

## **Chapter Two: Review of Literature**

A number of studies from the early seventies have concentrated on the composing processes of writers (Emig 1971; Mischel 1974; Stallard 1974). Such studies followed research that examined specific factors affecting writing such as frequency of writing, size of class, vocabulary and spelling. Rather than examine the effect of such discrete items on writing, researchers now set out to discover the total process that writers undergo when composing. Writing was viewed as a process of text construction. The primary motivation in constructing texts was to communicate meaning.

Studies on the total composing process revealed the various writing behaviours of writers in the act of composing. Further studies then revealed the more efficient behaviours of skilled writers in comparative studies with basic writers. Many of these studies have shown the act of composing to be a complex process even for skilled writers.

From these studies Flower and Hayes (1981) devised a cognitive process model for composing which represented writing as an inventive, generative process. According to the model, the writing process consists of three interacting components: the task environment, the writer's long-term memory and the composing processes. The model indicated that the first two components were constrained by the third component which included planning, translating and reviewing. The emphasis of the model was,

therefore, on the internal workings of the writer's mind seen as engaged in a problem-solving activity while composing.

Studies that followed attempted to examine specific composing behaviours such as revision (Sommers 1980) in an individual's total composing process. These studies were motivated by a need to find out how the behaviour contributed to the total process as well as how good writers used it in their composing.

Many of the early studies had subjects who were native speakers. Since the early eighties, however, much interest has been shown in the composing processes of nonnative speakers of English. The earlier studies of such writing have been of second language users of the language in English-speaking environments. Recent work, however, has focused on this group of individuals in nonnative environments such as Malaysia and Singapore (Lee 1989; Chandrasegaran 1991).

At the same time, the view of composing as a cognitive event has been somewhat dislodged of late by the view that the discourse community in which the production of the text occurs is as important. This view has led to writing being considered a socio-cognitive act. Studies such as Bazerman's (1988) reveal that writers transform and adjust their knowledge and behaviour to conform to the conventions of the community, whether academic or

professional, in which they operate. A good number of these studies have of necessity been on writers from the university-level and upwards.

The first section of the literature review that follows outlines some of the studies of general composing carried out with nonnative speakers of English abroad as well as in Malaysia. These studies indicate the influence of the cognitivist tradition of Flower and Hayes. This is followed by the second section which focuses on studies of composing for discipline-specific purposes. The studies of the latter section appear to be influenced by the theory of social constructionism that views texts as socially constructed products intended for a discourse community.

## 2.1 Composing for General Purposes

### 2.1.1 Studies of Composing

Vivian Zamel (1982) observed that competence in the composing process was a more important consideration than the isolated development of linguistic competence. This observation was based on his study of eight proficient ESL writers from five different language backgrounds. The study was carried out to see if the composing process of L2 writers resembled those of L1 writers and to assess the methods and approaches used in teaching writing.

Data collection for the study included obtaining the various drafts that led up to the production of an essay by each subject as well as retrospective interviews to find out how they composed. The essay written was on a course-related topic, familiar to the students.

The study found that the composing processes of the subjects resembled those of L1 subjects in other studies. The writers followed a recursive pattern of writing. The stages of drafting, reviewing and revising were all part of the general trend towards the discovery of meaning in composing. Zamel concluded that process-oriented writing instruction used in L1 teaching would be effective for teaching L2 writing and that the written products of students would improve when they understood and experienced composing as a process.

Using another case study approach, Zamel (1983) used her own university-level students from the sophomore and junior levels for another study on composing. The selected ESL students were from five different language backgrounds. They were designated skilled and unskilled based on evaluations of their essays by other L2 composition instructors.

The students were given a course-related topic as the writing task. Direct observation of the students as they wrote was done. Once the task was complete, the students were interviewed on their composing processes.



Similar recursive behaviour as in Zamel's (1982) previous study was found in the composing process of the six writers. At the same time, several differences were found between the skilled and unskilled writers. The skilled writers spent more time on revision than the unskilled ones. The skilled writers' initial concern was with ideas and organisation in composing and they revised at the discursal level. They also exhibited recursiveness in the writing process. Editing was carried out at the end of the process.

