She said she had a general organization plan for all case assignments. That was a summary of the case followed by an analysis and some recommendations. When she was writing, she never cared about her grammar or spelling. Instead, she wrote down all the key points first. She did not think she had any problems with the choice of words. She completed most of her writing when she finished the draft.

Like Chin and Chong, Elizabeth had a very low frequency of using *organization planning* (1.15%) in her planning process. In the interview, she said she read the source text very carefully, took notes and made an outline during her reading. When she started writing, she referred to her outline and notes quite often. Like Chin, she tried to use professional words in her writing by referring to her notes frequently.

Although all the participants made comments on the source texts, Elizabeth obviously had the highest frequency of *commenting on the sources* among the whole group. She primarily commented on the research, expressing her opinion or understanding of the issue. For example,
Ok, this is interesting, if it is compared to Crest, even for those who choose Crest as their first choice, and don't, they still get low rating uh decay prevention, which means people whether they use Crest or don't use Crest, no crest for decay prevention. (Elizabeth, # 96)

And then I put Colgate, and this is interesting as well, because for Colgate, also those who don't use it, did the same attribute rating, relatively attribute rating as those who use it. So Alive is the only who doesn't have that. (Elizabeth, #99)

In segment 96 and 99, she expressed her opinion and also showed her understanding on the brand preference exhibit regarding Crest, Colgate and Alive. Her commenting behaviors might be related to her previous employment background mentioned earlier. As she said, it was very important for a businessperson to have a good judgement on the daily changing market.

Her sharp judgement skill can also be detected in her retrospective report as she summarized her strategies used in completing Assignment 2 quite neatly. First, she said she used the format of her previous assignment. Second, she skimmed through the article again for key points to write them down. Third, as the source reading was about research with many tables, she read the tables very carefully and tried to summarize all the data. Finally, she referred back to her class notes for key concepts. According to my scheme, the first strategy she reported was coded under the category of format planning and the other three were all categorized under the referring category.
Figure 9 illustrates the distribution of the strategies that Emma used in her summary writing based on the percentage of the words articulated for each strategy in her think-aloud protocol. As shown in Figure 9, she appeared to use mainly five strategies, which were text planning (14.48%), referring (10.90%), verbalizing writing (21.15%), reviewing (18.46%) and modifying (8.30%). She had the highest frequency of using reviewing among the whole group and using modifying among the NES group.

The following excerpt from her think-aloud protocol records her process of writing Sentence 1, "Ocean Spray Cranberries Inc.'s primary revenue source comes
from the sales of a product consumers view as a traditional foodstuff", which gives us a glimpse of the strategies she frequently used. First, she referred to the source reading for generating ideas (#18). She appeared to have ideas and plan how to write (#19, #20). Then she started to verbalize and type Sentence 1 (#21). She did not seem to like what she had just written (#22) and decided to “start with cranberries” (#23). She wrote down what she planned (#24). She then changed her mind (#25) and decided to delete what she just wrote. She rewrote the sentence (#26) - "Ocean Spray Cranberries Inc.'s primary good primary revenue uh source comes from the sales". Then she decided to write about “the sales of a product” (#27) and continued writing (#28). She then decided not to use “traditionally” in the Sentence 1 she had just written (#29). So she modified the sentence (#30) and referred to the source reading again for generating more accurate ideas (#31). Finally she added the new generated ideas and completed the sentence (#32).

18. Ok, um, I'm just reading reading about the pilot test data again.

19. Ok, here we go, I have some ideas.

20. Ok, uh, I'm trying to write the first paragraph. Now I think what kind of the sentence that I want to start with, I could start it with a very general...

21. "It could be traditional food,"

22. Hen, I don't like this at all, I scratch the whole sentence.

23. Ok, start with cranberries

24. "cranberries food product,"

25. no,

26. "Ocean Spray Cranberries Inc.'s primary good primary revenue uh source comes from the sales",

27. I'm going to say from the sales of a product
Verbalizing writing  28. "comes from the sales sales of a product perceived a sales of product consumers traditionally"

Rhetorical planning

Modifying

Referring

Verbalizing writing

The analysis of the excerpt shows that, like Chin, Chong and Elizabeth, Emma switched back and forth mainly between referring, text planning and verbalizing writing when writing Sentence 1. As illustrated in Figure 10, Chong and Emma appeared to have used text planning, referring, verbalizing writing, reviewing and modifying with similar frequencies. Chong tended to use reviewing and modifying after he completed most of his writing, while Emma tended to use modifying during her writing of the sentence and review several sentences within a paragraph before she moved on to a new paragraph. In general, unlike Chin, Chen and Elizabeth, Chong and Emma seemed to pay more attention to the editing process. Their attention to the editing process seems to support previous findings that the experienced writers tended to evaluate and revise their writings frequently during the writing process (Arndt, 1987; Connor & Framer, 1995; Feng, 2001; Hu, 2000; Taylor, 1984; Zamel, 1982, 1983),
Like Chong, Emma made comments on the difficulty of writing the assignment, for example:

*Ok. Uh. Ok. The case of Ocean Spray positioning uh, it's more difficult than I thought it is going to be.* (Emma, #6)

Assignment 1 was Emma’s first written assignment for this course. The instructor had not discussed it in the class with the students yet. That might be why Emma was not quite sure about the instructor’s expectation even though the requirement for the assignment was in the course outline. When she completed five paragraphs, Emma read the requirement of the assignment in the course outline again to make sure that she was on the right track. This slowed her down in the writing. In the interview, she complained that the requirements for assignments were not clearly articulated. As a result, she found it difficult to identify her professor’s expectations, which hindered her thinking process during the writing. It took her two hours to complete the initial draft. In fact, she spent the longest time in doing her assignment among the whole group.
Although both Chong and Emma found the assignment hard, the causes were different. Chong was an ESL student who self-evaluated his English proficiency at a high-intermediate level. As mentioned earlier, a great challenge for him was lack of proper expressions in English writing. In contrast, Emma was an NES student who self-evaluated her English proficiency at an advanced level. She also had already obtained two graduate degrees and published some articles in relevant science journals before becoming an MBA candidate. As most of her previous writing were lab reports based on her own experiments rather than the source readings, she said that the task of summarizing the case and making recommendations was a new challenge for her. Chong and Emma’s comments on doing the course-related tasks indicate that both ESL and NES students need to learn to write appropriately for the specific subject course.
4.2.6 Elaine

Figure 11 illustrates the distribution of the strategies that Elaine used in the summary writing based on the words articulated for each strategy revealed in her think-aloud protocol. According to Figure 11, Elaine primarily used four of the strategies in her course-related summary writing, which were text planning (13.13%), referring (13.32%), reading (15.23%) and verbalizing writing (22.45%). She was on the top of using the strategy of reading among the NES group, only less than Chen. The following excerpt from her think-aloud protocol shows how she wrote Sentence 5, "This appears to be a weakness in their marketing strategy as no target market can be identified."
43. Uhm, <Alive toothpaste is positioned as an all-in-one mouth care product. They have made a limited effort to concentrate on any specific market segment.> Ok.

