CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

The first chapter gave a brief outline to the background of the study, the research questions and the theoretical framework that the study drew upon. Chapter Two presents literature with regard to different theories of writing followed by previous research done on the effects of planning on learners' written performance. Studies that have been done with respect to first and second language writing are also reviewed. Lastly, studies on fluency, complexity and accuracy in writing are presented.

2.1 Theories of Writing

There are a number of theories about writing. One popular theory is the Flower and Hayes (1981) cognitive process theory of writing based on their study using protocol analysis, where writers were asked to think aloud during the composing process. These verbalizations were recorded and transcribed for analysis. According to Flower and Hayes, while writers are writing, they organize their thinking processes, which make up the process of writing, and these processes "can be embedded within any other" (p.366). Composing itself is a goal-oriented process, where goals consist of high-level goals and sub-goals. During the composing process, the writer tries to achieve these goals. He may also create new goals or modify existing ones.

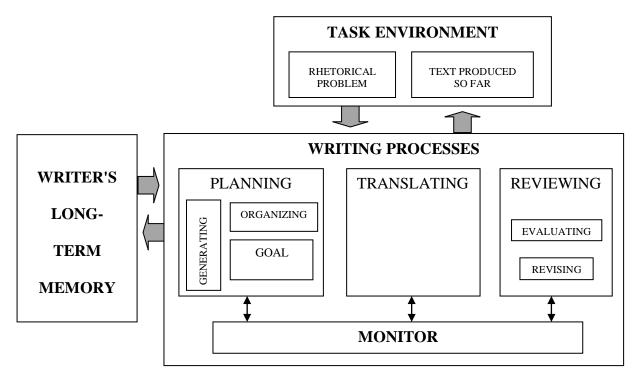


Figure 2.1 The Flower and Hayes' writing model (Flower & Hayes, 1981)

Flower and Hayes (1981) assert that the task environment, the learner's long-term memory and the writing processes make up the three main elements of the writing act (Figure 2.1). The *task environment* includes the rhetorical problem, such as a writing assignment and the audience who reads it, and the text produced so far. The learner retrieves information from his *long-term memory* to help him in the writing process. The writing processes involve planning, translating and reviewing.

According to Flower and Hayes (1981), during the course of planning, an internal representation of the text is moulded in the writer's mind. When ideas are generated, this process is subsumed under the *planning* task. This is a discovery process where ideas are organized and subsequently categorized. As composing is a goal-oriented process, planning thus includes goal- setting, where the writer creates goals for writing his text. These goals determine whether he is a good or poor writer because they

will guide the writing process. During the process of *translating*, ideas are essentially being translated into lexical and syntactic forms on paper. Within the process of *reviewing* are two sub-processes, namely evaluating and revising. These two sub-processes can occur anytime during the writing act. In fact, Flower and Hayes (1981) posit that the three processes (planning, translating and reviewing) are not linear; they do not take place in a chronological and sequential order; they can take place at any time of the writing act. The monitor is a "writing strategist" (Grabe & Kaplan, 1996, p.374) that helps the writer to know when to shift from one process to the other. Essentially, Flower and Hayes suggest that this theory of writing is applicable to writers of all proficiency levels, only that skilled writers perform better (Grabe & Kaplan, 1996).

Grabe and Kaplan (1996) concur with Flower and Hayes' model when they also assert that the process of writing is not linear in that writers continually shift between the tasks of prewriting, writing and revising. Where Flower and Hayes (1981) used the term "planning", Grabe and Kaplan used "prewriting" but both terms are similar in meaning. The literature shows that other researchers also regard both terms as similar in meaning. Raimes (1985) included planning as part of prewriting activities and Matsumoto (1995) used both words interchangeably in her study of EFL writers.

Grabe and Kaplan (1996) further developed the notion of planning in the writing process when they forwarded the idea that writing can be distinguished as either writing that consists of composing and that which does not. They defined composing as the combination of "structural sentence units into a more or less unique, cohesive and coherent larger structure" (1996, p.4). Essentially, composing can be further broken down into two types, that is, those that involve telling and retelling, encompassing narrative and descriptive forms, and writing that involves transforming (Table 2.1).

Table 2.1 Types of writing (adapted from Grabe & Kaplan, 1996)

	Writing		
Types of writing	Composing		Non-composing
	Telling and retelling	Transforming	
Types of text:		Creative,	
	Narrative and descriptive	persuasive and	Making lists,
	writing	expository	short notes etc.
		writing	
Planning process	Recall and reiteration	Information	
involves:		gathering	
Examples	Diaries, personal letters,	Poems, dramas,	
	business letters etc.	novels	

Under narrative and descriptive writing, there is recalling and reiterating during the planning process, whereas in transforming, planning involves gathering different bits of information. Examples of narrative and descriptive writing include diaries, personal letters and business letters. On the other hand, writing that entails transforming consists of poems, dramas, novels and others (Grabe & Kaplan, 1996).

