CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Introduction

The curricular and instructional programme of teacher training colleges must teach the skills and processes necessary for successful functioning in an information society. Two important skills are the ability to learn independently by acquiring and processing information, and the ability to access and process the ever expanding base of information to meet the specific demands of academic writing. This chapter will review the literature in three areas:

1. Views on academic writing
2. Theories and studies related to models of information skills
3. The British Library and the National Foundation for Educational Research (NFER) in information skills
4. Local studies related to information skills.
2.2 Views on Academic Writing

Different writers have different views regarding academic writing. In his case study of writing examinations across the curriculum and across grade levels in 200 schools, Applebee (1984b) found that the emphasis in school writing was on the demonstration of previous learning rather than on building new knowledge, which focused attention on information rather than on discourse. Topics for discussion were written superficially and lacked deep level personal engagement.

Applebee's research focused on school examinations and perhaps his findings were true in a school setting. Conversely, where the application of information skills in practicum reports was concerned, more serious thought and deep personal commitment on the part of the course participants were necessary for success in academic writing.

Academic writing is more than proficiency with written language. It surpasses a language-based conception. Paul (1987) says that critical thinking skills are essential for good academic writing. Paul defines critical thinking skills as good reasoning powers, developing multiple perspectives for knowledge building and an open-minded search for
the best truth. He emphasises that critical thinking involves inquiry, the gathering and critical evaluation of information. In order to develop students' critical thinking skills, he advocates instruction which enables students to think realistically and to be open-minded. He regards critical thinking as being integral to an individual's ethical position in life.

Paul's critical thinking skills are closely allied to the thinking skills taught in the information skills course by the researcher. As in Paul's case, thinking skills in the planning and writing of practicum reports were emphasised and they were prerequisites for good academic writing.

Hirsch (1987) advocates that information should be the centre of education in the form of a national curriculum on academic writing. He describes this metaphorically by using a 'bank metaphor' where the 'facts' are capital invested by learners with further learning being the interest their investments earn.

Hirsch talks of a 'bank' of information but this is not enough for the development of writing skills. This was found to be particularly true in the study of information skills in the practicum reports of the English Language Immersion Course Participants, where
retrieval and processing of information were emphasised more than a mere accumulation of 'facts' and details.

2.2.1 The Role of Writing Instruction in Academic Writing

A number of studies have focused on the role of writing instruction in academic writing. Stotsky (1982) says that writing activities such as dictation, reproduction (paragraph paraphrasing), other paraphrasing exercises, precis writing, sentence combining and sentence pattern practice are essential for good academic writing. These activities give students structures and enables them to grapple literally with the language and ideas of the forms of discourse.

Much of the writing activities mentioned by Stotsky have been covered in the course on information skills and the researcher agrees that writing instruction is vital for good academic writing.

Marshall (1987) says that instruction in writing pertaining to types of forms, patterns and purposes in various texts helps students to understand written discourse better. He recommends students and teachers to participate actively in reading and writing.
activities of the class to create an awareness of text comprehension as an act of academic writing. Here the researcher is in agreement with Marshall as regards to the importance of reading comprehension in academic writing. There is a close link between reading and writing skills and text comprehension creates a greater awareness of students' writing skills.

Gebhard (1983) emphasises four principles for a teaching programme.

1. To expand the audience, by having students work in pairs or small groups.

2. To develop writing from a broad context of interests.

3. To vary materials and assignments to enable students to produce a range of logical patterns.

4. Writing assignments should enable students to integrate new into known material.

She also recommends journal writing as it further enhances students' ability in writing. The four principles mentioned above integrate both reading and writing. Journal writing was also emphasised in the English Language Immersion Course and the researcher agrees with Gebhard that it really enhances students' writing skills as shown by the findings of this study.
2.2.2 The Role of Reading Instruction in Academic Writing

Kennedy (1980) gives four effects of reading instruction on academic writing.

**Students**

1. are made aware of the sound of a written text.

2. are more accurate with words.

3. are exposed to writer's planning and communication strategies.

4. become competent readers of their own text and its revision.

She also realises that many college students manifest inadequate experience with written discourse. This inexperience is evident in their level of reading comprehension, especially the inability to draw inference and shape inner thoughts. This inability is overcome with plenty of writing practice exercises on what one has read (Kennedy, 1980).