44. Uhm, my mind is little blank here, uhm.

45. I am just trying to absorb what I have written so far.

46. Ok. Ok, so “This appears to be a weakness of their marketing strategy,”

47. <This appears to be a weakness of their marketing strategy, >

48. “as”,

49. just take as a superficial factor.

50. I am just trying to think of right words here.

51. <This appears to be a weakness>

52. “in”

53. < their marketing strategy, marketing strategy>,

54. “as no, no target market can be identified.”

As the above excerpt shows, Elaine first read the two sentences she had just written (#43). She appeared to think hard about what she was going to write by relating to what she had just written (#44, #45). She verbalized and typed part of the sentence (#46). Then she read what she wrote for Sentence 5 (#47) and added the word “as” (#48). She planned (#49) and tried to find proper words to express her ideas (#50). While she was reading “This appears to be a weakness” (#51), she decided to replace “of” with “in” (#52). So the revised sentence reads “This appears to be a weakness in their marketing strategy”. She continued reading what she had just written (#53) and added more information (#54). The analysis of this excerpt shows that, like Chen, reading what she had written seemed to be a key method for
Elaine to generate ideas and keep the flow of her thought. Unlike Chen who only used two composing strategies—verbalizing writing and reading, Elaine also used the composing strategy of referring, and did more text planning.

Like the other participants, Elaine also had a very low frequency of using the strategy of organization planning. As she explained in the retrospective interview, she made an outline and took notes during her reading of the case. As she received only 6/10 on her Assignment 1, she discussed the case for the second assignment with some of her classmates to have a clearer idea about the instructor's expectations and to brainstorm some ideas before she started to write. During the writing process, she said she frequently referred to the outline and notes to make sure that she included the important points in her writing. This was evident in how she used the strategies of organization planning and referring in her think-aloud protocol.

Elaine reviewed the requirements more frequently than the other participants. Like Chong and Emma, she commented on the difficulty of writing the assignment mainly because she was not clear about what she was expected to do. For example,

_Muh. Basically, uh, this assignment, hard to understand what what they want from us, _ (Elaine, #24)

She also expressed her feelings of doing this assignment—"Uh, it's painful" (Elaine, #111). Probably her painful feelings of doing the assignment made her check the length of her writing a couple of times, which were categorized under the strategy of reviewing the requirements. In her retrospective report, she mentioned that she did print preview a couple of times to check the length of her writing. In other words, she seemed to force herself to write more sentences for the required length of the essay. Her difficulty in writing the assignment, like Emma, might be related to her previous educational and work background mentioned earlier. Although she did a great deal of
writing as a therapist, her previous writing experiences were different from what she was required to do for the *Buyer Behavior* course. Like Emma, she also needed to learn how to meet the requirements of the instructor.

### 4.3 Discussions of the Main Findings

This section of the chapter further discusses the characteristics occurred in the writing processes of the six participants. First, the present study showed the similarities between the ESL and NES group. Specifically, all the six participants appeared to process the summary writing like the experienced writers in the studies reviewed in Chapter 2 (Bosher, 1998; Connor & Kramer, 1995; Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Raimes, 1987; Taylor, 1984; Zamel, 1982, 1983). They all actively used prewriting strategies such as taking notes, underlining the key points, and making a rough outline. During the writing process, most of them actively used *text planning* and *referring* frequently through their entire writing processes. In other words, the participants all planned and referred to the source texts and notes frequently while composing.

Second, the present study showed that the ESL and NES writers had their individual preferences to some specific writing strategies. The individual difference among the three ESL writers seem to support previous findings that the experienced ESL writers tended to have unique patterns in strategy use(Connor & Kramer, 1995; Cumming, 1989; Raimes, 1987; Sasaki, 2000; Zamel, 1982, 1983). The individual differences among the three NES writers also confirmed the findings of Connor and Kramer (1995) that NES graduate students processed the course-related report writing
differently. Unlike Connor and Kramer (1995), Cumming (1989), Raimes (1987), Sasaki (2000) and Zamel (1982, 1983), the present study illustrated the individual writing strategies of the six participants in detail. The detailed examination of the six participants' writing strategies relied on the multiple methods used in data collection. This finding implies that it is difficult to generalize the writing strategies of the six participants in terms of definable groups of ESL and NES.

Third, the present study suggests similarities across the ESL-NES group boundary. For instance, as discussed in 4.2.1 and 4.2.4, Chin and Elizabeth planned the text more carefully and referred to the sources more frequently than the other participants. Likewise, Chong and Emma, as reported in 4.2.2, 4.2.5, have used text planning, referring, verbalizing writing, reviewing and modifying with similar frequencies. Compared to the other participants, Chong and Emma reviewed and modified texts more frequently. Moreover, as discussed in 4.2.1, 4.2.3 and 4.2.6, Chin, Chen and Elaine all frequently read the written text during the writing process in order to plan the text (i.e. generating ideas), check language accuracy and keep the flow of thought. This seems to confirm the findings of Zamel (1982, 1983) that skilled L2 writers assessed the form of expressions and constructed ideas while reading the already written text. It also seems to confirm the finding of Raimes (1987) that L2 students reread frequently part or all of the sentence or sentences they had just written. Similar findings were also reported in Garner (1982b) and Kennedy (1985) that the NES writers were found to frequently read the already written texts. Rereading, thus, appeared to have helped these students move forward and develop the new idea. The cross-group-boundary similarities seem to support the previous finding that ESL and NES writers use similar strategies (Connor & Kramer, 1995;
Cumming, 1989; Cumming et al., 1989; Feng, 2001; Kennedy, 1985; Raimes, 1987; Taylor, 1984; Zamel, 1982, 1983). Moreover, the cross-group-boundary similarities appear to support that it is difficult to generalize ESL and NES writers as definable groups (Connor & Kramer, 1995; Cumming, 1989; Raimes, 1987; Sasaki, 2000; Zamel, 1982, 1983).

The data analysis seem to indicate that there might be a correlation between strategy use and writing performance; and that there might be a correlation between work background and writing performance. For example, according to the grade reports, Chin and Elizabeth received the highest marks (9/10) on their assignments, whereas Chong, Chen, Emma and Elaine received average marks (8/10). So Chin and Elizabeth outperformed Chong, Chen, Emma and Elaine in doing the course-related summary tasks. This could be because Chin and Elizabeth planned more and referred to the sources more frequently than the other participants did. In other words, more text planning may help students produce essays with better quality. This suggests that instructors should encourage planning before writing such course-related assignments.

