Chapter One: Introduction

1.1 Background to the Study

Malay has been established as the national language of the country as well as the medium of instruction in the national schools for over a quarter of a century. It is also the main medium of instruction in all institutions of higher learning assisted financially by the government. The language is at once the language of the Civil Service and education as well as one of the main languages of daily interactions of people from all levels of society in Malaysia. However, Malaysia's increasing participation in the international arena in diplomacy, trade, commerce, science and technology as well as in academic pursuits has raised an awareness within the country of the necessity of English. The third Malaysia Plan of 1976-1980 emphasised the role of English in the country as a "strong second language" (Third Malaysia Plan 1976-1980 as cited in Chitavelu 1985). Despite this, perhaps due to a desire for integration and national identity as well as rejection of a colonial language, the use and standard of English in Malaysia is noted to have declined in recent years.

1.1.1 Development Programmes and the Role of Language

It is important to note the direction in which the nation appears to be moving in its quest for advancement and progress. A working paper entitled "Malaysia: The Way Forward" was presented by the Prime Minister at the
inaugural meeting of the Malaysian Business Council on 28 February 1991. The paper outlines the government's intended programme of development for Malaysia to attain the status of a fully developed nation by the year 2020. This plan, labelled Vision 2020, lists nine challenges as issues to be addressed for the country to be fully developed.

One of the challenges is the development of a scientific and progressive society "that is innovative and forward-looking, one that is not only a consumer of technology but also a contributor to the scientific and technological civilisation of the future." (Malaysia : The Way Forward 1991). Establishing a reputation and gaining recognition as a contributor would imply interactions and collaborations at the international level. The language of these communications would of necessity have to be a known and common one. As Kachru (1986, p.116) notes, English has attained the status of a language that is internationally understood and would be the obvious language of choice in this situation.

The objectives for Education and Training as outlined in the Sixth Malaysia Plan (1991-1995) appear to be in line with the aspirations of Vision 2020. They include the expansion of academic programmes at postgraduate levels in applied arts, science and technology. The enrolment at this level is projected to rise by 69% by the year 1995. A cursory look at the language of research in
the University of Malaya, especially in science-based programmes, is enough to establish English as the main language of research.

Another objective stated in the Sixth Malaysia Plan is the boosting of scientific and technological manpower in qualitative as well as quantitative terms within the country. This problem is to be addressed through increased education and training within the country as well as through programmes overseas. The case here for proficiency in an international language is strong.

1.1.2 The Need for English

One of the possible reasons for the decline in the standard of English could be the fact that it is no longer compulsory to pass the English paper in the school-leaving examination also known as the Sijil Pelajaran Malaysia (SPM). This has been the case since 1979 (Chitravelu 1985).

The situation is made worse by the fact that there is no English Language paper at the pre-University level examination also known as Sijil Tinggi Pelajaran Malaysia (STPM). This, in turn, led to a scenario where students may enter university with low proficiency in English. However it is often the case in many disciplines that the academic reading requires advanced skills in English from students. This point has been noted by academicians in institutions of higher learning such as the former Vice-Chancellor of the
University of the North also known locally as Universiti Utara Malaysia (UUM), Tan Sri Awang Had Salleh, who also recommended that English be made a compulsory pass in SPM examinations (New Straits Times 18th August 1994).

A particular academic problem that has raised an awareness of the importance of English is that of translation. It may have once been thought to have been the answer to required academic reading within disciplines at universities. Reality has proved otherwise. In her interview with the New Straits Times, Professor Asmah, Director of the Language Centre at the University of Malaya, referred to the inability of translation to keep pace with the latest information produced at the "frontiers of knowledge". It is a slow time-consuming process and the content may be outdated by the time the translation is completed. According to her, the obvious solution to the problem is to attain proficiency in English (New Straits Times 6 March 1992).

Another stumbling block linked with translation is the availability of subject-specific expertise among translators. When translations of textbooks for universities are carried out by language specialists rather than subject specialists, it is possible that significant concepts may not be adequately conveyed in the translation.
A debate on the national role of English was set off in one of the local newspapers in September 1992 when the daily criticised the Prime Minister for using English in one of his interviews. The Prime Minister's reply as cited in Ozog (1993) was:

"But we should not become fanatical about it because that will make it difficult for us to acquire knowledge to benefit our race in a competitive world. Whether we like it or not English is an international language."