Zamel's unskilled writers revised less. They began editing from the beginning of the process and seemed more concerned with local-level aspects of the text. The unskilled writers were also under the misconception that a good writer would always have a clear plan about the content of his/her text, and that there was no change in the content of the person's writing once the planning stage was over.

Similar differences between skilled and unskilled writers was also found among Malaysian students by Lee May Eng (1989). She conducted a case study of the writing process of four undergraduate students from the Humanities and Social Science faculty of the National University of Malaysia (UKM). The students were first set essays and evaluated by two other English instructors of the language centre at the same university.

The writing task required for the study was an essay on tourist attractions in Malaysia. The duration of the writing session was one afternoon. The instructions given to the students specified that the essay would be published in a foreign travel magazine. The students' composing behaviour was videotaped as they wrote. At the end of the session each student was interviewed by the researcher to find out about problems faced during composing as well as their general attitudes and perceptions of the process.

Similar to subjects in Zamel's (1983) study, the skilled writers in Lee's study focused their attention on the more demanding aspects of idea generation and text organisation in writing. The unskilled writers, on the other hand, were more concerned with surface level concerns such as grammatical errors and correctness of usage.

Another similarity between Zamel's unskilled group and Lee's unskilled ones was that the latter also shared the view of the stage of planning being a static process that did not change once the act of writing began.

Chandrasegaran (1991) also compared the composing processes of skilled and unskilled students from her sample group of twenty-four students from the arts and social science faculties of the National University of Singapore. The students were designated skilled and unskilled based on tests set by other instructors before the study began.

A task involving writing a letter to the newspapers on the topic of kidney donation was set for the students. The topic was a familiar one to the students as they had done a previous writing task on the same topic.

The students were videotaped while they wrote to note the points at which they paused in their writing and the duration of the pause. This was done by focusing the camera lens on the sheet of paper that the students were writing on. At the same time the researcher sat opposite the student at the individual writing sessions to note behaviours that were beyond the range of the videotape. The students were given questionnaires to report on the composing process after the writing task. They were also interviewed by the researcher after the writing task to find out the reasons behind the pauses during composing.

Chandrasegaran concluded that the factors contributing to ineffective writing were a lack of attention to the rhetorical aims of the written product as well as students' lack of awareness of metacognitive procedures in writing. According to her, another contributing factor to the problem is the undue emphasis in teaching and learning situations to a product-centred approach.

### 2.1.2 Studies of Revision Strategies

A study of revisions of writers was carried out by Faigley and Witte (1981). In it Faigley and Witte introduced a model for classifying the revisions according to meaning which included two broad categories, surface changes and text-base changes. The surface changes comprise editing and other grammatical changes as well as changes at the syntactic and lexical levels in which no change in meaning occurs. The intention of such changes is to improve the linguistic realization of the intended meaning of the text. The text-base changes were those which effected a change in the intended meaning of the text.

The subjects were six inexperienced student writers, six advanced student writers, both groups from the University of Texas in Austin, and six expert adult writers. All subjects had had some journalistic experience. The writing of the task took place over a period of three days and required the students to write a description of a place of their choice in Austin.

Faigley and Witte found that the advanced student writers were the most frequent revisers of the three groups of subjects. The researchers speculated that this could be due to expert writers carrying out more mental operations in the development of the text as well as in its revision than the advanced student writers. The expert adults were thought to have automated the processes necessary for the production of such texts. As with other studies on general

composing, it was found that the inexperienced student writers made the most number of surface changes.

Phooi Ching Lai (1986) used Faigley's and Witte's (1981) model for classifying revisions in her study of eighty-two all-male students at the National University of Singapore. The students were in their first year and were from Chinese medium schools with English as their second language in school. They had all undergone compulsory military service.

The writing task required the students to describe a memorable event or experience from their military service. Two drafts of the task were written in two consecutive days. The third was written after a lapse of twelve days to enable students to look at the text with some measure of objectivity. Students were also required to answer questions to indicate their intentions in revising as well as their perception of revisions.