The different grades that the six writers received on the assignments could also be related to their understanding the requirements for the assignments. Chong, Chen, Emma and Elaine all mentioned in the interviews that the description of the requirements in the course outline did not provide them with enough information on what they expected. This uncertainty about the instructor’s expectation might have hindered their thinking processes during writing. Chong, Emma and Elaine also commented on the difficulty of doing the assignments as evidenced from their think-aloud protocols. This seems to suggest that the strategies the students employed to write the course-related summary tasks might be related to their understanding of the
audience expectations and knowledge of genre for business writing. Compared to the other four participants, Chin and Elizabeth appeared to be more familiar with business writing, which may be because both of them wrote many business reports during their previous jobs. Chen and Chong, who were general managers in China, did little business writing in English though they frequently read business documents. In comparison with their NES classmates, Chen and Chong stated that their limited linguistic competence was the big challenge for them in discipline-based writing assignments. In other words, they could have had very good ideas for the assignments, but had problems of finding appropriate words to express these ideas. In contrast, Emma and Elaine as native English speakers had better linguistic competence than Chen and Chong. Emma and Elaine also did more English writing in schools, universities and at their previous jobs than Chen and Chong. However, Emma and Elaine still appeared to be unfamiliar with the writing in the MBA program. Chen, Chong, Emma and Elaine all seemed to need more practice to familiarize themselves with the genre of business case writing and expectation of the course instructor. Previous researchers such as Leki and Carson (1997) reported similar findings about the challenges of ESL students as they made transition from general ESL writing courses to disciplinary academic writing. In a word, all the six writers showed their awareness of specific audience and genre constraints. Chin and Elizabeth, however, appeared to be more adept than others at transferring their writing skills across purposes and tasks to conform to expected genre constraints when doing the assignments for the course Buyer Behavior. Due to the focus of the present study, these correlations were not explored further in this study. It will be interesting, however, for the future research to look into these correlations.
Broadly speaking, the six writers' composing processes are not merely cognitive processes as revealed from their think-aloud protocols, but also social processes. The six writers were first-year MBA candidates, who did the summary tasks as part of the required assignments for the course *Buyer Behavior* rather than only for my research. The audience of their assignments was their instructor. The students were motivated to meet the expectations of the instructor and get good grades for the assignments. The students were expected to use the genre that was shaped by their discipline-specific academic discourse community (i.e. MBA program). By doing the discipline-based writing tasks, the students are learning to behave like the members of the discourse community. As Casanave (1995) indicated, "Writing can thus function to introduce novice community members to discipline-specific issues that lie buried in jargon and research activities – issues that ultimately have to do with what it meant to identify oneself as a member of a discipline or profession" (p. 86).

The present study not only showed that the six participants experienced the processes of *planning, composing, editing* and *commenting* when doing the course-related summary tasks, but also how they were working to meet the expectations of the audience - their instructor. For example, according to the analysis of their think-aloud protocols, all participants except Elizabeth reviewed the assignment requirements, indicating that they were trying to meet the expectations of the instructor. Chong, Emma and Elaine expressed their 'painful' feeling of doing the assignment. In a word, their learning of disciplinary writing was also part of learning the discipline (Leki & Carson, 1997).

This study was conducted following the Hayes and Flower (1980) cognitive writing process model. However, the findings seem to indicate that summary writing
is not simply composing but also social construction, as it involves cognitive as well as social processes. It may be important for future research to investigate the other course-related writing tasks to expand our understanding of the writing processes. It may also be interesting for future research to verify the findings of the present study involving ESL students speaking L1s other than Chinese.
CHAPTER FIVE

CONCLUSIONS

In this last chapter of the thesis, I will first summarize the findings from the present study. Then I will discuss the implications for future research. Finally, I will discuss the pedagogical implications of the study.

5.1 Summary of the Findings

This study explored the writing processes of six MBA students in completing the course-related summary tasks. Specifically, it aimed to identify similarities and differences between the ESL group and the NES group as well as among the individual writers. Three major findings emerged from the analyses of the data collected through think-aloud protocols, retrospective interviews, questionnaires, initial written drafts and grade reports.

First, similarities were found between the two groups in the course-related summary writing. Based on the analyses of their think-aloud protocols and retrospective reports, both the Chinese ESL and the NES graduate students were found to have devoted similar amount of attention to the writing processes of planning, composing, editing and commenting. In addition, they used some common writing strategies such as reading the sources very carefully to look for structure and theme, underlining the key points and taking notes while reading, making a draft outline before composing, and planning and referring to the sources while composing. Besides, all the participants presented the recursiveness in their summary writing
processes. That is, their writing strategies were not fixed in a rigid linear order, but were recursively embedded within each other. The writers shifted between various strategies frequently when they developed the ideas and the discourse.

Second, the six participants also displayed their personal preferences to some specific strategies: Chin did a great deal of *text planning* and *referred* to the source frequently; Chong resorted to his first language when planning the text and referring to the source; Chen always *read* what he had written before producing new text; Elizabeth *commented on the source* while *planning the text* and *referring* to the source; Emma paid relatively equal attention to the five strategies (i.e., *text planning*, *referring*, *verbalizing writing*, *reviewing* and *modifying*); Elaine, in addition to using strategies of *text planning* and *referring* to the source, *read* the written text as she tried to generate new ideas. As each participant showed his or her individual preferences in using various writing strategies, it was difficult to make the statement that the six participants fell into two generally definable ESL and NES groups.

Third, similarities were found across the ESL and NES groups based on comparisons of various strategies used. For example, Chin and Elizabeth *planned the text* more carefully and *referred* to the sources more frequently. Chong and Emma, while paying an equal attention to strategies of *text planning*, *referring*, *verbalizing writing*, *reviewed* and *modified* texts more frequently. Furthermore, Chin, Chen and Elaine used the *reading* strategy frequently for the purposes of generating ideas, checking language accuracy, and keeping the flow of thought. The cross-group-boundary similarities further suggest it is difficult to generalize ESL and NES writers as definable groups.
5.2 Implications for Future Research

Several implications for further research can be drawn from the findings. First, think-aloud protocols seems to be a promising method for detecting participants’ underlying writing processes and obtaining direct evidence for their writing strategies (Hayes & Flower, 1983; Smagorinsky, 1994). Both the ESL and NES graduate students of the present study responded well to the think-aloud method. In other words, there was no evidence that the thinking processes of the six participants were altered or distorted by thinking aloud during text production. Although it took them a little longer to finish their assignments by composing aloud, the participants all agreed that thinking aloud was the best way to capture the flow of thought occurring in their writing process.

Second, the use of multiple methods in the study of writing process seems to be desirable for further research. The present study is an attempt to explore summary writing processes of both experienced L1 and L2 writers using multiple data such as think-aloud protocols, retrospective reports, interviews, questionnaires, grade reports and written products to obtain a complete picture of the writing strategies of the participating students. Specifically, the combination of think-aloud protocols and retrospective protocols has proved to be effective as the two methods complement each other in revealing the underlying processes of the writers. Information from interviews, questionnaires, grade reports and written products also help to interpret the verbal protocols. As writing involves a complex integration of processes, it is difficult for any one method to work single-handedly for achieving the goal of understanding the nature of writing processes and the complication of the problems.
the writers have to take care of while writing. Further research is needed to verify the benefits of the multiple-method approach to composition research.

