LEARNER NEEDS AND ESP

BY

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Dedicated to

my sister, Layla

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DECLARATION

All the work submitted in this thesis was carried out
by the candidate at Dublin City University during the period
of October 1988 to September 1990.

The candidate has not been a registered student for
any other university degree during the course of the
research programme.

Signed _____

Randa M. Asadi

September 1990

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The purpose of this thesis is to explore how ESP learner needs have been perceived and answered in contemporary ESP programmes. It aims at providing some suggestions and implications regarding needs analysis, course design and the development of language skills.

The first chapter introduces the concept of 'ESP' and, therefore, attempts to unfold the debate which has surrounded its definition and its practices. This involves viewing the factors which have led to its development and which have set it apart of General Purpose English (GPE); investigating the theoretical background against which it has developed and, thus, questioning the validity of equating ESP with the learner's specialized subject-matter or specialist register; and considering the major types of ESP courses which have branched off ESP.

The second chapter is concerned with the main changes that have occurred in ESP course design. It argues for a process-oriented approach since this type of syllabus, in its balanced form, accommodates the learner's real-world needs and process-learning needs. The process oriented movement has revolutionized the concept of **'learner needs'**. The needs of the learner are not only viewed in terms of language items or course content but also in terms of the psychological aspects of the learning process and classroom learning behaviours.

Chapter Three establishes a view of needs analysis and course design which takes the learner's perception of her needs as a starting point. This view is opposed to the needs analysis associated with Munby's work (1978). It proceeds from the concept of 'need' and is built upon the ideas emerging from the process- oriented movement. It emphasises the centrality of the learner's role in the needs analysis and course design procedures.

Chapter Four represents a case study conducted at Dublin City University (D.C.U.). The study arose from a concern about how adult learners envisaged their needs and, thus, the extent to which they could act as informants regarding the content of the language course and the teaching-learning methodology. It was inspired by a belief that EAP learners are not necessarily instrumentally motivated and, therefore, their needs cannot be met by a course which proceeds from a target-situation needs analysis. In addition to supporting our assumption, the study has provided some insights into the nature of learner needs and learning styles and perceptions of teacher-learner role.

Chapter Five aims at highlighting some of the subskills and strategies involved in each of the four skills with reference to specialized needs. It provides suggestions for selecting learning materials and some teaching implications.

The final chapter discusses some conclusions about the implications which this research provides for ESP instruction and course design.

INTRODUCTION

Our interest in ESP arises from our teaching experience in the Scientific Studies and Research Centre (SSRC) in Damascus, Syria. In SSRC language teachers are sometimes required to give ESP courses to undergraduate science students and to graduate engineers and assistant engineers who need English in order to further their studying abroad or to obtain professional training courses.

By reviewing much of the literature related to ESP, we drew the conclusion that ESP is very much identified with the learners' scientific discipline and specialist language as represented by printed materials. This is underpinned by the belief that ESP learners and university students are instrumentally motivated, that is, they are motivated by their study or professional needs. It is taken as a matter of fact that the ESP learner needs are dictated by *her specialized situation and are,therefore, typically pre-conceived. Accordingly, the needs of the learner are met by narrowly-focussed language programmes which arise from an analysis of the stylistic conventions and/or language functions which characterize the specialty literature. Such programmes are geared at providing learners with restricted competencies in terms of formal language knowledge (ie. grammatical structures and lexis), language functions or language skills.

The argument behind this thesis, however, is that the learner's motivation for learning a foreign language springs from a variety of individual concerns, professional and personal. His needs, therefore, might not conform with the requirements of the specialized area. Further, his inadequate performance in his specialized situation might stem from lack of knowledge in general English, and his professional needs might not be confined to handling written materials. Many non -English-speaking scientists feel handicapped when oral performance is called upon, even inside their particular situation, due to the over-emphasis placed on the printed text in language instruction. This calls for emphasising the importance of the learner's role in specifying his needs and language problems, and for breaking up the stereotypical pattern which has generally been adopted in ESP courses.

*The pronouns he/she or her/his will be used interchangeably , throughout this work, as is now common practice in TEFL writing.

CHAPTER ONE

THEORETICAL AND PRACTICAL ISSUES

IN ESP

1. INTRODUCTION

The demands made upon the language teaching profession have changed as changes have taken place in the world. Previously English was taught in the context of English literature and English culture to learners who were learning English for educational purposes or for pleasure. Now that English has become an international language of science, technology, commerce, aviation, politics, academic instruction etc._ language teaching has been called upon to meet the different demands of new types of learners and, thus, also, to refer to the learner's specialized study or the required professional/vocational skills.

This has been accompanied by two fundamental trends in foreign language instruction. The first is characterized by an awareness that the teaching of a language does not necessarily involve the teaching of literature or culture and, therefore, by a shift towards the practical teaching of language ability. Emphasis is placed on the learner's pragmatic needs and the communicative purposes for which the foreign language is required. Accordingly, as Widdowson (1985) notes disapprovingly, literature has been "purged from" language teaching programmes "on the grounds that it

makes no contribution to the purpose or the process of learning the language for practical use" (p. 180). Literary and culturally orientated texts have, therefore, been replaced by texts aimed at responding to the immediate needs of the learner.

However, it is noteworthy that there is now a return to emphasising the teaching of English in association with the target language culture, even in ESP situations. This has been expressed by Frelick and van Naerssen (1984):

> When people think of ESP, they tend to think of discourse analysis of oral or written texts.... The humanization of ESP through the inclusion of a cultural orientation to the relevant scientific community may be an important area for future development in ESP programmes (p. 151).

The second trend which has influenced foreign language teaching is sometimes referred to as the 'humanistic movement'. It advocates that learning programmes should cater for the learner's needs, interests and other cognitive and emotive variables. This has partially resulted, as Hutchinson and Waters (1987) note, in constructing syllabuses around texts taken from the learner's specialized field; so as to sustain the learner's motivation and, thus, advance learning.

These factors have collectively contributed to the development of what is now known as English for Specific (Special) Purposes (ESP). However, this has led to a break

with what has been termed General Purpose English (GPE) and
has given ESP a distinctive status in the teaching
profession. It has almost become an industry in its own
right as the wealth of ESP materials testifies.

What follows, however, aims to explore the nature of
'ESP'. This involves examining the theoretical context
within which it has flourished and demands reference to its
applications in language teaching.

2- ESP VS GPE

English for Specific Purposes has developed out of
"the notion that the teaching of a language can with
advantage be deliberately matched to the specific needs and
purposes of the learner" (Strevens 1977). It follows that
the crucial word in the label itself is the term 'purpose',
and what underlies the label is the term 'need'. However,
since there are needs and purposes informing all language
learning programmes, in what way is ESP different from GPE?

Traditionally, ESP is "used to refer to the teaching
of English for a clearly utilitarian purpose" (Mackay &
Mountford 1978: 2). In other words, it is used to refer to
situations where English is not learnt as an end in itself,
but as a tool for gaining access to knowledge or performing
an academic or professional/occupational role. On the other
hand, GPE usually relates to the teaching of English in an
educational or broader setting. However, Hutchinson and
Waters maintain that it is not the nature of the learning

purpose as such that defines ESP, but rather the fact that the learner's purpose is made explicit and is, thus, specified:

> ... although it might appear on the surface that the ESP course is characterized by its content (science, medicine, commerce, tourism etc.), this is, in fact only a secondary consequence of the primary matter of being able to readily specify why the learners need English. Put it briefly, it is not so much the nature of the need which distinguishes ESP from the General course but rather the awareness of a need (1987: 53).

Widdowson (1983), on the other hand, tackles the question from a different angle. He argues that what distinguishes ESP from GPE is the way 'purpose' is identified and implemented. In ESP, he observes, 'purpose' is basically a **training** concept. Therefore, a conventional ESP course is a rehearsal of the prospective role which the learner is required to assume in her target situation. By contrast, in GPE, 'purpose' is perceived in educational terms. The learner is supplied with a general language knowledge and is exercised in communicative strategies which would enable her to perform in future undefined situations. The term 'educational' is used by Widdowson as being synonymous with his concept of 'capacity' which, in broad terms, refers to the language user's underlying ability to solve undefined communicative problems.

Furthermore, it is agreed that an ESP course is

different from a GPE course in that the former is "... is based on a rigorous analysis of students' needs and should be 'tailor-made'" (Robinson 1980: 13). However, Hutchinson and Waters advocate a common approach to language teaching based on needs-analysis: "The answers to the analysis will probably be different, but the questions that need to be asked are the same" (1987: 54).

3. SPECIAL LANGUAGES VS ESP

The concept of 'special languages'_ also referred to as 'restricted languages', 'registers', 'superposed variants', 'restricted repertoires' etc._ relates to language variation, within the same speech community, identified according to the type of situation in which the language is put to use.

A special language is said to "[serve] a circumscribed field of experience or action" and is said "to have its own grammar and dictionary" (Firth 1968:87). Hence, the language of advertising, for example, is considered to be different from the language of sports commentary and this, in turn, is said to be different from, say, the language of legal documents, and so forth (cf. Crystal and Davy 1969). The language user, on the other hand, is conceived of as having at her disposal a stock of language varieties, and as being conditioned in her choice by a number of sociolinguistic variables such as the social situation she finds herself in, the professional role she is to assume, and the communicative functions she needs to fulfill.

However, according to this, one might "[have] the image of the language user as somebody going around with bits of language in his head waiting for the appropriate occasion to insert them into the right situational slots" (Widdowson 1984: 239). Such factors, as Widdowson (1984) notes, do not absolutely determine what the learner does; and such an image of the language user denies him his creative ability. Moreover, as Gumperz observes, "[not] all individuals within a speech community have equal control of the entire set of superposed variants"; their mastery of the different registers depends on the degree of their incorporation into the social network of their language group and their social experiences (1972: 226).

However, some special languages are said to be more restricted than others both in use and usage. That is, their use is confined to well-defined contexts and is manifested in limited sets of grammatical patterns and lexical items. This type is defined by Halliday (1989) as "a kind of register in which there is no scope for individuality, or for creativity. The range of possible meanings is fixed" (p. 39). The extreme example that is usually given is the language of 'Air-Traffic Control'. More open varieties, as Halliday (1989) notes, are the languages of legal documents, official forms, verses on greeting cards, recipes, technical instructions, doctor-patient interaction, and so forth.

However, the first steps towards a systematic study

of specialised languages were taken by Firth. The idea of restricted languages occupied much of his thinking towards the end of his life: "There are vocational, technical, and scientific languages set in a matrix of closely determined sections of what may be called the general language" (Firth 1968: 207). It proceeded from his interest in the concept of 'situational context' which says, in rough terms, that language description cannot take place in the abstract, and a text cannot be divorced from the situation in which it occurs: "Whatever bits and pieces of language we choose to study are, or should be, functionally engaged in situational contexts" (Firth 1968: 206).

His situational approach was put into practice when he developed a 'special purpose' Japanese course for the RAF (Royal Air Force) during the Second World War, in which Firth applied "the concept of the limited situational contexts of war" (Firth 1957, cited in Widdowson 1983:29). Moreover, his ideas about restricted languages set down the bedrock for subsequent studies in language variation and what was termed 'register-analysis'.

Like Firth, Halliday and his colleagues (1964) assert that registers are primarily differentiated by their specific combination of formal properties:

> ... the crucial criteria of any given register are to be found in its grammar and lexis. Probably lexical features are the most obvious. ... Often it is not the lexical item alone but the collocation of two or more lexical items that is specific to one register (p. 88).

In addition,their belief that the study of the stylistic features of registers can not be done in abstraction from their respective situational contexts, resulted in a tripartite model for defining registers. According to this model, the formal features of registers are associated with the intersection of three dimensions: 'field', 'mode' and 'style' (later modified by Halliday into 'tenor'). Each dimension represents one aspect of the situation in question and the role played by language in that situation.

'Field of discourse', as defined by Halliday et al (1964), refers to the whole range of activities taking place in a given situation, of which the language activity forms a part. The role played by language can be major or minor; but in either case, the 'field' is mainly realized by the subject-matter of the discourse which could be politics, medicine, domestic affairs etc._ as is further explained by Halliday (1989): "... those meanings that express our experiences of the world around us and inside us; and these reflect the field, the content in the sense of what is going on at the time" (p. 31). 'Mode of discourse' refers to the medium of the language activity: spoken or written. This includes the various modes of speaking (academic lectures, conversations, radio talks, sports commentary, sermons etc) and the different forms of writing including genre-bound texts (journal articles, reports, business letters etc.). Finally,'style' or 'tenor of discourse'

refers to whether the language is polite or colloquial. It reflects the nature of the specific relationship between participants.

However, having developed his notion of 'meaning potential', Halliday has come to view 'register' in terms of semantic units: "A register is a set of meanings that is appropriate to a particular function of language, together with the words and structures which express these meanings" (Halliday 1978: 195). And again: "A register is a semantic concept. It can be defined as a configuration of meanings that is typically associated with a particular situational configuration of field, mode and tenor" (Halliday 1989: 38). The tripartite model is retained but emphasis is given to semantic concepts over linguistic elements. Moreover, the three aspects of the situational context (field, mode and tenor) are given premium as a basis for register analysis over the formal properties of the text which were emphasised in his early work.

This theory of 'special languages' or of 'registers' has played a major role in giving birth to ESP. Yet, it has also been responsible for much of the argument and confusion that has surrounded it.

Halliday et al (1964) advocated that meeting the specialised needs of adult language learners presupposed 'restriction' and 'selection': restricting the language to be taught to the register used in the learner's target

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situation and selecting from within that register the items which occur most frequently and, thus, which would presumably be more useful to the learner. This involves, as they indicated, collecting a large body of texts of the language used in the specialised situation and subjecting it to formal analysis cutting across the three categories of 'field', 'mode' and 'style'.

The belief that has, therefore, been commonly held is that an ESP course should be related to the learner's specialty area and, consequently, that the language to be taught should be specific. ESP would be defined, then, as the teaching/learning of special registers related to particular areas of specialisms or occupations_ which implies, as Draskau (1983) points out, equating ESP with 'registers'. This has been reflected in the nature of the corpus of ESP materials published: English for Medical doctors, English for Mechanical Engineering, English for Businessmen, and so forth.

Such materials aimed at teaching restricted samples of structural and lexical items which recurred frequently in different types of discourse. However, the concept of 'relative frequency', which was drawn from theory of register, was strongly objected to by many linguists and teaching practitioners:

> To say that a particular word in a language is 'more common' than some other words is like saying that the apex of a triangle in geometry is 'more common' than some other angle, or that

> diameters are 'more common' than chords of
> circles. The notion of relative frequency is not
> applicable to items in a language as a system,
> any more than it is in geometry (Corder 1973:
> 210).

Further, as Draskau (1983) argues, since there are no clear-cut boundaries between registers, and since the scale of register differentiation is referred to as a continuum, "[at] what point does density of markers place a text conclusively within ESP?".

According to the theory of register, registers are primarily demarcated by subject-matter or 'field of discourse' as expressed in lexical items and collocations. This means, as Draskau indicates, that even texts with relatively low frequency of secondary markers and with a minimum of highly specialised terminology_ such as popular scientific articles, for example, or instructions for the layman_ might as well be classified as ESP texts, "by virtue of their subject matter and specialized vocabulary".

Moreover, what if the learner's needs for taking the language course step beyond the boundaries of her particular field? Would it be possible, then, to draw a clear demarcation line between ESP and GPE? And does the learner's occupational role manifest itself simply in handling the special register?

As Corder (1973) observes, when we teach a scientist a foreign language, we are preparing her to adopt the role

of "visiting scientist" in the foreign country (p. 47)_ or even to assume the role of 'host scientist' when meeting with foreign scientists in her home country. "The role of scientist goes well beyond the ability to conduct scientific discourse" and "a social role is a cluster of rights and obligations and involves a certain range of behaviour more or less clearly defined depending on the nature of the role in question (Corder 1973: 47).

Further, in the case of teaching English for pilots, Halliday and his colleagues (1964) maintain that "the total range of situations for which language behaviour must be taught is restricted and can be analysed, described and taught as a finite operation" (1964: 202). This assertion seems to run counter to Chomsky's valid definition of language learning as the ability to generate an infinite set of sentences and against the creative nature of language itself.

In this context, it seems relevant to mention Widdowson's distinction between what he calls 'prescriptive' and 'descriptive' languages. The language of 'Air-Traffic Control' is **prescriptive** because it consists of "a closed system of conventionally accepted verbal routines devised for the purpose and subscribed to by international agreement" (1983: 29). In this case, language training would take the form of what Halliday et al call 'a finite operation' which involves conformity between the situational context concerned and the linguistic code needed for

operating within that individual situation: conformity between problem and formula. Whereas, the language of 'Civil Aviation', as Widdowson explains, is **descriptive** in the sense that "it is an account of what people say when they carry out their various flying activities". In a situation as such, no matter how confined the language behaviour is expected to be, "there is always the chance that a situation may occur which has not been accounted for in the description, where a problem may arise for which there is no formula" (Widdowson, ibid). Therefore, as Widdowson aptly remarks, even in situations which demand exact training, learners should be equipped with a potential which enables them to cope with unpredictable situations. An educational component should be incorporated into the ESP programme.