This inadequacy is also apparent in the reading skills of the English Language Immersion Course Participants who are the subjects of this research. Many rated their perceptions of reading as being merely satisfactory and their main problem was the inability to 'draw inference and shape inner thoughts'.
Broderick and Caverly (1987) made a study of the uses of microcomputer in the teaching of academic writing. They describe how the computer promotes interactive learning in the pre-writing, writing, editing and publishing stages of academic writing. This interaction increases students' use of reading during the writing process. They become critical readers of their own texts.

The study made by Broderick and Caverly is very informative but in an environment where the use of microcomputers is limited as in Malaysia, this interactive learning will never be realised.

Stotsky (1983) concludes that better writers tend to be better readers. Increased reading experience has a positive effect on academic writing and is dependent on mastery of "the languages of formal schooling" (637). Reading instruction therefore helps students in acquiring this special language. Birnbaum (1986), reports that as a student shuttles between reading and writing, he extrapolates from one process and uses that knowledge in the other.
This notion of good writing skills emanating from good reading skills is true as this was also evident in the practicum reports of the English Language Immersion Course Participants. The best writers in this research did not have any problems in their reading skills.

2.2.3 Language Processes in Academic Writing

In a study of a small class of undergraduates enrolled in a basic writing skills course, Reagan (1985) found that students changed their writing behaviour from a paragraph approach to a planning approach. They changed their concept of revision from a separate process to an integrated process. There were also the influence of personality and cultural factors on the performance of the undergraduates.

Dahl (1984) examined schema maps, composition, journals and interview reports of undergraduates and found a close interaction between reading and writing in the students' learning and problem solving efforts. When the students read unfamiliar materials, their summaries were patterned closely to the original texts. The academic writing that the students were engaged in after reading the text reflected the syntax and the
language of the text. Dahl's study gives an insight into how undergraduates construct their text and develop into good writers.

Dahl's study proved to be true in the case of the writing skills of the course participants in the English Language Immersion Course. The poor writers tended to plagiarise and the language used did not vary much from the original text.

Sternglass and Smith (1982) collected retrospective journals of graduate students pertaining to writing processes over one semester. They discovered that each student developed a narrative account of his/her writing process throughout the semester. Journals were also kept by the English Language Immersion Course Participants and in their journals they expressed their experiences in writing out their practicum reports.

Kucer (1983) made a study of a group of graduate students in a basic writing course and found that most of the students lacked adequate cues for text processing. Moreover, their paraphrasing skills were not satisfactory as their interpretations of the text deviated from the original meaning.
2.2.4 Thinking Processes in Academic Writing

A number of writers feel that students should be taught to develop strategies for relating writing to thinking processes. Hunt (1984) believes that a study of language, its use and its usage, including a research approach to writing instruction with an emphasis on peer work, is essential for success in academic writing.

Where the research on "Information Skills In Academic Writing" is concerned, the researcher agrees totally that a research approach to writing instruction is important as it makes students more aware of their writing ability. There is also personal involvement in the whole writing process.

Salvatori (1983), however, thinks that reading of literary texts makes a student more sensitive and reflective in his/her writing process. He says that the process is an,

...extremely complicated activity in which the mind is at one and the same time relaxed and alert, expanding means as it selects and modified them, confronting the blanks and filling them with modifiable projections produced by inter-textual and intra-textual connections.

(Salvatori, 1983: 661)
Squire (1983) says that poor thinking skills amongst high school students is the result of lack of experience in expressing ideas in their own language. He blames teachers for this because they have failed to understand that comprehension and composing are necessary as classroom activities. Comprehension and composing are derived from the same cognitive process and Squire believes that teachers should develop these two skills through various language activities such as:

1. making summaries
2. retelling what has been heard
3. rephrasing
4. reprocessing and interpreting
5. elaborating
6. translating from English to Malay or vice versa

Squire is of the contention that comprehension of text involves construction and reconstruction of whole ideas.
Hull and Bartholomae (1986), in their study of how students learn to write, discuss two perspectives:

1. Writing as complex behaviour and

2. Writing as a complex intellectual process.

They emphasised writing that embodies efforts to increase understanding. They called this writing "speculative" and it was an important means for learning in subject areas.

From the views on academic writing expressed above, it could be summarised that writing is indeed a complex activity which requires good critical thinking and reading skills. Success in writing is assured with adequate practice (Kennedy, 1980).