Bereiter and Scardamalia (1987, as cited in Grabe & Kaplan, 1996), differed in their views about the Hayes and Flower model in terms of the composing process. As has been pointed out above, the Hayes and Flower model applies to writers of all skills, from the highly skilled to the novice writers. However, Bereiter and Scardamalia proposed that skilled and less-skilled writers have different composing processes. Bereiter and Scardamalia devised two models to explain the writing process, namely the knowledge-telling model and the knowledge-transforming model. The knowledge-telling model describes the composing process of the novice writer who uses knowledge that is already internalized to convey his or her message in written form, but in an uncomplicated manner. The knowledge-transforming model applies to higher skill writers, who consider methods of resolving rhetorical problems such as those about language structures and content organization, to enhance reader comprehension. This strategy involves a content problem space and a rhetorical problem space. There is

interaction between these two areas. According to Bereiter and Scardamalia (1987, as cited by Eysenck & Keane, 2000), the content problem space revolves around the writer attempting to pen down the content and the rhetorical problem space is where the writer tries to achieve the goal of the writing task. In a sense, the higher skill writer makes a conscious effort to organize language to achieve the intended message in written form.

Galbraith (2009, as cited in Galbraith, Hallam, Olive & Bigot, 2009) argued that the knowledge-transforming model focused strongly on high-level thinking and thus proposed that writing be described using a dual process model. Based on this model, content generation in writing involves two processes— knowledge retrieval and knowledge constituting. The former entails recollecting ideas from long term memory, and then in the latter process, these ideas are reconstructed into new content in semantic memory.

In an updated version of the Flower and Hayes (1981) model, Hayes (1996, as cited in Weigle, 2002) organized the writing model around two elements, namely the task environment and the learner himself (Figure 2.2). The task environment includes the social environment, such as the audience for the written text, and the physical environment, which is the text written so far and the composing medium, such as in handwriting or typing. This does not differ significantly from the previous model. The major difference between the two models lies in the emphasis on the individual in Hayes' updated model. There is the element of affect in Hayes' updated model and the inclusion of short-term memory, which were not included in the Hayes and Flower model. According to Hayes, the writer applies cognitive processes, long-term memory and working memory to achieve the writing task, and is influenced by motivation and affect. Working memory includes not just the phonological loop and visuospatial sketchpad, but also semantic memory, which stores "conceptual information" (p.25).

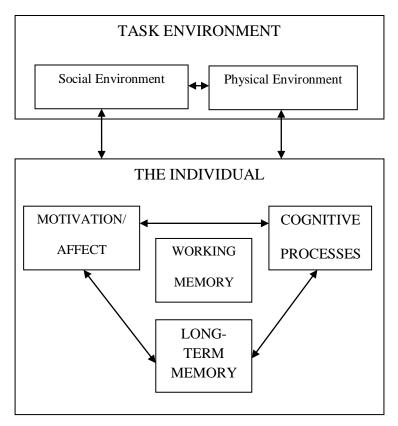


Figure 2.2 Simplified version of Hayes' (1996) framework for understanding cognition and affect in writing (adapted from Wiegle, 2002)

To Kellogg (1994), writing is closely related to thinking. He posited that the writer's mind constructs a schema, a structure of the knowledge he or she has. This schema in turn is the basis of the written output generated by the writer. More broadly, it supports the writer's meaning-making. He explained that this process of meaning-making is rendered via symbols, so that one is able to communicate. Forming symbols results in one creating a way to record an event which one has experienced or learnt. Writing and thinking are two processes closely related to one another such that Kellogg even likened the processes to a pair of twins. This led to his assertion that without quality thinking, quality writing cannot be produced.

Kellogg (2008) emphasized that the writing process involving planning, language production and reviewing undergo positive changes through the learner's maturation and practice in the writing tasks. Planning usually involves jotting down

notes (Eysenck & Keane, 2000). Kellogg (1994, as cited in Eysenck & Keane, 2000) suggested three different forms of note-writing, i.e. listing ideas to form connections between them, arranging ideas in the right sequence and "outlining" (p.378) them to link the ideas "hierarchically" (p.378). The planning, language production and reviewing processes incur a heavy load on the learner's working memory. His model of working memory in writing, which was described in Chapter One, relates the writing processes to various parts of the working memory. Interestingly, Kellogg (1994) also found that the cognitive effort exerted in planning, translating and reviewing a writing task exceeded that spent on reading a complex text, and was only comparable with the cognitive effort that expert chess players spent during a chess match.

