Chapter 3

Research Methodology

From the 2004 Report of the Chinese Language Curriculum and Pedagogy Review Committee, we knew that Higher Chinese Language (HCL) students will be given an emphasis on the four language skills. However, the review had also highlighted the shift in emphasis for those students who are not HCL students. That is, it will place an importance first on speaking. This seems to be based on the belief that language acquisition follows a natural progression, as evident in the quote from the report shown below.

"Oral fluency is aided by the early acquisition of the sounds and tones of a language. Reading and writing skills are in turn aided by the ability to listen and speak the language." (CLCPRC 2004: ii)

The oracy (speaking and listening) and literacy (reading and writing) in this respect would be on an unequal balance. And since English and Chinese are two of the official languages in Singapore, the exposure to oracy and literacy in English and Chinese is not lacking in the environment. However, given the fact that English is dominant in the society and in the educational system, along with Chinese being given comparatively lesser time in the curriculum, the degree of exposure certainly depends on the language background and language habits of the individual. This could affect students' learning of the two languages.

We also have to note that in the process of language acquisition, particularly in the case of mother tongue, it is natural to proceed from oracy to literacy. Moreover, this usually happens without any conscious effort on the part of the learner unlike the case of second language acquisition. To some students in Singapore, Chinese can be a mother tongue as well as a second language. As such, the language learning experience to some may not necessarily follow the 'natural progression'.

According to Hudelson's (1984) study on the development of second language literacy proficiency, it is said that oracy and literacy can be developed at the same time, where both can act as a reinforcement factor to each other. Brisk and Harrington (2000: 105), on the other hand, has also pointed out that literacy need not be developed after oracy has reached a certain high level of proficiency. In other words, the four language skills of 'speaking, listening, reading and writing' can be developed with a "holistic approach".

Hornberger (2003: 17) has also stated that the development continuum on oracy and literacy "is not necessarily unidirectional". She even provides the example of a study by Baynham (1988) that shows young children in Muslim societies engage in rote learning and memorization of the Koran which is conceptually and linguistically complex for their level of understanding. In Hornberger's words, "the level of the reading outstrips the children's speaking knowledge of the language; yet they do read it". In addition to this, since English and Chinese are two different writing systems, particularly with the latter's complexity in graphic configuration, this certainly poses challenges to the learners who have to cope with another language that is alphabetic (Liskin-Gasparro 1982, Shen 2005). According to Grainger (2005), this difficulty was acknowledged by Douglas (1992: 106) who noted that learners whose first language are English face serious obstacles when learning Japanese as a foreign language because of the latter's Chinese characters (*kanji*). The problem faced in learning Chinese characters also seems to occur in the Singapore context. Taking into consideration the increasing number of students whose home language is English, this could perhaps also explain why the syllabus in 2007 as compared to 2002, had placed more emphasis on character recognition and shown a reduction in the number of Chinese characters that Singapore primary school students have to learn to write (See MOE website¹). To quote from Grainer (2005: 330),

"...the writing system thus has an influence on the ability of learners to both read and write the target language being studied, which in turn may have consequences for a learner's ability to advance to the higher proficiency levels, which are often characterized by high degrees of literacy."

While the difficulty of Chinese characters is highlighted here, there are other contrary views. According to a study (Gleitman and Rozin 1977) pointed out by Lee *et al.* (1994: 247), from the perspective of pattern recognition, reading in logographic orthography such as Chinese language is easier than alphabetic orthography such as English because unlike the latter, the former "does not require mastering an arbitrary system focusing on symbol-sound relations". However, one should note the role of frequency hypothesis here which could account for the discrepancy in learning the two language systems. Also, it also could account for the differences in oracy and literacy. This is because according to the frequency hypothesis, "whether visually presented items are more recallable than auditorially presented materials depends on the differential availabilities of visual versus auditory traces" (Liu 1994: 149).

Taking into consideration the differences in degree of exposure between English and Chinese, and the non-linear development of four language skills, it is thus important for us to understand the strategies used by good learners of Chinese language in the Singapore context. This study will focus on reading and writing, the two language skills that are likely to pose challenges for learners and affect their degree of literacy and proficiency levels. This chapter shall discuss the research design of this study and the procedure in carrying out the survey.

¹Singapore Ministry of Education (MOE)

http://www.moe.gov.sg/education/syllabuses/languages-and-literature/

3.1 Research Design

This study is a description case study of students in the Singapore Special Assistance Plan (SAP) program through a mix-method approach. Since the research participants are from secondary school level, we shall take a look at the Singapore Secondary Schools within the educational system in the following section and give a brief introduction to the SAP program. The discussion on the pilot study will be included as a background that leads to the selection of SAP students. This is followed by an introduction to the procedures used in data collection, discussing its quantitative and qualitative methods.

3.1.1 Singapore Secondary Schools

In the Singapore education system, there are two school types-Government schools and Government-aided schools. The former is fully funded by the government whereas the latter's development costs are given 90% funding and its recurrent costs are borne by the government. The government-aided schools are set up by churches, clans and other religious organizations. These government schools or government-aided schools may be designated as 'Independent', 'Autonomous' and 'Special Assistance Plan' (SAP) schools, and receive extra funding.² Since this study focuses on Secondary school level, the Niche Programme Schools which are part of the secondary school system and had been introduced in 2005(MOE Press Release 2007) shall be mentioned here. The characteristics will be briefly identified in Figure 3.1 below.