2.3 Theories and Studies related to Models of Information Skills

The component of information skills is divided into three subcomponents. The first, which is closely related to cognitive processes, is information processing. This skill allows students to analyse and evaluate information from a variety of sources in order to solve problems. Central to information processing is the second subcomponent, library media skills, which allows students to locate, organise and evaluate information in a variety
of formats. The third subcomponent is text analysis skills, which is closely related to the learning component. Much of the information students deal with is in text format. The ability to read and process information and knowledge from a book is imperative for success in academic writing. Traditional study skills are a part of text analysis.

2.3.1 Cutlip's Information Model

Cutlip (1988) in his description of Information Model, has included four subcomponents in information skills. Figure 1 shows a flow chart which encompasses all four subcomponents mentioned in this model. The four subcomponents are information processing, library media use, text analysis skills and study skills. Each subcomponent is further subdivided into smaller components for better understanding. For example, information processing includes acquisition, organisation, integration, utilisation and evaluation of information. Similarly, library media use comprises technological literacy, library use, research, database searching, media and material production and presentation and independent library use. Text analysis skills involve skills such as structural analysis,
INFORMATION MODEL

INFORMATION PROCESSING

Information Acquisition
- central area methods
  of investigation
- observing
- formulating questions

Information Organization
- content frames
  classifying
  comparing
  ordering

Information Integration

Information Utilization
- restructuring
- application

Information Evaluation

LIBRARY MEDIA USE

Technological Literacy
Library Use
- resource access
- resource selection
- resource use
Research
Database Searching
Media and Material Production
and Presentation

TEXT ANALYSIS SKILLS

Structural Analysis
- parts of a book
- textual aids
Text Structure
- story grammars
- surface structure
- deep structure
Content Structures
- mathematics
- science
- literature
- social sciences

STUDY SKILLS

- study guides
- underlining
- test taking
- time management
- graphic aids/charts
- study habits
- notetaking
  - outlining
  - mapping
  - reading flexibility

text structure and content structures. Finally study skills which is an integral part of information skills encompasses a whole gamut of skills. For details regarding Cultip's Information Model, please refer to Appendix A.

While Cultip's model appears comprehensive, it is defective in a number of ways (Cultip, 1988). Most of the subcomponents are closely related and will converge when put into practice, yet Cultip does not take into account this convergence. Cultip's Information Model implies a slight interaction effect among its components. However, it does recognise the importance of language as it provides the structural basis for cognitive processes. Positive personal attributes are crucial for the acquisition of cognitive processes. Facility in the learning skills precedes their application to information skills. These are unaccounted for in this model. Library media skills provide the foundation for the interrelationship of the cognitive processes and information processing abilities. Text analysis provides the skills for story structure analysis and study skills in the Information Model. According to Cultip, these skills and processes should be taught explicitly, reinforced and practised by students throughout the school continuum. He believes that lecturers and media specialists have joint responsibility in teaching the skills and maintaining this academic writing programme.

35
2.3.2 Gawith and Information Literacy

Gawith (1991) has defined information skills as follows:

Information skills are the skills needed to make efficient and effective use of information. Traditionally we have seen and taught this complex of skills in a fragmented way - as reading skills, comprehension skills, library skills, study skills, notemaking skills. To use information effectively you need reading, listening, viewing, observing, 'library', and retrieval skills; you need to know how to skim, scan, select, reject, analyse and synthesise, and present information selectively, with originality and impact.

(Gawith, 1991: 53)

In addition, Gawith goes beyond the text and views information skills in terms of information literacy which is pertinent in an information age. Information literacy is the ability to use computers and other information technologies to retrieve, process and produce information effectively for independent lifelong learning. Important skills for information literacy are:

(a) locating information sources and resources

(b) using information selectively, analytically, critically

(c) recording and organising appropriate information
(d) presenting relevant information using relevant media

(e) evaluating the process formatively and summatively.

2.3.3 Avann's Research on Information Skills

Avann (1985) gives special emphasis to the teacher. She says that among the most useful functions of the teacher is to develop the ability of young people to deal with and organise information. She discusses techniques of teaching information skills in the primary school. She regards information skills as vital for pupils to be able to make the most of educational opportunities at all levels and become independent learners in preparation for life after school. She says that even the youngest pupil in primary schools can master tasks that are fundamental to 'learning how to learn.'