Similarly, Crystal and Davy (1969) question the validity of assuming a one-for-one correlation between linguistic behaviours and situation:

> ...in situation X, feature Y will be highly probable, but one must allow for the possibility of feature Z occurring, other things being equal—for instance, the introduction of informality where on all other occasions one has experienced formality. Situations in which positively only one set of stylistic features is permitted, with no variation allowed ..., are far outnumbered by those situations where alternative sets of features are possible ... (p. 63).

However, dissatisfaction with common practices in ESP programmes has resulted in a redefinition of ESP and in shifting the emphasis away from 'special language' to the

learner's purpose and perceived needs.

The learner's purpose for learning the target language might roughly correspond to the acquisition of a given register, whether 'register' is conceived of in functional or formal terms. A learner may follow an ESP course in order to be trained in the use of special terminology and expressions necessary for communication in her particular area. In an experimental course given to non-native pharmacy students at the University of Maryland, for example, some of the students' professional perecieved needs were to practise the names of 200 most common drugs and to be trained in colloquial expressions used in a pharmacy situation (Graham and Beardsley 1986).

On the other hand, the learner's specific purpose might well fall within the scope of general English. A learner, for example, may take a special course specifically to get herself acquainted with the use of cultural idioms in English, say, because she subsequently wants to conduct a comparative study between the use of idioms in English and their use in her native language. The language of idioms rests within the domain of GPE; yet the course might be classified as an ESP course since the learner's purpose is explicit, well-defined and targeted.

It follows that it is the learner's purpose that is specific, not the language; and Hutchinson and Waters are right to say that it is not the nature of the need that

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defines ESP but the learner's awareness of her needs.

4. TYPES OF ESP

The three major categories which have flourished
within the area of ESP are English for Science and
Technology (EST), English for Occupational Purposes (EOP),
and English for Academic Purposes (EAP). Such a division
is, of course, loose; for there is a great deal of
overlapping among the three types. Figure 1 illustrates the
major types of ESP with their subdivisions.

4.1. ENGLISH FOR SCIENCE AND TECHNOLOGY

English for Science and Technology (EST) relates to
the teaching of English in connection with the learner's
specialized subject which could be nuclear physics,
biochemistry, meteorology, agriculture, engineering,
medicine etc.

EST has acquired a prominent position in ESP due to
the massive development of Western science and technology
which has swept the world, and because of the fact that
English has established itself as the lingua franca of
scientific communication. Consequently, much of the
research into ESP and the subsequent debate provoked around
the issues have taken place in this area, with the result
that the two terms (ESP & EST) are at times considered to be
synonymous. This is expressed by Cruickshank's statement,
"ESP and EST may be used interchangeably, unless exactness
dictates using one instead of the other" (1982: 101). This

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                                              Pre-experience

                        Occupational

               EST                            Post-experience


   ESP

                                              Discipline-based (EAP)

                        Educational             (Pre-study)
                                                 (In-study)
               Others


                                              School-subject
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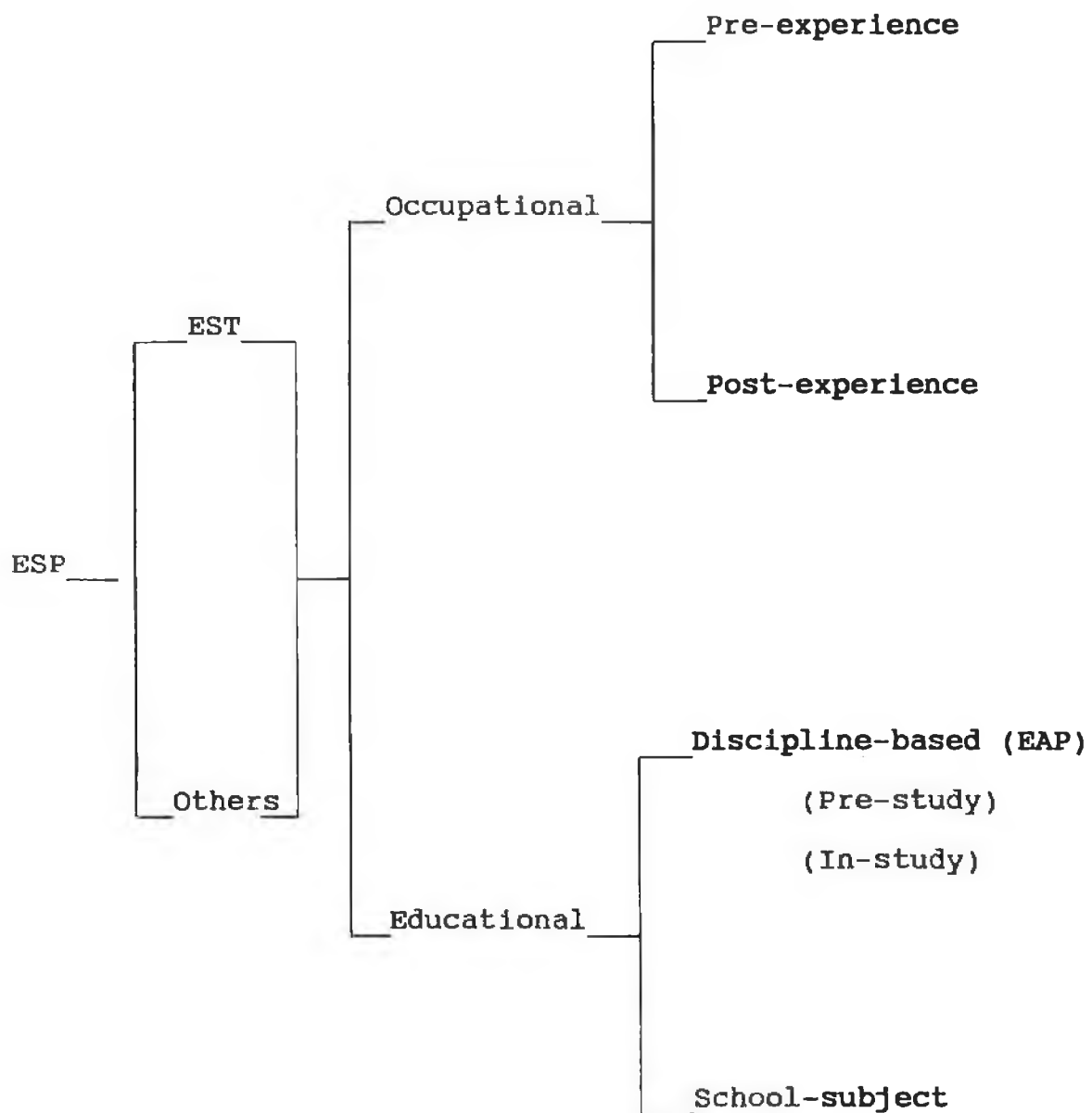
TYPES OF ESP

STREVENS (1977)

Figure 1

once more bears out to the common assumption which equates ESP with the subject-matter and special language of the learner's scientific discipline, overlooking the fact that the scientist learner is a human being whose needs might not fit into the slot.

However, much of the debate that has surrounded EST revolves around whether it exists as an entity of its own apart from general English. If so, what are the special characteristics of EST, and are the differences between EST and GPE great enough to merit detailed study and special teaching materials? At one end of the scale, Corbluth argues:

> It is unlikely that, except in the most general sense, there is any such register as that of scientific prose, and certainly from an English language teaching point of view, such a compendious variety will be too general to have much utility (cited in Hitchcock 1978: 10).

On the other hand, extended studies have been carried out to analyze the language of science and technology and, thus, identify its peculiar features. Early research was informed by the concept of 'relative frequency' and focused on the syntax and lexicon of EST. This can be exemplified by Cowan's "Lexical and syntactic research for the design of EFL reading materials", published in TESOL Quarterly 1974.

Accordingly, EST is said to be characterized_ apart from the highly technical terminology_ by the high frequency

and wide range of sub-technical vocabulary used in texts. As Inman points out:

> ... there is far more to EST than a specialized technical lexicon. To focus on technical vocabulary alone would be to exclude nearly 80 percent of a text! Based on frequency and range of occurrence in authentic scientific and technical texts, it is obviously subtechnical vocabulary which should be focused on in teaching scientific and technical English (1978: 248).

Sub-technical terms are defined by Cowan (1974) as "context independent words which occur with high frequency across disciplines", e.g. isolate, function, process, form, result, structure, system, solution, relation, basis, inference, approximately, and so forth (p. 391).

Syntactically, EST is said to be identified_ apart from the frequent use of passives_ by the high frequency of logical-grammatical connectors (e.g. therefore, however, despite this, etc.), abbreviated relatives, subbordination, conditionals, long compound-nouns (e.g. vacuum furnace control system), expressions of quantity, demonstratives, and so on.

However, interest in the communicative function of language and discourse analysis has given impetus to a different analytical approach to language variation. Concentration on the formal code of EST has given way to the study of scientific and technical rhetoric. This involves examining the intellectual acts which are believed to be

inherent in scientific thinking (eg. deductions, the making of hypotheses, generalizations etc.), and establishing the relationship that exists between such acts and the way scientific discourse is structured.

This theory has provided a revealing insight into the study of scientific genres (ie. particular text types such as reports, abstracts, research papers, journal articles, clinical surveys etc.). The particular physical structuring of such text types (ie. the overall layout of information) and their stylistic variation have come to be viewed in relation to the communicative purposes of the scientist and as an expression of the internal logic that drives discourse. In other words, genre-analysis is no more conceived of in terms of the outward features of the particular text type but rather in terms of 'how the rhetorical acts of science combine to form coherent discourse' (cf. Adams- Smith, in Dudely-Evans (ed.) 1987).

Theory of 'rhetoric' has also shifted the debate in a new direction. The argument now is not whether EST is different from general English, but whether the language of science and technology is a universal phenomenon.

The principal work in the analysis of EST rhetoric has been done by Selinker, Lackstrom, and Trimble in the United States and Widdowson in Britain. Selinker et al (1973) define the term 'rhetoric' with regard to EST as being connected with the structuring of information and

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correlation of concepts, so as to achieve a specific purpose.

In EST the 'conceptual paragraph', they say, constitutes the basic rhetorical unit of discourse. The purpose of the conceptual paragraph would be, for example, to report an experiment, or to present a new hypothesis, etc. To achieve his objective, the scientist makes rhetorical decisions regarding the amount and type of information he needs to present and manner of organization, and employs different rhetorical functions (e.g. definition, classification, description, etc.) and rhetorical devices (e.g. time order, causality, comparison, analogy, contrast, exemplification, etc.) which he incorporates within the framework of the conceptual paragraph. The conceptual paragraph may have a one- to-one correspondence relationship with the physical paragraph (a group of sentences marked on a page of a text by spacing or indentation), or may consist of more than one physical paragraph.

Along these lines, contrastive studies have been done for uncovering the universal processes and rhetorical features that characterize the language of science and technology across cultures e.g. Mage's "Contrastive Discourse Analysis: EST and SST" (1978), Konecni's "Contrastive Analysis of the Rhetoric of Scientific and Technical English and Macedonian" (1978), and Sugimoto's "Contrastive Analysis of English and Japanese Technical

Rhetoric" (1978).

All of the three studies have confirmed that there are striking similarities in how scientific information is structured in EST and their respective languages. Mage, whose study was concerned with contrasting English and Spanish technical rhetoric, states:

> In examining the various functions and uses of language at the discourse level, it appears that these well-ordered sequences of language are connected with certain reasoning processes which are given expression through basic rhetorical patterns of paragraph organization, definition, classification and generalization (p.164).

Sugimoto proposes two glosses for this phenomenon:

> 1) That scientific processes of thinking are independent of any linguistic system; and
>
> 2) That English, as the dominant language of science and technology, has influenced the expression of scientific concepts in other languages (p. 195).

It follows that analysis on the syntactic and lexical level has sought to prove that EST has peculiar characteristics of its own which sets it apart from general English. However, such studies have revealed that the differences between EST and GPE are not as great as have been expected, and that the differences are more of degree than of kind. The teaching movement which was informed by such studies aimed at giving precedence to the stylistic forms which were seen to be more frequent in scientific prose, and which were thought to be subsumed or neglected

in general English textbooks. This involved dealing with the specialist topics of the learner's discipline. On the other hand, analysis on the discourse level has not only emphasized the distinctive nature of EST as opposed to GPE, but the unique nature of scientific discourse across language groups, as well. This is reflected in Widdosown's observation:

> Scientific and technical English is not a variety
> of English text but rather a textualization of a
> variety of discourse which is itself independent
> of any particular language and expressive of a
> universal culture (1979:20).

4.2. ENGLISH FOR OCCUPATIONAL PURPOSES

English for Occupational Purposes (EOP) is applied to situations where a learner needs English in order to get by at work, or as a tool for acquiring a body of professional/vocational skills, or both. For example, a businessman may need English to negotiate contracts with his customers, or to take part in conferences and read journals and, thus, be in touch with the world of business; an air traffic controller needs English to guide aircrafts into, out and between airports; a medical doctor may need English to carry out his profession in an English speaking country, and so forth.

Strevens (1977) makes a distinction between, what he calls, pre- experience and post-experience EOP learners, that is, between learners who are already qualified in their individual job and those who are learning English at the

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time of their training. Perhaps this distinction is relevant when making decisions on the content of the EOP programme. Post-experience EOP learners might need further specialized skills that help them cope with their training course. Moreover, a learner who is already in the job is in a far better position to readily specify his language needs and to participate in forming judgements regarding the content of learning materials than somebody who has not embarked on the job yet.

With reference to EOP, one might need to ask the following: How far has ESP established itself in the area of EOP? How far have developments in ESP, whether in course design or pedagogy, influenced or informed language programmes given in EOP contexts? How far has EOP contributed to the large developments that have taken place in ESP?

Despite the plethora of commercially published materials for technical, business and other professional Englishes, and despite the proliferation of EOP programmes given in various professional situations world-wide, we became aware in the course of our research of the shortage of ESP literature about current EOP practices or which refers to ESP developments in the context of EOP_ when compared to its counterpart EAP. In this context, Davies (1984) observes:

> Under the general heading of ESP a distinction is
> made between the academic and the occupational

areas, and most of the feedback on the running
of ESP programmes in the Arab World comes from
the academic institutions such as the
universities, the British Council ... where the
'educational' aspect of language learning is
acknowledged (p. 273).

Davies (1984) also notes that EOP programmes in the
Arab World "have contributed little to the general fund of
experience in ESP as they have remained somewhat isolated
within their commercial, technical or industrial contexts"
(p. 273). However, what Davies observes of the EOP
situation in the Arab World seems to be also true of EOP
contexts in other parts of the world_ as the shortage of
feedback EOP literature bears witness.

Davies (1984) attributes this to problems and
shortcomings in EOP programmes given in some of the Arab
countries which, as he observes, proceed from insufficient
qualifications of the language teacher, gap in communication
between the language teacher and the technical trainers and
underestimation of the language teacher's role in the
transfer of professional skills.

Perhaps Escorcia (1985), from Colombia, gives the apt
explanation to the case that EAP has been active in research
and innovation and that EOP, by contrast, has been
relatively inefficient. Escorcia (1985) notes that in the
context of EOP:

where needs are immediate and motivation is
strong, teaching is in the hands of traditional
teachers, with little time or any inclination to

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do any research, with characteristic lack of knowledge of the content area they are handling.... In the universities, on the other hand, ... most of the ESP expertise resides, with better-trained teachers and the possibility of obtaining resources for research (p. 229).

4.3. <u>ENGLISH FOR ACADEMIC PURPOSES</u>

As the name indicates, English for Academic Purposes (EAP) refers to English courses offered by Higher Educational institutions to students who need English in their studies. It varies according to whether the student is learning English at the time of her specialisation (in-study) or in order to be admitted to her subject specialism (pre-study) or whether English is taught as a subject on the academic curriculum. Usually study skills form a major component of the EAP course: listening to lectures and taking notes, participating in academic seminars, writing reports and term papers, reading and note-taking, and so on.

However, the orientation in some EAP situations has tended towards an over-emphasis of the teaching and practising of reading skills, and play down or ignore the other skills, oral skills in particular. The development of reading skills has formed a major component of many EAP programmes, and the tendency still persists in many EFL contexts to confine the EAP course to reading-comprehension practice.

Perhaps this trend has developed alongside the concept

of 'specificity' and due to the paramount position which EST has acquired. It is not only the language to be taught which has to be restricted, but also the language skills involved. As Cowan (1974) maintains, "if the sole objective of a person's studying a language is to acquire a good reading knowledge of that language.... then the most efficient course of action might be to put the student through a program where he primarily practices reading" (p. 389). However, this goes against the current communicative approach which emphasises the integration of skills and, as Corder (1973) has pointed out, implies confusing the end with the process (See Chapter on Skills for further elaboration on this point). And since EST is primarily a written form, focus has been placed on reading. The relationship between emphasising the teaching of EST and the emphasis placed on reading is reflected in Hitchcock's remark:

> It would seem that we are now past the time of debating the particular merits of teaching EST. From a very practical point of view, a willing market exists, particularly in EFL situations where the need for solid, compact reading courses is greatest (1978: 48).