Third, further research on writing from sources should also examine the reading/prewriting process and final revising process after the completion of initial drafts in order to have a complete picture of the social cognitive process of completing a course-related writing task. The present study focused on the writing process of participants in completing the initial drafts. The prewriting strategies were reported by the participants rather than observed by the researcher or recorded by using think-aloud protocols. All the participants revised the initial drafts after the study, which was not followed because of the scope of the present study. In order to have a better understanding of the social cognitive process of doing an assignment, further research needs to look at the strategies employed during the reading/prewriting process and post-writing process of the writer.

Fourth, as the present study was limited to a small number of graduate students from the same discipline, further research needs to involve more participants, especially those ESL participants with different L1 backgrounds to verify the findings of the present study. Moreover, further research needs to investigate how ESL students perform other course-related summary tasks and compare the strategies they use in different assignments. Since very little research has looked at the developmental process (i.e., social, cognitive and linguistic aspects) of experienced writers, longitudinal studies are needed to generate knowledge. Such studies will help us understand how the participants become experienced L1 and L2 writers and what processes the participants had experienced. For example, further research can be conducted to investigate the writing processes and use of strategies of the participants
throughout their graduate (i.e., master's, doctoral) and undergraduate education. Such studies can help us understand what roles the curriculum of tertiary education and the students themselves play in the developmental process of their academic writing competence in general and discipline-specific writing competence in particular. As pointed out in the previous chapter, future research could also explore the correlation between strategy use and writing performance of the participants, and the correlation between work background and writing performance of the participants.

5.3 Implications for Teaching

Some of the participants mentioned in their think-aloud protocols and interviews that they had a hard time interpreting the requirements of the assignment. It is, therefore, important for the instructors to articulate their expectations and requirements for each assignment clearly. The instructor’s clear direction would be very helpful for those students to fulfil the requirements of a discipline-specific course. The difficulty of interpreting the assignment requirement also suggests the importance of helping university students, especially first year students to familiarize themselves with and master the genres and conventions of writing. One possible way of doing this is to provide a disciplinary academic writing course, which centers on the real content of a discipline in designing various kinds of writing activities. Such course should help students develop awareness of the audience for specific writing tasks.

The recursiveness presented in the writing processes of the six writers suggests that the students, especially less experienced writers, need to know that the linear straightforward form of academic writing is not the result of linear thinking
process. Composing aloud could be an invaluable means of revealing the essentially generative and recursive nature of the act of writing, dispelling the notion of linearity (Arndt, 1987; Hayes & Flower, 1983; Raimes, 1985; Zamel, 1982, 1983). As shown from the think-aloud protocols in the present study, all six writers switched back and forth in using various strategies while completing the assignment. The knowledge of such recursiveness in the writing process is important for the less experienced student writers. If they realize the relationship between the non-linear nature of the writing process and the linear form of the written product, these less experienced writers may find themselves more at ease and confident, developing the ideas at the level of their writing competence.

Third, the individual differences were noted during the writing processes of the six graduate students, suggesting that it seems impossible to have one best way to teach writing. Thus, the teachers should take into consideration the individual differences when planning the writing class. It is very important for the teachers to know what strategies the students use and what aspects they need to improve in completing subject-related writing tasks. The teachers could create autonomous learning situation and help students develop their own writing strategies.

Finally, the findings of the present study show that think-aloud might be an effective teaching tool in the writing classroom. As the participants of the present study indicated, composing aloud helped the student writers to be more aware of their own writing processes, which in turn helped them improve their writing strategies resulting in the restructuring of ideas and improved coherence. The student's think-aloud protocol may work like a mirror through which teachers as well as students can
record and understand the writing processes and writing behaviors. It would
eventually help students improve their written products.
REFERENCES


APPENDIX A

INTERVIEW QUESTIONS

1) Tell me all that you can remember about the strategies you have used in your summary writing.

2) How often are you required to do summaries in this course? How much do they count toward your final grade?

3) Have you ever been taught how to write summaries in English and/or in Chinese? What have you been taught to do?

4) What qualities do you think a good summary should have? Do you think summarizing is essential skill in academic writing?

5) Are you satisfied with your present writing performance? What difficulties do you have in your writing?
APPENDIX B QUESTIONNAIRE

Check the sections that are applicable to you. Please either tick the appropriate box or fill in the information in the space provided.

A. Background Information

1. Please write the name of the graduate program in which you are registered:

2. Gender: Male □ Female □

3. Age group: 20-25 □ 26-30 □ 31-35 □ 36-40 □ 41-45 □

4. I am a □ full-time / □ part-time student.

5. I am a □ native / □ non-native English speaker.

6. How many courses have you taken / are you taking?
   a. I have taken (____) undergraduate courses.
   b. I have taken (____) graduate courses.
   c. I am taking (____) undergraduate courses this semester.
   d. I am taking (____) graduate courses this semester.

B. ESL learning experience

7. How many years/months did you study English in your country?

   ___________ years ___________ months

8. How many years/months have you studied English in an English environment?
   (e.g., The United States, Canada, Britain, Australia, New Zealand, etc.)

   ___________ years ___________ months

9. What level do you think your English proficiency is at?

<table>
<thead>
<tr>
<th>Level</th>
<th>Speaking</th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-intermediate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Writing experience in English

10. When do you start to write in English?

11. If you have ever taken or currently taking any writing courses, please list the courses, the years, the length of time, and the level of courses:

<table>
<thead>
<tr>
<th>Courses (e.g., academic writing course)</th>
<th>Years</th>
<th>Length of time</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Have you ever published in English? Please list them.

__________________________________________________

__________________________________________________
D. Writing Experience in Chinese

13. When do you start to write in Chinese? __________

14. Please list any writing courses you have taken, indicating the titles, the years, the length of time, and the level of courses.

<table>
<thead>
<tr>
<th>Courses (e.g., academic writing course)</th>
<th>Years</th>
<th>Length of time</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Advanced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Have you ever published in Chinese? Please list them.


E. Attitudes towards writing

16. Do you like to write in English? (Check one answer)
   1) I am fond of writing.
   2) Sometimes I like to write.
   3) I write only when I have to.
   4) I hate writing and try to avoid it whenever possible.

17. Do you like to write in Chinese? (Check one answer)
   5) I am fond of writing.
   6) Sometimes I like to write.
   7) I write only when I have to.
   8) I hate writing and try to avoid it whenever possible.