Teachers of all years and all subjects in primary schools will find some practical guidance and detailed case studies in the acquisition and use of information skills. Information skills, when applied effectively, will create independent and flexible learners. Teachers are viewed as creators of opportunities for children to discover ideas and facts for themselves from a variety of sources such as books, audiovisual aids and outside visits.
Avann defines information skills as

"...those skills concerned with the acquiring of knowledge from a variety of sources, and the ability to assess and apply the information gained. Therefore they certainly include:

1) identifying a need for information and being able to articulate that need (what do I want to know?)
2) framing appropriate questions (how can I find out?)
3) finding information sources (where do I find out?)
4) evaluating information sources (will they answer my questions? How reliable are they?)
5) extracting relevant information (this is what I need to know)
6) processing and, if necessary, presenting the information found to satisfy the original need or to convince others (this is what I’ve found out).

(Avann, 1985: 2)

She says that such skills encompass library skills; comprehension; skimming and scanning; identifying main ideas; notetaking; report or essay writing; mapping and number skills for presentation of information.

Avann reiterates that information skills help a writer organise ideas and facts effectively especially in assignments that require research and presentation. The planning of an assignment should start from the idea that the skills which it will develop are just as important as the topic chosen for study. The steps necessary for progressing
encourage students at home and at educational institutions, to include books, audiovisual aids and computer databases to expand their ways of learning. The capabilities of computers as information handling devices make it possible to demonstrate how databases are created and that the computer will only retrieve what is put into it. The computer in schools and colleges should take its place as a tool with other learning aids, encouraging logical, sequential thought and the importance of accuracy - valuable adjuncts to information skills.

Besides the use of computers, Internet and other sophisticated technology, we cannot deny the fact that books are still the main sources of information. Avann (1985) contends that book skills are often assumed to be acquired by book use. 'Information books' are organised for information retrieval with contents, pages, indexes and bibliographies and that clues such as dates when they were published can help us to assess their usefulness as an information source.

Owing to the importance of books for the acquisition of information skills, it is important that library resources in schools are well-organised. The organisation of library resources in schools and colleges is a clue to the way in which we regard information skills.
If information retrieval is to be efficient and a success and is important in an information skills course, then the library should be well organised.

2.4 The British Library and the National Foundation for Educational Research (NFER) in Information Skills

One of the most popular case studies on information skills is Marion Griffin's research which was commissioned by the British Library and the National Foundation for Educational Research (NFER). Griffin concentrated more on specific learning skills acquired by children in their tasks, whereas the researcher of this study concentrated more on the information skills acquired by course participants in their academic writing task.

2.4.1 Griffin's Research on Information Skills

(a) Aims of the Research

The purpose of Griffin's research was to look at how the teaching of study and information skills was carried out in a few primary schools, what opportunities existed for innovation and what constraints operated. The opportunities that existed in the schools where innovation had been possible can be identified as certain common and contributory
factors. Innovation was usually started by one person who had the interest and expertise to
develop materials for an identified area of need. This innovation was made possible
through the positive attitude of the headteacher; the 'democracy' of the school and
existence of 'whole-school policy'; staff willingness to work on materials in their own time;
the availability of resources; support from outside agencies, teachers' centres and library
services.

(b) The Sample

Griffin looked at eight schools. Five had been identified as implementing study or
information skills teaching, three as a comparison, were included because they made no
claims to be teaching these skills. Seven schools in the study were in urban areas and one
was in a rural setting. Of these, five were county schools (7 - 11 years), two were mixed
infants and juniors (5 - 11 years), and one was a first school (5 - 9 years). Three of the
sample schools were in designated "special priority areas".

(c) Findings of the Research

The main areas of influence in the sample schools were as follows:

1. Grouping of children, classroom and curriculum organisation
2. Attitude of headteacher
3. Staff discussion
4. Staffing levels and parental involvement
5. Books and other resources
6. Positioning of resources
7. Outside support and in-service training.

On visiting the five schools where it was known some form of innovation of information skills' teaching had been attempted, it was learned in fact, that only three had been successful. In these schools, the original ideas introduced had been developed and continued. In the remaining two schools, the attempted innovation had not been sustained.

To consider the factors that contributed to the success, or failure, of innovation, the information gathered in each school is presented within a common format:

How and why innovation started (or was attempted)
Nature of innovation and age of children involved
(or where innovation had failed current skills' teaching practices)
Materials and resources used
Teaching methods
Teachers' assessment of value of practices

In schools A (junior school 7 - 11; 315 on roll; 10 full-time staff), B (junior school
7 - 11; 228 on school roll; 7 full-time staff) and C (junior school 7 - 11; 216 on roll; 9 full-time staff), three very different forms of innovation had been attempted and proved successful.