Hayes' (2006) and Kellogg's (1999, as cited in Hayes, 2006) independent models for writing differ in their views about the role of working memory. Hayes believes that working memory is used in all the various writing processes, while Kellogg (1999, ibid) posits that not every working memory component is used by each of the writing processes. Specifically, Kellogg argues that planning and editing involve the spatial working memory and that translating together with reading take up the verbal working memory. Kellogg (2004) found that sentence generation can be deterred by a strong load on the verbal working memory and the central executive, which manages the visuosketchpad and phonological loop.

Chenoweth and Hayes (2001) also proposed a model of written language production in their study of fluency in writing. This model has three levels, i.e. the resource level, the process level and the control level. The resource level contains "internal memories" (Chenoweth & Hayes, 2001, p.83) that the other two processes can refer to during the writing task. The process level consists of internal processes and an external environment. The external environment is somewhat like the task environment of the Hayes (1996) model. The internal processes include the proposer, translator,

reviser and transcriber. There is interaction going on between the internal processes and the external environment, and the reviser also monitors what the translator produces. The control level stores the task goals for the written language and controls the communication of all the processes where ideas are transformed into written form. Chenoweth and Hayes (2001) stressed that different writers would have different experiences of interactions between the processes.

Silva (1993) argued that an L2 writing model is necessary for evaluating L2 writing. Wang and Wen (2002) proposed an L2 model of writing adapted from the Hayes and Flower (1981) model. Instead of planning, translating and reviewing activities, Wang and Wen replaced these with five other activities: task-examining, idea-generating, idea-organizing, text-generating and process-controlling, with no linear order between them (Figure 2.3).

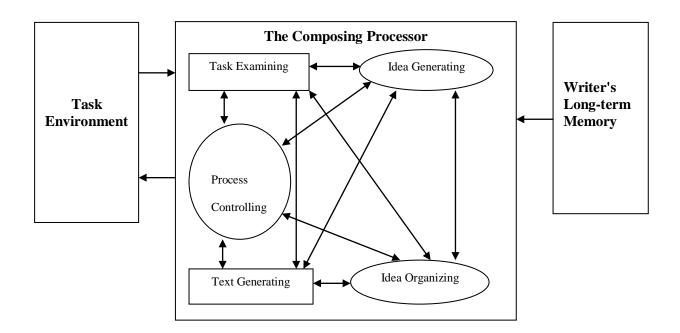


Figure 2.3 Simplified model of the L2 composing process (adapted from Wang & Wen, 2002)

Several researchers have also emphasized the importance of planning in the process of writing. Lannon (1995) stated that writing involves making purposeful decisions. He claimed that if a writer arbitrarily drafts anything that comes to mind, he misses planning and revising, which are important stages. Planning and revising are

essential in so far as they often take longer than the drafting stage. According to Lannon, planning takes place throughout the writing process. It directs the course of one's work and involves setting the right tone in the writing and thinking about the audience who will read the work.

Thinking about the audience means that planning involves making purposeful goals, which Flower and Hayes (1981) emphasized. Alamargot and Chanquoy (2001) assert also that the planning process is a highly cognitive effort and does not only require drawing information kept in long-term memory but also involves having purposeful goals. Thus, Lannon (1995) together with Alamargot and Chanquoy's assertions concur with the Flower and Hayes's model (1981). As with Lannon (1995), Alarmargo and Chanquoy also stated that planning is found at each level of the writing process, from planning the text to transcribing it graphically.

According to Flower, Schriver, Carey, Hass and Hayes (1992), writers need to transform a network of ideas that can come from images and experience into a text of coherence and clarity. They maintain that in writing, content knowledge is not enough, hence the process of planning helps writers to structure their language to suit the audience. In the same vein, Hayes and Nash (1996, as cited by Alamargot & Chanquoy, 2001) differentiated planning in writing into process planning and text planning. Process planning encompasses understanding and performing the task at hand, and text planning focuses on what is to be written for the reader.

The aim of all who aspire to have good writing skills is to have "executive control over cognitive processes" (Kellogg, 2008, p.2). As the literature discussed above shows, writing is a skill that is cultivated and the implication is that the ability to be an expert in writing requires extensive practice. Therefore writing in another language, for example a second language (L2) would require more effort for the first language (L1) writer (Silva, 1992). Second language writers also tend to display more restraint in their

writing due to the fact that they have a poorer knowledge of the language itself and are less familiar with the socially acceptable norms or conventions related to the genre of the text (Weigle, 2005) than L1 writers.

Although the writing models presented above refer to L1 writing and are not specific to the Malaysian context, they nonetheless offer a clear idea of learners' writing processes. It is worthwhile to note that much research done on L2 writing has been based on L1 writing models. It can be seen that throughout the writing process, planning plays an important role. Planning enables the writer to think about the goals of the written task, to generate ideas for it and consider the audience for the text. It assists the writer to structure the language and content in a coherent manner. The following section discusses studies on planning and writing, with many of the theoretical platforms anchored on L1 writing models.