Where ESP is taught as an independent subject on the academic curriculum (eg. Syria and Colombia), learning materials utilized are specialty-language based and are built around reading as the major skill to be acquired. However, in both the Syrian and the Colombian situations, problems seem to arise in the ESP learning context itself

(Hakim 1984, Escorcia 1985). In both situations learning problems are said to proceed from a discrepancy between learners' actual needs and needs as perceived by the educational system, which has resulted in low learning motivation. In both cases, where specialized subjects are not instructed in English, learners are revealed not to be aware of the relevancy of the course to their needs.

However, though Hakim (1984), from Syria, touches on the question of need perception discrepancy, she points to the problem as being a student learning problem. What she refers to as being 'Arab students' learning problems', which forms the title of her paper, seems to be a course design problem and a teaching methodology drawback.

Hakim has designed and given ESP courses at the University of Damascus. The language programmes she has designed are narrowly focussed and are essentially based on what she perceives to be "immediate needs" (her emphasis). These immediate academic needs, as she notes, are: a) To be able to read articles and references within one's specialized discipline. b) To be able to speak with specialists (occasional visiting professors eg. in dentistry).

However, what she emphasises as being academically 'immediate needs' are actually false needs, since science subjects are instructed in Arabic and a student can well graduate without having to read a single reference or

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article in English and without having to speak to so-called 'visiting professors'. If a student happens to read an article or a reference in English , it is a personal interest and not an academic demand.

The language programme should have originally been designed to meet the students' individual personal needs for learning the foreign language. It should have proceeded from what the students had actually perceived as needs. For ESP is not so much a question of relevant content as it is a matter of 'recognition' and 'awareness' of a need. Learners cannot be expected to be aware of a need if they feel it does not exist in the first place. Further, a successful teaching methodology would have created interest in the learners by relating the specialty course content to real-life situations, that is, by using authentic materials which would engage learners in authentic learning activities_ rather than relying on a textbook constructed around functional categories such as the one cited by Hakim (1985): Hakim <u>Medical English</u> (1980).

Finally, as far as EAP is concerned, there is a tendency in some educational institutions to offer science- and technical-orientated ESP to overseas students studying Arts and/or Linguistics or advanced General English (Rossiter 1980). The ESP class aims at acquainting Arts and English Language students at the university level with the mode of scientific and technical subjects. The assumption behind this is that non-native teachers of English, who are

in most cases literary orientated and primarily trained in modes of literature, are often called upon in their native countries either to translate or teach technical English. This points to the need to incorporate a scientific or technical element into Arts and Language university curricula directed at non-native students. This might result in a positive attitude towards EST and might mitigate so-called 'ESP teacher difficulties'.

The problem that might arise is how to promote motivation in students who are not scientifically or technically biased. The solution that Rossiter (1980) proposes is to build the ESP course around ecological or environmental topics such as the danger of nuclear technology, pollution, infectious diseases etc. Ecological texts, as Rossiter (1980) explains, are technically orientated, written by experts for intelligent and thinking readers (specialists or non-specialists), and have ramifications in various field areas (Physics, Medicine, Mechanics etc.). An ESP class based on ecology, as Rossiter notes, does not only create motivation in Art and Language students, but might provide 'a springboard' for further study or private reading outside the class.

ESP is also offered at schools either as an independent subject on the curriculum but relevant to the students' core curriculum (eg. Syria and Egypt),or as an integrated subject when English is the medium of instruction of one or more subjects (Strevens 1977). In school ESP

programmes, such as those in Syria, emphasis is also placed on reading, which allows other skills to lag behind, and also on specific structural items within written texts.

In conclusion, This chapter has sought to uncover some of the conventions and principles that underlie the acronym 'ESP' and which have set it apart from General Purpose English. It has especially argued against the common assumption which tends to identify ESP with the specialty subject-matter or technical language of the target area. It is not the content of the course that defines ESP but rather the fact that the content is selected to meet the learner's particular needs and purposes whether these needs relate to the learner's specialism or fall within the area of GPE. It has emphasised the necessity of relating the ESP course to the needs and purposes which actually drive the individual to learn the foreign language or take the particular language course rather than concentrating on the learner's specialist subject-matter.

CHAPTER TWO

ORIENTATIONS IN ESP COURSE

DESIGN

1. INTRODUCTION

The purpose of this chapter is to review the major developments that have taken place in ESP and, thus, point out how the needs of the learner have been perceived and answered in learning materials and classroom work. The major trends that will be touched on in this chapter are: register-analysis, the notional/functional approach, discourse analysis, and the process-oriented approach.

2. REGISTER ANALYSIS AND LEARNING MATERIALS

This trend developed in the mid 60s and early 70s, the golden era of syntactic theory and comparative studies. It also sprang from the contemporary interest at the time in language variation relating to contexts of use and fields of knowledge, which was germinated by Firth and later popularized by Halliday, McIntosh and Strevens (1964), as discussed in the previous chapter.

The conviction behind this orientation was that registers could be differentiated by their stylistic features, that is, in terms of the grammatical and lexical items that frequently occurred in different types of discourse. Its application to ESP courses might best be

exemplified by Ewer and Latorre's <u>A Course in Basic Scientific English</u> (1967) which reflects many of the concerns and practices of that period.

This book emerged from an exhaustive research into the structures and lexis of a large corpus of scientific literature as stated by its authors in the introduction to the book:

> The material incorporated in the course has been selected, for the most part on a frequency basis, from the scrutiny of more than three million words of modern scientific English of both American and British origin. This sample covered ten broad areas of science and technology (physics, chemistry, biology, geology...) and represented the type of literature likely to be consulted by students or graduates of science <u>university textbooks, professional papers and articles, scientific dictionaries and semi-popularizations</u> (emphasis added).

The prevailing conviction at the time was that once the student had mastered the structures and vocabulary of her specialized field, she would automatically be able to put these structures to use and, thus, come to grips with the communication demands of her particular situation. The result was that the traditional structural approach, along with the tenets of the behaviourist learning theory, were applied to a narrow band of linguistic elements. Language units were introduced in linear order, and learning activities were directed towards establishing in the learner automatic habits in the production of language structures.

This is expressed by Ewer and Latorre (1967) in their introduction:

> ...   the   material   included   has,   in   its
> presentation,   been   graded   in   length   and
> complexity.... The approach used throughout the
> book is essentially an oral one, in view of the
> fact that...   oral repetition (in context) is
> the most effective way of fixing material.

The   most common method whereby structural patterns were orally practised was the substitution-table technique. The following example is taken from Ewer and Latorre (1967), Unit 1:

A substitution table: Simple Present Active Affirmatives

1	2	3	4	5	6	7
A scientist A technologist A researcher An investigator		uses employs needs	mathematics complex in- struments imagination		his	
	often			in		work
They Scientists You Researchers		use employ need	statistical methods new appara- tus		their	

The approach adopted by such courses has provoked a

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lot of criticism as it has disappointed learners and parties involved in the teaching operation, alike. It has produced "the learner who drill[ed] beautifully in the classroom, but who remain[ed] essentially inarticulate outside it" (Cook 1978: 106).

The most common criticism that has been levelled against this approach is that the needs of the learner were simply seen as lying within the phraseology and lexicon of the specialized field as represented by the printed text. The question that was simply asked was: 'What are the specialist linguistic elements that the learner needs to have achieved by the end of the course?". Further, though theory of register has focussed emphasis on relating the language to be taught to the learner's specialized situation, the language items that were considered to be common in that situation were extracted and taught extrinsically and discretely. In other words, the interactional nature of context of use, which generates forms, lexis and functions, was ignored both in language selection and language teaching. This has been referred to by Hatch (1978):

> It is not enough to look at input and to look at frequency; the important thing is to look at the corpus as a whole and examine the interactions that take place within conversations to see how that interaction, itself, determines frequency of forms and how it shows language functions evolving (p. 403).

Hatch (1978) continues to say:

In second language learning the basic assumption

has been ... that one first learns how to
manipulate structures, that one gradually
builds up a repertoire of structures and then,
somehow, learns how to put the structures to use
in discourse. We would like to consider the
possibility that just the reverse happens. One
learns how to do conversation, one learns how
to interact verbally, and out of this
interaction syntactic structures are developed
(p. 404).

The approach employed by Ewer and Latorre (1967) has

focused on oral production on the grounds that, as they

note, "the number of English-speaking specialists visiting

non-English-speaking countries to give lecture-cycles or

direct seminars is increasing rapidly" and that "the

widespread failure of students or local specialists to

understand oral scientific English, and to be able to

communicate themselves, is robbing these countries of much

of the value which would otherwise be gained from these

visits". Yet, the literature that was examined for

determining the language to be taught, as quoted earlier,

was confined to written materials. In other words, features

of spoken discourse were not considered.

Moreover, studies in Second Language Acquisition

(SLA) have presented a case against the systematic

presentation of learning materials and the beliefs of

behaviourism. The learner has come to be viewed as a

cognitive apparatus at work rather than as a passive

recipient; and language learning is now conceived of as a

discovery procedure and a process of internalizing rules via

interaction rather than as a process of habit formation

through imitation and repetition. The learner is revealed to have his own internal learning syllabus independent of the input syllabus; with the result that systematicity is perceived as an internal aspect of language learning, as opposed to externally imposed systematicity. This has been explained by Bourke (1988):

> 'Interlanguage' (i.e. learner language) is characterized not by well-formed target-like structures, but by idiosyncratic forms, which are erroneous to the native speaker, yet systematic from the L2 learner's point of view. Clearly, learning a second language cannot be equated with the progressive mastery of a finite and carefully sequenced set of syntactic patterns. It is much more complex. It is a coming to terms with an unfamiliar cognitive system having its own rules and representing reality in its own unique way (p. 7).

Consequently, the term 'chaos' has come to be echoed in language teaching environments as an expression of current disillusionment with the principle of 'systematicity' which has long governed learning materials and teaching efforts. As Hatch (1978) remarks: "The fact that 'chaos is the alternative to orderly systems of grammatical rules should not dismay workers in the field'" (p. 433). The contention that now underpins language teaching is that by being extensively exposed to L2 raw data and by interacting freely in the foreign language, learners will be able to generalize rules and structure their own learning. The belief that is now also commonly held is that there is no such thing as the right teaching/learning method. Each individual learning situation demands that the

teacher make decisions that might be unique to that particular situation.

3. The FUNCTIONAL/NOTIONAL APPROACH

The movement towards functional/notional syllabuses flourished by the mid 70s when sociolinguistic and semantic studies prevailed. It was an expression of the current interest at the time with the question of 'what it meant to be a language user'. Language use was then generally identified as the ability to express meanings through language functions in appropriate communicative contexts (cf. Halliday 1975,1978). This established the belief in language teaching that what the learners wanted to do through language (functions) and what they wanted to convey (meanings or notions) were more important than the mastery of linguistic forms. This was expressed by Wilkins (1977):

> Let us abandon completely the grammatical basis on which we have founded our language teaching, and instead base our language teaching on a systematic presentation of the types of meanings I have been talking about_ either the functional meanings, the uses of language, or ... what might be called the conceptual meanings which are always there in language (p. 6).

The first efforts to construct a syllabus based on the idea of 'functions' and 'notions' were initiated by the Council of Europe's Threshold Level syllabus for English which sought to meet the communicative needs of the adult European learner (cited in Howatt 1984). In the Threshold Level inventory prepared by Wilkins (1972) which he later

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published as <u>Notional Syllabuses</u> (1976), three types of notional categories were differentiated: 1) Semantico-grammatical categories, such as concepts of time, of place, of direction, of quantity etc. 2) Categories of modality such as possibility, necessity, obligation etc. 3) Categories of communicative functions such as expressing opinion, arguing, complaining, asking questions, suggesting, and so forth.

This approach with its emphasis on the communicative needs of the learner, was soon adopted by ESP practitioners for providing rapid training in various specialist fields and for repairing the deficiencies of the previous approach. This led to work in needs analysis and, thus, to an examination of the language functions and/or notions which the learner was expected to handle in his particular area.

An example of ESP materials which were built upon the principle of 'notions' was Bates and Dudely-Evans' <u>Nucleus</u> series (1976). This series consists of a common-core science course plus a number of specific courses for different branches of science and technology, which aim at introducing the learner to the basic concepts related to his particular field. The common-core course, <u>Nucleus: General Science</u>, for example, is built around a number of key scientific concepts: 'properties and shapes', 'location', 'structure', 'measurement', 'proportion', 'quantity', 'cause and effect', 'actions and sequence' etc.

The reason why Bates and Dudely-Evans opted for basing their courses on 'notions' rather than on linguistic or functional items was their belief that the language involved in expressing concepts is transferable to different areas of linguistic use. As Bates (1978) has later explained: "[Concepts] were not tied to any particular unit of language, whether lexical, grammatical or rhetorical.... Nor were our concepts tied to topic: the concept of structure could be applied equally to the cell or the atom. Nor were they restricted to particular language functions..." (p. 90). Further, the interdependent nature of concepts, as Bates (1978) has noted, allowed for a cyclical arrangement of language content, that is, the re-appearance of language items in new contexts of the syllabus.

However, as Howatt (1984) points out, while the idea of 'notions' presented itself as being rather "abstract" for pragmatic use, the idea of 'functions' was more welcomed as a practical means for specifying syllabus content_ despite Wilkins' preference for a notional approach. Wilkins (1977) observes: "On the whole, attention focused much more on what I would call the functional element in language, the element represented by the long list of categories ..., than on the basic concepts which are involved in the sentences of the language". Wilkins continues to say: "If we are fully to revolutionise language teaching ..., we would be adopting what I call a notional approach" (p. 6). The use of 'functions' as a basis for devising syllabuses

was dramatized by Munby's work (1978) out of which there emerged many functional syllabuses for specific purposes such as "English for Biological Science" and "English for Motor Mechanics" (cited in Nunan 1988).

The technique adopted by functional theorists was to specify the communicative events which the learner was expected to get involved in, collapse them into their functional units, and, then, decide on the linguistic forms which realized the functions, based on the previous data. Further, as noted by Wilkins (1977), some functionalist materials producers had assumed the learner's knowledge of given structural patterns, then set out to "functionalise" those patterns, that is, give them functional tokens. In either case, the language functions and the corresponding forms indicative of the functions did not proceed from empirical examination of the language occurred in real situational contexts. This might partially account for Williams' observation (1988), with reference to some functional textbooks that taught business English, that there seems to be no agreement among coursebooks as to which functions or which exponents for the functions to teach (The point raised by Williams (1988) will be returned to in chapter on skills).

The common misconception behind functional syllabuses was that by replacing grammatical labels by communicative ones, the learner's communicative competence would naturally follow. Therefore, instead of syllabuses being

built around structural forms that realized grammatical rules, syllabuses came to be designed around structural patterns that were thought to be appropriate for expressing, say, a request, an opinion, a suggestion etc. The communicative approach as represented by such syllabuses has failed to consider methodology as the major factor in developing the learner's communicative competence. Efforts and innovation, as Howatt (1984) remarks, were confined to setting out principles on which to base syllabuses, whereas, methodology was overlooked. As Howatt maintains: "... communicative teaching is in many ways more dependent on assumptions about method ... than on theories of the syllabus" (op cit.p.288). The methodology that was, therefore, adopted was again a reflection of the principles of the behaviourist learning theory: drills of functional expressions and rehearsal of pre-fabricated dialogues into which such patterns were incorporated for further practice.

It follows that despite the emphasis placed by such syllabuses on language as communication, they fell back on the same track of the previous approach which they were meant to replace. This rendered them subject to the same kind of criticism which was raised against register-based or structural courses.

Register-based and functional/notional syllabuses are now both criticised for being product-oriented and language-based. In other words, they have both aimed at implanting in the mind of the learner ready-made language

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items, whether grammatical or functional. Little attention has been paid to the reasoning processes that underlie language learning and to the coping strategies that aid the learner to make sense of the incoming data or to get his meaning across.

Moreover, studies in SLA have illuminated the distinction made by Wilkins (1976) between two approaches to course design: Synthetic and analytic syllabuses. The synthetic approach is now associated with structuralist and functional courses to the extent that they are built around discrete elements organized in linear or additive fashion (Nunan 1988). The learner's task is to patch these elements together and,thus, build up his communicative competence. The analytic approach, as Howatt (1984) and Nunan (1988) explain, is linked to syllabuses which aim at exposing the learner to large stretches of language where the learner's task is to decompose the input, extract rules and form generalizations about the foreign language in the same way a child learns his mother tongue. A good learning syllabus, Howatt (1984) remarks, is the one which comprises "both synthesis and analysis, but in different proportions depending on the characteristics of the learner" and the learner's educational purposes (p. 153).

Finally, functional/notional ESP programmes have been criticised for placing too much emphasis on the specialised subject-matter and, thus, permitting no room for GPE. As Davis (1977) puts it: "We feed our students on 'pure steak',

and in so doing omit ingredients that will be conducive to general 'language learning vitality'" (p. 70). Further, pre-occupation with course design in the late 70s, as Howatt (1984) remarks, has allowed no time for asking questions like: "Do overseas students really need special-purpose courses?" (p. 284).