The changes were classified according to the six operations used by Sommers (1980) in her study. The six operations classified were additions, deletions, substitutions, permutations, consolidations and distributions. These operations reflected the actual changes to the text as carried out by the writer.

In common with other studies, it was found that 80% of all the changes made by the students were surface changes. In general, students seemed to focus on

surface meaning, lower syntactic levels and cognitively easier operations such as additions, deletions and substitutions. The demanding operations of permutations, distributions and consolidations were less used with consolidations as the operation that was least done. In defining revisions many students described it as checking for errors as well as the improvement of structure and written language.

Chandrasegaran (1986) carried out a study to examine the use of feedback on the revisions of students. Her subjects were ten first-year students from the National University of Singapore. A full length essay was set as the writing task for the subjects. The first three paragraphs of the essay were extracted and copies made for the researcher's use. Students were then returned the first three paragraphs of their writing. In a three-step procedure, students first did revisions on their own after which the researcher read the paragraphs out to the individual students and they made further revisions while listening to her. As the final step, the researcher pointed out the problems in the text to the student and the latter made changes where he could.

It was found that the detection of errors by the researcher enabled the students to put right an equal number to those found in the first two stages of the procedure used in the methodology. The researcher suggests that having the text read aloud to the students created a sense of detachment that was useful in helping them pinpoint further problems.

Chandrasegaran noted that students with little training in revising were able to revise a quarter of the errors and defects in the text. Most of the revisions detected were syntactic and lexical errors rather than text level improvements. She concluded that since students in the study showed a latent ability for revising, it was a skill that could be consciously taught to students to improve their composing abilities. The positive results from the use of feedback in the study also proved the usefulness of feedback from teachers and peers in composition classes.

The use of feedback from composition teachers in improving the revisions of students was again highlighted in the study by Lu Rongze (1990) in his study of thirty undergraduate students of the National University of Singapore. In classifying the revisions for analysis he made use of an eclectic model which was a combination of models used by Faigley and Witte (1981), Sommers (1980) and Bridwell (1980). The model classified the changes according to surface or text base changes, the operations used in carrying out the change and the linguistic levels at which the change occurred.

The total sampling size of thirty students were divided into three groups: Sample I, Sample II and Sample III. The students were divided into those who revised according to suggestions from their supervisors and those who revised on their own without any guidance. Lu Rongze's conclusions favoured the use of feedback in composing situations. This was based on findings that showed

that students who received feedback from the tutor revised more and produced better drafts.

His findings were also consistent with previous studies on the general composing tendencies of basic writers. Students were found to have concentrated on surface changes and used easier operations such as substitutions, additions and deletions in revisions. They also revised at lower syntactic levels such as in formal aspects, at the level of the word and phrase.

### 2.1.3 Summary of Findings of Studies on General Composing

Generally, the findings of research on nonnative composing processes were found to be similar to those of native composing strategies. The presence of recursiveness in writing was one very common feature. Much recursive behaviour in planning, selecting and revising of the draft may continue throughout the composing process of a writer. Similarly the stage of revision is not confined to the final stage but could start from the moment prewriting begins.

Another point consistent with previous studies of native composing is the view of writing as a process of discovering meaning. The writer may backtrack, review and revise at any stage in the composing process. In doing so he may change his plans and pursue a different line of thought from the one



that he started with. This may be the consequence of having verbalised his abstract thoughts and finding that they do not approximate his original intentions accurately enough.

The findings of comparative studies of skilled and unskilled writers again corresponded with similar studies of native speakers. Skilled writers displayed an inclination to focus on global concerns in writing. Their composing processes were less distracted by the mechanics of the text such as spelling, lexical choice, sentence construction and punctuation. Instead, these concerns were dealt with once they had established the content of the text clearly. On the other hand, unskilled writers showed more concern with the surface features of the text. The clarity of the message and the achievement of rhetorical aims were often overlooked as a result. Revisions carried out by these writers were often an exercise in editing. These writers also seemed to have the misconception that good writing meant having a clear mental map of the message to be set down in writing.