2.2 Planning in Written Performance

As discussed in the previous section, planning plays an important role in the process of writing. There are also different types of planning. The following section discusses the different planning processes used by learners and reviews studies on how students plan their writing.

2.2.1 Studies on planning in writing

Whalen and Ménard (1995) explored the planning, evaluation and revision strategies of undergraduates taking French as their major and the interaction of these strategies and their linguistic knowledge. The texts written by the subjects were argumentative in type and were written in English (L1) and French (L2). The verbal protocols in the texts were analyzed at the pragmatic, linguistic and textual levels.

Whalen and Ménard found that the participants showed preferences for different languages for different levels of planning. They planned at the pragmatic level twice as often in L1 than in L2. Linguistic level planning in L2 was three times more than that in L1, while textual planning in L2 was less than that of L1 by half. Differences in linguistic knowledge affected participants in using their strategic knowledge effectively for overall processing.

To compare the content-generating and planning processes of writers, Beare (2000) studied the writings of eight proficient bilingual adults of English and Spanish, to find out whether they differ cross-linguistically. There were four Spanish participants whose first language was Spanish, and two Canadians and South Americans respectively whose first language was English. The subjects were asked to compose an expository essay in L1 and L2 using think-aloud protocol. Planning was discussed with respect to conceptual planning, process planning and rhetorical planning, following Haas (1989, as cited by Beare, 2000). The native English subjects focused on conceptual planning more in their L1 than in L2, but most of the native Spanish subjects did this more in their L2. Native English subjects practised process planning more in L1 than L2, but native Spanish writers focused on L1 and L2 equally. Native English writers gave equal attention in their rhetorical planning to both L1 and L2 but native Spanish writers focused more on L1 than L2. Beare concluded that the proficient adult L1 and L2 writers exhibited similarities in content generating and planning processes, and that the native English writers produced more content in their L1 and L2 than the native Spanish writers.

The planning processes of skilled and less-skilled learners have also been compared. Sasaki (2000) compared the writings of expert writers, skilled and less-skilled participants from a college in Japan. The writers were asked to write an argumentative text as opposed to other types of writing, e.g. narratives, as it required

more cognitive skills and would enable the researcher to differentiate skilled and novice writers better. It was found that expert writers spent a longer time planning and planned a detailed outline whereas less skilled writers used a shorter time to plan. Expert writers exercised global planning but novice writers used more local planning. While expert writers did not stop and think much during the course of writing, novice writers made more pauses to think about what they were going to write. The novice learners had to think about how to translate their generated ideas into L2, while the experts paused to refine their English.

It can be seen that learners employ planning processes in the course of writing and the amount of planning can be affected by their language proficiency. The following section discusses studies on the effects of planning on the written performance of learners.

2.2.2 Effects of planning on written performance

Studies on the effects of planning on written performance are not new and research done in the past has seen varying results. Some measures used to evaluate the data include fluency, accuracy, and complexity measures and holistic ratings. The following section discusses the effects of planning on written text.

Friedlander (1990) explored the effect of planning in L1 on the L2 written text of ESL students. He divided 28 Chinese students into two groups to test two conditions. Each group was required to write two essays. In the first group, named the match condition, participants planned in Chinese (L1) on a topic they learnt in their L1, namely a Chinese festival. For the second essay, they planned in English (L2), on another topic which they acquired the knowledge for in L2, namely life in an American university. The second group, the mismatch condition, worked with the opposite criteria, where they planned the first essay in Chinese about their life in the American

university. Their second essay required them to plan in English about the Chinese festival. For both the match and mismatch conditions, all the participants wrote in English (L2). All the participants were advised to plan in point form. Friedlander found that plans which were prepared in the language familiar to the topic were longer and contained more information. The essays that were produced were also longer and of a better quality. On the contrary, those who planned in the language different from the language that they had acquired the topic knowledge in produced plans with less information. He concluded that planning in the language in which topic knowledge was acquired will enhance writers' ability to plan and write effectively.

Prewriting discussions can be considered a form of planning. Shi (1998) divided adult ESL learners into three groups to investigate the effects of different types of prewriting interactions, i.e. peer discussions, teacher-fronted discussions and no discussions. Although there were no significant differences in the writings across the three groups, Shi found that peer discussion resulted in written texts of more variation in the verbs and ideas produced, while the teacher in the other group discussion guided the learners in concretizing their thought processes. Those who did not have any prewriting discussion wrote longer drafts because they had more time overall. Shi suggested that giving students more time to write after the discussions may lead to better quality essays.