The importance of both Malay and English has been pointed out by Professor Asmah. In her interview with the New Straits Times she spoke of the twin philosophies of nationalism and nationism in the language planning policy of Malaysia. According to her, the development of individual as well as group identities that foster nationalism may be achieved through the common language of Malay. At the same time Malaysia is not separate and apart from the rest of the world. To participate effectively at the international level and to establish the nation, the second component of nationism must be given focus. Professor Asmah's view is that nationism, which fosters efficiency and group cohesiveness, may be achieved through proficiency in English among Malaysians (New Straits Times 3 March 1992).

The problems with regard to the need for emphasis of English appears to have been acknowledged in the Sixth Malaysia Plan (1991-1995). The point is
made in the chapter on Education and Training that the teaching of English as a second Language should be given focus to stop declining standards. It is further stated that the government would consider the possibility of making the English paper a compulsory pass in examinations (Sixth Malaysia Plan, 1991-1995).

Perhaps with a view to achieving the plans and objectives stated in these documents, the Education Minister Datuk Amar Dr. Sulaiman Daud was quoted in the New Straits Times on the policy decision by the Government to allow English as a medium of instruction in institutions of higher learning. (New Straits Times, 6 December 1994). The Universities and University Colleges Act of 1971 is to be amended to allow for this change in policy.

1.2 Significance of the Study

1.2.1 Language Use in the Academic Environment

The increased use of English for academic purposes in the future justifies the need to discover, describe and document the different uses of the language by novices and experts in the various disciplines. Such studies seem warranted also when considering the relatively wide use of English at postgraduate levels in the University of Malaya.
A great proportion of publications generated at postgraduate levels in the University of Malaya are produced in English. According to information available on the database of the online public access computer catalogue of the University, the theses published during the years 1993 and 1994 show that approximately 67% were in English. About 96% of the science-based theses were published in English over the same period. The high rate of theses published in English among the sciences appears to be an important reason to explore the use of the language in some of these disciplines.

The Annual Report (1993) of the Institute of Advanced Studies, University of Malaya indicates that all the refereed journal publications, monographs, books, book chapters as well as conference and workshop papers produced at the Institute in 1993 have been in English. A perusal of a similar provisional list for the Annual Report for 1994 indicates a similar trend in language use. These figures appear to support Swales's (1990) hypothesis that those research fields, such as science-based disciplines, not relying on localised input alone are less likely to resist the use of English.

The necessity for communicating in English is further underlined by the fact that 98% of the journal articles from the Institute of Advanced Studies in 1993 were published in international journals. At the same time, 80% of the conferences at which papers from the Institute were presented were international ones conducted in English.
1.2.2 The Institute of Advanced Studies

The Institute of Advanced Studies, University of Malaya was first established in 1979. It is essentially a research facility promoting multidisciplinary research with a view to contributing to the needs of society at large. The research fields ventured into, such as the environment, human development and biotechnology, are indicative of the Institute's commitment to making a serious contribution to the country's development.

In addition to its contributions to national development, the Institute of Advanced Studies serves as a centre for graduate studies. One of its stated aims in this respect is to "produce personnel who could contribute to the University and the country in general" (Annual Report 1993). The post-graduate degrees available at the Institute include MPhil, MBiotech, M.Tech and PhD.

Much of the work carried out by the staff and students of the centre are in new and innovative areas. In the course of their research, therefore, students are sometimes asked to present their work at events such as conferences and seminars both locally as well as overseas. Their presentations which are usually carried out through short conference papers may be given orally or in the form of posters.
Needless to say, these presentations mark a rite of passage for the students in making their work known to the general academic community. It may also be their first attempt at preparing materials for publishing, albeit for limited circulation purposes, in books of proceedings and abstracts. In many cases, the presentations occur prior to the actual writing of their thesis. It may therefore be the first time that they present their work in print. In such cases, this could be considered an important first step as it clarifies for the students an amorphous mass of information that may have existed at an abstract level until then.

These novice writers use samples of papers written by more experienced writers and participants from previous conferences to guide them. Thus the training in such writing is done mainly through examination of finished products. Chandrasegaran's (1991) observation about the "how" involved in the creation of the product not being made conscious and explicit to students would seem to be the case here.

Students seem to acquire the communitive competence and "specialised literacy" necessary to prepare effective short papers. However, this acquisition appears to be a purely top-down approach without the support of important bottom-up building blocks that would ensure a firmer understanding of such composing.
At the same time, there seems to be little help available for graduate students as most English for Specific Purposes programmes designed at the University are for undergraduate students. Moreover, many of these programmes emphasise the skills of reading and speaking which are perceived as skills of immediate need in the University. Thus not only are avenues for finding help in writing limited for postgraduate students, but the teaching of writing itself appears to have been overlooked.