On the other hand, two of the schools had attempted innovation but the innovation had not been sustained. They were classified as Schools D (mixed infants and juniors 5 - 11; 193 on roll; 8 full-time staff) and E (junior school 7 - 11; 220 on roll; 9 full-time staff). The reasons why these two schools failed in their innovation were that:

1. the innovation was not considered of value by the other teachers;
2. the initiating member of staff did not 'sell' his ideas well or involve other teachers in their development;
3. the attitude of the headteacher may have been negative and influenced the attitudes of other staff;
4. the organisation of the staff did not lend itself to general discussion about possible innovation, whereby a 'whole-school' policy might be adopted.

The last three schools in the sample were schools where no particular study and information skills teaching was being practised. A considerable amount of teaching of specific learning skills was observed. This teaching was included in the school's language development programme, project or topic work.

Most of the teachers felt that the teaching of learning skills should be incorporated into the actual tasks children were set to do. The observation of tasks children were involved in included:
1. A group of eleven year olds working independently through the exercises contained in a language laboratory, involving the use of dictionaries.

2. A class of eleven year olds re-writing in their own words a passage from a reference book on their topic subject. There was no note-taking stage, the descriptions being written straight onto the final sheet. The class teacher explained that the children had worked through the stage where a first draft was necessary.

3. Another group of eleven year olds were writing their own television scripts. This required them to demonstrate their proficiency in a number of independent learning skills: choosing a suitable subject, finding the information required, and presenting it in a logical sequence in a piece of interesting writing.

The three observed activities above involved the use of learning skills by children. It is necessary for children to see the relevance and usefulness of the skills they had acquired. Some of the worksheets and language kits were very good as they contained a wide range of ability levels. The materials were designed to enable children to work through them at their own speed.

Several teachers commented on the need for a 'whole-school' policy in the teaching of study skills. This gave children continuity of experience and enabled staff to reinforce skills that had been learned before.

Innovation was sustained and developed according to the research, by continuing staff commitment based on the considered value of the practice and the case with which it could be integrated into other classroom activities; the flexibility of the innovation was
manifested by teachers who were in control of the practice; opportunities for in-service training to allow ideas to be discussed with others, reinforcing teachers' own sense of value and personal contribution.

There were several constraints for the successful implementation of innovation in schools. They were,

1. developing children's learning skills
2. range of materials available for the teaching of skills
3. the appropriateness of materials
4. learning about the innovations of others.

Other constraints were staffing cuts, lack of financial resources, the limitations of old buildings, low levels of ability and finally the lack of reinforcement in primary schools.

Very few attempts have been made to study the teaching or application of information skills at secondary schools or at tertiary level. Significant efforts have to be made to incorporate information skills in classroom teaching and to monitor students' progress in assignments and tasks.

(d) Limitations of the Research

Since Griffin's research was limited by time constraints and a small sample, it was difficult to draw too many rigid conclusions, but this brief look at such schools highlighted the difficulty of introducing change. It suggests that a committed individual can succeed in producing change, but it appears to last only if colleagues fully understand the
nature of the change and commit themselves to it also. Without this, it can fade away if the teacher leaves the school.

The short duration of Griffin's research, a total of six weeks to cover the collection and analysis of data and completion of a report, inevitably limited the number of schools that could be visited and the amount of time spent in each school. One day was spent in each school, making classroom observations and talking to teachers. The research brief was presented to schools in terms of how children find and use information.

The administrative and organisational structure of each school was gathered to provide a background for the practices observed. It was possible to appreciate those areas that were particularly influential in determining a school's environment and opportunities for innovation.

2.5 Local Studies related to Information Skills

At the local scene, there is a dearth of materials pertaining to the teaching of information skills. The most valuable source of material available on information skills is the syllabus for the English Language Immersion Programme. While this is not a study, it does provide insights into what contents are regarded appropriate for an information skills programme and what rationale underpins their inclusion.