Ellis and Yuan (2004) explored the effects of planning on the fluency, accuracy and complexity of narrative writing among Chinese undergraduates. Participants were asked to write narratives based on a set of pictures with a prompt under three conditions. The researchers found that participants who planned before writing produced better texts in terms of fluency and complexity. Participants who wrote immediately upon seeing the pictures seemed to produce more accurate language. Therefore, participants who planned before writing were more fluent but less accurate than those who wrote

immediately. Ellis and Yuan found that participants who did not plan at all produced text that was least complex and accurate, compared with the other two groups, but wrote nearly the same amount of syllables per minute as the group who wrote immediately. The researchers concluded that pre-task planning facilitated the formulation process of writing while participants who wrote immediately monitored their output while writing.

Using concept mapping as another form of pre-task planning, Ojima (2006) investigated its effects on the writing performances of three adult Japanese learners. The concept mapping sessions were based on the theory that the brain stores information as mental structures, thus the concept mapping sessions involved the participants drawing maps to brainstorm ideas. Results showed that their writing performance improved in terms of fluency and complexity but not in accuracy.

Shin (2008) in her study of Korean learners examined the effects of planning on their writing with respect to proficiency level and the type of task. Learners either planned their writing individually or in pairs. Then they individually wrote separate argumentative and expository essays. The written work was evaluated analytically on the criteria of content, organization, language use, mechanics and grammar. Scores revealed that planning done in collaboration resulted in better expository essays but there was no significant difference for the argumentative essays in terms of the two planning conditions. Shin concluded that proficiency and planning conditions affected the quality of the learners' writing but had minimal influence on the task type when the essays were assessed analytically based on the five criteria.

Another study explored the effects of different types of planning on argumentative texts of adult learners. Isnard and Piolat (1994) divided participants into 3 groups. Each group was assigned a writing task structured in 3 phases, i.e. note-taking, idea organization and sentence generation. In the idea organization phase, participants had to organize their ideas for their argumentative essays using either free

writing, outlining of ideas or using graphical diagrams or charts. Prior to that, 15 minutes were given for note-taking to jot down any ideas they had. Results of the experiment found that participants who used the outlining method generated the most ideas compared to those who used free writing and graphical diagrams. There were no significant differences between ideas generated using the free writing and graphical diagrams method. However, in the final draft written, all the idea organization modes did not result in a significant difference in the number of ideas written.

Local studies on the effects of planning have also been carried out. Leong (1999) explored the effects of local students planning in L1 on the content of their L2 writings. She formed two pairs of Form Five students whose L1 was Tamil, and gave several lessons which involved planning and writing the essays during separate lessons. In total the participants wrote four sets of plans and essays but she found that their ideas were not organized coherently and the content was poor. She concluded that the use of L1 in planning did not have substantial positive effects on either the students' plans or essays.

It can be concluded from the studies presented above that planning positively affects the quality of writing. However, planning may not substantially improve the quality of a text written in another language, as was shown in Leong's (1999) study. The next section discusses studies done to evaluate writing performance.

2.3 Studies on Written Performance

Much research has been conducted in the area of L1 and L2 writing. Narrative, expository and argumentative texts written by undergraduates as well as school students have been analyzed holistically and in quantifiable measures. The following sections discuss some of the recent studies done locally and outside Malaysia. Most of the studies presented here focused on L2 writing, but a few studies on L1 are also discussed

below because they pertain to narrative writing and measurements of fluency, complexity and accuracy. These studies are relevant to the current study, which analyzes the narrative writings of undergraduates in terms of these three measures.

2.3.1 Studies on L1 Writing

According to Ransdell (1995), writing is a complex task that requires time management and space organization. Ransdell compared the impact of think-aloud protocols on the narrative writings of college students with retrospective-replay protocol and without protocol. Retrospective-replay meant the participants wrote without protocol first, then the writing process was replayed in real-time, and they thought aloud while they watched their writing process unfold. All the participants typed their essays on a computer. Ransdell found that the thinking-aloud condition resulted in the lowest writing rate, with the least words and clauses generated. She claimed that the writers needed to slow down their rate of writing to accommodate the demands of verbalizations through think-aloud protocols, though the narrative task was deemed as less taxing compared with other types of writing assignments. However, syntactic complexity was unaffected by the different conditions.

Research has also been done to compare the narrative writings of undergraduates where individual interests are concerned. Albin, Benton and Khramtsova (1996) predicted that higher individual interest in a particular topic would play an important role in the students' planning of a narrative essay and its topic development. Albin et al. used a theoretical framework grounded on the Flower and Hayes model (1981), wherein it is thought that interest will enhance attention about the topic, and thus affect the process of planning, as argued by Krapp et al. (1992, as cited by Albin, Benton & Khramtsova, 1996). Students were asked to fill out two multiple-choice tests, one regarding their knowledge about baseball and their interest in the game, and another

about soccer and their interest in the sport. They were then asked to write two essays, one each related to baseball and soccer. The essays were analyzed according to thematic maturity, as this can be related to the writers' planning processes. Albin et al. found that most students had more interest and knowledge in baseball than soccer. Thematic maturity in the baseball essays was more evident than in the soccer stories, which meant that there was more planning in the essays on baseball. This showed that individual interest and knowledge played a significant role in the process of planning.