SCHOOLS	Characteristics
Independent Schools	Independent School scheme was introduced in 1987.
	Independent Schools enjoy autonomy in setting their own scale of fees, in the admission of pupils, implementation of school programmes and administration. They conform to national education policies, such as the bilingual policy and the teaching of Civics and Moral Education.
Autonomous Schools	Autonomous Schools were established in 1994 to provide pupils with quality education within the framework of a non-independent status but with greater autonomy devolved to the schools.
	Autonomous Schools are given additional funding to enable them to develop a wider and better range of programmes to stretch the capability of their pupils. 3

² <u>http://www.inca.org.uk/singapore-organisation-mainstream.html</u>

³ <u>http://www3.moe.edu.sg/corporate/contactonline/2005/Issue15/glossary/glossary.htm</u>

Special Assistance Plan Schools	SAP schools were first established in 1979 to preserve the ethos of the Chinese medium schools and to promote the learning of Chinese Language and culture.
	The Special Assistance Plan (SAP) Schools are government, government-aided or Independent Schools. These schools were well- established Chinese-medium schools in the past. The ethos and environment of SAP schools enable the pupils to be effectively bilingual in both English and Chinese and also inculcate in them traditional values in a Chinese school environment.
Niche Programs Schools	Niche Programme Schools were introduced in 2005.
	Niche Programme Schools are mainstream secondary schools (non- independent and non-autonomous schools) with niche programmes approved by MOE to offer discretionary places for the purpose of building up their niche programmes. This allows a more diverse range of pupil achievements and talents to be recognised and gives due recognition to abilities not fully assessed in the PSLE.

Figure 3.1 Characteristics of Singapore Government Schools and Government-aided Schools at Secondary Level. All information above are abstracted and quoted from Ministry of Education Websites ⁴

As of the figures shown in 2007, there are 107 Government schools, 20 Government-aided schools, 21 Autonomous schools and 6 Independent schools (Educational Factsheet 2008). However, the latest figures in 2009 show that currently, there are 27 Autonomous schools and 8 Independent schools.⁵ In 2010, another school will be given autonomy in the school management. This reflects MOE's belief in empowering schools as can be seen in the following quote from the speech by Dr Ng Eng Hen, Minister for Education and Second Minister for Defence (Ng 2009).

"We [MOE] have sought to build peaks of excellence. Not just a few but a range of mountains peaks to cater to the diverse talents of our students and to meet the increasing demands of job requirements for a global workforce. MOE recognizes that *these efforts require school leaders to be empowered with more autonomy* to decide on the vision and direction for their schools (Emphasis is mine). "

The Autonomous schools are selected from government schools and governmentaided schools based on broad education policies set by MOE. They are given greater autonomy and more funds so as to enable them in carrying out "a wider range of innovative and enrichment programmes" with the purpose of "enhancing educational benefits and developing pupils' talent". ⁶ At the primary level, there is only the

⁴ Source where most of the information are abstracted and quoted:

http://www.moe.gov.sg/education/admissions/secondary-one-posting/general-information/other-schools/

⁵ List of independent schools (IS), Special Assistance Plan (SAP) schools, Autonomous Schools (AS) and Niche Programme Schools (NS). Source: <u>http://www.moe.gov.sg/education/admissions/secondary-one-posting/files/other-schools.pdf</u>

⁶ <u>http://www.moe.gov.sg/education/admissions/secondary-one-posting/general-information/other-schools/</u>

distinction of government schools or government-aided schools, where the available figures for the former and the latter shown in 2007 are 129 and 41 respectively (Educational Factsheet 2008). However, SAP which was initially introduced at the secondary level also saw its appearance at primary school level since 1990. An overview of the Singapore educational system can be found in Appendix A.

The SAP schools that are relevant to this study will be discussed further in the next section. But first, we have to understand how the students are being posted to the SAP schools after their six years of primary school education. A general overview of the Secondary One Posting Exercise can be referred to in Appendix B.

A flow chart that explains the process can be found in Appendix C. The Secondary One posting exercise was implemented in 1984. In a letter dated 1997, addressing MOE Secondary One Posting Exercise⁷, every primary six (P6) students would have to submit their list of six preferred schools in mid-August. They would know their result of posting by late December upon completing their Primary School Leaving Examination (PSLE). After the first option was made in mid-August, second option would be given to students who were the top 10% performers in the PSLE results. This group of pupils would be able to apply for the EDUSAVE⁸ Entrance Scholarships for Independent Schools (EESIS)⁹ and be given the opportunity to list their preferences for four Independent schools. As the vacancies in the independent school. In addition to this, they are also allowed to list their preferences for up to 3 Special Assistance Plan (SAP) schools. Priority is given to this group of top students who have made their choices in the second option, after which the consideration for the remaining students will be made based on their choices in the first option.

However, there are multiple phases in the order of posting the PSLE pupils as stated in the letter and the three main ones are listed below. For the flow chart, see Appendix C.

- 1. Consider pupils who have applied for EESIS in the second option and post them to independent schools.
- 2. Consider pupils who have applied for SAP schools in the second option and post them to SAP schools.
- 3. Consider all other pupils one by one, and post them to schools chosen in August.

⁷ www.bschool.nus.edu.sg/staff/bizteocp/moe.doc

⁸ "In 1993, the Government started the Edusave Scheme to maximise opportunities for all Singaporean children. The Scheme rewards students who perform well or who make good progress in their academic and non-academic work, and provides students and schools with funds to pay for enrichment programmes or to purchase additional resources." Abstracted from MOE website. Source: http://www.moe.gov.sg/initiatives/edusave/

⁹ http://www.moe.gov.sg/education/admissions/secondary-one-posting/option-exercise/option-form/

When preferences are not met, pupil will be posted to a neighborhood school. And if there is unavailability of vacancies in the neighborhood school, the pupil will be posted to schools in other postal districts that have vacancies available. This system of posting pupils based on their PSLE results, school choices and vacancies available in the school remains unchanged since the exercise has started, except that currently this annual exercise is conducted from late November to December, as shown in the case of Primary Six cohort in 2008 that had submitted the school selection in late November.

Based on the PSLE results, pupils will be streamed to one of the following secondary courses.

Special Course (S-Course); Express Course (E-Course); Normal (Academic) Course [N (A)-Course] and Normal (Technical) Course [N (T)-Course].