F. Types of writing you have done in English and/or Chinese. (Check all the appropriate lines)

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>scholarly book(s) or journal article(s)</td>
<td></td>
</tr>
<tr>
<td>book chapters</td>
<td></td>
</tr>
<tr>
<td>poetry</td>
<td></td>
</tr>
<tr>
<td>short stories</td>
<td></td>
</tr>
<tr>
<td>plays</td>
<td></td>
</tr>
<tr>
<td>term papers in university</td>
<td></td>
</tr>
<tr>
<td>others (please explain)</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX C

### TRANSCRIPTION CONVENTIONS

<table>
<thead>
<tr>
<th>Mark</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>Period: closure of an utterance</td>
</tr>
<tr>
<td>,</td>
<td>Comma: used with utterance having a shorter pause or abrupt shift</td>
</tr>
<tr>
<td>?</td>
<td>Question mark: an utterance with interrogative intonation</td>
</tr>
<tr>
<td>“ ”</td>
<td>Double quotation marks: used where subjects verbalize and type utterances</td>
</tr>
<tr>
<td>-</td>
<td>Dash: used for utterances that are cut off or unfinished</td>
</tr>
<tr>
<td>#‘ #’</td>
<td>number signs (#) and a single quotation marks: used with the English</td>
</tr>
<tr>
<td></td>
<td>translation of the utterances spoken originally in Chinese</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>Angle brackets: used where the written text being read by subject</td>
</tr>
<tr>
<td>{ }</td>
<td>Curly brackets: used where subject reads phrases or sentences from the</td>
</tr>
<tr>
<td></td>
<td>source readings</td>
</tr>
<tr>
<td>(( ))</td>
<td>Double parentheses: used where the transcribed utterances may not be</td>
</tr>
<tr>
<td></td>
<td>accurate.</td>
</tr>
<tr>
<td>(...)</td>
<td>Three dots in the brackets: used where the words were hard to recognize</td>
</tr>
</tbody>
</table>
APPENDIX D
RETROSPECTIVE REPORTS

Chin’s Retrospective Report

Y: Tell me all that you can remember about the strategies you have used in your writing.

CHIN: Number one, I use notes to get outline first. Uh, number two, I kept referring to the outline so that I can keep to the structure the whole structure of the essay I am going to write. (P) hm, number three, number three that I kept, at least those structure first, then I put into the contents later (...), so I want to keep consistence of the thinking, the flow of the thinking. Uh, number four, what else, I refer to the notes and textbook sometimes, to keep reminding me. Yeah, I reword, rewrite the wordy part, actually I reworded lots of sentences again and again, yeah.

Y: Do you use your own words to summarize the case?

CHIN: Uh, I started by using my own words, but uh after I write, after finish the writing of the sentence, I reminded myself maybe I could exchange some certain words with the professional words I should use, so I exchange that, such as I exchange one word like “association” into “schema”, so

Y: Where did you find this “schema”?

CHIN: In the textbook.

Y: So you use, so actually you use some words from the original reading to replace your own words, to achieve professional hm style?

CHIN: Hm, yeah, you can say that, but, hm, for most of the words, I use my own words. But for certain part I think it’s too oral, so I have to change.

Y: So use the words, you just use the words, you didn’t copy the whole structure, right? You don’t use the phrase or pattern?

CHIN: Hm, there is, there is not ready structure actually for this case, so I made, I made structure by myself actually when I do the draft reading of the case and textbook. Before I started writing, I make my own structure, but all of the structures are based on the based on the case itself, based on the, especially the textbook. I have to list out all the points that I I think I am going to readjust.

Y: OK. That’s the strategies you have used. Anything more you can remember?
CHIN: En, (laughter) en, I kept referring back to what I have written and then, I can have idea what I have written out then, decide what I have been missing, the some parts maybe I have missed (...), that's one of the [...].

Y: So, actually as you mentioned that, you rehearsed a lot while you were writing to keep reminding yourself of what you were going to write next.

CHIN: Hm, it's not only reminding, because when I, usually when I and when I write, I didn't speak it out, I maybe I really keep it my mind, but when I read through it, it's more easy for me to get a flow, it's more easy for me to think of the next point, next hm there should be a flow in the whole paragraph, when I read it in my mind, so I could get a feeling of, ok, this is the first part, there should be another part, it makes more easy, more easy to think of the other parts.

Y: Hm, so in your writing you mainly think of the flow of your thought rather than think of the words which you use in your writing.

CHIN: Yeah, that's why I kept referring back to, the referring process is actually kind of hm restructuring my thinking my my flow. Hm, when I when I write it I did have to think of what kind of words I am going to choose, but I don't think it's hm it takes a long time.

Y: Hm, so when you finish your writing, you go back to reread your writing and revise some words.

CHIN: Yeah, but when, hm, when I write it I may from time to time I may change words or sentences, but writing it in another way but, hm, so that's why I kept referring, because when I finish one word, I rewrite it, I lose check of my flow, so I have to refer back.

Y: Hm, OK. That's all you can remember about your process and strategies.

CHIN: Yeah. (laughter)

Chong's Retrospective Report

Y: Tell me all that you can remember about all the strategies that you have used in your writing.

CHONG: I have no strategy in writing such kind of assignment. The only one is that the professor has told us that you have to apply the knowledge you learned in class to your assignments. Basically I have to write assignments. Even though I think in the different way I have to use this buzz word, such as
‘perception’, ‘attribute’ and ‘attitude’ and something that I am not familiar with. Basically I think my strategy is to translate the buzz word into Chinese and into English.

Y: So what’s the requirement of this assignment?

CHONG: The requirement of this assignment is that how you apply your, uh, I mean the thing you learn from the class to the case. The concept of the Buyer Behavior I learned from the professor and apply these concepts to the case. This case is about the marketing research and it talked about the method of the market research, attributes and procedures of the market research and questionnaire. And we have to apply what we have learned such as motivation, perception, memory, these concepts to this case.

Y: How do you apply..?

CHONG: I basically just write buzz words first, and then I try to find ways to apply the buzz words to the case. It’s uh very straightforward thinking, I think.

Y: So in the case you have abundant information there, you have to pick up some of the information of the case...

CHONG: Yeah, because uh basically when I do the reading of the case, before I read the case, I read about lecture notes. I read lecture notes, and remember that, OK, I should pay attention to these concepts in the reading of the case. So when reading the case, I highlight all the things I think is valuable to my assignment. And I can apply some concepts to the highlighted area. And then when I write the case, I just concentrate on the highlighted area and just copy this down from the article and then apply the concepts to the highlighted area.

Y: First you summarize the important parts of the original reading?

CHONG: Not really. Because you define the important part of the case is two different ways. One way is that you think this is the most important thing for the article itself, the other thing is that you remember some of the concepts and for these concepts it is useful. Do you understand? Because for the professor, he only talk about memory and perception, you remember memory and perception and try to find if there are any relative information are talking about memory and perception in this article. If there is anything, that should be important, but for me to understand this whole article, it might not be necessary important. I highlighted all these things that have some relationships with the concepts of the lecture but not very important for the article.

Y: Ok, you ...summarize those information rather than just the concepts you have learned in the class, and also emphasized by your instructor. Right?
CHONG: Yeah.

Y: You summarize those information although you think probably important in this case, and then you do this assignment.

CHONG: Yeah. Because all my purpose is do this assignment, not write a perfect comment on this article.

Y: Ok, that’s requirement of this assignment?

CHONG: Sure. Even you write a very good article and just like we do assignments on Finance. You know a lot of things about finance and background and you apply your knowledge to this assignment. But the professor’s comment is that you should write more about the things that you can get grade from. I mean that it is not necessary for you to really understand what this case is talking about, but try to write assignment that the professor likes.

Chen’s Retrospective Report

Y: Tell me all what you can remember about your writing, what strategies you have used, what’s the process, the whole process of this writing.