The effects of different writing prompts on the quality of written essays were explored by Way, Joiner and Seaman (2000). They investigated the French writing capabilities of secondary level learners in narrative, descriptive and expository tasks, using three different prompts, i.e. bare prompt, vocabulary prompt and prose model prompt. The bare prompt was merely the instructions given to the students, the vocabulary prompt included a list of words to aid the students, and the prose model prompt was a model French letter. The written work of the learners was scored using holistic scoring, mean length of T-units to assess syntactic complexity and percentage of correct T-units to evaluate accuracy. When assessed holistically, the prose model prompt resulted in the best essays written in each type of essay, while the bare prompt gave the poorest writing quality. With regard to fluency, descriptive tasks were the longest followed by narrative and expository writing, and in each type of writing, the prose model prompt elicited the longest essays. The prose model prompt also greatly enhanced the syntactic complexity and accuracy of all three types of essays. The study found that the descriptive task was the easiest for the learners. As these learners were writing in French, the findings are in contrast with Kellogg's (2001) study, where the subjects wrote in English, which showed that the narrative text was easiest to write compared with the descriptive and persuasive text.

Another study involving narrative writing was done by Ross, Rolheiser and Hogaboam-Gray (1999). They studied the effects of self-evaluation on the narrative writings of students from Grades 4 to 6 (10 to 12 years old), which are equivalent to Malaysian primary school students of Standards 4 to 6. The students first wrote a narrative in the pretest and evaluated it. After that, their teachers discussed with the students on identifying the evaluation criteria and taught the students how to apply the evaluation criteria. They then provided feedback to the students on their self-evaluation after they wrote the narrative. There were several practices before the posttest, where students once again wrote a narrative and then evaluated it themselves. The results showed that the students assessed their writings more accurately and 86% of the students improved in their narrative writing especially in the area of plot development, though overall the researchers found that the improvement was minor. This could be due to the short period of the experiment, which was eight weeks. However, the experiment greatly impacted the weak students. They had the greatest improvement in their narrative writing compared to the proficient students. The study showed that selfappraisal plays a role in writing and is close to a form of on-going planning in the writing process.

The relationship between drawing and writing has been explored too. Caldwell and Moore (1991) conducted a study on the effects of drawing prior to writing a narrative on 42 second and third grade elementary school students. They wanted to find out the relationship between drawing and writing, both being different forms of symbol systems, and the notion that drawing can serve as a planning tool for narrative writing. 15-minute discussions were held followed by 45 minutes of drawing and 30 minutes of drafting the story. 15 such sessions were held. A rating scale developed by Caldwell was used to assess the writings in terms of overall score, organization, style, ideas and context. Analysis of the students' writing after the experiment found that these students

produced better quality writing. Caldwell and Moore believed that drawing can function as a form of planning in that it enables students to test and integrate ideas before putting them down in words, and can help writers to have a better management of content prior to writing.

The studies above discussed various studies done to investigate learners' L1 writing with varying results. The following discussion presents studies done with respect to L2 writing, as the current study focuses on the L2, in the form of written narratives, produced by undergraduates.

2.3.2 Studies on L2 Writing

Raimes (1985) studied the composing processes of unskilled ESL learners. Using think-aloud analysis, 8 students wrote a narrative about something unexpected that had happened to them. Five wrote about it without thinking about the audience while the other three had to write with an audience in mind. Students were also assessed based on a proficiency test. Raimes found that their proficiency did not correspond with their ability in writing. Raimes also did not find a general pattern of composing in these writers and they did not perform differently whether there was an audience or not. However, Raimes found that they were creative in producing text and were not inhibited by the thought of making errors; they were focusing on expressing their ideas.

In another study, Kroll (1990) investigated the effects of time on the syntactic accuracy and rhetorical competency of students' written text. Subjects were asked to write two essays at home and two more in class under a one-hour time constraint. Although subjects were selected using stratified random sampling method, their proficiency levels were not categorized prior to the test, unlike in Raimes' (1985) study. Errors produced in the written text were encoded according to different error categories. The holistic scoring criteria included areas in topic focus, consistency in topic,

paragraphing aspects and idea sequencing. Kroll found that the distribution of errors for essays composed at home and in class were similar, which implied that errors were not affected by the time spent.

Overall, although time contributed to improved performance at the syntactic and rhetorical level for essays written at home, the differences were not statistically significant. Kroll suggested that these students may not have known the process of writing. Thus they may not have utilized their extra time profitably. Without sound knowledge of the steps of writing, extra time provided may not have been advantageous to them.