However, the Special and Express Courses for Secondary One cohort had been merged and called the "Express Course" since 2008. The Express Course takes four years to complete as compared to the Normal Course that takes four to five years. For pupils in the Express Course, they will sit for the Singapore - Cambridge General Certificate of Education Ordinary (GCE 'O') Level Examination at the end of the fourth year, whereas for pupils in the Normal Course, they will have to take it at the end of the fifth year. But first, the latter have to perform well on the Singapore - Cambridge General Certificate of Education Normal (GCE 'N') Level Examination at the end of the fourth year and proceed to a fifth year secondary education. For those who are unable to enter the fifth year, they may choose to go for technical-vocational education and training at Institute of Technical Education (ITE)¹⁰.

From 2009, the Direct School Admission-Secondary Exercise (DSA-Sec) was introduced and this is seen as a decentralizing of power from MOE; another move to empower schools. Also, it gives the schools greater flexibility in selecting their pupils based on criteria other than the PSLE results. The group of SAP pupils selected for this survey is not affected by this exercise.

¹⁰ "Established on 1 April 1992, Institute of Technical Education (ITE) took over the role and functions of the Vocational & Industrial Training Board (VITB). Since its formation in 1992, ITE has focused its effort on establishing the institute as a post-secondary technical institution of excellence. The primary role of ITE is to ensure that its graduates have the technical knowledge and skills that are relevant to industry. ITE is the national authority for the setting of skills standards and the certification of skills in Singapore." Abstracted from MOE website. Source: <u>http://www.moe.gov.sg/education/post-secondary/</u>

3.1.2 Special Assistance Plan (SAP)

In 1979, the SAP program was introduced in response to more students choosing English-medium schools over the Chinese-medium schools. The objective of establishing SAP schools was therefore "to preserve the best traditions and ethos of the old Chinese medium schools, and to nurture a core group of students who are proficient in both English and Chinese" (Press Release 11 February 2008). As a result of this plan, nine established Chinese secondary school were identified and converted into bilingual institutions whereby students would have to study both English and Chinese at first language level. SAP schools are in effect elite schools and the students are seen as high-ability students due to its admission criteria. At that time, SAP program was targeted at top 8 per cent of those passing the PSLE (Gopinathan 2001: 30).

Studying Chinese as first language in primary schools was also implemented but it only started in 1984. There were four schools being identified and called the "Seed Schools" (Press Release 2008). According to Gopinanthan (2001: 30), the demand to increase more primary schools offering Chinese at first language was made by the Singapore Chinese Teachers' Union. And in 1990, the SAP program for primary schools was introduced and ten primary schools were chosen "to preserve the best traditions of Chinese Primary education" (Giam 1992: 13).

In 2001, the proposed plans related to Chinese language learning can be seen as a pro-active approach by the government in response to the demands of societal and global changes. Based on statistics, there is an increasing trend of more Primary One Chinese students coming from English speaking homes. In 1988, the figure was 20% and in 1998, it was doubled (40%). In 2007, the figure was at 54% (Press Release 2008). In addition to this increasing dominance of English in Singapore and the recognition on the rising power and emerging economy of China, the importance of Chinese language can be seen in the announcement made by Ministry of Education in regards to some of the plans that were meant to improve the existing programs in schools (MOE Speech 15 March 2001).

This is evident from the initiatives by MOE in its revision on criteria to allow more students to study Chinese at first language; that is Higher Mother Tongue (HMT). In 1995, the criteria for those who could be offered HMT was targeted at top 11%- 20% of PSLE. In 1999, it was extended to those in the top 21% -30% (MOE Speech 15 March 2001). It was a three fold increase within five years in the number of students who could be offered HMT. Another secondary school was also being identified as an SAP school. Currently, there are 10 SAP secondary schools and 15 SAP primary schools. For pupils who may offer to study Chinese as First language in SAP schools, the present requirements are for those pupils in the top 10% of the PSLE cohort. For those who are in top 11%-30% of the PSLE cohort, they may also be offer Chinese as First Language in SAP schools, provided that they meet the language criteria; that is getting an A* grade in Chinese (as a second language) or at least a Merit in the Higher Chinese (as a first language) or at least a Merit in the Higher Chinese (as a first language). It is also pointed out that if those criteria are not applicable to the students, the schools will have the discretion to decide based on their assessment to see whether the

students are able to show that they possess "exceptional ability in Chinese and are able to do Higher Chinese without affecting their performance in other subjects".¹¹

The SAP students for this study was selected not only because the pilot project has shown that it was easier to elicit information from them as compared to the other schools, but also because these group of "new Chinese elites will be different" as noted by Lee Kuan Yew in an interview (Chua 1999). They would be English educated as the rest of the students in other schools. Given the Singapore context where English is dominant in the education system, it is hoped that the information obtained from these SAP students on Chinese learning strategies could be used as a reference for other learners who find the difficulty in Chinese learning. It is also particularly for the reason that "a good performance in Chinese Language obtained at the PSLE was a selection criterion for admission to the SAP schools" (Soh 1992: 6). Two SAP schools that had participated in the pilot project had agreed to continue with the survey, and one class from each school was selected for the survey.

3.1.3 Pilot Study

In order not to disrupt the school curriculum time, a pilot study was conducted in October 2008, a period after the year-end examinations. Through recommendation, six schools agreed to take part in the pilot study. There were 2 government schools and 4 government-aided schools as shown below. School D, E and F are autonomous schools.

School	Type of Schools		Courses offered
А	Government	Neighborhood school	E, N (A), N (T)
В	Government	Neighborhood school	E, N (A), N (T)
С	Government-aided	Missionary school	E, N (A), N (T)
D	Government-aided	Missionary school	E, N (A), N (T)
Е	Government-aided	SAP school	Е
F	Government-aided	SAP school	Ε

The purpose of the pilot study was to gain an understanding on students' general response and attitudes towards learning Chinese language. The term "learning strategies" was not explicitly defined for them in order to avoid any confusion. The whole process was aimed at eliciting what and how much the students could express about their personal learning experiences.