One issue that needs to be highlighted is the fact that the above studies follow a strong cognitivist orientation in which the writer and his/her meaning are the central considerations. These considerations were not linked to a social context in which purpose and audience would have been affected the writing process. Emphasising the social environment would also have drawn the

writer's attention to the aspects of text convention that would expedite the acceptability and assimilation of the message.

Although the topics set were familiar ones, they were researcher-initiated ones. The writing was thus carried out under experimental conditions and bound by time constraints. In actual writing situations, writers often begin by accumulating information of the subject through referring to a variety of sources. It is rarely the case that they begin on a writing task immediately, without adequate preparation. Neither is it always so that writers are able to complete a task in one sitting. The pressures of the above writing situations could, therefore, have produced composing behaviour different from behaviour in actual writing situations.

The methods of data collection such as protocol analysis and direct observation used in the above studies could be seen as potentially intrusive methods. Talking about the task while composing and having an observer could be distractions that could affect the usual direction of a writer's thought processes.

The studies that are reported in the next section examine the processes of writers composing for professional and academic purposes.

## 2.2 Composing for Discipline-Specific Purposes

### 2.2.1 Construction of Texts by Experts

Selzer's (1983) study was carried out in recognition of the lack of research into technical writing by scientists and engineers. The written products of such writers and the processes that the writers undergo in creating the products had not been given sufficient focus. Selzer's subject was an experienced engineer, Kenneth E. Nelson, who wrote proposals, reports and correspondence at work. Half his time at work was spent writing these documents.

The researcher collected and examined all drafts of several written products written by Nelson. Before and after composing each of these products, Selzer asked Nelson to respond in detail on paper to questions probing the conduct and length of each session. At the same time, Selzer visited Nelson's workplace to examine the physical environment and to see if it contributed in any way to his writing. The researcher also interviewed him at length on his writing style and choice as well as the principles and attitudes influencing his writing. The subject's involvement in an engineering project and the written products that ensued were kept track of by the researcher.

An important finding of the study was the linear nature of the engineer's process of composing. Unlike previous studies on composing for general purposes, the subject did not go back and make many changes once a certain stage and section in the composing process was completed.

About 80% of Nelson's time in composing was spent on the planning of the content. Several sources are referred to by the writer in the creation of the document including the use of previous documents. Input was also solicited through consultations and brainstorming sessions with advisors and coworkers. Since much time was spent on planning, the writer appeared to have very minor revisions. Revising was done mainly for superficial editing.

Another point Selzer noted was the writer's clear sense of purpose in each of the documents he wrote. The researcher observed that as a result of writing such documents over and over again, his sense of purpose had become almost automated.

The fact that the text written by writers not only attempt to approximate private intentions of the writer but also the consensus of the discourse community in which and for which it is written was clearly established in Myers' (1985) study. He selected two biologists working on two controversial research programmes as the subjects of his study. Grant proposals for funding submitted by the biologists to various agencies were the texts under examination in the study.

Myers collected all the drafts leading up to the finished product. In addition various comments by coworkers and other researchers on the drafts as well as peer reviews of previous proposals written by the same researchers were also

collected since these were referred to in the preparation of the grant proposals. The researcher noted and categorised the changes made in the different drafts according to the motivations behind the changes such as writer's self-presentation and relation to the community, content and readability. Once he had categorised the changes, he interviewed the two researchers to find out if his interpretation of the changes concurred with their intentions.

More of the changes noted related to the writers self presentation and their relation to the discipline as well as to readability. The writers were found to use citations to suit their purposes. In the case of one of the researchers, considered a newcomer to the research field he was venturing into, citations were used to show his familiarity with the field. In the case of the second, who was seeking funds for an ongoing research, his own previous work was cited to support theoretical views in his ongoing research.

The use of tone was another area that the writers seemed to focus on. The objective according to Myers was to sound "completely scientific" (p.227). This adjustment in tone was achieved through the use of hedging in making claims of priority in the studies, justifying the choice of research animal and in other instances.

The writers were also found to make changes in terminology for various reasons; changes were made to conform with reviewers comments, to avoid

terms that were ambiguous or with a restricted sense in one field compared to another as well as to accommodate members and non-members of a discipline. In one instance a change of term was effected to increase the appeal of the study for the grant panel.