In Silva's (1992) study of graduate students' perception of L1 versus ESL writing, he found that many of them indicated that ESL writing was different where "planning, writing, grammar and vocabulary" were concerned (p.43). These ESL writers also suggested their instructors provide assistance in building up their grammar and vocabulary. According to Silva (1993), L2 learners tend to be more constrained in their writing, but the overall composing processes of L1 and L2 are not very different, though L2 writers are less able to use these composing processes effectively. L2 writing constraint may not apply to those who are highly proficient. In Matsumoto's (1995) study of professional EFL Japanese writers, she found that the writers perceived the processes of writing in English to be similar to that of writing in L1. Matsumoto suggested that they applied similar writing strategies in both L1 and L2 writing and that these strategies, if imparted to learners, would enable them to improve in writing.

In another study, Roca de Larios, Marin and Murphy (2001) investigated the extent that L1 and L2 proficiency influenced the time needed for formulation processes in writing argumentative texts. They found that the learners used similar amounts of time for formulation in both L1 and L2 tasks. However, those who were more proficient exhibited higher interactions between formulation and other processes of writing.

Woodall (2002) conducted a study on intermediate and advanced L2 learners, as opposed to Raimes' (1985) study of unskilled learners. 13 participants were learning an L2 that was cognate with their L1 (Spanish versus English and vice versa), and 15 participants were learning an L2 that was non-cognate with their L1 (Japanese versus English and vice versa). Woodall found that both intermediate and advanced learners tend to apply language switching in the course of writing in L2. However, for the non-cognate learners, the intermediate learners switched to L1 more frequently than the advanced participants did. For the cognate learners, the advanced participants used longer periods of time in their L1 than the intermediate learners. Language switching was used to aid in the planning process as well as in editing the text. Woodall's findings suggested that intermediate and advanced learners use language switching for different reasons such as planning and revising. He suggested it may also aid cognate L2 learners to produce a better quality essay.

Wang and Wen (2002) also studied the use of L1 in the L2 composing processes of Chinese undergraduates. With the aid of prompts, participants were asked to write a narrative and an argumentative essay. The prompt for the written narrative was a set of pictures while for the argumentative essay a sentence prompt was given. Analysis of the verbal protocols revealed that participants used L1 more for controlling their writing processes and in the generation and organization of ideas. The use of L1 decreased as the participants' L2 proficiency increased.

The use of pictures to study writing performance has also been done. Bennui (2003) used a set of pictures as part of two guided writing tasks to test the effectiveness of guided writing activities. Using culturally familiar pictures, he asked Thai students aged 16-18 years old to first narrate the stories orally before writing. He found that vocabulary skills of some students improved but some pictures were incorrectly interpreted.

The extent to which L1 is used in conceptual activities for L2 writing has also been explored. Using think-aloud protocols, van Weijen, van den Bergh, Rijlaarsdam, and Sanders (2009) performed this study on twenty participants whose L1 was Dutch. They were instructed to write four argumentative essays in L2. They also wrote 4 essays in Dutch to determine their overall writing proficiency. Conceptual activities included generating ideas, planning and using metacomments. Metacomments are activities related to the overall writing process but not specifically on the written content. Planning itself was broken down into self-instructions, goal-setting and structuring. Van Weijen et al. found that L1 was used variably, and self-instructions and metacomments were more frequently used in L1 during the course of writing. Participants who were likely to engage in self-instructions were also likely to apply metacomments in L1. Van Weijen et al. deduced that writers were more likely to use L1 when there was a burden in cognitive processing in L2.

Local studies have been conducted with pre-university students, not on narrative and argumentative writing but on expository writing. Lim (2004) studied the expository writing skills of four ESL students of different proficiencies using a models approach over the course of four weeks. During the eight lessons which were taught throughout the study, discussions were held and revisions made before a final draft was produced by the students. These discussions could be said to be the planning and brain-storming sessions prior to the writing task itself. Overall, Lim's finding was that this approach improved the writing performance of the students.

Moore (1995) in his study on the relationship between critical thinking and writing in Malaysian L2 learners found that there was no significant relationship between them after critical thinking skills were taught. The pretest was a narrative essay while the posttest was analytical in nature. Moore (1995) suggested that because both

the pretest and posttest tasks were different, the ability to write well in one genre does not guarantee the ability to write well in another.

The studies above explored L2 writing in terms of time, audience, proficiency, influence of L1 and use of pictures. The following discussion on researches which measured writing according to fluency, complexity and accuracy scores are relevant to the present study which also uses these measures.

2.3.3 Studies on Fluency, Complexity and Accuracy in Writing

Chenoweth and Hayes (2001) performed a study on thirteen undergraduates learning French or German using the think-aloud protocol. By measuring fluency as the number of words written per minute, they found that learners who had more experience in the language had a higher fluency score than those who did not. These learners also revised less than their less-experienced counterparts. Chenoweth and Hayes asserted that less skillful writers usually interrupted their writing with too many revisions.