Questionnaires were given to the student for background information. A written translation task from English to Chinese and from Chinese to English was given to the students. Students were asked to read two short passages (one in English and another in Chinese) and the task was designed closely to their life experiences, requiring them to translate the notes to a friend. As expected, students in the SAP schools generally

¹¹http://www.moe.gov.sg/education/admissions/secondary-one-posting/general-information/other-schools/

perform better than other schools, in terms of ability to write Chinese characters and correct grammar structure. However, this does not mean that there were no such students in other schools. In other schools, there were students who were unable to complete the tasks and thus seen as poor learners. It would not be a difficulty to identify the good and poor learners in other schools, but the problem was the amount of information that could be elicited. At the interview session, in general, selected students in SAP schools were able to express their opinions and provide more information as compared to those in other schools.

As a result, this survey was redesigned after taking into consideration the problems encountered in the pilot study. Students from SAP schools were selected as research participants, and a framework proposed by Oxford (1990) was adopted and adapted to the present study.

3.2 Data Collection Procedures

The major objective of data collection is to find out the influence of contextual factors on Chinese language learning strategies use by SAP students in Singapore. If language use and language learning strategies are subjected to 'particularity' of the context, then we should be mindful about the generalization of results. Hence, the first objective of this current study aims to investigate the contextual factors that are particular to Singapore. It is assumed that the educational system, the role of English and Chinese, and the value of meritocracy in Singapore have an effect on the language use and language learning strategies. These three assumed contextual factors are encapsulated in the Singapore's language planning and policy, and they are believed to be part of the contributing elements to the sustainable and successful development of the country. The secondary objective is to identify the patterns of Chinese language learning strategies use of SAP students in Singapore.

There are four instruments used in the procedures of data collection: questionnaires, Strategy Inventory for Language Learning (SILL)¹², translation task and semi-structured interview. They are carried out in three phases. In Phase One, the design of the questionnaire is divided into four parts with the purpose of finding out students' language background on home and social languages, their language appraisal, language attitude and motivation. It will also include SILL instrument to seek an understanding of Chinese learning strategies use by the targeted group of SAP students. The information will be used during the interview session for in-depth investigation. Translated tasks will be given in Phase Two and its rationale will be further discussed. In Phase Three, a semi-structured interview is conducted in order to elicit information from the SAP students about the use of Chinese language learning strategies in reading and writing. The framework adopted and its modification will also be explained later. Instead of focusing

¹² SILL used in this survey was made in reference to the design created by Rebecca L. Oxford. A brief introduction to the origin of SILL and its use can be found in Oxford's (1990: 255-256) *Language Learning Strategies: What every teacher should know.* It is used to measure the frequency of language learning strategies.

on one specific category of strategy such as metacognitive strategy or one specific strategy such as self-monitoring, the study takes on the procedure of generating information on all strategies based on the framework, in order to gain better understanding on the strategies used in Chinese learning by SAP students in the context of Singapore.

3.2.1 Questionnaire and Strategy Inventory for Language Learning Design

While carrying out the implementation of the survey, the study had to take into consideration of the time factor in schools. Although the survey was scheduled in October, students usually have post-examination activities. Thus, there was a possibility that they would not be able to participate and follow the research study throughout. That is to say, there was a foreseen difficulty in arranging three or four days for the survey and interview session. This problem was noted during the implementation of the pilot project. As a result, one day for the survey and one day for the interview session was scheduled and arranged with the relevant school personnel. One and half hour was allocated to the survey on Day One and a maximum of five hours were allocated to the interview session on Day Two. On Day One, the survey included the use of three instruments; questionnaire, *SILL* and a translation task. The next section shall describe the design of these instruments, followed by an explanation of the framework used in this study.

Questionnaire

In Phase One, two questionnaires were used. One was to gather information on the background information of the SAP students in this study. Another was to find out their Chinese language learning strategies through the use of *SILL*.

Since Singapore has a multilingual setting, Singaporean Chinese can differ in their degree of exposure to its linguistic situation where English, Chinese and dialects are used. Part I tried to find out students' language use at home with grandparents, father, mother and siblings. It also asked about their social language use in school and outside school. This was followed by an attempt to find out their language habits through the use of English and Chinese in different activities.

Part 2 sought a language appraisal from the students in terms of listening, speaking, reading and writing. A five-point Likert scale was used for their rating on the level of proficiency and difficulty in the four basic language abilities. Referring to Figure 3.2, the four language abilities can be placed on two dimensions: active and passive learning or verbal and visual communication. In this case, being active would mean one is able to produce the language output such as speaking and writing (production skills), whereas passive would mean the absorption of language input such as listening and reading (receptive skills). On the other hand, oracy would refer to the aspect of verbal communication and literacy would be on the visual communication. In the latter, the

importance of Chinese characters should be highlighted in Chinese learning, and seen as relevant to this survey.

	Oracy	Literacy
Receptive Skills	Listening	Reading
Productive Skills	Speaking	Writing
Figure 3.2 Four Basic Language Abilities		

Source: Colin Baker (2006:7)

Unlike alphabet language such as English that focus on spelling of the word, students have to learn each Chinese character for its sound, shape and meaning. Hence, it is likely that a student who may be good at oracy may also be poor in literacy. This is true when children generally learn their mother tongue (assuming it is Chinese) first by listening and speaking and later acquire reading and writing. If the learning of Chinese characters is difficult, it may be an obstacle to the development of literacy. The reverse is also possible in a situation where Chinese is not one's mother tongue but a second language. In this case, one may focus on literacy by reading more books or writing more for the purpose of practice but may be inadequate in terms of oracy to express one's ideas. Therefore, in the context of Singapore, where Chinese can be either a mother tongue or a second language to a student, it is necessary to find out students' language appraisal on the four language abilities before looking into the learning strategies in reading and writing in details.

Also, we have to note that Chinese as a mother tongue is designated in the bilingual education policy of Singapore, yet it may be a mother tongue or second language for some students. Thus, this might have an effect on their attitude and motivation in learning Chinese. In order to have a better understanding on this, comparison is made between their English and Chinese learning. Part 3 of the questionnaire asks the students' level of interest in studying English and Chinese, this is followed by a list of 8 statements for English and Chinese respectively. The purpose is to find out their general language attitudes towards these two languages and their motivations in learning the languages.