St.John (1987) conducted a study of the composing process of Spanish scientists from the University of Cordoba. The aim of the study was to find the writers strategies for overcoming problems in their writing articles. It also aimed to see whether the writers used a linear or recursive mode of composing. The researcher was at the University to conduct ESP courses for scientists and researchers during two short visits at the institution. Over the second visit the staff were asked about the problems they had in writing in English and their solutions to the same. In describing the problems encountered, the staff referred to the most recent papers that they had written. Copies of those papers in drafts and final versions were collected by St.John for her study.

A similarity with the subject in Selzer's (1983) study was the fact that the composing behaviour of the Spanish writers seemed to follow a linear mode. Apart from rereading of what had been written earlier in the text before continuing the writers did not generally go back and reshape the meaning of the written text.

Revisions that were carried out were at the lexical level rather than at the level of text organisation. St.John observed that this could be due to the writer's concern with precise expressions and the avoidance of ambiguity. The fewer changes in organisation seemed to highlight the writers' familiarity with the type of genre they were composing.

The writers also noted that of the sections written for the papers, the ones describing methods and results were the easiest to write. The discussion sections, however, were more difficult as nuances of language had to be given consideration. Hedging devices such as the use of modals were used in postulating possible reasons for the findings observed in their study.

Another similarity with the subject in Selzer's study was the fact that writers spent a longer time on mental planning. This was done to collate the information and to work on the organisation before it was actually written down.

Winsor (1989) studied the creation of two texts by a research engineer, Richards, supervising a Research and Development group in a manufacturing firm. The study of his composing aimed to find out whether collaborative efforts in composing in the workplace affected the process. All drafts and documents that were used in the creation of a technical report and a progress

report were collected for the study. Retrospective interviews were carried out with the writer to find out about the process involved.

The shaping of purpose, authorship and text was communally done through input from peers, coworkers and several other written products. Individual effort from Richards in writing the technical report consisted of only three paragraphs.

There was very little revision done of the final document that was drawn up. However, in order to get the document together, the contents of several documents were referred to and revised for inclusion in the document. Viewed from this angle Winsor contends that the linear nature of the composing processes highlighted in previous studies may not be accurate. Rather, she holds that it is a misconception occurring due to the collaborative aspect of such papers in its early stages being overlooked.

A comparative study of the way in which native and nonnative research scientists and professors composed was carried out by Parkhurst (1990) . The subjects of the study were nonnative speakers of English. However, four were living in the United States while four others had lived in the United States or in the United Kingdom. The study highlighted many similarities between the two groups as well as several differences in their attitudes, perceptions and general composing behaviour.



Collecting data was done through interviews with researchers as well as through the distribution of five-page questionnaires that the scientists completed and submitted to the researcher. Interviews were done with six of the native speakers and five nonnative speakers to clarify and discuss their responses to the questionnaire.

Both groups stated that the topic of the article was based on developments in the discipline. There were agreements again on the length of the prewriting stage taken in preparing for the article. It lasted months or even years.

Further similarities between the two groups were found in the stated objective of using clear, unambiguous language. Imprecise, qualitative language and expressions were not favoured in descriptions. Revisions were carried out repeatedly until no mistakes were found in content or in form. The researcher noted that a tolerance of mistakes among the writers was a sign of a person with less than proficient skills in composing.

Differences were found in the preplanning stage with the finding that nonnative informants had a clearly planned mental model before they began writing. The native informants spoke of having a general plan in mind which they experimented with and revised as they wrote their early drafts.

There were differences found between the two groups in the amount and the type of feedback obtained. Nonnative speakers reported getting relatively less feedback from others when compared to the native speakers. Similarly, nonnative speakers received more feedback on sentences and structures rather than at the paragraph level. Native speakers, in comparison, sought and received greater feedback from their colleagues and peers. The response in such cases, focused more on the content rather than on the correctness of the language.