4. <u>DISCOURSE ANALYSIS</u>

Theory of discourse represents one version of the functional approach to language teaching developed in the late 70s. The assumption behind this theory is that language use is not limited to the ability to produce grammatical forms or to discretely match forms with functions, but is far more dependent on the ability to handle stretches of language longer than the sentence. As Savignon (1983) remarks: "Discourse competence is concerned not with the interpretation of isolated sentences or utterances but with the connection of a series of sentences or utterances to form a meaningful whole" (p. 38).

ESP has taken the lead in applying concepts of discourse to language teaching, at the same time, much of the literature related to discourse analysis has emerged from ESP efforts; with the result that the two have come to be associated with one another.

Meeting the specialized needs of science students has resulted in voluminous work on the rhetorical structure of EST/EAP discourse, as discussed in the previous chapter. Its

manifestation in ESP teaching materials can best be exemplified by the English in Focus series (1974-1978), the well-known exemplary volume of which is Allen and Widdowson's English in Physical Science (1974). The same orientation is pursued by Widdowson in the Reading and Thinking in English series (1979-1980).

These books derive from the assumption that the communicative needs of EAP learners "cannot be met by a course which simply provides further practice in the composition of sentences, but only by one which develops a knowledge of how sentences are used in the performance of different communicative acts" (Allen & Widdowson 1978: 58). The overall aim is to enable the learner to use the language knowledge he has already learned for interpreting and expressing scientific facts and concepts in written discourse. Therefore, the orientation is towards 'competent performance' (ie. learn how to communicate with the language you have already learnt) rather than towards 'communicative competence' (ie. learning as you communicate (cf. what Howatt 1984 calls the 'weak' and 'strong' approach to communicative language teaching). The users of these courses are, therefore, assumed to have already acquired "considerable dormant competence in the manipulation of the language system" and some basic knowledge of science (Allen & Widdowson 1978: 59).

In Widdowson's books, the structure of EST discourse is conceived of as a realization of the logical procedures

associated with scientific research: defining, describing, generalizing, reporting, and so on. Such rhetorical functions have set the base upon which to construct the learning units. <u>Reading and Thinking in English: Discovering Discourse</u> (1979), for example, is built around the following rhetorical functions: 'generalization', 'description', 'definition', 'classification', and 'hypotheses making'. The specific purpose of this book is to create awareness in the learner of the structure of EST/EAP discourse and to enable the learner to process these functions both receptively and productively in completed passages.

The point that has, in particular, caused controversy about these books is that the reading passages are especially constructed for teaching purposes instead of being authentic. Howatt (1984) argues that "The psycholinguistics of reading would not be greatly disturbed, if at all, by texts especially written for learners (<u>assuming they are well written</u>)" (p. 278 (emphasis added)). Widdowson (1978) maintains that authenticity has more to do with the relationship between reader and text than with materials (This point will be further discussed in chapter on skills). Widdowson (1984) also notes that in reading, "the reader's concern is to derive as much information as he needs from his reading so as to consolidate or change the frames of reference which define his particular conceptual territory" (p. 92).

Now, how far do Widdowson's texts represent the real nature of discourse? Is allowance made for an authentic relationship and natural interaction between reader and text? Is the reader's ideational concern fulfilled? And do these texts contribute to consolidating or modifying the reader's frames of reference?

Allen and Widdowson (1978) explain that the passages are written for two reasons: firstly, in order for avoiding "syntactic complexity and idiosyncratic features of style which would be likely to confuse students"; secondly, in order to "'foreground' features of language which have particular communicative value" (p. 59). It is actually the second reason which represents the main concern of the passages.

It follows that the passages are not written for communicative purposes, that is, they are not meant to feed the reader's conceptual curiosity; they are rather used as exemplifications of rules of use, that is, 'how sentences are used in the performance of acts of communication' (cf. Coulthard 1977: 147- 153). Therefore, they cannot be conceived of as real discourse and cannot be expected to engage the learner in actual reading processes_ unless rules of language use are equated with the 'psycholinguistics' of reading.

The overemphasis placed on the techniques involved in the performance of rhetorical functions has not allowed for

ideational interaction between reader and text out of which, as mentioned earlier in this chapter, the ability to manipulate language functions evolve. Further, focusing on techniques, as Ticko (1981) remarks, is very likely to make students "like cricketers who get to know all about how to handle the bat or to play the ball but have not had opportunities to stretch their muscles in doing so. They are thus theoreticians of cricket rather than dependable users of the bat or the ball" (p. 159).

Moreover, the insertion of comprehension questions and exercises into the reading passages disrupts the natural process of reading. The authenticity of the relationship between reader and text is disturbed by the continuous intrusion of a third party.

Further, it is safe to say, as Coulthard (1977) and Hutchinson and Waters (1987) observe, that the authors of these books have done to discourse what the structuralists have done to the formal language system. In much the same way the language code was broken down into its discrete elements and thus taught, the text is dissected into its discoursal components and likewise taught.

The passages composed for expounding the rhetorical functions to be learnt are relatively short and each passage is made to represent a single function. This seems to be a misrepresentation of the real nature of scientific communication where a number of rhetorical acts are very

likely to occur in the course of discourse.

The learner is introduced to the rhetorical bricks that constitute a text but is exercised in identifying and constructing these bricks in dissociation from one another. The learner is not trained in how to put these bricks together to produce extended coherent discourse; with the result that these courses fall into the category of synthetic syllabuses, along with structural and functional syllabuses.

Moreover, one of the disadvantages of these books, as Coffey (1984) remarks, lies in "an excessive earnestness which led in practice to dullness in the classroom". Coffey (1984) continues to say:

> It was forgotten, in the intense absorption with embodying a very promising theoretical approach in the form of materials, that all ELT materials have the obligation to be palatable and intrinsically interesting to the learner.... There was probably an expectation that the ESP customer was a far more mature and severe-minded person than he actually is (p. 6).

Another influential approach to discourse analysis which has also emerged from ESP teaching situations is represented by Candlin, Bruton, Leather and Woods' projects (1974-1977). These working papers provide a large study on the kind of interaction that takes place in doctor-patient consultations, particularly in casualty departments, and the kind of communicative skills and

strategies involved. The aim is to cater to the language needs of foreign doctors who need English in order to practise their profession in British hospitals.

Like Focus and Reading and Thinking, these materials, as Coulthard (1977) observes, are based on an "explicit theory of discourse". Coulthard points out that these materials "attempt not simply to teach single functions but to show the doctors how to open and close an interview, how to participate in other types of exchange, how to build exchanges into longer sequences, how to manipulate the turn taking system..." (p. 146). In other words, language functions are not conceived of as discrete elements of language that exist independently on their own. They are rather seen as the principal operational tools whereby the language user starts a conversation, sequences it, keeps it going, introduces or announces a new phase in it, arranges turn-taking and concludes it. This can be illustrated by the following analysis of one of the consultations provided by Candlin et al (1981):

> .. the doctor began by greeting the patient and followed on with an **ELICIT** While the patient was responding with general information about the accident the doctor encouraged him with a **GO-ON**. By means of an **INTERROGATIVE** the doctor then initiates another phase in the consultation (p. 109).

Like Widdowson's books, Doctor-Patient Communication Skills (DOPACS) materials are aimed at learners who have some basic knowledge of both their specialty area and the

target language: "they call upon an already existing medical expertise and a good formal knowledge of English structure and vocabulary" (op cit.,p. 106). In other words, the orientation is also towards 'competent performance' (ie. learn how to communicate). Attention is chiefly given to the doctor's ability to handle a consultation most effectively which entails appropriate performance of language functions, verbally or non-verbally, at appropriate stages in discourse.

Competent performance is seen from the viewpoint of both doctor and patient. Emphasis is placed on the doctor's ability to communicate with the patient in the language he understands and in such a manner that the patient is not disturbed or offended. The following example given by Candlin et al (1981) illustrates the point: "Nurse, give this patient anti-tetanus, would you." This utterance is very likely to be produced by a non-native doctor who is not acquainted yet with the different ways of expressing messages in English. It reflects conscious knowledge of the foreign language formal structures and familiarity with the specialized jargon. It fulfills its transactional function from the doctor's standpoint. However, it might act to produce panic in the patient who might be made to assume that she has tetanus and impair the development of good doctor-patient relationship. The same message might be conveyed by a native doctor as follows: "I think we'd better give you a little jab, Mr. Smith, just to be on the safe side" (p. 106). 106).

Unlike Widdowson's courses, the concern being for oral interaction, DOPACS materials are built upon authentic texts actually used in a hospital setting. As Howatt (1984) remarks, in "an interaction oracy model of discourse ... the spontaneous use of spoken language makes the issue of authenticity more acute" (p. 278). Authenticity of language data and learning tasks, as the authors of these materials note, was achieved via observations and audio/video recordings of consultations.

The language functions and their corresponding realizations which form the major body of these courses have not been arrived at on the basis of educated intuition. They are rather the result of empirical and exhaustive study of the language used in consultation contexts. Candlin et al (1981) describe the way whereby such a taxonomy of functions was arrived at. A set of functions was postulated, as they note, on the basis of observations of about fifty consultations, and set out in the form of a checklist. This set was then tested by observing further interviews. If a doctor's utterance expounded any of the functions postulated, a tick was entered against the function. The new emerged set was again tested and revised by observing more interviews, and so on. Here are some of the functions that are revealed to frequently occur in interviews in casualty departments: 'Greet', 'Elicit' (to get broad description of accident eg. 'Can you tell me what happened?'), 'Interrogate' (to probe information relevant to diagnosis eg. 'Do you remember if your whole weight was on

the foot?), 'Question' (to get information during examination eg. 'Does this hurt?'), 'Reassure' (eg. 'Nothing serious here.), and so on (cited in Candlin et al 1981).

Further, these materials are based on a socio-psychological view of teaching language as communication. As Candlin and his colleagues (1981) point out : "The materials concentrate on the complex issues in communication that arise from the contrasting experience and expectations of the local patient and the doctor from overseas" (p. 105). They seek to help the learner develop a clear awareness of the cultural conventions of the new setting in which she needs to perform and bridge the gap between her cultural experience and expectations and the attitudes and expectations of the local patient. This is the function of the modules labelled 'sensitization' which are designed to this end.

The DOPACS materials, as Candlin et al explain, are organized on a modular basis. They are built around three types of modules: 1) The 'Sensitization' modules. These are presented at the outset of the course materials and principally take the form of discussion work. 2) The 'Function' modules. In these modules language functions are dealt with via a variety of exercise types such as illustration, recognition, discussion, drill and practice and simulation exercises. 3) The 'Transmediation' module. The aim of this module is to train the doctor in handling

messages which demand the use of interrelated channels such as the transfer, say, from speaking to writing or vice versa.

The fact that these materials are constructed on a modular basis and employ a variety of learning techniques and exercise typology allows the teacher a high degree of freedom in designing her own course. The teacher is given the freedom to choose from the modules the ones which meet the needs of her particular group of learners and to adjust the materials according to the circumstances of the learning situation. Further, the teacher is allowed the freedom to choose from the wide range of learning activities presented the ones which answer the preferences of and which fit the learning styles of her particular group. This has been pointed out by the producers of the materials (1981):

> A module in the DOPACS materials represents a discrete unit of learning that has been designed in such a way that sections of it can be expanded or shortened or omitted according to the needs of the learner and the situation in which the instruction is taking place. The principle of flexibility in the materials extend over both the range of printed activities and exercises within the module as well as the use of various accompanying media (p. 110).

Candlin and his colleagues (1981) also maintain that "One of the objectives of DOPACS course is to allow individual students to adopt their own speed of learning and learning strategies" (p.121). This implies that these materials recognize the variation that might occur in

language learning, in terms of both product needs and the learning skills and strategies.

5. THE PROCESS-ORIENTED APPROACH

More recently ideas derived from studies in SLA, from theory of education and from psychology, particularly work on cognitive styles, have brought about a new approach to syllabus design, namely, process- based syllabuses. This type of syllabus, as opposed to language- or product-based syllabuses, represents a shift of interest in ELT away from pre-occupation with the rigorous analysis of the language to be taught in favour of greater attention to the learning process, learner's learning variables and the classroom learning/teaching behavioural patterns. This implies that the teaching/learning methodology is brought to the foreground and has become a major concern of syllabus design. The language course is now more viewed as a means for activating and facilitating learning than as a formal statement of content. This has been expressed by Widdowson (1981):

> ...the language content of the course is selected not because it is representative of what the learner will have to deal with after the course is over but because it is likely to activate strategies for learning while the course is in progress' (p. 5).

Similarly, Breen (1987) remarks: "A crucial function of a syllabus is to facilitate the learning of new knowledge and capabilities" by the organization of the syllabus (p. 159).

Further, the process-oriented approach perceives language learning and course design from an educational perspective. White (1988) notes that learning, like education, is "a discovery procedure" and is "concerned with unexpected rather than predicted outcomes" (pp. 4-5). Widdowson (1983) likewise observes that ESP programmes should accommodate an educational element, that is, equip the learner with the 'capacity' to perform in novel situations.

5.1. TASK-BASED SYLLABUSES

Although most syllabuses are now informed, to a greater or lesser extent, by the pedagogic and psycholinguistic principles of the new trend, the process-oriented approach has most eloquently realized itself through task-based syllabuses.

Task-based syllabuses, as Breen (1987) notes, are concerned with "how a learner may engage his or her communicative competence in undertaking a range of tasks" and "how learners may develop this competence through learning; a concern with how to learn alongside a concern with how to communicate" (p. 160). Prabhu (1987) observes:

> Task-based teaching operates with the concept
> that, while the conscious mind is working out
> some of the meaning-content, a subconscious
> part of the mind perceives, abstracts, or
> acquires (or recreates, as a cognitive
> structure) some of the linguistic structuring
> embodied in those entities, as a step in the
> development of an internal system of rules. The
> intensive exposure caused by an effort to work

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out meaning-content is thus a condition which is favourable to the subconscious abstraction_ or cognitive formation_ of language structure (p. 70).

Task-based syllabuses, as Breen (1987) further glosses, are based on a view of communicative competence as "a unified system". They focus "upon communicative knowledge as a unity of text, interpersonal behaviour and ideation" (p. 161). In other words, the undertaking of tasks involves the learner's linguistic knowledge, underlying knowledge of appropriacy (interpersonal knowledge), and ideational knowledge, that is, the ability to interpret and express meanings and ideas.

Within the task-based syllabus type, there evolved two major projects: The Bangalore project of N.S. Prabhu and his colleagues in Southern India (Prabhu 1987) and the project of the 'ELC', King Abdul Azees University (KAAU) in Jeddah (Harper 1986). However, these two projects, in a sense, represent opposite poles of a spectrum.

In the former, as Nunan (1988) remarks, "... the focus is exclusively on learning processes and there is little attempt to relate these processes to outcomes" (p. 44). Focus is placed on the procedural activities to be carried out in the classroom and on how the language is learnt, paying little attention to what the foreign language will be needed for. Despite the fact that this programme was initially aimed at young learners in primary and secondary schools, still the activities employed for

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producing learning could have, somehow, been related to real-world social needs. In other words, as far as course design is concerned, a reconciliation between the product and the process will have to be made, that is, a marriage between the 'what' and the 'how' needs. Brumfit (1985) warns against constructing syllabuses solely in terms of learning procedural activities:

> People, when asked what they believe in, do not answer 'activity' without reference to what the activity is for. They believe in political, social, religious ideas; they wish to create things, to understand things, to improve their own and others' behaviour. Unless language teaching can relate itself to some of these goals it condemns itself to marginality, in any culture. In broad terms, we may be able to specify such goals by asking what group a learner of English is making a bid to join: what does it mean to be a speaker of English in country X (p. 156).

Similarly, Hutchinson and Waters (1987) note:

> Learning is not just a mental process, it is a process of negotiation between individuals and societies.... The learners will certainly determine their own route to the target and the speed at which they will travel the route, but that does not make the target unimportant (p. 72).

The latter project, by contrast, which is located within the area of ESP have emerged from a 'severe' situational needs analysis. The courses of the 'ELC' programme are tightly tailored to meet the immediate specialized needs of students at KAAU. The programme is founded on the assumption that "the acquisition of the requisite language goes hand in hand with the assimilation of the subject matter" (p. 8). Thus a match is established

between the learner's specialized study and the language learning operation. The language syllabus is tuned "in content and timing to specific areas of the science syllabus" (p. 71).

The selection of the course tasks is preceded by a specification of behavioural objectives such as the ability to ask and answer questions, to follow lectures, to participate in laboratory work, and so on. The structure of these objectives is viewed to be made up of three aspects: conceptual, linguistic and physical. The conceptual aspect demands an understanding of the specialty subject matter. The linguistic aspect proceeds from the content, that is, it refers to the language items which actualize the concepts. The physical aspect states whether students will use the language in the science lab., in a lecture or in the library; or whether the language is used in print or orally (ie. channel of communication).

The selection of tasks is based on two inter-related criteria: 1) Authenticity of content and language. Learning tasks are authentic insofar as they reflect the concepts and systemic language of the scientific discipline. Systemic language is the language that is "common to all expositions of a particular topic" regardless of idiosyncratic uses of the science language. 2) Tasks should by definition reflect the structure of the terminal objectives with its three aspects: the conceptual, the linguistic and the physical aspects (Wilson, in Harper 1986).