The design of statements related to attitudes and motivation is modeled and modified with reference to Liu's (2007) and Soh's (1992) studies respectively. The statements were all presented with a five-point Likert scales. Soh (1992) has pointed out three motives in language learning, in which the two most commonly identified ones are instrumental and integrative motives, and another which is called the identity motive. Instrumental motive is driven by benefits in learning a language and integrative motive is the desire to be accepted in a community. Identity motive, according to Soh's definition, is related to "a person's perception of ethnic membership". These are explained with examples shown in Figure 3.3 below.

Instrumental motive	To pass examination; to increase the opportunity of further education; and to improve the chance of getting the desired job.
Integrative motive	To make more friends who speak Mandarin/English; to read more Chinese/ English books; and, to watch more TV programmes in Mandarin/English.
Identity motive	To feel more a Chinese/Singapore; to feel close to the language (Chinese/English); and, to enhance self-respect as a Chinese/Singaporean.

Figure 3.3 Language motivation in behavioural terms Source: Soh (1992:7)

This study agrees with Soh's (1992) proposed "identity motive" which is relevant to the Singapore context, and thus this concept is used along with instrumental and integrative motives in the questionnaire. However, further elaboration is needed on "identity motive". In the case of Singapore, Chinese language taught in school is based on the standards used in China (Peiking). For a Singaporean Chinese, one learns Chinese (Mother tongue) in school because it is an ethnic language. However, that does not mean that a Singaporean Chinese who learns Chinese is identifying himself/herself as a Chinese in China, rather it is more for the purpose of integrative motive; for historical and cultural reasons. This is evident from the following quote.

"Our mother tongue languages give us values and roots that are crucial to our sense of ourselves as a people. ...Proficiency in the mother tongue also equips us to access the rich cultures and value systems that we inherit. Take the simple pleasure of reading in the mother tongue, for instance. It enables us to read a piece of work in its original form without having to rely on translations, where to some extent the richness and layers of meaning of the original are often lost. In the process we are able to better appreciate the unique traditions and outlooks that make us who we are." (Shanmugaratnam 2003).

The above was quoted from a speech by the former Education Minister and it shows that identity and integrative motives are emphasized in the learning of mother tongue, in this case Chinese Language. For identity motive, this means that mother tongue (Chinese language) gives us a sense of identity of being a Chinese. However, this "Chineseness" is not to be associated with the identity of being a Chinese in China. The emphasis should be the identity of being a Chinese in Singapore instead; meaning to say the sharing of common values in Chinese and knowing the roots of our Chinese cultural heritage. Thus, the importance of identity motive should be highlighted. And being proficient in Chinese, would also mean being able to integrate into the Chinese community. In addition to this, the instrumental motive in learning Chinese is also not to be neglected, as seen in the following quote. "Today, increasingly, proficiency in the mother tongue languages has also assumed greater economic importance, as opportunities in China, India and Southeast Asia become more important to our future growth. Our cultural affinity to these three growth regions, in terms of languages, customs and practices, puts us in better stead to tap the economic opportunities they afford." (Shanmugaratnam 2003).

This shows the growing importance and incentive of learning mother tongue due to the emerging economic power of China and other regions. Hence, the instrumental, integrative and identity motives used in the questionnaire are seen necessary for finding out the motivation in Chinese learning by this group of SAP students.

Overall, the information gathered from this questionnaire is important for gaining an understanding on the students' backgrounds in a multilingual setting before the next step is taken, which is to focus on finding out their Chinese language learning strategies in reading and writing.

Strategy Inventory for Language Learning (SILL)

The *SILL* (Oxford 1990) is adopted in this survey since it is currently the most popular instrument in measuring the frequency of language learning strategies (LLS) and said to have been "validated across cultures and languages" (Takač 2008: 91). There are two types of *SILL* used; one is targeted at speakers of other languages learning English, and another which is targeted at English speakers learning a new language. While the former has 50 items of LLS, the latter has 80 items. These items are classified under the six groups of strategies (memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) proposed by Oxford. Each strategy is presented with a Likert scale of 1-5 to measure the frequency of strategy use; with 1 and 5 being the lowest and highest indicators respectively.

The second type of *SILL* was used by Wharton (1997) in his study of university students of Japanese and French in Singapore. This seems to assume that the university students in the project are English speakers learning a new language. Given the increasing dominance of English in Singapore, the assumption is valid and *SILL* can be used in this study. However, taking into consideration the targeted research participants in the Singapore context and the targeted language (Chinese) for this project, the design of background questionnaire should help in providing more information about the research participants as compared to the one designed by Wharton (1997). Furthermore, the items are modified to suit the purpose of this study which focuses on reading and writing. As a result, language learning strategies were redesigned with reference to the original 80 items and eventually reduced to 50 items for this study.

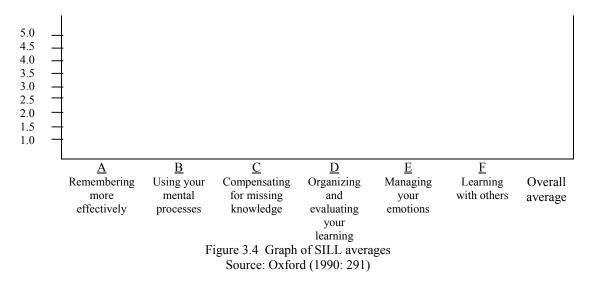
After the students have completed the *SILL*, their response is scored and the computation of the sum and average will be presented (See Appendix H). The average for each part will be within the range of 1.0-5.0 since the possible response for each item is

rated on a scale of 1 to 5. The following table is used to understand the frequency of strategy use in the *SILL* (See Table 3.1).