CHEN: Ok. Basically I think my structure is like this: first, I gave the introduction of this case, to introduce some key issues of this case and the challenges they are facing. So by doing so, I just gave a picture of my whole writing, The whole organization?

CHEN: The whole ideas, the whole thing, the whole writing is about this issue: about how to solve the problem, how to face the challenges, so this is the introduction of my writing. Then basically after that, through three paragraphs, I gave the three major, three primary causes, because this case is talking about a marketing failure, a marketing failure is their worry, they are worrying about their marketing share decline. So in the following three paragraphs, I examine the case and find out the three major causes for this failure. Then after that I gave my recommendation. It’s very simple. In the end I give the conclusion to wrap up.

Y: Did you make notes before you start writing?

CHEN: I made some notes before I came here?

Y: Oh, yeah, is it very helpful?

CHEN: Sure. The whole thing gave me the frame, gave me the structure of the writing. I mean, I think for the academic writing, in my opinion, the hardest part is the content, is the thinking rather than the formula and grammar, or
using language. I think the most important part is content and thinking. If you have good thinking, the quality of the essay should be fine.

**Emma’s Retrospective Report**

**Y:** Tell me all that you can remember the strategies you have used in the writing you have just done.

**Emma:** Ok. I didn’t have a clear focus when I started in the morning, and I am not sure I really had a clear focus now. Uh, one of problem I feel was that the question as posed was not very definite, and made me as a student hard to, really articulate what the professor wants, so I think that was hindering my thinking process. I also feel, in the end, I am not sure if I answer the question, because I don’t understand the question they are asking. So I am just looking through it, scroll down, it is only two pages, it’s very short assignment, yeah, I think that’s about it. I think, if the question has been asked better or more simply, it would help my thinking process a lot. And strategies, just start to write and go forward, and read every once a while, and make sure I am sticking to my point that I want to make in this case what I should want to make because the question was that bad.

**Elizabeth’s Retrospective Report**

**Y:** I want you to tell me all you can remember about your strategies you have used in your writing.

**LIZ:** Basically what I do is I take my old summary from last week, I take that as my template, and then I type on that I just use the same format. That means, I don’t think too much about format. So I do the same, I do the background. Basically I read, you know, although I already read the article, I just skim read again. The article is quite short, so skim through the main paragraph, just kind of picking what the key points of each paragraph and, you know, just write those down, and then look at the …, because the article is written staff about whole bunch of research, full of tables, so I look at first all the written part and you know probably five sentences, is kind of key points there. Then I read through the research and put the key points. It took me longer to do research section, because what they written is not now for me. I, kind of, have to stop and think and look at all the different numbers and compare them and, you know, think of what is relevant and have the best to summarize all the data, so that took a little while. And then after I have done that, then I, because I start to think a little about that some are analysis and some are the research, so I already have some ideas. So OK now, what the implications of all. Now I organize my research what I can say about it. So then I make some comments about what this research means, and then I, now, I know about research, what they summarize, and then I said what the research means, now I could write my last section which was, uh, you know, what are their recommendations
based on the research and then I just came up with different recommendations. And also uh refer back to my class notes, just trying to find some key words and things.

Y: So you use some words from your key notes to make your writing professional?

LIZ: I just refer to my class notes. ... reflect back and assure that I use some of the words, you know, our professor uses.

Y: You have to, you are supposed to use those concepts.

LIZ: Oh, yeah, probably, yeah. I don’t think you have to, but you know, it is probably better..

Y: Use those words to prove that you already..

LIZ: Exactly, prove I learn something.

Y: Yeah, actually you already have a global organization of this assignment.

LIZ: Yeah, I do basically all my, well, and I have a global organization any time for all case summaries. You always just first you summarize that, you do some analysis, and you make some recommendations. That’s pretty well the format I follow in work and school, in almost every case study I do.

Elaine’s Retrospective Report

Y: Tell me all about the strategies you have used.

ELAINE: Ok. In terms of strategies, I think that I had already read the case before. And then I just met some people and brainstormed some ideas. So I wrote down some ideas about what I should write in my paper. So I tried to have a basic outline. First I thought I would do like an issue analysis, marketing application, marketing recommendation section. So I start section by section at the top, then I went on and thought ,uh you know, logically what is through the background the case and through getting in more depth. And then I use my, I have got a page of scriped notes that I’ve written down in terms of brainstorming, so I just check that once a while and thought of where I would fill it in and wrote that, and then I looked at the article every once a while to get information and I refer to my notes a couple of times, my class notes, and then basically what I write down about the ideas in different section that I’ve gone through in order, then I went back to my piece of my paper, try to make sure that I’ve written everything in that I did my brainstorming thing. I just want to make sure that everything is in, and then basically it is done. And then I print preview a couple of times, to see in
terms of length, because it seems to be two pages, so I just check back.

Y: So you rely on your script notes. while reading the case, you make some

notes.

ELAINE: I think I did all the time. Nothing detail, just some ideas, I have ideas for
direction for what I am going ...

Y: So you’ve already have an outline in your mind…

ELAINE: Yeah, I guess a very rough outline in my mind. It’s not in my mind. It’s
written down on a piece of paper.
APPENDIX E

SAMPLE OF CODED THINK-ALOUD PROTOCOL

Q.S.R. NUD.IST Power version, revision 4.0.


Margin coding keys for selected nodes in document chinthinkaloud:
A: (1 1) /planning/organization planning
B: (1 2) /planning/text planning
C: (1 3) /planning/format planning
D: (1 4) /planning/rhetorical planning
E: (1 5) /planning/reviewing the requirements
F: (2 1) /composing/referring
G: (2 2) /composing/reading
H: (2 3) /composing/verbalizing writing

+++ ON-LINE DOCUMENT: chinthinkaloud
+++ Document Header:
* Chin's think-aloud protocol
* Mar. 10, 01

+++ Retrieval for this document: 35 units out of 177, = 20%
++ Text units 1-35:

1. It requires two parts, first part is Buyer Behavior Issues, and second part, second part, uh, second part is, I have to list the most important Implications Implications for marketing strategies.
2. So I list the first two, I list two big parts first. Then write write each part separately.
3. The first part is Buyer Behavior Issues.
4. In this, according to my reading in this case, in this case, uh, the consumers perception of the products are different, so I write
5. "in the Ocean Spray, OSC, in the OSC case, consumers consumers' perception of the Cranberry Cranberry Sauce are so different, are different based on their, based on their psychographics characteristic, characteristics and, and their age, and their age and social class".
6. Actually I find psychographics characteristics and age social class are part of the cultural, are part of the consumer culture that influences the ((olding)) consumers' perception.
7. " to be specific,"
8. I have to, because I am going to explain what's psychographics characteristics,
9. and I will talk about different characteristics uh separately.
10. So<to be specific to be specific,>
11. "consumers consumers' perception to be specific to be specific uh consumers consumers' value consumers' value and belief, their personalities their personalities and lifestyle play uh play an important role in deciding their perceptions their perceptions of products of of cranberry source."
12. And then I will talk about the characteristics separately.
13. So I just type the title.
14. "Number one Number one is consumers' value or belief, consumers'
value or belief."
15. I have to ((alive)) the format first.
16. Uh. The consumer Cranberry Sauce, uh, I have to think about what I am
going to write, value and belief.
17. Uh, maybe I could refer back to the case.
18. So I find uh, I find in this case, uh, consumers value and belief
deciding their perceptions about the products.
19. " in this case, uh, values show western culture,"
20. are they important?
21. Uh. " some some values, some values"
22. so some values it's not western cultures.
23. Some values, I have to think about a word to describe this.
24. "Some values, uh. ((appraised)), some values obey,"
25. uh, I am choosing a proper word to describe. Some values,
26. oh, "Western culture are very important, such as time such as time, family, and health".
27. Uh, I forgot one of the buyer behaviors, so I have to add it now.
28. <Consumers' perception of the Cranberry Sauce, the perception of the Cranberry Sauce. The personalities and lifestyle play an important role in deciding their perceptions of Cranberry Sauce. Perceptions>
29. I change the product name to, what I'm going to write, that is
30. "in deciding their perceptions of product attributes and product attributes and brand image."
31. Uh. "so first Brand Image. Uh, in this case, in this case Cranberry, Cranberry Cranberry brand name is almost a household word and it's it is well-known, it is well-known and well accepted."
32. And "The second part is product attributes."
33. So I just divide buyer behaviors into two categories, one part is Brand Image, the other part is Product Attributes.
34. So in all the Product Attributes I am going to write specifically what uh what's chara- uh what's influence consumers' perception to product attributes? What's kind of uh consumers' characteristics determine their perception of the product attributes.
In the OSC case, consumers’ perception of the Cranberry Sauce are different based on their psychographics characteristics and their age and social class. To be specific, consumers’ value or belief, their needs, personalities and lifestyle play an important role in deciding their perceptions of product attributes and Brand image.

1. Brand Image

Cranberry brand name is almost a household word and it is well-known and well accepted.

2. Product attributes

2.1. Value / belief - attitudes
Research shows different consumers’ attitudes and consumption/usage pattern because of the different values and belief they held.

Most consumers associates Cranberry Sauce with tradition and festivals like Thanksgiving, Christmas and Turkeys. Some customers who value time as very important factors in their life regard this sauce as convenient to serve and they only use Jelly type. Certain group of consumers prioritizes family members’ attitudes and they rejected CS because some of the members don’t like the taste. Most of the consumers are health conscious and regard “nutritious and with vitamin” as very important product attributes and stated that CS can’t fully satisfy this requirement.

2.2. Personality
Some consumers perceive CS brand as time-consuming and there is a decreasing trend in younger users. And there is an age concentration in CS users.

2.3. Needs
Besides the different perceptions of CS in meeting consumers’ functional needs, it is viewed by certain group to meet hedonic needs. Some consumers use it more as decorations than as a part of a meal.

Some consumers are so enthusiastic about cooking and they tend to use both types of CSs and they are less price sensitive than light users.

2.4. Lifestyle
Most of the heavy users of CS are “family centered” and they tend to have high frequency usage and they use two types of CSs.
Consumers of CS can be divided into three categories: heavy users, light users and non-users. Among heavy users, there’re also three different types, “convenience oriented”, “Enthusiastic cooker and Decorators. For non-users, they have lower MAO effort and disinterested in this product due to the taste or other reasons.

Elizabeth’s initial draft

1.0 BACKGROUND
In the 1970’s, Libb Pharmaceutical (Libb) was concerned since the market share of its Alive toothpaste had declined from 15 to 10% and undertook attitude research to determine how to best position itself against other toothpaste brands. Currently Alive is positioned as an all-in-one mouth care product (tooth polishing and brightening, breath freshening, and tooth decay reduction) and does not focus on any specific market segment (rather it focuses on getting the most advertising for their budget.). Advertising includes TV ads (boy meets girl and “slice of life” scenes), print ads in national magazines or newspaper supplements and lastly couponing Alive with other Libb products. Alive’s research focused on the female head-of the household, which was probably the appropriate consumer group in the 1970’s (compared to the 1990’s where single fathers should probably also be surveyed). The research showed that Libb’s attitude prediction model based on the fishbein expectancy model, also performed relatively accurately. This may be due to the fact that the survey appropriately used specific measurements to test for specific product attributes. Libb’s research showed that overall, Alive was the 3rd most preferred out of 5 toothpastes. Consumers first toothpaste choice was Crest (46.4%), followed by Colgate (24.9%), Alive (10.5%), MacLeans (9.2%), and Gleem (9%). Consumers 2nd choice of toothpaste was Gleem (28.1%), followed by Alive (22.7), and consumers 3rd choice of toothpaste was Gleem (25%), followed by Colgate (24%), and Alive (22.7%).

2.0 ANALYSIS OF ATTITUDE RESEARCH RESULTS
There was a negative correlation between consumer’s education and their preference for Alive and Colgate, compared to a positive correlation between education and the preference for Crest. The most important toothpaste attribute for respondents was tooth decay prevention (75%), followed by taste/flavor (11.4%), freshen mouth and whiten teeth both (approx. 5%) and price (2.9%). The research also showed that consumers that preferred Alive, ranked its taste/flavor as its most important attribute, and consumers who did not prefer Alive, considered its best attribute to be breath freshening. Those that preferred Alive ranked its remaining attributes as follows: freshen breath, teeth decay and whiten teeth. Alternatively, those who preferred Crest ranked it’s tooth decay prevention attributes highest, and even those who do not prefer Crest ranked its best attribute as tooth decay. Colgate had similar attribute ratings as Alive (ie: freshen breath and taste/flavor most important), those who prefer Colgate ranked its freshens breath attribute highest, followed by taste/flavor. Additionally, those who do not prefer Colgate also indicated its best attribute as freshens breath. These results show that the marketing strategies used by Crest and Colgate seem to be delivering the same message to those that prefer and do not prefer their products, compared to Alive which had users rating taste/flavor as the best attribute and non users rating freshens breath as the best attribute.
## APPENDIX G