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The learning theory that underlies these courses proceeds from the principle of 'learning by doing', that is, "the more one does something, the better one gets at doing it" (Wilson, op cit.:8). Though this sounds very behaviourist, what is actually meant is engaging the learner in performing tasks, as opposed to explicit and direct teaching (ie. conventional language teaching). It is also based on the belief that students learn by producing more than by receiving: "one way of ensuring a high ratio of productive to receptive tasks is to set students problems to solve" (Harper 1986: 112). This runs counter to the principles of the Bangalore project: "the best preparation for production is continual comprehension" (Prahbu 1987: 80). Prahbu also notes:

> Production involves a display of language and therefore causes a sense of insecurity. One can afford to fumble, backtrack, or to try out different possibilities in comprehension without revealing one's incompetence or losing face ... Learners therefore need a relatively high level of linguistic competence ... to engage in production (p. 79).

The criticism that has commonly been put against the 'ELC' syllabus type is that it allows for a "poor degree of transference of performance to areas outside the task, particularly to social English" (Coffey 1984: 7). This is due, as Coffey notes, to the fact that the student is supplied with the exact amount of language knowledge that merely prepares him to perform his specialized tasks.

The strict limitation of the language to be taught to the learner's immediate specialized needs has proceeded from the course designers' assumption that "learning English for its own sake is clearly no part of the student's educational purpose" (p. 8). However, the programme producers do not state on what grounds they have based their assumption, unless the concept of 'education' is meant to be synonymous with the learner's 'academic study'.

Perhaps one of the major drawback of the 'ELC' programme lies in the type of tasks employed for producing learning. The problem-solving activities used are basically of the 'convergent' kind wherein only one correct solution is perceived by the student, rather than being 'divergent', that is, allowing for different solutions and different approaches (the distinction between 'convergent' and 'divergent' tasks will be further discussed in section on cognitive style below). The following are examples of the type of tasks employed (Harper 1986):

_ 'Is salt insoluble?'

_ 'The symbol for ____ is Br.'

_ 'Where do you find organelles?'

_ 'What is the partial pressure of oxygen in the blood entering the pulmonary capillaries?'

Such tasks demand definite responses; with the result that The learner is not permitted to use the foreign language freely and creatively, but rather in a very

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controlled manner. The type of tasks adopted is a replication of the intellectual structures associated with the specialized field of study and, therefore, do not allow for adequate interactional exposure to the foreign language_ contrary to the Bangalore project in which the learner is allowed ample opportunities to manipulate his learning strategies and make free use of the foreign language input.

The criteria set for the selection of tasks are very much goal-oriented; while the learner and the psychological aspects of learning are hardly considered. Compare the criteria devised by the architects of the 'ELC' project, mentioned above, with the following offered by Candlin for judging the worth of learning tasks:

_ Draw objectives from the communicative needs of learners.
_ Promote attention to meaning, purpose, negotiation.
_ Allow for flexible approaches to tasks, offering different routes, media, modes of participation, procedures.
_ Allow for different solutions depending on the skills and strategies drawn on by learners.
_ Involve learners' contribution, attitudes, and affects.
_ Heighten learners' consciousness of the process and encourage reflection (ie. to sensitize learners to the learning process in which they are participating.

(Cited in Nunan 1988)

It follows that by modelling the language syllabus on

the science syllabus and, thus, equating the psychological processes involved in language learning with those associated with the specialized situation, the 'ELC' programme is reduced to a product-based syllabus of the most rigid kind.

5.2. COGNITIVE STYLES AND COURSE DESIGN

There has been a tendency in ESP to build the ESP course in terms of the cognitive styles and intellectual structures associated with the specialized discipline. This is reflected by the type of tasks used in the 'ELC' project and has been suggested by Widdowson (1981):

> ... this facilitating language will often correspond quite closely in some respects to that of the special purpose because of the likely correspondence between what the learners need the language for and the ways in which they will acquire it (p. 5).

Widdowson continues to say that "There is some evidence to suggest that ... there is a correspondence between disciplines and cognitive styles" (p. 7). The implication is that students learning English for specialized purposes adopt different styles from those learning English for general or literary purposes; and that to facilitate language learning in an ESP context, it would be useful for course designers to draw on the intellectual behaviours in which students engage in in their particular field. Widdowson rests his argument on concepts derived from work on the issue of cognitive styles such as the research

done by Hudson (1974) and some other works. What follows, therefore, seeks to explore some studies done on cognitive styles and, thus, question the suggestion offered by Widdowson.

Hudson (1974) makes a distinction between two styles of reasoning: the 'converger' and the 'diverger'. The person who is a 'converger', as Hudson explains, is the one who is substantially better at intelligent tests than he is at open-ended tests. In an intelligent test, Hudson glosses, the person is set a task in which he is required to find the correct answer, and he is usually provided with a list of alternatives. "His reasoning is said to 'converge on' to the right answer." The following question types are given by Hudson as examples of intelligent questions (IQ):

- 'Brick is to house as plank is to orange, grass, egg, boat, ostrich.'
- 'Which number is missing from this series? ...1, 2, 4,__, 16.'
- 'Which of the following words has the same meaning as the word on the left? Correct ... neat, fair, right, poor, good.'

The 'diverger', on the other hand, is the person who flourishes on open-ended tests which convergers are believed to dislike. In an open-ended test, the individual is "invited to 'diverge', to think fluently and tangentially, without having to examine any particular line of reasoning

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in detail". As an example, Hudson provides the following question type along with two sets of answers. The first set (A) is produced by a young modern linguist; while the second (B) is written by a young physical scientist:

'How many uses can you think of a brick?'

A_ (Brick) to break windows for robbery, to determine depth of wells, to use as ammunition, as pendulum, to practise carving, wall building, to demonstrate Archimides' Principle, as part of abstract sculpture, cosh, ballast, weight for dropping things in river, etc., as a hammer, keep door open, footwiper, use as rubble for path filling, chock, weight on scale, to prop up wobbly table, paper weight, as firehearth, to block up rabbit hole.
B_ (Brick) For building. For throwing through window.

Hudson observes that a question such as that on 'the uses of objects' is expected, on the face of it, to be favoured by individuals with practical interests such as physical scientists, engineers, mathematicians etc. However, on the test, impractical individuals such as historians, arts men and modern linguists performed much better. Hudson accounts for this on the grounds that arts men are free to use their imagination just because they are not committed to being practical; while the scientist's commitment to practical action confines his thinking to the right and most prosaic uses of objects. Hudson also points out that it is not the verbal nature of open-ended tests,

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as opposed to numerical and diagrammatical activities, that puts convergers off, but rather the fact that they are open-ended.

Witkin, Moore, Goodenough and Cox (1977) have, by the same token, recognized two types of learners in terms of their mode of perception: **field-independent** and **field-dependent** people. Their research has sought to identify "the extent to which the person perceives part of a field as discrete from the surrounding field as a whole, rather than embeded in the field; or the extent to which the organization of the prevailing field determines perception of its components", that is, "the extent to which the person perceives analytically" (p. 7). A relatively field-independent individual, Witkin and his colleagues note, is "likely to overcome the organization of the field, or to restructure it, when presented with a field having a dominant organization" and is "likely to impose structure spontaneously on stimulus material which lacks it". On the other hand, a relatively field-dependent person, they note, "tends to adhere to the organization of the field as given" (p. 9). The individual's tendency to structure things, they observe, equally applies to perceptual materials, that is, when a stimulus configuration is involved, as well as to the processing of verbal information (pp. 9-10).

Field-dependent learners, Witkin and his colleagues note, are at a disadvantage when the learning task calls for structuring or when the learning materials presented are not

clearly organized or structured. They are also said to attend more to messages with social content and, therefore, are better at learning materials which are socially or culturally orientated. Their learning is also said to increase when reinforcement is introduced in terms of praise or reward. By contrast, the performance of field-independent learners is said not to significantly be affected when the information presented is lacking in structure because of their ability to provide structuring rules of their own to facilitate their learning. They are said to be more interested in the abstract and the theoretical than in social subjects. Their performance is also said not to be affected by reinforcements because they are more inclined to adhere to self-defined goals and reinforcements.

Witkin and his colleagues (1977) further observe that people's educational and vocational choices are influenced by their modes of perception. Field-independent persons are believed to favour such domains as sciences, mathematics, engineering, architecture etc; while field-dependent people are believed to be more orientated towards such subjects as sociology, humanities, languages, social work, education, and so forth.

However, though studies on cognitive styles provide language teaching, and teaching in general, with some profitable insights, the inferences that one might draw from such studies, as Hudson (1974) notes, are "bound to be

guarded" (p. 67). Further, identifying the learner's individual cognitive strategies, as implied by Widdowson, with the intellectual skills associated with the academic field might be harmful to the learner. For the question as to whether cognitive styles are discipline-dependent or discipline-free or as to whether there is a correspondence between one's cognitive style and one's field of study is still surrounded with uncertainty. The dubious nature of this issue is articulated by the differences in opinions and findings among psychologists.

Some psychologists seem to adhere to the belief that cognitive styles are the result of the assimilation of the intellectual habits involved in field of study. This view is expressed by Hacker (1984):

> ... the profiles of abilities which science pupils will ultimately develop must reflect closely the profiles of abilities which they are able to practice in the classroom.... intellectual growth in science is largely determined by the opportunities provided in the classroom for pupils to practise the intellectual skills commonly associated with science and scientific inquiry" (pp. 140-1).

Hudson (1974), on the other hand, argues that intellectual bents and skills exist prior to academic specialization and are not merely "by-products" of it (p. 32). With reference to his distinction between 'divergers' and 'convergers', Hudson notes that "few are so biased academically, and even fewer reflected their biases so neatly in their test scores" (p. 36). He further remarks

that a successful scientist has developed convergent and divergent skills. Witkin et al (1977), likewise, hold the view that students' academic choices are the result of their intellectual biases and not vice versa. They further draw attention to the fact that there are other factors involved in determining people's academic or vocational choices other than their intellectual aptitudes. "Sex-role assignment", they note, "may override the effects of cognitive style" on academic or career choices (p. 51). This implies that it is very likely for a male student who is field dependent to choose to study, say, Engineering instead of, say, Social Work or Education because of some social values regarding male-role assignment. Further, Dewey has long observed that "... certain social aims, meanings, values incarnate in the mature experience of the adult" and that "The educative process is the due interaction of these forces" (cited in Hacker 1984: 138). The implication offered by Dewey is that the development of cognitive attributes is influenced by a number of heterogeneous social factors which need to be taken account of when considering learning styles and teaching methods.

It follows that most psychologists, though rather tentatively, are more inclined to believe that the student's cognitive style is independent of field of study and is not identical with the intellectual structures of the specialty field. The common sense belief is that there is no clear-cut line that can easily be drawn between two people of different cognitive styles. Cognitive styles are not

seen as 'abilities' but rather as 'tendencies' which are articulated in varying degrees of strength (Witkin et al 1977 and Hudson 1974). In this respect, it is worth mentioning that there are some successful scientists who at the same time enjoy a vivid poetical imagination; and that there are well-known men of letters (eg. writers of detective stories) who reveal strong intellectual bents and skills usually associated with scientists.

In the ESP sphere, van Naerssen and Kaplan (1986) argue that Widdowson's suggestion "must be approached with caution". They further note:

> A physical phenomenon may be studied by scientists from a variety of backgrounds with the same basic result, but the individual scientist may approach the problem very differently .... These differences may be the results of varying ways of thinking, which are in turn largely shaped by cultural phenomena including educational, political, and philosophical systems, etc. (p. 94).

Flowerdew (1986) calls attention to the fact that in some countries in the Middle East, students are streamed right from secondary schools into science and arts classes according to their overall performance in all subjects, and not necessarily in terms of their intellectual bents. Add to this that in these countries the student's choice of his academic discipline is in many cases a function of social values than of cognitive aptitude. Thus, as Flowerdew observes, "it is clear that it would be dangerous to characterize students of science as having any sort of

universal cognitive bias" (p. 126).

Refuting Widdowson's proposition for adopting a process-oriented approach in terms of the intellectual processes of the specialized field, Flowerdew (1986) notes, "Instead of taking the cognitive style associated with successful language learning as a starting point for course design, [Widdowson] suggests we take the cognitive style associated with the particular purpose for which the language is being learned" (p. 122). Flowerdew presents a list summarizing the characteristics of so-called 'good-language learner' proposed by Rubin (1975):

_ He or she is a willing and accurate guesser; and is comfortable with uncertainty.
_ He or she has a strong drive to communicate, or to learn from communication; and may use circumstances, paraphrase, gestures, cognates, create new words.
_ He or she is willing to make mistakes and live with a certain amount of vagueness.
_ He or she tries to distinguish relevant from irrelevant clues.
_ He or she will seek out opportunities to use the language.
_ He or she is always processing information whether or not being called on to perform.
_ He or she goes beyond surface forms and considers social factors to get at meaning.

Flowerdew points out that each of these attributes

points to a learner who is a 'diverger' rather than a 'converger' in the sense that they involve open-ended and creative performance. Flowerdew further remarks:

> If effective language learning, therefore, is associated with divergent activity, it is difficult to see how a language course emphasizing convergent activity, as Widdowson suggests, say for physical scientists, can be successful. It might be more fruitful, it could be well argued, to try to develop in the convergers more divergent ways of thinking and learning (p. 123).

Flowerdew continues to say:

> ... the development of weaker cognitive styles, would seem to be all the more desirable if ESP is to be seen to be part of the overall educational process as opposed to simple training, something for which Widdowson (1983) has argued (p. 124).

Witkin and his colleagues (1977), likewise, emphasise the role of education in diversifying the learner's cognitive behaviours: "for the educator, the development of greater diversity in behaviours within individuals seems as important an objective as the recognition and the utilization of diversity among individuals". They further note: "It is not difficult to see the benefit to some domains, such as medicine, in having in them more persons with both analytical/structuring competence and a social orientation" (p. 53).

It follows that, from a language teaching point of view, Widdowson's suggestion falls into doubt and disfavour. Further, encouraging and aiding the ESP learner to move

outside the channel of his cognitive orientation is advisable from the standpoint of both language teaching and education.

However, it is noteworthy that while ESP course design will have to be informed by what has now come to be known as the attributes of good language learners and the strategies such learners employ, the course designer will have to take the learner's own attributes, what the learner believes to be most conducive to his language learning and what he can be persuaded to do in the classroom situation, as a point of departure. For the question of 'cognitive style', as Witkin and his colleagues (1977) remark, is "a feature of personality, and not alone of cognition in the narrow sense" (p. 15). It is not simply a matter of being orientated towards structuring or unstructuring, or towards convergent other than divergent activities, but also a matter of ideational and affective variables which contribute to the cognitive-make-up of the individual. This manifests itself in the students' preferred learning modes and attitudes towards classroom activities and learning materials. A person, for example, who feels insecure to perform productively in the classroom situation because of some affective factors, might have developed a receptive learning mode and might be more orientated towards individualized learning activities. His learning mode will have to be considered and catered for. Yet, this does not imply that the learner is not to be helped to expand the scope of his learning behaviours.

In conclusion, constructing syllabuses on the basis of an analysis of the cognitive structures associated with the specialized field might yield syllabuses not largely different from those produced by Munby's model (1978): narrowly-focused and goal-oriented syllabuses rather than learner- or learning-centered syllabuses.

5.3. THE TEACHER-LEARNER ROLE WITHIN PROCESS-ORIENTED PROGRAMMES

In process-based syllabuses, as mentioned above, the teaching-learning methodology has become a function of syllabus design and is given premium over specification of content. Activating the learner's cognitive strategies and ensuring optimal learner involvement in the teaching-learning situation have become a major pre-occupation for the syllabus designer. This has resulted in a review of teaching-learning routines and, therefore, in a redefinition of teacher-learner role. The process-oriented approach has brought about fresh roles for both teacher and learner. A new role implies different demands, new responsibilities and, thus, readjustment.

Moreover, bridging the gap between methodology and course design has called for the integration of 'theory' and 'practice'. In other words, the teacher's task is no more confined to the fulfillment of classroom pedagogic techniques but is extended to involve knowledge of language theories and syllabus design research. The teacher has become very much involved in syllabus design processes after

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having long been kept distant by the expert linguist.

Traditionally, the teacher's perception of his task has been limited to the classroom situation wherein he exercises a preponderent role. The teacher has perceived his role in terms of conveying the linguistic knowledge presented in the assigned coursebook; correcting students' faulty pronunciation; and controlling, directing and imposing discipline on students. The learner's role, on the other hand, has been confined to absorbing the information conveyed to him; and to listening, mimicking, drilling, memorizing, copying etc. The learner is seen as an empty vessel or a "receptacle" which needs to be filled by the teacher. As Freire (1970) notes: "The more completely he fills the receptacles, the better a teacher he is. The more meekly the receptacles permit themselves to be filled, the better students they are" (p. 58).

The teaching-learning situation is conventionally seen as a one-way process and is marked by a high level of social distance and lack of established dialogue between teacher and learner. Traditional classroom-routines are aptly described by Freire (1970):

> ... the teacher teaches and the students are taught; ... the teacher knows everything and the students know nothing;... the teacher thinks and the students are thought about; ... the teacher disciplines and the students are disciplined; ... the teacher acts and the students have the illusion of acting through the action of the teacher; ... the teacher is the subject of the learning process, while the pupils are mere objects (p. 59).