### 2.2.2 Processes of Novice Writers

The initiation of an individual into the discourse community and the reflection of community values and frames of reference in that person's writing was the point of discussion in the study by Berkenkotter, Huckin and Ackerman (1988) . To examine the organisation of these values, the researchers chose to note the adjustments made in the writing of a novice written over a period of one year. The intention of the study was also to clarify the linguistic and sociocultural conventions governing rhetorical purposes of texts used in discourse communities. The writer selected was a doctoral student in his first year in a rhetoric programme at the Carnegie Mellon University.

Data collection for the studies included observation of classes in the rhetoric programme as well as interviews of faculty members and students in the

programme. These field notes provided the background and theoretical principles adhered to in the programme. In addition the student, Nate, kept written weekly self-reports of his experience in the programme. The researcher held discussions with the student based on the weekly self-reports. Drafts of all texts written by Nate in the one year were collected and examined in the study. Eventually, five papers were selected from those submitted for the actual analysis.

From the study Nate appeared to be developing towards the norms of his academic community in terms of syntactic complexity and avoidance of inappropriate registers in his writing. The linguistic analyses of the text indicated a decreased use of the first person singular in his writings. This was an indication that there was greater objective stance in his texts by foregrounding his research rather his own persona. There was also a progressive change in his texts which became more reader-based in the course of the year. The presentation of texts with dense ideas gave way to those which gave greater attention to style and organisation.

Nate's previous training had given him sufficient skills to write informal prose. However, in acquiring the textual competence necessary for the rhetoric programme he had to acquire new information and to use it appropriately in his text production. The increase in the use of the indefinite articles in Nate's later writings showed an increase in his knowledge of new information or

"declarative knowledge". However, the application of such knowledge in a rhetorically and stylistically appropriate manner did not seem apparent in Nate's writings.

The researchers observed that while the writer, in being initiated into the community gives up some of his former habits, he does not reject knowledge he acquired previously. Instead the new language characteristics are added to the prior knowledge he already possesses.

This observation is consistent with Flower's (1990) views of the entry of an individual into the academic environment as a social as well as a cognitive event. Negotiating new discourse requires strategic knowledge on the part of the individual in terms of setting goals, developing strategies for achieving these goals as well as metacognitive awareness for developing goals and strategies. However, the prior knowledge or existing schema of the individual is a useful foundation in his/her initiation into the new discourse environment.

In negotiating academic discourse, the novice writer further transforms his or her prior knowledge to make it suitable for use in response to problems, purposes and issues of the new discourse community. Flower's view of the writer is that of an "insider" with useful knowledge gained from previous educational experiences and communities.

The individual entering the academic community must therefore adjust his behaviour to be accepted as a member of the community. The process of adjustment to the norms of the community is called socialisation of the individual into the academic community.

Freedman's (1989) study of six undergraduates of a law course was carried out to discover how students acquire the discourse rules of a new discipline and genre. The students selected were in their first year in a Law course and had no previous experience to formal discussion of the subject.

The data collection for the study included the collection of all essays written by the students over a period of one year. These essays were then textually analysed. Lectures and seminar sessions in which students participated were taped. The students kept progress logs on all activities in which they participated in their classes. These students were then interviewed once or twice weekly based on their logs. At the beginning of the course the professor of the course was interviewed to ascertain the general design, philosophy and goals of the course.

It was found that students received much help from the professor, the teaching assistants and other students in acquiring the new genre. No models were used in learning the genre and the attention of the students was on the content rather than the form and organisation of the text.

Freedman (ibid.) proposes that students rely on the use of the "dimly felt sense" in acquiring the new genre. This is the broad schema or the conceptual map that students start out with when composing in the new genre. A number of sources that writer uses in preparing to compose in the genre help to refine this map or schema. These sources act as constraints on the individuals existing schema.

This sense is given form when composing begins and this form is further reshaped to approximate the writer's intentions. External feedback serves to confirm or modify the conceptual map of the individual further.

The researcher maintains that the writers must attain proficiency in their writing through more composing before they are able to articulate the processes that they experience. This finding appears to be at odds with studies on composing carried out with protocol analysis as one of the methods of data collection. In the latter method it would seem that students are required to articulate the composing process while being involved in the process of composing.