High	Always or almost always used	4.5-5.0
	Generally used	3.5-4.4
Medium	Sometimes used	2.5-3.4
	Generally not used	1.5-2.4
Low	Never or almost never used	1.0-1.4
		· CILI

Table 3.1: Key to Understanding Averages in SILL

Once the scoring is completed, the averages will be transferred to a profile and a graph will be drawn to depict the results (See Figure 3.4).



An overall average for the six parts focusing on different strategies will be computed to show the general patterns of strategy use by the selected group of SAP students in two schools. However, only twelve profiles will be created and used for the interview sessions. This qualitative aspect of the study is to complement the quantitative method of investigation. The weakness in quantitative method was pointed out in an article by Woodrow (2005: 90), who concluded that "studies employing LLS scales that use a standard Likert-scale are not appropriate because of the wide range of possible contextual influences, such as cultural and educational background", and thus suggested for "in-depth qualitative methods". The following quote also shows a similar perspective shared by Dörnyei (2007:36) who regards contextual influences as an important factor in language learning and hence, proposed qualitative method as an appropriate approach to its study.

"...almost every aspect of language acquisition and use is determined or significantly shaped by social, cultural, and situational factors, and qualitative research is ideal for providing insights into such contextual conditions and influences".

The mixing of quantitative and qualitative approach in this study sees the need to understand the characteristics of the group of SAP students in an overall perspective, and gain a further understanding through interviews with a selected number of students. Before the study goes into the Phase 3, students are asked to complete a translation task and state the choice of text they have started to translate.

3.2.2 Translation task

Here, the rationale of using the translation task for this study shall be highlighted. Purpura (1999: 26) has pointed out Ellis's (1994) "strange criticism" on Oxford's taxonomy for making "no distinction between strategies that were invoked in both learning and language use". In this regard, Oxford seems to view language strategies and language use as means in language acquisition, hence making no distinction between the two; a position that would inevitably be criticized in the mainstream of second language acquisition (SLA). As Larsen-Freeman (2002: 36) has noted in the comment made by Gass (1998:85) who said that "The research question central to SLA…is: How do people *learn* an L2? — The question is not: How do people *use* an L2, unless the latter is a means of getting the former." Looking at the first question, language strategies employed in language learning would see itself drawing a line with language use. Here, a further distinction is possible through the use of two concepts; competence and performance.

According to Brown (1987: 24), he regards competence as the non-observable and performance as the observable. In the former, it is "one's underlying knowledge of a system, event, or fact". Whereas in the latter, it is "the manifestation or realization of competence" that is measurable and assessable through the use of instruments such as test and examinations. Baker (2006: 24) in his listing of language test terminology has also pointed out the two concepts used in language, seeing competence as something covert that has the knowledge of the language system in the mind, such as vocabulary, grammar or rules of usage. Language performance on the other hand, is the overt evidence of such language competence. However, this language competence and language performance are not always on same equation. For example, a new foreign language learner might have the knowledge of the language system but unable to engage in a proper language production. In other words, he or she has the language competence but does not have the language performance.

There is also another situation that language performance may not necessarily reflect the language competence. Take the example of Singapore where the society is diglossic. Diglossia is a term used by Ferguson (1959) to describe societal bilingualism whereby there is the existence of 'High-variety' (H-variety) and 'Low-variety' (L-variety) of a language. The High-variety would be the language that is used in formal situation and the language standard used in schools is one example. The Low-variety would be those languages used in informal situation. In schools, students learn the English and Chinese based on the standards from Britain and China (high varieties), however, given the multilingual setting of Singapore, the contact of languages can result an interlanguage influences, producing English and Chinese that are uniquely local to the

Singapore context, such as Colloquial Singapore English or Singlish, and Colloquial Singapore Mandarin (low varieties). That is to say, a person who produces the H-variety will reflect his competence in H-variety, likewise the case for L-variety. However, a person who has the competence in H-variety may not necessarily produce the H-variety and may prefer to use the L-variety, such as using Singlish with a group of friends. The opposite will be unlikely.

Another point to make in such a bilingual environment like Singapore is the degree of exposure to languages. The Chinese students' exposure to English and Chinese can differ according to individuals. And given two languages, it is inevitable that one language can be more dominant than the other, causing a likely occurrence of transfer or interference in the production. Brown (1987: 78) noted that Taylor (1975) has referred to "transfer" and "interference" as strategies.

Since this study focus on reading and writing, another rather similar strategy that can be used in learning languages is translation. O'Malley *et al.* (1985a: 582-584) has given a description on the list of strategies identified and defined transfer strategy as "using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task". On the other hand, translation strategy is defined as "using the first language as a base for understanding and/or producing the second language" (also found in Brown 1987: 93).

To find out students use of "transfer" would require an in-depth analysis of their cognitive knowledge and cognitive process which is not the area of this study. The translation task in this study is neither a test of their translation knowledge or skills nor to measure the degree of bilingualism. The latter was pointed out by Skutnabb-Kangas (1981: 213) in its accuracy in measuring the degree of bilingualism.

As explained by Green (1998: 29), translation is like reading as it needs a comprehension of the text. It "involves the additional processes of acting upon this understanding in order to reconstruct the target text with precision of meaning in another language, often the first language". However, to use the first language either as a base for understanding or as a standard to achieve, would require us to know what is the "first language" of the students. And given the sociolinguistic situation of Singapore, this would seem to be difficult. Hence, it is hoped that task would help us to understand their language performance and differences captured in the translation task. In other words, the purpose for having a translation task is to find out SAP students' dominant language and it would help us to understand their use of English and Chinese as reflected in their language performance.

In the case of translation, if we were to say that there is "no distinction between strategies that were invoked in both learning and language use", we would see no difference in the use of sub-strategies such as planning, analyzing and reasoning in translation task for both learning and language use. However, using the concept of competence and performance, a difference does exist between the translation strategies used in a translation task for learning and language use. In the case of using translation strategy in a translation task, one is trying to build up their language competence for future language performance whereas the language use in translation task would require one to apply their already acquired language competence. Although inadequate language performance would require one to look up the dictionary just as what the learner would do in using translation as strategy for learning, the latter would calls for more activeness in the process of learning as compared to translation strategy for language use. That is to say, given the same translation task, one may consult the dictionary more in translation strategy learning situation than one who would do so for a translation job. This is because we are assuming that the latter has already acquired the language competence in a jobrelated field.