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However, the propositions offered by the process-oriented movement have acted to liberate both teacher and learner. The teaching-learning syllabus is not externally pre-selected but arises from the joint efforts of teacher and learning group. It springs from the learning situation itself and from the on-going teacher-learner dialogue. Liberation implies ejecting the conventionally-established image of teacher-learner role and replacing it by responsibility and communication (Freire 1970). It implies taking on new roles and new attitudes.

The process-oriented approach, as Breen (1987) notes, "involves teacher and learners in a cycle of decision-making through which their own preferred ways of working, their own on-going content syllabus, and their choices of appropriate activities and tasks are realized in the classroom" (p. 167). It is motivated, as Breen explains, by the assumption that "the teacher and the different learners will all have particular and varying views as to what might constitute the most appropriate content for learning", that "learners' views will change as learning progresses and as they uncover aspects of the new language and its use during their work", and that "particular problems and difficulties which learners may discover can not be planned for in advance" (p. 168). Taking into account heterogeneity, variability and unpredictability of needs, the language syllabus becomes the function of continuous teacher-learner negotiation. The resultant

classroom programme is "a synthesis of external and internal syllabuses", that is, it provides for the learner's external real-world needs and process-learning needs (Breen, op cit.). It is a synthesis of the 'how' and 'what' needs.

The process-oriented approach has developed alongside, or perhaps has acted to generate or foster, such concepts as the 'catalyst' teacher and 'autonomy' in language learning. Such concepts have proceeded from the focus placed on the teacher's role in activating and speeding up the learner's learning processes and on the learner's individual learning modes.

The 'catalyst' teacher is seen to negotiate with her students most of the issues concerning the teaching-learning activities, encourage fresh ideas, praise, activate and adapt to emergent requirements. She views the teaching-learning operation as a joint venture and authority is, therefore, distributed among the learning group (Chamberlain 1985).

The term 'autonomy' in language learning refers to the students' ability to take charge of her own learning and decide on most of the aspects of the learning operation, using the teacher as an advisor/consultant. According to this approach, Dam (1985) notes that the individual learner or the learning group together:

_ Independently sets down aims for a given period of teaching/learning.

_ Independently chooses materials, procedures and forms of evaluation.

_ Independently takes over responsibility of judging whether the aims have been achieved and what further to do.

The principle of 'autonomy' has most been realized in self-directed learning programmes which now form a valuable component of many ESP programmes. It has been revealed to be significant to ESP contexts in which individual needs are clearly articulated_ especially in situations where the needs of the learning group are not fully homogeneous.

Though process-oriented tendencies have aimed at emphasising the centrality of the learner's role in the teaching-learning operation and at liberating both teacher and learner, the teacher's role has become more complex and, perhaps, more challenging. As far as ESP is concerned, the teacher is now required to take on some or all of the following tasks (cf. McDonough 1984: Chapter 8):

_ Acquaint herself with approaches to needs analysis and with syllabus design procedures.

_ Establish communication with the learner's utilizing institution or subject tutors and observe target situation in order for obtaining raw information on the learner and his needs. This implies that the teacher is required to step outside the four walls of the classroom.

_ Devise questionnaires for obtaining data on the needs of the learner.

_ Interview learners for eliciting further information on their needs and preferences.

_ Be willing and ready to cope with individual needs and individual learning styles.

_ Select and adapt from the available materials those which match up with her particular learning situation and with the the students' expectations and preferences.

_ Produce tailor-made materials to meet particular needs.

_ Encourage students to develop learner initiative and aid them to change their image of traditional teacher-learner role.

_ Train learners in new learning habits.

_ Prepare learners for self-directed learning. This entails, as Blue (1981) points out,psychological and methodological preparation. Psychological preparation involves training students to be self-dependent. It requires encouraging learners to specify their learning objectives, diagnose their language problems and work out solutions (op cit.). Methodological preparation, on the other hand, involves discussing with the students the kind of tasks they can perform and their usefulness, showing them what language materials are available and are open for self-access, and helping them to evaluate their own work and their learning techniques (op cit.).

_ In order for the ESP teacher to function as a 'catalyst' and to establish intelligent and meaningful communication with the learning group, she will have to draw upon the learners' conceptual knowledge and experiences. This entails acquainting herself with the essential concepts

and common aspects of the learner's professional or study area.

It follows from what precedes that the most productive innovation in language teaching has been brought about by the process-oriented movement. While previous approaches have been pre-occupied with setting up language principles upon which to base coursebooks, the process-oriented approach has pushed the revolution right to the learning situation itself, to the heart of the matter.

As it has focused on the psychological aspects of the learning process and, thus, on the classroom behavioural patterns, the barrier that has long existed between teacher and learner has begun to collapse and the classroom learning syllabus has come to be produced and run jointly by its own consumers, the teacher and the learner; with the result that the classroom programme has become an expression of the students' actual needs and a fulfillment of their cognitive and emotive variables.

The teacher-learner involvement in syllabus design processes will have a substantial bearing on the learning process itself. The teacher's involvement in syllabus design procedures is very likely to influence her attitude towards the learner's specialized area. As the teacher becomes more engaged in communication with the learners regarding their particular needs and with subject tutors or sponsors, in observation of target situation, and in selection of

specialized learning materials, she is very likely to develop genuine interest in and appreciation of the learner's specialized knowledge and activities. On the other hand, the learner's active participation in making decisions regarding the classroom-work syllabus will act to enhance his motivation and his involvement in the teaching-learning procedures.

Finally, though we seem to have dwelt on the disadvantages of the previous approaches, this does not imply that the teacher will not sometimes draw upon those syllabus types for meeting particular needs and answering certain language problems.

CHAPTER THREE

NEEDS ANALYSIS AND COURSE

DESIGN

1. <u>INTRODUCTION</u>

Perhaps the basis of a sound approach to course design is to start with a profile of the needs of the learner, so as to fit what is taught to what is needed. ESP, however, has an advantage over GPE, as referred to in Chapter One, in that it brought into focus the concept of 'needs analysis'. As Escorcia (1985) notes:

> In the context of ESP, needs analysis has become the dynamic impulse underlying course design, the justification for the S and the P, the driving force that has motivated teachers and course designers throughout the world ever since the magic acronym ESP came in (p. 53).

And as Hutchinson and Waters (1987) maintain: "This is one way in which ESP procedures can have a useful effect on General English" (p. 53).

The process of needs analysis might involve considering the following: who the learners are, what their proficiency level is, what they can already do in the requisite language, what they need the foreign language for, in what situations are they required to operate, what roles are they expected to adopt, what communicative activities

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they will be most engaged in, how far they are familiar with their specialized subject area, how far they are motivated, what teaching modes suit them best, and so on. Finally, decisions are made as to what type of tasks would most effectively address the learners' aims, fit their learning styles and sustain interest and motivation.

However, needs analysis has often been associated with the notion of 'learner-centredness'. As Prabhu (1985) points out, needs analysis is one form in which the concept of 'learner-centred' has been expressed, and ESP is one of the major factors responsible for the establishment of this concept. According to Prahbu (1985), "learner-centred approaches are those which justify themselves essentially in terms of a concern for the learner.... One form in which this is often expressed is the educator's responsibility to give the learner the best value for his money or effort" (p. 164). Quirk and Widdowson (1985) observe that 'learner-centredness' "had to do with bringing about a certain kind of social environment in classrooms whereby learners took the initiative for learning as a realization of their own personal constructs" (p. 178).

However, as Prabhu (1985) notes, common practices in ESP has resulted in an "interesting contrast" between ESP and the concept of 'learner-centredness' for which it has argued:

> ESP can be said to increase the teacher's responsibility and control in deciding what is

learnt and how, while a recognition of the learner's rights leads to a transfer of responsibility and control from the teacher to the learner (p. 165).

The overall purpose of this chapter is to emphasise the significance of needs analysis as an approach to course design. The specific purpose is to suggest an approach to needs analysis and course design which reinforces the concept of 'learner-centredness'. However, since the concept of needs analysis has often been associated with Munby's work (1978), it seems relevant to present an overview of Munby's model and an evaluation of his approach.

2. MUNBY'S WORK IN NEEDS ANALYSIS AND COURSE DESIGN

2.1. A DESCRIPTION OF THE MODEL

Munby's work presents a detailed model for identifying the communicative competence the language learner is expected to acquire in order to function in his target social context. His model starts with constructing a profile of the communicative needs required of the learner or learning group and ends up with specifying the speech functions, language skills or linguistic forms to be taught in the ESP programme. The learner needs are viewed to be constrained by a number of interactive socio-cultural and linguistic variables. These variables are represented by two sets of parameters which form, what Munby (1978) calls, 'The communicative Needs Processor' (CNP). The information obtained is processed in the following nine parameters:

1) **Participant.** This provides data regarding the learner's

identity, native language and the other languages that he knows.

2) **Purposive domain.** This refers to the type of ESP required (professional/educational) and area of specialism.

3) **Setting.** This denotes the kind of environment in which the foreign language will be used (physical, temporal and psychological).

4) **Interaction.** This component concerns itself with information about the people with whom the learner is expected to communicate, that is, their roles and role-sets.

5) **Instrumentality.** This indicates the medium (receptive/productive), the mode (monologue or dialogue, written to be spoken or written to to be read silently etc.) and the channel of communication (eg. face-to-face or radio contact). The information processed in this parameter is significant for deciding on the language skills needed.

6) **Dialect.** This parameter identifies the regional social and temporal variety of English which the learner will encounter and in which he will be required to perform.

7) **Target level.** This defines the grammatical complexity of texts or utterances, the range and size of the forms, micro-functions and micro-skills and the speed and flexibility of communication.

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8)**Communicative key**. This specifies the tone and manner in which the communicative act will be carried out.

9) **The communicative event**. This parameter defines the macro-activities demanded of the learner by his profession or study (eg. attending lectures, visiting factories and workshops, participating in seminars and conferences etc.). These activities are then broken down into their micro-activities (eg. listening and taking notes, giving and receiving instructions etc.) and into their topics. The topics will be the main generator of the specialty lexis.

Then the designer can opt for itemizing the syllabus either in terms of micro-functions (eg. greeting, suggesting, defining, questioning etc.), or in terms of micro-skills required for the realization of the communicative activity (eg. understanding word formation, understanding relations between parts of a text through cohesive devices_ on the basis of the profile of needs, as shown in Figure 2.

2.2. EVALUATION OF MUNBY'S WORK

The theoretical basis of Munby's model is a view of communicative competence which subsumes three integral elements: sociocultural, linguistic and discoursal. The socio-cultural aspect refers to the social/situational language functions and conventions of use. The linguistic level, though referred to in the parameter labelled 'target