2.5.1 The Syllabus of the 14-Week English Language Immersion Course

The syllabus for the 14 week Immersion Course for English Language teachers was
formulated by the Curriculum Unit of the Teacher Training Division of the Malaysian Ministry of Education in March 1991. The Syllabus Panel consisted of a curriculum officer from the Teacher Training Division, three lecturers from the Specialist Teacher Training College, Kuala Lumpur, an Inspector of Schools from the Federal Inspectorate and a curriculum officer from the Selangor State Education Department. The main aims of the course were to upgrade participants' competence and performance in English to enable them to become effective and efficient teachers of English and also to provide participants with the means of enhancing their professional and personal development as teachers of English. The syllabus was divided into four sections:

1. Section A:- Core Components

2. Section B:- Immersion for the English Language Teacher
   - Aural-oral Skills
   - Reading
   - Writing
   - Information Skills
   - Grammar
   - Enrichment

3. Section C:- Practicum

4. Section D:- Examination

The course component 'Information Skills' was covered in Section B of the syllabus. The objectives of information skills were to develop primary school teachers into independent learners, to inculcate the habit of using a wide range of information sources
and Resource Centres for professional and personal development and finally to enable the course participants to acquire the strategies for information search and use. The main purpose of this course was to enable participants to practise the information skills that they had learnt rather than to acquire the theoretical descriptions of the skills, strategies and information sources.

The course content consisted of five areas, namely

1. Selecting the theme and defining the topic for developing information skills
2. Locating and Retrieving Information on topic
3. Source outside the library/resource centre
4. Recording information
5. Organising information for presentation.

In selecting the theme and defining the topic, the participants were required to define the purpose and audience for the information required. Then they had to identify the specific and general key words/items to search under, by using model mind-maps. They were also required to identify what was already known and to formulate appropriate questions for information search.

In the second course content, that is, sources in the library/resource centre, the participants were exposed to card catalogues, microfiche and computerized catalogues. As regards using card catalogues, the participants made use of the college library. An assignment on card catalogues was given, where they had to make use of the college library card catalogues. This was purely to give them practice in searching for information for
their practicum reports later.

As regards sources in the library/resource centre, the course participants were taught how to locate materials on shelves using call numbers. They were exposed to the concept of the Dewey Decimal Classification of information (D. D. C.) and the arrangement of fiction and non-fiction materials on shelves. They were also taught how to use indexes such as the periodical index, the newspaper index, index to conference/seminar papers and bibliographies. In addition, they were exposed to other reference tools such as dictionaries, thesaurus, encyclopaedia, year books, telephone directories, yellow pages and finally bibliographies. To facilitate search for articles pertaining to English Language teaching, periodicals and journals were recommended. Finally, they searched for reference books pertinent to their practicum topics.

The main sources of information outside the library were interviews, library visits, field trips and information agencies. Through structured interviews and simple questionnaires, they were able to acquire much information from people such as heads of schools, senior assistants, head teachers and pupils. They also gathered much information from library visits such as the visit to the Sultanah Zanariah Library of Universiti Teknologi Malaysia, Sekudai, Johor Bahru, where the course participants were given first-hand information pertaining to the use of microfische, microfilms, CD-Roms, NSTP-Online, the Internet and Information Kiosks. Besides the library visit, they also visited the Resource Centre at Sekolah Kebangsaan Khir Johari, Johor Bahru. This visit proved to be most fruitful as they were exposed to a wide range of teaching materials appropriate for primary
schools and these materials were relevant for their practicum reports. None of the participants consulted information agencies as the information derived from them might not be pertinent to their areas of interest, namely language tasks and activities. Much of the information found outside the library/resource centre were acquired through structured interviews, simple questionnaires, observation and note-making.

After they had acquired the skill of obtaining information from within and outside the library, they were taught how to record information. They learnt how to evaluate the currency, accuracy and authority of source by using the title page. Another salient feature of recording information was distinguishing between fact and opinion, relevant and irrelevant information and essential and non-essential information. A mastery of Barrett's Taxonomy was essential in order to distinguish between relevant and irrelevant information. Skills such as literal recognition and recall, inference, evaluation and appreciation were the cornerstones of Barrett's Taxonomy of Reading Skills (Refer to Appendix G).

Once they had acquired the skill of distinguishing between fact and opinion, essential and non-essential information, the participants then went on to note-making. Note-making skills required a sound knowledge of reading skills such as identifying main points and supporting details, identifying cause and effect relationships, making comparisons and sequencing. They were also required to classify information under relevant headings. Lastly, after acquiring the basic reading sub-skills, they went on to record relevant information in linear and non-linear forms through the use of mind-maps,
flow charts, underlining of key-words and key-word mapping.