Helping students at the freshman level attain pragmatic competence was the goal of Johns' (1990) study. She pointed out that students entering the academic milieu are not consciously taught enabling skills that would help them function successfully in that environment. Instead, they are expected to

"intuit" the rules of discourse and the general expectations of the academic community.

As part of her study, journalogs were used by a group of twenty freshman students. These journalogs enabled the students to become participant-observers in their academic classrooms by focusing their attention on topics studied, the conventions of the written discourse that they were expected to use in doing their assignments, and their approach to the assignments.

Responses from participating students at the end of the session indicated that the journalogs had helped them understand the academic conventions better and to produce a coherent text. The exercise of keeping the journalog had also enabled them to function as potential members of the community. These two achievements constituted the twin goals that the researcher was aiming for to help the students develop pragmatic competence.

Shaw (1991) conducted a detailed interview with twenty-two nonnative postgraduate students at Newcastle University to find out students' perceptions of what they do while composing. Students were asked about their experiences in composing their theses. It was the researcher's stated belief that such a study would help researchers in English for Academic Purposes (EAP) understand

how students relate to the academic community that they enter and how their writing is made to conform to the norms of the community.

Shaw's study indicated that one of the problems faced by the students was deciding who their readers were. There was confusion in the writers' minds as to whether to write for a non-specialist with background knowledge of the topic or for a subject specialist. For this reason, the writers could not decide whether the thesis should be a display of knowledge or a transmission of knowledge.

The writers relied on models and previous studies in similar fields in learning the genre and its organisation. Source texts were also used in finding words, phrases and structures that could be used in their writing. About half of the subjects reported keeping notes of useful words and phrases from references that they came across. Within the text, as with previous studies (St John 1987; Dudley-Evans 1988), the sections of Introduction and Discussions were found to be the most difficult to write.

Various approaches in composing were adopted by the writers with some spending much time planning while others used brainstorming techniques. It was noted that nine of the writers had prepared papers for publication based on their theses. Shaw perceives the writing of papers as a "stepping-stone" (p.198) for those who would eventually write theses. The researcher's



observations indicated a clear link between proficiency in language and the ability to carry out the writing task.

Dudley-Evans' (1991) subject for his study was a native-speaker doctoral student pursuing research in plant biology. One or two drafts of each of the chapters of her thesis had already been completed and her supervisor had made extensive comments on her drafts about her writing. Dudley-Evans collected the drafts to examine and classify the comments made by the supervisor. Three categories were used in classifying the comments: organisation, content and language. Each of these categories had subcategories for further specification of the comment

Dudley-Evans found that a great number of the comments made was in relation to lexical choice in writing. There were fewer comments on genre convention which was a subcategory under the heading of organisation. He suggested that the focus on lexical choice could be due to scientific concern for precision in writing. At the same time, the student had had experience in writing a thesis for her Master's degree and was not totally new to the genre.

The need for clear signalling was indicated in the supervisor's comments that focused on the need for cohesion. The researcher noted that the concentration of such comments showed a similarity in the problems of the student with the nonnative student of social science whose writing was examined by James

(1984). Consequently, Dudley-Evans notes that there could be more quantitative than qualitative differences between L1 and L2 writers composing for discipline-specific purposes.

### Conclusions

The experience of the writer in constructing the texts for particular purposes appears to have a direct effect on the composing behaviour of that person. A familiarity with the genre appears to cause the processes involved in the creation of that text to become automated and, consequently, less obvious to observers. Processes that mark a writer's initiation into the discourse community would seem to be better observed from studying the composing of novice writers.

The existing studies of novice writers have focused mainly on the processes of native writers in various disciplines (Dudley-Evans 1991). While studies of nonnative novice writers' composing do exist, these are mostly situated in environments where English is the lingua franca. The globalisation of the English language has led to a recognition and acceptance of nonnative varieties of the language. Coupled with this is the fact that the English language is widely used for instrumental purposes in nonnative environments such as in Malaysia. There appears to be a need, therefore, to examine the processes of novice writers in nonnative environments to discover the manner

of their initiation into their academic communities. It is this need that the present study hopes to meet in a very modest way.