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                    ┌─────────────────┐
                    │   Participant   │
                    └────────┬────────┘
                    ┌────────┴────────┐
                    │  Communicative  │
                    │      needs      │
                    │    processor    │
                    └────────┬────────┘
                    ┌────────┴────────┐
                    │     Profile     │
                    │       of        │
                    │      needs      │
                    └────────┬────────┘
             ┌───────────────┴───────────────┐
    ┌────────┴─────────┐            ┌─────────┴────────┐
    │ Language skills  │            │     Meaning      │
    │    selector      │            │   processor      │
    └────────┬─────────┘            └─────────┬────────┘
             │                      ┌─────────┴────────┐
             │                      │   Linguistic     │
             │                      │     encoder      │
             │                      └─────────┬────────┘
             └───────────────┬───────────────┘
                    ┌────────┴────────┐
                    │  Communicative  │
                    │   competence    │
                    │  specification  │
                    └─────────────────┘
```
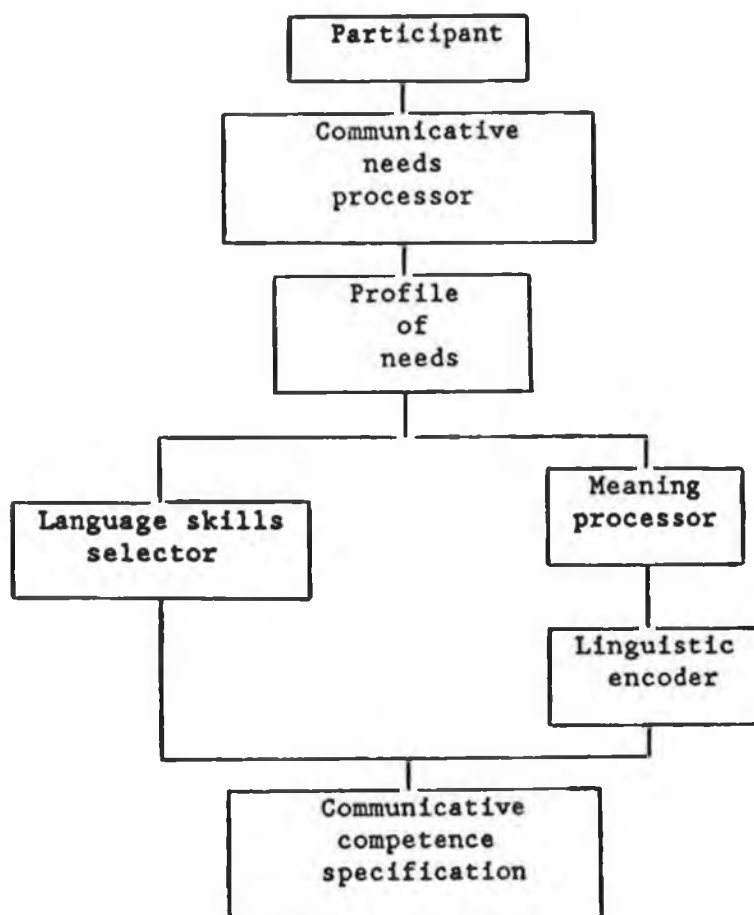
(Model for specifying communicative competence)

Munby (1978)

Figure 2

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level' of the (CNP), is viewed to be sociosemantically based and to be a realization of the micro-functions marked for their contextual appropriacy and is, thus, handled in the 'Linguistic Encoder'. Discoursal competence includes the ability to understand the communicative functions of utterances and, thus, establish their discoursal coherence and textual cohesion. It stands in relation to both the 'Meaning Processor' and the 'Language Skills Selector' (See Figure 2).

However, Munby's model , derived mainly from Halliday's theory of 'meaning potential' and Hymes' view of communicative competence, allows for the sociocultural level to predominate and to define the learner's target communicative competence. In Munby's words:

> What is needed is a theoretical framework that stems from a sociolinguistic view of knowledge and communication, where the contextual and environmental factors which constrain competence, or are involved in the development of communicative competence or the realization of meaning potential, are predominantly sociocultural (p. 21 (Our own emphasis)).

It follows that the linguistic and discoursal aspects of competence are viewed to be determined by the communicative events and the social activities the learner is expected to get engaged in in her particular situation. This accounts for the fact that Munby's work has commonly been held to be responsible for the production of narrow-focus ESP syllabuses the content of which is

specified in terms of linguistic exponents of social functions peculiar to a specific field (eg. by Breen 1987 and Nunan 1988).

Munby (1984), on the other hand, notes that it was never the intention to produce a syllabus content itemized in terms of performance repertoire of utterances. He points out that the parameter labelled 'Linguistic Encoder' is simply there to illustrate how semantic units might appropriately be realized linguistically if the course designer has opted for content specification in terms of micro-functions rather than in terms of language skills. To remove ambiguity, he suggests removing this component and subsequently placing it in syllabus implementation such as materials production.

However, the existence of the 'Linguistic Encoder' at the syllabus design stage is not so much the major factor in causing what Munby calls 'ambiguity'. It is the theoretical framework underlying the model that seems to have made course designers interpret it in terms of linguistic realizations of social functions. The over-emphasis put on the sociocultural level of competence and the premium placed on sociosemantic options will inevitably produce product-based syllabuses specified in terms of surface aspects of language use.

Further, the function of the 'Language Skills Selector' is restricted to selecting the specific skills

required for the realization of the activity, from a taxonomy of abstracted skills. It does not account for how the various skills, presented under distinct headings and subheadings, inter-relate and combine in the implementation of the communicative activity (Widdowson 1983: 86). As Widdowson exemplifies, 'understanding relations between parts of a text through lexical cohesion' will usually involve 'understanding relations between parts of a text through grammatical cohesion'; yet the two skills appear in Munby's model under separate headings, and each is divided into its own sub-types. This has reduced the 'Language Skills Selector', as Widdowson points out, to an inventory of language procedures and, therefore, rendered it inefficient.

Actually Munby's work seems to be much predicated on Halliday's functional theory of language and language learning which proceeds from his notion of 'meaning potential'. Halliday_ who defines language learning as being "essentially the learning of a semantic system" or as "the encoding of a 'behaviour potential' into a 'meaning potential'" (1975: 9, 1978: 21)_ seems to have derived his theory from observations in child first language learning. Applying his theory to adult second language learning tends to ignore the fact that the adult L2 learner is already in command of a 'meaning potential' which awaits to be textualized in the target language. What the adult L2 learner needs is a 'lexicogrammatical potential' and a discoursal competence that enable him to express and

negotiate meanings, rather than sociosemantic units couched in functional or notional labels (cf. Canale and Swain 1980).

Further, as shown above in quoting Munby, the meaning options which the adult L2 learner will need to handle in the foreign language is viewed in Munby's model, in agreement with Halliday's theory, to be constrained by the socio-behavioural patterns of the situational context in question. But what about the learner's individual properties and characteristics? What about her personal interests, orientations, attitude, aptitude, cultural and educational background and the knowledge she has cultivated over the years? Such variables are major forces in determining the range of meaning choices the L2 learner will need to handle in the foreign language and, thus, influence the level and range of target language competence she wishes to acquire. And as Canale and Swain (1980) maintain:

> We would certainly not agree that one is limited
> to expressing semantically only what social
> conventions, for example, allow; one may
> choose to violate or ignore such conventions
> .... social options do not seem sufficient to
> account for the sets of intentions or other
> semantic options available to the language user
> (p. 19).

Moreover, confining the foreign language functions to the target socio-cultural context might not result in optimal language learning. A negative attitude towards a

given culture or sub-culture is very likely to result in 'fossilization' (when learning ceases to improve beyond the point of satisfying one's communicative needs) or in 'pidginization' (when the learner uses a simplified and reduced form of language that serves her pragmatic needs, ignoring non-informative elements such as verb inflections or grammatical transformations). In both cases, the learner acquires only the language knowledge that enables her to survive in the target community or in her particular setting. Research in second language acquisition is rich with case histories that confirm this phenomenon (see, for example, Hatch 1978).

Though Munby describes his approach as being 'learner centered', it has been revealed to be a target situation analysis (TSA). His analysis device yields a description of the social processes and conventions that characterize the learner's specialized area; and the learner is simply used as a means for spotting the target situation but is dismissed, thereafter (Hutchinson and Waters 1987). The learner's cognitive and affective needs are, therefore, permitted no room, since TSA entails separating the needs analysis from both the learner and the learning operation. As Chambers (1980) notes: "TSA goes into the target situation, collects and analyses data in order to establish the communication that really occurs_ its functions, forms, and frequencies, and provides a basis for selecting the long-range aims of the course" (p.25).

Since the educational principle behind ESP programmes is 'economy', that is, providing the learner with the best value for his money and his time_ 'economy', as Early (1982) notes, "cannot be realized in terms of syllabus specification alone. It can only be realized in terms of economy of individual learning effort, and this implies taking into account the variability of individual learning behaviour" (p. 93). Commenting on Munby's work, Early further observes: "It is disturbing to find no mention of such factors and no consideration of methodology in a work which takes the broad field of communicative syllabus design" (p. 93).

Moreover, needs analysis is treated by Munby as an act done prior to course specification, rather than a 'process' pursued throughout the language programme. Consequently, course design is stripped of its dynamic nature and reduced to a fixed and impermeable plan. Munby's principle is reflected in his definition of ESP: "ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner" (1978: 2). However, case histories in ESP course design have shown that syllabus and materials might alter 'in all essentials' during the actual implementation of the course and after the students have actually begun learning. Drobnic (1978), for example, reflects on an EST course designed and implemented at Oregon State University and aimed at 15 Taiwanese students studying Nuclear Engineering:

There were, then, two major changes in the course design during the programme. Both of the mistakes in the original planning can be traced to a lack of information ... Once the students arrived they formed very clear ideas on their own about the nature of their language needs (p. 319).

As Drobnic points out, the course originally sprang from a target situation analysis. The needs analysis revealed that "the primary language needs of students studying at the Radiation Centre would be reading and listening skills. Writing was in a distant third place, and speaking was perceived as an almost non existent need". However, one of the major changing that took place in the course, as Drobnic explains, was introducing into the programme discussion sessions that touched on contemporary American values such as garage sales, personal hygiene, euthanasia, littering etc.

The second major change that was made in answer to the students' demand, as Drobnic glosses, was replacing The Language of Atomic Energy in English, a textbook intended to increase the students'reading skills, by materials aimed at improving lecture comprehension skills. The students were revealed to encounter little difficulty in handling their reading assignments; besides, the conceptual content of the textbook seemed to be insulting to the students' existing professional knowledge. Drobnic further remarks that the students "were adamant and nearly unanimous in their demand for change" (p. 319).

The implication is that needs analysis and course design can not be carried out in isolation from the learner, and that they should be conceived of as being subject to change and open to modification. In short, the fact that Munby's model interprets learner needs in terms of conformity to the features of the target situation, in isolation from the learner's individual properties and individual perceived needs and in abstraction from the teaching/learning environment, and the fact that it is not informed by theories of language learning and language use , render it a sterile enterprise (Hutchinson 1985, Widdowson 1983). What needs to be recognized, however, is that "making needs analysis a central part of the curriculum activities which teachers and learners share in, has a logic of its own" (Hutchinson and Waters 1980a).

3. AN ALTERNATIVE PROPOSITION

It follows from what precedes that an in-house produced syllabus informed by a local assessment of individual learner needs is to be desired, rather than submission to a syllabus produced by a distant expert and, thus, based on predicted needs. What is required, however, is that practising teachers should, as Tarone and Yule (1989) note, "put a little more faith in their own judgements and defend them against so-called experts" (p.21). What is further needed is that teachers should have confidence in their own students' perceptions and abilities. They should sincerely believe that their adult students can be valuable sources of insight regarding their needs and

that they can, with advantage, be responsible for their own learning.

The teacher's need for constructing her own syllabus and for carrying out a local needs-analysis is reflected in the fact that the ESP teacher is often encountered with learning situations in which a mismatch is revealed between the predicted needs of her learning group as represented by the assigned coursebook and the actual needs of these learners; or in which unforseen needs emerge which demand a re-assessment of needs and change in learning materials.

What follows, however, seeks to suggest an approach to needs-analysis and course design based on a view of learner needs that encompasses the psychological, the social and the pragmatic. It is a learner-centered approach which takes the learners' perceptions of their needs as a point of departure. It is different from other approaches, seemingly, centered on the learner but which, in practice, have tended to ignore the learners' self-perceived needs and cognitive and affective variables, and the circumstances of the learners' local learning situation.

It aims at placing the individual learner at the centre of the picture. The 'individual learner', however, stands in opposition to the 'typical learner' on whom typically pre-conceived needs are usually imposed (eg.the stereo-typed needs of a businessman/woman, a student, or a learner/learning group from a given culture).

3.1. THE RATIONALE FOR THE PROPOSED MODEL

The proposed model derives mainly from the concept of 'need' itself. Richterich observes:

> ... a need does not exist independent of a person. It is people who build their images of their needs on the basis of data related to themselves and their environment (Quoted in Hutchinson and Waters 1987: 56).

Porcher notes:

> Need is not a thing that exists and might be encountered 'ready-made' on the street. It is a thing that is constructed, the centre of conceptual networks and the product of a number of epistemological choices... (Quoted in Richterich & Chancerel 1987: 6).

Rousson remarks:

> ... need could be regarded as the expression of a project... of a social agent.... Any project may conflict with other projects of the agent in question or of other agents... It is therefore safe to say that the fulfillment, the satisfaction of a need implies making a choice, renouncing and negotiating (Quoted in Richterich and Chancerel 1987: 6 (Our own deletion)).

Maslow (1970) suggests that people have a complex set of exceptionally strong needs which form themselves into a hierarchy. His theory postulates five sets of basic needs:

```
                              / \
                             /   \  self-actualization
                            /\    /\
                           /  self-  \
        Maslow's          /  esteem   \
   hierarchy of needs    /              \
        (1970)          /belongingness\
                       /                 \
                      /      safety        \
                     /                       \
                    /      physiological      \
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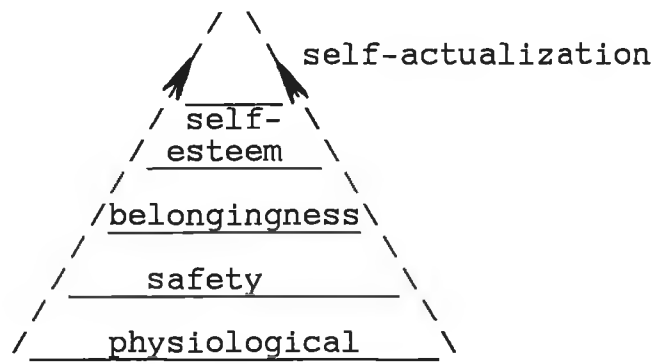
Underlying this hierarchy are the following basic
assumptions:

1) The 'need' network for most people is very complex, with
a number of needs influencing the behaviour of the
individual at any one time.

2) When a need is strong and the need deficiency is present,
the individual becomes subject to inner tensions and, thus,
to motivational behaviours which persist till the need is
fulfilled and tension is released.

3) A satisfied need does not motivate. When a need is
satisfied, it is gradually replaced by a fresh one.

4) Lower-level needs are prepotent over higher-level needs.
This implies that like physiological needs, unfulfilled
safety or security needs may weigh heavily upon the
fulfillment of higher-level needs.

From these different reflections and observations

concerning the concept of 'need' we might arrive at the following:

_ Needs-analysis can not be conceived of as being independent of the learner. Needs are images built up by the individual learner into what forms the learner need perception system.

_ A dynamic relationship obtains between the learner's needs and expectations and social and institutional needs. This relationship might be congruent or conflictive.

_ Since needs are not things to be found 'ready-made' and, thus, be readily analyzed, and since they are subject to renounciation and constant change, needs-analysis can not be viewed as an event taking place at a given point in time, but rather as an on-going process of making decisions and choices. And as Malay (1982) points out: "... a once-for-all needs analysis is insufficient to take account of the evolving needs of the learners, and ... it may reinforce a 'product' view of the learning process" (p.35). However, it might be argued that ESP learners are highly motivated and are, thus, readily able to specify their needs. While this is true, broadly speaking, about ESP learners, this does not veil the fact that learners' awareness of their needs and of their language problems might increase and become clearer during their actual language learning experience (Richterich & Chancerel 1987), or during their actual engagement in their specialized

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study, be it an in-study EAP course. Fresh needs might emerge, new avenues might be opened or new shifts in focus might be demanded while the language course is in progress. ESP case histories, as shown in discussing Munby's work, have shown that dramatic changes might take place during the actual implementation of the course.

_ Learning a foreign language is a fulfillment or a means for a fulfillment of a number of needs which implies negotiation and making compromises and which presupposes the fulfillment of the learner's psycho-learning needs. Therefore, needs-analysis ceases to be 'uniform' (as represented by the target situation needs- analysis) but rather takes on a 'multiform' nature which entails considering other aspects of learner needs such as the learner's cognitive, affective and security needs. This, therefore, calls for the need to move a way from a narrow-focus approach to needs-analysis to an approach that embraces broader learner needs.

_ Negotiation is better looked at as being both psychological (an internal process) and socio-psychological (interactional ie. involving two or more people) (cf. Candlin 1985). This proceeds, as quoted above, from the likely conflicting nature of the learner's individual needs which demands the learner to assess her own needs and make choices of her own, and the conflict that might emerge between needs as perceived by learners and needs as perceived by other agents involved in the learning operation

such as employer, academic institution or language teacher. Hence, the negotiation procedure is to be conceived of as underlying and pervading the needs analysis process at all times and at all levels. And needs-analysis, "instead of being static, ...becomes a dynamic means of making choices and decisions" (Richterich & Chancerel 1987).

_ The learner's terminal needs can not be viewed in isolation from such aspects of learner psycho-learning needs as the learner's established learning habits, preferred learning techniques and activities, expectations of teacher-learner role etc. As Rivers (1983) notes, "By not allowing [students] to learn at their own pace and in their own way, we attack them at the level of security" referred to in Maslow's hierarchy of needs (Rivers 1983:71). One common aspect of the security needs is seen in the individual's "preference for familiar rather than unfamiliar things, or for the known rather than the unknown (Maslow 1970: 41).

_ Needs-analysis should take into consideration what aspects of the target language are already at the command of the learner. For, as Maslow (1970) observes: "a satisfied need is not a motivator" (p: 57). If a learner, for example, does not encounter difficulty in reading the foreign language, a course geared at developing reading skills would be de-motivating for that learner.

_ Finally, allowing learners to specify their needs and

make decisions on their own learning may act to increase learners' awareness of their needs, promote learners' understanding of the self and of the surrounding environment, develop positive thinking in them, promote teacher-learner rapport, improve learners' self-esteem and reduce the threat of the learning situation to which they are accustomed.

The suggested approach is also predicated on the belief that needs-analysis can not be viewed in abstraction from the pragmatic needs of the classroom learning situation such as teacher's view of language and language teaching/learning, resources, size of learning group etc. Although such factors, including the learner psycho-learning needs, are referred to in Munby's work, they are given a peripheral place and are said to be irrelevant to the specification of the syllabus (pp. 40 and 217). However, as Swales (1980) argues, it turned out in practice that the prior analysis of such factors might be useful enough to give the syllabus its general shape and determine the kind of learning tasks and activities, and that the syllabus designer should not only know "what his students can do and need to do but also what they would be willing to do or could be persuaded to do within the confines of their particular educational environment" (p. 68). And as Hutchinson and Waters (1987) point out:

> It is naive to base a course design simply on the target objectives, just as it is naive to think that a journey can be planned solely in terms of the starting point and the destination.

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> The needs, potential and constraints of the
> route (i.e. the learning situation) must also
> be taken into account, if we are going to have
> any useful analysis of learner needs (p. 61).

3.2. NEEDS-ANALYSIS PROCEDURES AND COURSE DESIGN

According to this approach, learners are very much involved in carrying out the needs-analysis and in planning their language learning. Tarone and Yule (1989) cite Hanges (1982) in arguing that there are sound philosophical and educational reasons for getting students identify their needs. Thus, learners, guided by the teacher, are actively engaged in providing and recovering data concerning their terminal needs and learning needs.

Further, needs-analysis is viewed as a feedback process that operates at three interdependent levels: subjective learner needs, objective analysis of target-situation needs and learning situation needs. Deciding on target objectives and on the means for fulfilling these objectives involves negotiation and making compromises within and across the three levels. Needs, in their various forms, are checked and re-assessed throughout the language course which entails re-assessment of the learning syllabus. This reflects the dynamic nature of the needs-analysis process and teaching/learning operation as a whole. The interaction between needs at their various levels and the learning syllabus can be summarized in Figure 3.
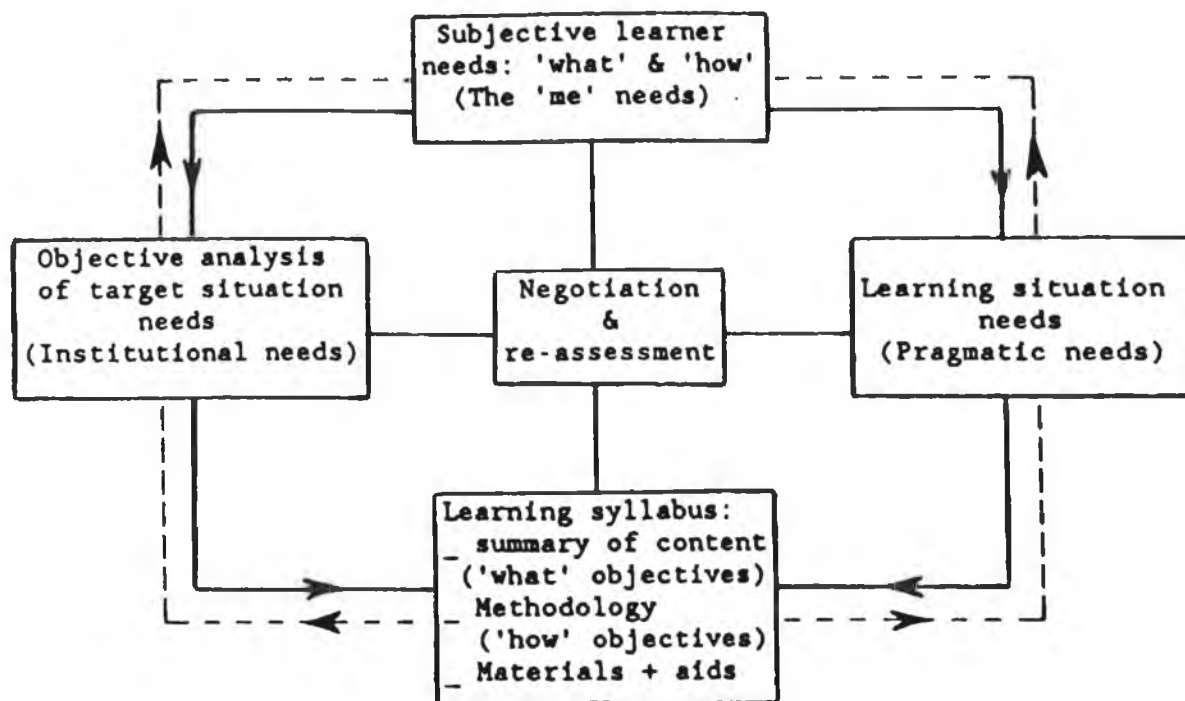
Needs Analysis and Course
Design
Figure 3

3.2.1. SUBJECTIVE LEARNER NEEDS

The data provided at this level is an expression of the students' perceptions of their individual needs: what they wish to learn and how they expect or prefer to learn it.