A salient feature of academic writing is citation skills. Where citation skills were concerned, the participants were taught how to quote directly from reference texts as well as to paraphrase phrases and paragraphs. Practical sessions on citation skills were held and they were required to apply these citation skills in their written practicum reports.

The organisation of information for presentation was accomplished purely through outlining and the final writing of the practicum report. The main features of this report could be categorised as formatting, note-making, acknowledgement of sources used, bibliography and relevant audio-visual aids for activities devised.

Writing the report required application of writing skills and the strategies learnt in information skills component were applied in their reports. Mechanics of writing such as spelling, grammar, organisation within and between paragraphs were emphasised.

Finally to sum-up the self-appraisal of their product and the information process experienced, the course participants indulged in what is known as journal-writing. Journal writing is process-based and gives more emphasis to the writing process rather than the product. Through journal writing one commands personal power over the act of writing and writing becomes more personal than traditional. There is fluency of ideas as the writer is not coerced into writing. Writing becomes more purposeful, becomes of personal involvement.

In the Malaysian context, information skills is not a term which is used widely.
People are more familiar with the term 'study skills'. Study skills and information skills are not the same. Study skills are "abilities, techniques, and strategies which are used when reading, writing, or listening for study purposes" (Richards, Platt & Weber, 1985). Information skills involve gathering of information from various sources and processing this information for written assignments. Although information skills has elements of study skills embedded in it, the two terms are not synonymous. While the student is preparing himself, he asks himself some soul-searching questions such as:

How can I read efficiently?

What is the best method of taking notes?

How should I prepare myself for seminars and tutorials?

How do I set about researching a major piece of written work? How do I organise and present it?

Academic Writing is reflected in the English Language Immersion Syllabus as the practicum report, which is actually the product of a school-based study done during the practicum. The practicum is an important practical aspect of the course. The emphasis in the practicum report is the participant's use of language and it aims to bridge the gap between experience and classroom teaching. The language use is holistic, centred on the theme of the participant's choice.

Some writers have linked academic writing to academic reading. They have cited a number of writing activities which have been linked to reading improvement including paragraph paraphrasing and other paraphrasing exercises. These activities stick to a literal
level of understanding but they are useful for that reason because they give students structures, active practice in grappling literally with the language and ideas of the forms of discourse.

However, some writers are not totally supportive of this link between writing and reading. They say there are other variables that come into play. One of them is the language that has been taught formally in school. 'Formal Schooling' focused on ways in which instruction could assist students in acquiring this special language rather than on deeper levels of reading/writing relationships.

2.5.2 Academic Literacy

Sharon Pugh's work on "Academic Literacy" was reviewed purely to highlight the importance of higher order reading skills for assimilating and processing information for academic writing. Pugh, in her study of graduate students' preparation for higher education has discovered that students' literacy is very basic and only prepares them for the assimilation of information at the lowest level of knowledge and learning. Thus there is a need for college educators to bring about significant improvements in student learning at all levels by formulating and communicating the idea of academic literacy that is relevant and functional for undergraduate studies.

With this view in mind, she has provided a conceptual framework for academic reading and writing. The conceptual framework consists of five steps. They are,

(a) planning, involving goal setting and knowledge mobilisation
(b) drafting, involving schema selection and schema instantiation
(c) aligning, involving collaboration and role immersion
(d) revising, involving re-examination and redevelopment; and
   in the centre of all these operations
(e) monitoring, the conscious supervision of these processes

(Pugh, 1994: 26)

2.5.3 The Impact of Lecturing and Individualised Learning on Students' Approaches to Learning

Rohana Zubir, a former lecturer at the Faculty of Education, University of Malaya, Kuala Lumpur, made a study of the impact of individualised learning and lecturing on student learning in Malaysia, for her doctoral dissertation in 1983. An extract of that study was published in the Journal of Education, Faculty of Education, University of Malaya, Kuala Lumpur in 1984.

(a) Aims of the Research

The main purpose of this research was to study the impact of lecturing and individualised learning on the students' approaches to learning. Rohana's aim was to find out to what extent teaching methods had an effect on the approaches that students adopt in their learning.