Error feedback can also influence the fluency and accuracy of college level L2 writing. Chandler (2003) requested two groups of Asian students to write an autobiographical assignment of five chapters. The errors made by the students in the experimental group were underlined by the researcher at the end of each chapter, and they were asked to correct the errors before commencing the next chapter. The control group only made corrections to their errors toward the end of the experiment. The fifth chapter was completed in the tenth week of the experiment. Fluency was measured by the length of time used to produce each chapter. Findings showed that when students corrected their errors throughout the experiment, their accuracy increased significantly. However, fluency in both the control and experimental groups increased after the assignment. This showed that error correction by the students done throughout the writing exercise resulted in increased accuracy without a decrease in fluency.

Chandler (2003) also examined the effects of types of error correction on students' writing by investigating the change in the fluency and accuracy of their writings. Correction as a form of error feedback from the researcher and the use of underlining with a description of the type of error was found to produce fewer errors in the subsequent written work of the students during the experiment, with overall improvement in both fluency and accuracy. However, the quality of the writing did not change over time.

Handwriting fluency can affect the quality of a learner's writing. Connelly, Dockrell and Barnett (2005) conducted a study to examine the effect of low level handwriting processes on the writings of undergraduates. Participants' handwritten fluency was measured and their written samples from examination and classroom conditions were taken. Slow writing skills were found to affect the overall written performance in examinations and the researchers concluded that higher level writing processes of undergraduates can be restricted by low level handwriting processes.

In another study, Larsen-Freeman (2006) asked five Chinese learners to write a narrative about an event in their lives and tell the story orally three days later. The two tasks were repeated, under no time constraint, once every six weeks over a period of six months. Group averages on fluency, accuracy and complexity revealed improvements over the study period. Individual analysis of participants' written narrative found progression and regression in each of the measures throughout the months. Overall, there was increased competence in achieving the narrative tasks over time.

Topic assignment and freedom to choose topics to write about can influence the complexity and fluency in writing. In Bonzo's (2008) study, students learning German were divided into four groups. Two groups were given freedom to write about a topic of their choice. The remainder groups were assigned a topic. Four writing sessions were conducted and test conditions were switched for another four sessions after that,

totalling eight writing sessions. Bonzo found that overall, the increase in fluency corresponded to an increase in complexity. In examining the effect of topic control over fluency, it was found that students' fluency in self-selected topics was higher than those who wrote about assigned topics. However, the complexity of the students' text was not significantly affected by topic control although it did increase over the course of the writing sessions.

Storch (1999) investigated the effects of pair work on the grammatical accuracy of EAP (English for Academic Purposes) graduates. The participants were asked to complete a cloze text, reconstruct a text and write a short essay. Results showed that overall grammatical accuracy increased when there was collaboration in the language activities. Storch suggested that this was because a longer time was spent while pair work was done than when the activities were done individually. Also, the feedback received while learners were discussing in pairs also enhanced grammatical accuracy.

In a another study, Wigglesworth and Storch (2009) also explored the effects of pair work on the quality of written text. Two groups of students, the majority of whom came from Asian language backgrounds, wrote argumentative essays. One group worked individually while the other group discussed and wrote an essay in pairs. Both types of text were compared in terms of fluency, complexity and accuracy. Another aim was also to find out the approach adopted by the paired group in writing the essay and the language they focused on. To provide a testing environment, a time limit of 40 minutes was given for individual writing and 60 minutes for paired writing. Wigglesworth and Storch found that in terms of fluency and complexity, paired writing and individual writing did not result in significant differences. However, paired groups produced less T-units with errors. Collaboration seemed to produce more accurate text, based on the accuracy measures used in this study. The dialogues of the paired students were analyzed and the researchers found that they focused most on the content of the

composition during their planning time. The researchers concluded that collaboration spurred learners to discuss and generate ideas together about the essay content. Paired writing also resulted in greater accuracy in the texts produced compared with individual writing, as shown in Storch's (1999) study.

The many studies performed on different rhetorical styles of writing underscores the importance of writing in learners' grasp of the language. The above studies also revealed that the element of planning in various forms is important in the process of producing a written text. The studies show that planning can have various effects on the quality of the essays produced. The current study focuses on the effects of planning on the quality of undergraduates' narrative writing and thus, results from this study can be used to compare with those from the studies discussed above to a certain extent.

2.4 Conclusion

This chapter presented previous research done in the area of the different types of planning used in writing and the effects of planning on written performance. Studies on L1 writing and L2 writing were also reviewed. This chapter also discussed the various theories of writing proposed by several researchers. The following chapter presents the methodology used for the current study.