Lately, a recognition of the importance of a writing component has led to projects on writing for professional and academic purposes at the Language Centre, University of Malaya. These projects have been done with a view to obtaining results that are academic as well as pedagogic in nature (CICHE PROJECT 308: WRITING NOV 1991 TO JULY 1993)

1.2.3 Examination of Written Scientific Texts

Within the domain of English for Science and Technology (EST) at the University, the written products seem the most easily available instances of language use. Research has shown that written products are shaped and conditioned by the expectations, norms and constraints of the discourse community in which it is produced. Examining the writing could provide the key to understanding the values of the community or the discipline. This could then provide useful input to course designers in creating effective writing
curricula. It could also provide useful insight into appropriate pedagogical practice that could be used in teaching students from such disciplines.

The individual shaping of a scientific text may be useful in understanding the role of the text as well as the social norms of the academic community in which it functions. It may also exhibit characteristics of the cultural community in which the discourse community is situated. While some researchers such as James (1984) may consider scientific texts to be rigidly structured discourses, others like Johns (1994) find that within the structure of scientific texts composing is governed by sociological issues such as the audience reaction.

Thus the apparently factual style of scientific discourse are not without conflicts that must be resolved in order to produce an objective piece of written work. It seems worthwhile, therefore, to seek out and make explicit such conflict resolution, at least to dispel the myth of scientific writing being a detached, objective account produced by a distant and remote being. In this way, not only is a human face given to the endeavour of scientific discourse but it will make explicit for people within and outside the field those issues that have implicitly been dealt with by writers of scientific texts.
1.3 **Rationale of the Study**

A written text does not occur in isolation. It is the conscious choice of a member of the discourse community and fulfils a social function in that community. One way of understanding the norms of the community is by examining the writing of a member of the community. The processes of the writer in composing may be discerned through an examination of the selection of ideas, their organisation and the focus used. This investigation would require input from the writer and is not therefore only based on the objective observation of the researcher alone. Input could also be sought from expert informants in the community to create a greater understanding of the processes and the norms.

The more recent studies of text as process have examined the strategies and processes of native users of English (Myers 1985a: Berkenkotter et al 1988: Dudley-Evans 1991) in the academic environment. There seems to be a paucity of such studies using nonnative informants. The benefits of a study of this nature as Dudley-Evans (1991) notes is to show how novice writers socialise into the academic communities. In the cases of nonnative novice writers, it is also possible that such a study could yield information of the manner in which they negotiate with a second language for academic purposes. The dilemma of these writers are possibly what Raja Rao (1939) was referring to when he wrote:
"One has to convey in a language that is not one's own the spirit that is one's own."

Some of the research on writing carried out in Malaysia have focused on two areas: discrete items in given texts or written products (Wong 1972; Ho 1976; Padmini 1983) and composing processes of students writing for general purposes (Lee 1989). Many of these studies have considered the performance of writers without linking it to the social environment in which it could function purposefully. That communicative competence in writing for a discourse community is the product of social constructionism seems to be a worthwhile composing aspect that needs investigation. To the best of this researcher's knowledge there are not many published studies in the country at present on the processes of writers writing for discipline-specific purposes.

The writing done in the previous studies have also been mainly in response to researcher-initiated tasks which are conducted in a classroom situation (Lee 1989). The writing that is carried out is done within a time constraint. While such activities chart a writer's composing behaviour, it is questionable whether such behaviour is exhibited by the same writer when carrying out writing tasks for real purposes. Studies conducted by Peitzman (1981) and Shwartz (1983) demonstrate that writers show greater commitment towards the composing of a text that they had selected themselves.
The present study is a case study of four postgraduate students from the discipline of microbiology. The written products composed by them are short papers presented at various conferences that they attended. These papers were based on the research that they are involved with. There was no time constraint imposed during composing; the papers were written by the subjects on their own time. The effect of the discourse community on the composing processes of the writers are uncovered through an examination of their revisions in the various drafts. Retrospective interviews were held with the writers to ascertain as much of their composing behaviour as possible.

The use of a case study approach has been resorted to in several studies on the composing processes of writers (Pfingstag 1984: Raimes 1985). The intention of the researchers in the above-mentioned studies was to delve as deeply as possible to discover the writing strategies and behaviours of their subjects. For the same reasons, the present study has been restricted to four cases. Rather than an empirical, generalisable investigation, the study will attempt to discover as much as possible about the writers inclinations and motivations, the type of text composed, the audience, the purposes as well as the norms of the discourse community.
1.4 Objectives of the Study

The following are the research questions that inform this study.

1. What are some of the revisions made by ESL post-graduate students of science when writing short papers?

2. What are the motivations behind the revisions as perceived by the writer and/or his/her supervisor?

3. How are these research students socialised into the academic community?