Suffice it to say, the distinction between strategies that were invoked in both learning and language use may not made clear because "in daily reality the strategies for L2 learning and L2 use overlap considerably", as noted by Hsiao and Oxford (2002: 378-379). This was pointed out by Anderson (2005: 761-762) in addition to the differences made on language strategies and language use as identified by Cohen (1996). As Cohen (1996: 1-2) has put it, "*language learning strategies* have an explicit goal of assisting learners in improving their knowledge in a target language" whereas "*language use* strategies focus primarily on employing the language that learners have in their current interlanguage". Based on this explanation, "translation" in this case, would be different as a language learning strategy and language use strategy.

Given the multilinguistic situation in Singapore, students can differ in the degree of exposure to English and Chinese. Hence, L1 and L2 in the case of Singapore context can differ among the students. The use of translation task for the purpose of this study, as I would like to reiterate, is an attempt to ascertain students' L1. Below is quoted from Green's (1998: 29) explanation.

"The translation task $L1 \rightarrow L2$ is likely to be more difficult than the task of translating from $L2 \rightarrow L1$ since the former requires the generation of vocabulary and sentence structure in L1, whereas the latter requires the recognition of the counterparts of L2 words in the native language. Recognition is usually considered an easier task than the generation of the same information."

Based on the above, the translation task is given to find out which language the students have difficulty in generating information $(L1 \rightarrow L2)$, and also which language is easier for the students to recognize and translate $(L2 \rightarrow L1)$. In order to determine their L1 and L2, students are required to state the choice of text they have started to translate (1 or 2). A mix of students who choose 1 and 2 will be selected for the interview. The questionnaire and profile of results on the Strategy Inventory for Language Learning (SILL) of the selected students will also be referred and an interview will be conducted for in-depth understanding of their choice and Chinese language learning strategies for reading and writing.

3.2.3 Interview

Although the translation task used in Phase 2 is not used to find out students' translation strategy, it could use as a take-off point for the interview session and helping them to recall the strategies use in Chinese learning while having to learn English at the same time. This retrospective interview with the individual students is the qualitative method adopted in this study in an attempt to gather more information from them.

The researcher would first ask them some opening questions, seeking to establish a good rapport and making them feel comfortable in the session. This was followed by some guiding questions prepared beforehand, but students were not constrained by any closed format. A semi-structured interview was adopted in this case, hence students were encouraged to express their opinions on the issues and made elaboration on them. That is to say, the "-structured" part of the interview requires the researcher to guide and direct the students, ensuring that they would not be out-of-focus in their responses. Whereas, the "semi-" part was more exploratory, requiring the students to talk more about the issues discussed (Dörnyei (2007:136). The interview guide consists of two parts. Part 1 asked students on their choice of text that they have started to translate first. Its purpose was to find out which language (English or Chinese) that the students were more familiar with. Part 2 sought an in-depth understanding on some of the items in the *SILL*. Also, any clarification needed for the response in the questionnaire and *SILL* would be done in the interview session.

The framework for the analysis of learning strategies is based on the classification proposed by Oxford (1990). Direct and indirect strategies form the two major classes, with each class further divided into 3 sub-groups. This is shown in Figure 3.5.

Referring to Figure 3.6(a)-3.6 (f) where under the six groups of strategies, each group is suggested with more likely used strategies. Oxford (1990) has given a detailed description on the strategies in each group. It is to note that the design of the SILL based on the framework is modified to suit the purpose of this survey which focuses on reading and writing in Chinese. Also, considering that the research participants are secondary school students, some of the language use in the original SILL is slightly changed to suit the level of the students.

Memory Strategies

Memory strategies are concerned with helping learners in storing, recalling and retrieving information. Since reading and writing require one to remember the Chinese characters, its characteristics such as radicals(部首) or strokes(笔画/笔顺) are particularly mentioned in *SILL*. Also, words such as "rhyming" or "a combination of sounds" are replaced with "*pinyin*" (Chinese phonetic-拼音) or "a combination of *pinyin*". Furthermore, the statement "I visualize the spelling of the new word in my mind" is changed to "I create an image of the new character (or word) in my mind", since Chinese

characters are remembered by its shape with the formation of different strokes and not by the writing of alphabets as in English.

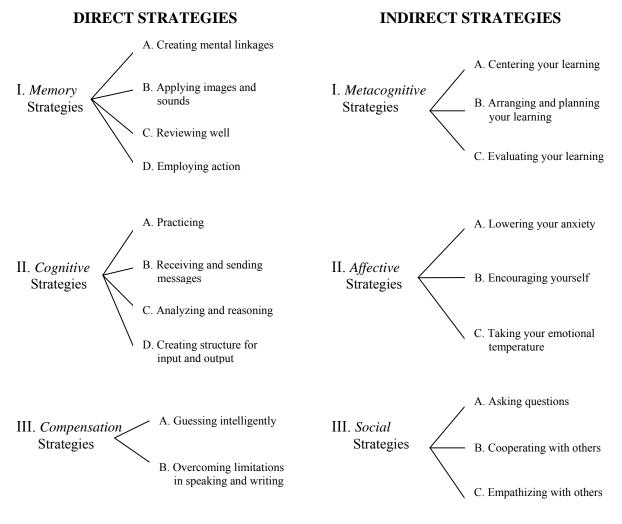


Figure 3.5 Diagram of the Strategy System Showing Two Classes, Six Groups, and 19 sets. Source: Oxford (1990) p. 17

Cognitive Strategies

Cognitive strategies involve the internal working of the mind in order to receive and understand language input, so as to engage in appropriate and productive language output. And practice which allows one to get used to the formulas and patterns is seen as essential for acquiring proficiency. Also, how one identifies the gist of the information and understand it may be cognitively demanding to the learner, since it will depend on their analyzing and reasoning skills. As for those who know more than one language, they could be offered a wider repertoire of resources because the learner already has the experience of learning a language and this could provide them a reference for learning or help them in making comparison between languages. Learner can also take notes and make summaries that help to create a structure for language comprehension and language production.