### FREQUENCY OF STRATEGY USE

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Subcategories</th>
<th>Chin</th>
<th>%</th>
<th>Chong</th>
<th>%</th>
<th>Chen</th>
<th>%</th>
<th>Elizabeth</th>
<th>%</th>
<th>Emma</th>
<th>%</th>
<th>Elaine</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Organization planning</td>
<td>18</td>
<td>0.78</td>
<td>28</td>
<td>0.77</td>
<td>27</td>
<td>1.15</td>
<td>36</td>
<td>1.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format planning</td>
<td>31</td>
<td>1.34</td>
<td>209</td>
<td>5.74</td>
<td>35</td>
<td>0.83</td>
<td>39</td>
<td>1.66</td>
<td>46</td>
<td>1.36</td>
<td>54</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>Rhetorical planning</td>
<td>90</td>
<td>3.88</td>
<td>285</td>
<td>7.83</td>
<td>11</td>
<td>0.26</td>
<td>49</td>
<td>1.45</td>
<td>35</td>
<td>1.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Referring the requirements</td>
<td>31</td>
<td>1.34</td>
<td>86</td>
<td>2.36</td>
<td>48</td>
<td>1.14</td>
<td>101</td>
<td>2.98</td>
<td>90</td>
<td>4.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composing</td>
<td>Referring</td>
<td>304</td>
<td>13.11</td>
<td>395</td>
<td>10.85</td>
<td>487</td>
<td>20.78</td>
<td>369</td>
<td>10.90</td>
<td>286</td>
<td>13.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>160</td>
<td>6.90</td>
<td>72</td>
<td>1.98</td>
<td>1520</td>
<td>36.20</td>
<td>12</td>
<td>0.51</td>
<td>130</td>
<td>3.84</td>
<td>327</td>
<td>15.23</td>
</tr>
<tr>
<td></td>
<td>Verbalizing writing</td>
<td>754</td>
<td>32.53</td>
<td>533</td>
<td>14.63</td>
<td>1908</td>
<td>45.44</td>
<td>901</td>
<td>38.44</td>
<td>716</td>
<td>21.15</td>
<td>482</td>
<td>22.45</td>
</tr>
<tr>
<td></td>
<td>Explaining</td>
<td>38</td>
<td>1.64</td>
<td>5</td>
<td>0.15</td>
<td>7</td>
<td>0.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Using dictionary</td>
<td>78</td>
<td>2.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editing</td>
<td>Summarizing</td>
<td>17</td>
<td>0.73</td>
<td>109</td>
<td>2.99</td>
<td>34</td>
<td>0.81</td>
<td>32</td>
<td>1.37</td>
<td>6</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing</td>
<td>171</td>
<td>7.38</td>
<td>568</td>
<td>15.60</td>
<td>244</td>
<td>5.81</td>
<td>625</td>
<td>18.46</td>
<td>179</td>
<td>8.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluating</td>
<td>51</td>
<td>2.20</td>
<td>82</td>
<td>2.25</td>
<td>9</td>
<td>0.38</td>
<td>162</td>
<td>4.79</td>
<td>59</td>
<td>2.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modifying</td>
<td>32</td>
<td>1.38</td>
<td>433</td>
<td>11.89</td>
<td>242</td>
<td>5.76</td>
<td>281</td>
<td>8.30</td>
<td>97</td>
<td>4.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commenting</td>
<td>Course</td>
<td>44</td>
<td>1.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assignment</td>
<td>46</td>
<td>1.26</td>
<td>77</td>
<td>2.27</td>
<td>40</td>
<td>1.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sources</td>
<td>33</td>
<td>1.42</td>
<td>115</td>
<td>3.16</td>
<td>32</td>
<td>0.76</td>
<td>328</td>
<td>13.99</td>
<td>45</td>
<td>1.33</td>
<td>57</td>
<td>2.65</td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td>30</td>
<td>1.29</td>
<td>40</td>
<td>1.10</td>
<td>12</td>
<td>0.29</td>
<td>29</td>
<td>1.24</td>
<td>217</td>
<td>6.41</td>
<td>79</td>
<td>3.68</td>
</tr>
<tr>
<td></td>
<td>Unrelated remarks</td>
<td>26</td>
<td>0.71</td>
<td>8</td>
<td>0.34</td>
<td>66</td>
<td>1.95</td>
<td>37</td>
<td>1.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total words</td>
<td>2318</td>
<td>3642</td>
<td>4199</td>
<td>2344</td>
<td>3385</td>
<td>2147</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: "w" refers to the number of words.
## Appendix H

GROUP COMPARISON OF USING THE STRATEGIES

<table>
<thead>
<tr>
<th>Major categories</th>
<th>Sub-categories</th>
<th>Chinese ESL group</th>
<th></th>
<th>NES group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>words</td>
<td>%</td>
<td>words</td>
<td>%</td>
</tr>
<tr>
<td>Planning</td>
<td>Organization Planning</td>
<td>46</td>
<td>0.45%</td>
<td>63</td>
<td>0.80%</td>
</tr>
<tr>
<td></td>
<td>Text Planning</td>
<td>1164</td>
<td>11.46%</td>
<td>1214</td>
<td>15.41%</td>
</tr>
<tr>
<td></td>
<td>Format Planning</td>
<td>275</td>
<td>2.71%</td>
<td>139</td>
<td>1.76%</td>
</tr>
<tr>
<td></td>
<td>Rhetorical Planning</td>
<td>386</td>
<td>3.80%</td>
<td>84</td>
<td>1.07%</td>
</tr>
<tr>
<td></td>
<td>Reviewing the requirements</td>
<td>165</td>
<td>1.62%</td>
<td>191</td>
<td>2.43%</td>
</tr>
<tr>
<td>Composing</td>
<td>Referring</td>
<td>699</td>
<td>6.88%</td>
<td>1142</td>
<td>14.50%</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>1752</td>
<td>17.25%</td>
<td>469</td>
<td>5.95%</td>
</tr>
<tr>
<td></td>
<td>Verbalizing Writing</td>
<td>3195</td>
<td>31.45%</td>
<td>2099</td>
<td>26.65%</td>
</tr>
<tr>
<td></td>
<td>Explaining</td>
<td>38</td>
<td>0.37%</td>
<td>42</td>
<td>0.53%</td>
</tr>
<tr>
<td></td>
<td>Using Dictionary</td>
<td>78</td>
<td>0.77%</td>
<td></td>
<td>0.00%</td>
</tr>
<tr>
<td>Editing</td>
<td>Summarizing</td>
<td>160</td>
<td>1.57%</td>
<td>38</td>
<td>0.48%</td>
</tr>
<tr>
<td></td>
<td>Reviewing</td>
<td>983</td>
<td>9.68%</td>
<td>804</td>
<td>10.21%</td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
<td>133</td>
<td>1.31%</td>
<td>230</td>
<td>2.92%</td>
</tr>
<tr>
<td></td>
<td>Modifying</td>
<td>707</td>
<td>6.96%</td>
<td>378</td>
<td>4.80%</td>
</tr>
<tr>
<td></td>
<td>Course</td>
<td>44</td>
<td>0.43%</td>
<td></td>
<td>0.00%</td>
</tr>
<tr>
<td>Commenting</td>
<td>Assignment</td>
<td>46</td>
<td>0.45%</td>
<td>117</td>
<td>1.49%</td>
</tr>
<tr>
<td></td>
<td>Source</td>
<td>180</td>
<td>1.77%</td>
<td>430</td>
<td>5.46%</td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td>82</td>
<td>0.81%</td>
<td>325</td>
<td>4.13%</td>
</tr>
<tr>
<td></td>
<td>unrelated remarks</td>
<td>26</td>
<td>0.26%</td>
<td>111</td>
<td>1.41%</td>
</tr>
<tr>
<td></td>
<td>Total words</td>
<td>10159</td>
<td>100.00%</td>
<td>7876</td>
<td>100.00%</td>
</tr>
</tbody>
</table>