(b) The Sample

Rohana (1984) conducted a research on two hundred and twenty-five teacher trainees from two teacher training institutions in Kuala Lumpur, Malaysia. She studied the impact of lecturing and individualised learning on students' approaches to learning. All
teacher trainees answered a semi-structured questionnaire and the questions related to aspects of learning from both individualised learning and the lecture, which included "knowledge acquisition, understanding, retention, interest, contact with lecturer and so on" (Rohana, 1984).

(c) Findings of the Research

The students who favoured the lecture conceived their understanding as being very lecturer-related. The explanation given by the lecturer helped them to understand the subject matter better. This is illustrated by the following quotation:

This is due to the fact that during lectures you've got to listen and pay careful attention to what the lecturer says. This enables you to grasp the subject matter and thus retaining it, better. Whereas, in IL you've to read the modules yourself and sometimes whatever you read may not interest you. So you may just not read it at all or just skim through without understanding the subject matter.

(Rohana, 1984: 120)

Those students who favoured individualised learning (IL) said that they had more time and opportunity to 'think' and do things for themselves. They mentioned that,

... IL allows the person to reflect and meditate deeper into what the module is trying to convey. As such, on most occasions, we can understand the subject matter better in IL.

(Rohana, 1984: 121)

The responses to the questionnaire were characterised by the two responses given above. However a small minority was neutral and did not indicate any preference for
either teaching method. Rohana came to the conclusion that students learning from lectures and individualised learning adopt different orientations to their learning and that there are basically two types of students, namely

1. lecturer-oriented learning students or learners (LOL) and
2. self-oriented learning students or learners (SOL).

Rohana says that in a lecture situation, the student may either be a LOL or a SOL depending on factors such as the educational system and the motivation of the student. In the lecture situation, the SOL student tended to become LOL. In an individualised learning situation, the SOL student had more opportunity for self-assertion in his/her learning and thus was more motivated. Similarly the LOL student in the lecture situation tended to adopt a SOL approach in IL. A minority of LOL students remained LOL in the individualised learning situation. Thus Rohana came to the conclusion that teaching methods can affect learning approaches.

Rohana also examined the transcripts of the LOL and SOL students and found that the LOL tended to use 'surface' level processing whether in the IL or the lecture situation. The SOL used either 'deep' or 'surface' level processing. Students who gave importance to passing of examinations tended to focus on 'surface' level processing. On the whole the findings indicated that students seemed to adopt different learning orientations in different teaching methods.
Rohana's research throws much light on lecture comprehension, which is one of the salient features of this study on information skills as described in Chapter I.

(d) Limitations of the Study

Rohana did not mention of any limitations in her study. She had highlighted the findings of her research but had made no mention of shortcomings or any limitations encountered in the course of her research.

2.5.4 Information Advantage

Syed Salim Agha, a lecturer at the Department of Library and Information Science, International Islamic University, Malaysia, delivered his keynote address on 'Information Advantage' at a seminar entitled 'Penggunaan dan Perkongsian Maklumat Elektronik' at Universiti Pertanian Malaysia Library on 24 May 1996.

Syed, in his seminar paper, examined the pervasiveness and importance of information. The development of information as it went through its various phases of utility was explained. The strategic integration of information and various technologies were looked upon as an evolutionary development. He talked of 'information advantage' which was actually information content and its effective and integrated management with key technologies. He pointed out that failure to manage this information advantage would result in a great opportunity loss. Managing this 'information advantage' well will bring forth the eventual development of a knowledge culture in a society. Knowledge culture was elaborated upon at the levels of the individual, the organisation, the nation and the world.
Syed (1996) examined the information management within an organisation which entailed the following:

a. Determination of the type of information and the information content (strategic information) that is needed by the organisation such that it will play an important role in value creation activities such as decision making, problem solving, analysing events, creation of ideas, development of products, understanding of market needs, etc. in support of organisational objectives.

b. Planning, implementation and coordination of the organisation, development and maintenance of information sources and information stores to ensure information system effectiveness.

c. Planning and coordinating the appropriate use of information technology of all kinds.

d. Coordinate the development and training of information handling skills of all personnel in the organisation.

e. Monitor and map appropriate information flows such that access to, transfer and distribution of information is achieved.

f. To promote the strategic use of information in the organisation at the following levels:-
   - Strategy formulation
   - Decision making
   - Operational
   - Development

(Syed, 1996: 58)

The ethics of a knowledge culture demands that information should be shared through the process of cooperation and exchange of information, experience and knowledge. The society should pay greater attention to the generation, access, management, transfer and exchange of information and knowledge.