Compensation Strategies

Compensation strategies are used to overcome any difficulty in verbal or written communication. One may notice that "getting help" is listed as a compensation strategy. Asking someone for help in "providing the missing expression in the target language" (Oxford 1990: 50) is not to be confused with asking someone for clarification or correction that is under the category of social strategies, although both instances of "getting help" rely on someone's assistance. Under compensation strategies, "getting help" from someone focuses on solving a problem; in this case a limitation in speaking or writing due to inadequate knowledge in the target language (Chinese language). Under social strategies, on the other hand, it "involves asking someone, possibly a teacher or native speaker or even a more proficient fellow learner" (Oxford 1990: 146). In addition to this, the statement in SILL inventory "If I am speaking and cannot think of the right expression, I use gestures or switch back to my own language momentarily" is replaced with "I try to find words or expressions in English and translate it if I do not know the right ones in Chinese", since the former is related to speaking and the latter is more suited for writing purpose. However, since the latter involves "translation", it is categorized under cognitive strategies in SILL inventory used for this survey. It should be noted that "translation" is used in order to overcome a limitation, thus it should be classified first.

Metacognitive Strategies

Metacognitive strategies are concerned with managing one's own learning. It involves taking the steps to set goals, plan and control the progress of learning. Responsibility is also considered important here because it means holding accountable to oneself and taking charge of one's direction in learning. It is to note that "delaying speech production to focus on listening" in the list is irrelevant in this survey and hence excluded in the *SILL*.

Affective Strategies

Affective strategies are related to controlling one's emotions, attitudes and motivations in language learning such as reducing anxiety, self-encouragement and talking about one's feelings through diary or with someone. This aspect is closely related to investigation of language attitude and motivation stated in the questionnaire at Phase One. One may have the positive attitude and motivation but managing and maintaining it through appropriate strategies are also important for ensuring successful language learning.

Social Strategies

Social strategies emphasize the interaction with others to facilitate language learning such as asking questions to a more proficient language user, cooperative learning or cultural understanding. Making friends from Chinese-speaking countries such as China or Taiwan can also provide an opportunity for more Chinese language interaction and deepen learner's understanding of Chinese culture.

This study focuses on the Chinese language learning strategies in reading and writing, as it is believed these two language skills could affect the degree of literacy and proficiency levels. SAP students are selected for this project since they are considered as high-ability students who are effectively bilingual in English and Chinese. As compared to other non-SAP schools, this group of SAP students also showed the ability to express their opinions during the pilot study that had helped the researcher in gathering and eliciting information. The research design and procedure had been discussed in this chapter and two days will be scheduled for the implementation of the survey. Phase One and Phase Two will take up one and half hour for the first day, and Phase 3 will take up a maximum of five hours for the second day. On the first day, three instruments (questionnaire, SILL and translation task) will be used and on the second day, the semistructured interview session for one student is approximately 45minutes to 1 hour. Students are led through the three phases to ensure that clear instruction is given by the researcher. The task and interview session will complement the questionnaire and SILL for a better understanding of how this group of SAP students learns the Chinese language in Singapore context.

Memory strategies		
Creating Mental Linkages	 Grouping Associating or elaborating Placing new words into a context 	
Applying Images and Sounds	 Using imaginery Semantic mapping Using keywords Representing sounds in memory 	
Reviewing Well	• Structured reviewing	
Employing Action	Using physical response or sensationUsing Mechanical Techniques	

Figure 3.6(a) Memory Strategies. Source: Oxford (1990) p. 40-43

Cognitive strategies	
Practicing	 Repeating Formally practicing with sounds and writing systems Recognizing and using formulas and patterns Recombining Practicing naturalistically
Receiving and Sending messages	 Getting the idea quickly Using resources for receiving and sending messages
Analyzing and Reasoning	 Reasoning deductively Analyzing expressions Analyzing contrastively Translating Transferring
Creating Structure for Input and Output	Taking notesSummarizingHighlighting

Figure 3.6(b) Cognitive Strategies. Source: Oxford (1990) p. 45-47

Compensation strategies	
Guessing Intelligently	Using linguistics cuesUsing other cues
Overcoming limitations in Speaking and Writing	 Switching to the mother tongue Getting help Using mime or gesture Avoiding communication partially or totally Selecting the topic Adjusting or approximating the message Using a circumlocution or synonym

Figure 3.6(c) Compensation Strategies Source: Oxford (1990) p. 49-51

Metacognitive strategies	
Centering Your learning	 Overviewing and linking with already known material Paying attention Delaying speech production to focus on listening
Arranging and Planning Your learning	 Finding out about language learning Organizing Setting goals and objectives Identifying the purpose of a language task Planning for a language task Seeking practice opportunities
Evaluating Your Learning	Self-monitoringSelf-evaluating

Figure 3.6(d) Metacognitive Strategies Source: Oxford (1990) p. 138-140

Affective strategies	
Lowering Your Anxiety	 Using progressive relaxation, deep breathing, or meditation Using music Using laughter
Encouraging Yourself	Making positive statementsTaking risks wiselyRewarding yourself
Taking Your Emotional Temperature	 Listening to your body Using a checklist Writing a language learning diary Discussing your feelings with someone else

Figure 3.6(e) Affective Strategies Source: Oxford (1990) p. 143-144

Social strategies	
Asking Questions	Asking for clarification or verificationAsking for correction
Cooperating With Peers	Cooperating with peersCooperating with proficient users of the new language
Empathizing With Others	 Developing cultural understanding Becoming aware of others' thoughts and feelings

Source: Oxford (1990) p. 146-147