3.2.1.A. LEARNER'S PERCEPTION OF 'WHAT' NEEDS

The learners' subjective articulations of their 'what' needs spring from a number of interacting variables such as the learners' motivations for learning the foreign language, subjective assessment of the needs demanded of them by their educational or professional situation, existing conceptual knowledge etc.

3.2.1.A.1. THE LEARNER'S INSTRUMENTAL AND/OR INTEGRATIVE ORIENTATION

The learners' motivations for learning the foreign language define, to a greater or lesser extent, what level and what aspect of the target language competence the learners may wish to attain. They may need to use the foreign language primarily as a tool for obtaining specialized knowledge and, thus, might aim at acquiring specialty subject-dependent competence; or they may need the foreign language, as well, in order to operate effectively as members of the target language community and, thus, might aspire to attain a native-like competence; or they might be survival-oriented, that is, they may simply wish to attain the level of competence that would enable them to survive as students, as scientists, as tourists,

as businessmen/women, as foreigners etc. in the target language community or as members of the international English-speaking community, and so forth.

3.2.1.A.2. <u>LEARNER PERCEPTION OF TARGET SITUATION NEEDS</u>

This refers to the learner's knowledge and expectations of the communicative events, actions and practices that take place in the target situation, modes of behaviours that typify that situation and communicative skills and tasks needed. This touches on the learners' sociolinguistic knowledge concerning the educational or professional environment in which they need to use the foreign language, be it in the learners' native culture or in the target language culture.

A pre-experienced medical doctor, for example, who takes an EOP course because she wishes to practise her profession in the foreign country must already be familiar with the communicative events and other sociolinguistic features of a clinic situation. Or, for example, a student who follows a pre-study EAP course in the foreign country must have some expectations of the sociolinguistic characteristics of, say, a science lab situation. However, it might need to be noted that learners' expectations derived from experiences in their native culture might fail them when confronted with the real demands of the foreign situation. For example, a Syrian student's perception of a science lab situation might be that in which the teacher performs experiments herself and comments on procedures and

results, and in which students watch, listen and take notes, and in which the input students receive is formal, systematic and contextualized. The student, thus, might encounter considerable initial difficulty when required to operate in a science lab environment in an English-speaking country in which she is required to solve problems herself, form hypotheses and report experiments, and in which the atmosphere might be informal and the input she is exposed to might , as Farrington (1981) observes, be de-contextualized and full of, what Farrington calls, 'out of the blue' expressions which demand instant response.

However, as Tarone and Yule (1989) note, the learners' sociolinguistic expectations and individual perceptions of the target situation are extremely important from a needs-analysis point of view. They might unfold which of the communicative needed skills and strategies are already acquired and which are not and, thus, need to be focussed on in the ESP programme. In other words, they might reveal areas of differences and/or similarities between the learners' native culture and the target language culture and, thus, highlight the sociolinguistic skills to be learnt.

The value of the learners' perceptions of their target situation needs is, however, paramount in the context of ESP courses given to learners who need to use English in their native sub-culture (ie. their professional or study setting). Learners' perceptions might, then, act as a

functional tool for obtaining ethnographic data about the existing communicative practices and cultural conventions that organize the use of English in their native academic or professional environment (cf. Romani et al 1988).

The need for acquiring ethnographic information concerning the learners' particular communicative environment and its significance to needs-analysis was brought to light by Swales (1985):

> ... our descriptions of the disciplinary and occupational matrics within which our Service work is set have been too thin .... it is not only texts that we need to understand, but the roles texts have in their environments; the values, congruent or conflictive, placed on them by occupational, professional and disciplinary memberships; and the expectations those memberships have of the patternings of the genres they participate in, be they monographs, textbooks, lectures, examination papers, memos, minutes ... (1985a: 219).

This brings into play Swales' definition of the concept of 'genre': "A genre is a recognized communicative event with a shared public purpose and with aims mutually understood by the participants within the event". And again: "Overt knowledge of the conventions of a genre is likely to be much greater in those who routinely or professionally operate with the genre rather than in those who become involved in it only occasionally" (Swales 1985b: 13).

The implication is that ESP learners already involved

in their academic or occupational work and who need English in order to function in their native sub-culture are solid sources of information regarding the ethnographic features of their particular situation. And as Romani et al (1988) observe: "It would appear, therefore, that ESP programmes focussing on genres <u>as identified by participants</u>, rather than by outsiders, would reflect more accurately the practices of particular target communities" (p. 83 (their own emphasis)).

Finally, it might need to be noted that the more motivated pre-study EAP learners or post-experience EOP learners, the more they are revealed to know about the sociolinguistic features of their future target situation or target job (cf. Lambert & Gardener 1972). Further, the learners' perceptions of their particular situation needs might act to reveal their attitudes towards their specialized situation. A negative attitude would be counter-productive to language learning. Learning materials should proceed from what actually motivates the learner, or else, aim at creating in the learner an intrinsic interest in the learning experience itself (Hutchinson and Waters 1987).

3.2.1.A.3. <u>EXISTING CONCEPTUAL KNOWLEDGE IN THE LEARNERS</u>

This derives from the learners' cultural, educational, professional or personal experiences. This has bearing on the range of meaning alternatives learners may need to manipulate in the foreign language and, thus,

might reflect on their perceptions of their needs.

For example, a learner coming from a fundamentalist Islamic background might not be interested in such topics as Feminism, Individualism, Secularism, Marxism, Freedom of Speech etc. or topics related to a pub situation and the like. They might not form part of the learner's conceptual repertoire and, therefore, might not be perceived as needs. By contrast, a learner, for example, interested, say, in politics might need to learn the register pertinent to her subject of interest which would enable her to engage in communicative interactions that fulfill her conceptual need.

The learners' subjective needs-analysis might reflect what knowledge of the world the learners' bring with them into the language class and which topics appeal most to them. This information is important when deciding on the content of learning materials. For the language teacher should draw on the learners' conceptual repertory rather than impose on them her own experiences or her view of what they might need to learn.

There are other factors which could enter into play when learners identify their terminal needs such as self-estimation of current language abilities and attitudes towards the different language skills (whether in terms of difficulty, importance or interest). However, these factors are extremely important in the sense that they might reflect the criteria the students have set for themselves to

measure their language progress and language learning. For example, some L2 learners measure their language learning in terms of acquiring oral fluency; others pride themselves in having learnt a wide range of the target language vocabulary.

In addition, The learners' previous language learning experiences do not only influence the learners' learning styles, but have also bearing on the learners' expectations of and attitudes towards what they want to learn. For example, if learners have been amply exposed to a traditional teaching method that concentrates on the teaching of grammatical rules and structures, learners might come to perceive their needs in terms of grammar learning. On the other hand, disappointment with the previous traditional learning experience might yield a negative attitude towards the learning of grammar. Further, the learners' financial resources and the time they can devote to language learning play a role in determining their needs. Learners might feel obliged to decide on what they perceive to be necessary.

3.2.1.B. LEARNER PERCEPTION OF 'HOW' NEEDS

Learners' subjective needs-analysis also provides information concerning learners' **'how'** needs such as learners' established learning styles, preferred teaching/learning techniques and activities, expectations of teacher-learner role, attitudes towards learning materials, attitudes towards method of performance

assessment and achievement evaluation etc. This data become significant when discussing the pragmatic needs of the learning situation.

3.2.1.C. <u>METHOD OF ELICITING SUBJECTIVE DATA</u>

Learners' perceptions of their needs can be recovered via a teacher-made **questionnaire** followed by an **interview** mediated by the language teacher at an early stage of their course. The interview would be structured on the basis of the information provided by the students' in the questionnaire. It would serve to verify and elaborate on the students' responses. Further, it would have the advantage of allowing for unexpected information which the teacher has not considered and, thus, has failed to include in the questionnaire.

Moreover, learners, as Tarone and Yule (1989) suggest, might be requested to write a **'script'** (an account) that reflects their own perceptions of the sociolinguistic features of the target situation and, therefore, the communicative skills and tasks that would be demanded of them. This allows learners to speak freely about their perceptions of the situation in question, and can, however, be included in the questionnaire itself as an open-ended question.

The students' awareness of their needs can be checked and promoted throughout the language course. This can be achieved via teacher-learner interaction and occasional

discussion of language problems, and by encouraging students to evaluate their own performance, diagnose problem and suggest remedies. A questionnaire would also be advisable during the course; for there might be some students in the class who would be disinclined to discuss their language problems or articulate their newly perceived needs in front of their classmates.

3.2.2. OBJECTIVE ANALYSIS OF TARGET SITUATION NEEDS

Learners' awareness of their specialist needs could be increased by encouraging learners to conduct an empirical study of the specialized needs demanded of them by their particular situation: encourage them to carry out a situational needs-analysis themselves or a job analysis. This can be achieved by providing learners with a framework, agreed to by both teacher and learners, within which to operate and by enlightening them about research method.

This has actually been put to practice by Hanges (1982) in designing a pre-study course in composition and research skills for international graduate students at Minnesota University (cited in Tarone and Yule 1989: 46). Tarone and Yule point out that "While she had a fairly clear understanding of what the research skills of her students would be, Hanges decided that her students would be responsible for identifying their written needs". Hence, she asked her students to conduct a research into the nature of their written needs in their particular fields, and she encouraged them to interview faculty members and students

doing the same study. The research took the form of a report written assignment.

The analysis framework adopted and the research report format suggested by Hanges to her students are re-produced in Appendix A, in addition to a sample of a student report, in order to show the feasibility and effectiveness of this procedure as a means for obtaining empirical data on learners' needs in their specialized situation. They are taken from Tarone and Yule (1989: 170-172).

However, it should be noted that engaging learners in collecting empirical data on their specialized needs, though essential, is not to be viewed as an alternative to the learners' subjective analysis of their needs. For it is very likely that there might not be a one- to-one correspondence between the learners' learning purposes and needs as demanded by institutions. And, as mentioned earlier, learning a foreign language is a fulfillment of a number of needs which can not be accommodated by a target situation needs-analysis.

Further, the learners' subjective needs analysis has the advantage of providing insight into, what Hutchinson and Waters call, the learner's 'underlying competence', that is, the learner's existing knowledge and abilities whether conceptual, communicative or sociolinguistic. As

Hutchinson and Waters note:

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On the principle of working from the known to
the unknown the teacher will take the result of
his analysis as the basis on which to construct
the new complex of knowledge (1980a: 178).

Engaging the learner herself in collecting objective
information about her specialized needs might, however, act
to broaden her need perception system and prompt her to make
new compromises. Further, it might enable her to measure
her already acquired communicative skills and knowledge both
in L1 and L2 against the empirical data she has obtained
and, thus, reduce her learning objectives and focus on what
she needs to know. Further, as Tarone and Yule remark,
engaging learners in obtaining empirical data regarding
their needs permits "the learners to become the 'experts' on
their own language needs and, through this involvement, to
improve their motivation for language learning" (1989: 46).

Engaging learners in recovering objective data on
their specialized needs seems especially significant in the
case of pre-study EAP learners or post-experience EOP
learners; or in the case of pre-experienced EOP learners who
have practised their profession in their native culture but
are unfamiliar with the sociolinguistic needs of the target
culture.

However, it might need to be noted that highly
motivated pre-study EAP learners and post-experience EOP
learners very often tend to obtain objective data concerning
their future specialized needs before having entered the

language class and very often before having set foot in the target language culture itself. This implies that their future specialized needs already form part of their subjective need perception system.

Pre-study EAP learners, for example, tend to obtain objective data on their future specialized needs by consulting other people who have done the same study in the same target culture, by correspondence (obtaining information from the foreign targeted university), and by acquiring language coursebooks usually taught to foreign students in the foreign university in their particular fields.

This is true, for example, of medical students in the university of Damascus, who are known to be the most hardworking, highly ambitious and highly motivated of all Syrian university students. Many of them who aspire to pursue higher study overseas, mainly in USA, practically embark on fulfilling their future specialized needs before even having got their first degree from their native university. They obtain data, language coursebooks and specialty literature in English_ taking into account the fact that Medicine, like all other subjects, is instructed in Arabic in Damascus University and students are not requried by their native academic institution to read specialty literature in English. Some of them sit language examinations (eg. TOEFL) and specialty subject examinations (eg. FMGEMS ie. Foreign Medical Graduates Examination of

Medical Science) required of them by the future foreign university before having set foot in USA.

3.2.3. LEARNING SITUATION NEEDS

To decide on their learning objectives and plan their language learning, learners will need to develop awareness of the pragmatic needs that would enable them to fulfill these objectives. This entails considering the following (cf.Richterich and Chancerel 1987 and Malay 1984):

_ Size and homogeneity of learning group

_ Course length/intensity

_ Suitability of timetable (distribution of learning hours)

_ Availability of technical aids that meet learning goals

_ Availability of self-access learning materials

_ Degree of cooperation between administration and teaching-staff (Lack of understanding and cooperation between teacher and administration might disrupt the fulfillment of objectives.)

_ Teacher's view of language and language learning

_ Teaching method and technique (Do they come up to the learners' expectations?)

_ Teacher-learner relationship (Does it allow for promoting rapport between teacher and learner? Does it allow for learning freedom in the classroom setting? What role is the teacher going to adopt? Instructor? Guide? Resourcer?)

_ Performance assessment criteria (This might proceed from the teacher's view of language. A teacher's assessment criteria might be, for example, 'accuracy', or 'fluency',

or the ability to manipulate communicative strategies or all of these. The teacher's assessment criteria might, however, conflict with the criteria the students have set for themselves to measure their progress).

_ Suitability of learning materials

_ Performance assessment method (Via teacher's own observations? And/or via learners' own self evaluation? What technical facilities available that help learners effectively evaluate their own performance? etc.)

_ Achievement evaluation method (Via tests? What type of tests? Formative? Summative? Or via a record kept by the teacher of her own observations of the students' progress throughout the language course? And/or via a record kept by the students themselves of their own progress through-out the learning programme? However, it might need to be noted that some students might not be examination-oriented and, thus, do not perform well in formal examinations due to affective factors.)

Learners will be able to recover information regarding the pragmatic needs of the learning operation via teacher-learner discussion at an early stage of the language course. This might enrich learners' perceptions of their language needs and learning needs and solve areas of conflict between teacher's views and those of the learners. Further, this might persuade the learner to adapt his learning objectives to the circumstances of the classroom learning situation. The teacher, on the other hand, will have to taper syllabus objectives, learning materials,

teaching style etc. to the individual needs of the learning
group. In other words, diversity in objectives, in teaching
techniques and learning materials will be required (Rivers
1983).

However, it might need to be noted that if a
discrepancy is revealed between the learner's needs and the
circumstances of the classroom learning situation, the
learner might be persuaded to join another learning group
which might be more suited to his needs, to have a
one-to-one course or change language school. Otherwise,
the learning experience might result in frustration on the
part of the learner who might feel that both his time and
his money have been wasted.

Since it is agreed that learner needs are subject to
change as the course progresses, change in learning
objectives will necessarily call for revision of the
pragmatic needs. This involves considering some questions:
do newly emerged needs require the learner to change
learning group? Do they require different facilities? Can
the timetable accommodate new learning objectives? What
fresh compromises can both teacher and teaching
administration offer? and so forth, (cf. Richterich and
Chancerel 1987: 28-29).

3.3. THE LEARNING SYLLABUS

The learning syllabus will be spelled out in terms of
three interacting components:

1) **Summary of content** is an expression of 'what' objectives, that is, the outcome knowledge, the skills and tasks the learner aims to be able to handle by the end of the language course. These derive from the learners' identification of their individual needs after being negotiated at the three levels of the needs analysis. This summary acts as a guide for organizing the learning programme.

'What' objectives can be itemized in terms of grammatical units, situations, topics, functional categories, language skills or communicative tasks_ depending on learner's needs and preferences, teacher's view of language and language learning, homogeneity of the learning group as a whole, course length, availability of materials and technical aids etc. However, since the syllabus would be geared to accommodate the individualized needs of the learning group, specifying the syllabus in terms of grammatical, functional, topical or situational categories or in terms of micro-skills might seem in many cases undesirable; for the language teacher might end up with an endless list of any of these categories (cf. Yalden 1987: 121-129). However, a task-based approach for specifying syllabus content would generally be recommended. For it might lend itself more responsive to the individualized and changeable needs of the learning group due to its generative capacity and dynamic nature. 'Tasks' can be manipulated to generate knowledge of grammar, lexis, language functions or mastery of communicative skills and strategies depending on the focus desired by the learner;

and they can be as diverse as the needs of the learning situation demand. Further, 'tasks' can be easily replaced or integrated into the syllabus in compliance with the fresh demands of the learner without having to worry about disturbing the systematicity of the syllabus as is the case with structural syllabuses.

Moreover, a task-based syllabus would be more comprehensible to the learner than a syllabus specified in functional or linguistic metalanguage and, therefore, would allow for genuine feedback from the learner either in terms of its relevance to her needs or in terms of her ability to perform given tasks. 'Tasks' mean "nothing obscure" and mean something "concrete" and "familiar" (Yalden 1987: 125). And as Long remarks, 'tasks' are "the hundred and one things people do in everyday life, at work, at play, and in between. 'Tasks' are the things people will tell you they do if you ask them and they are not applied linguists" (Quoted in Yalden, op cit). Examples of performance 'what' tasks are the following:

_ Take part in routine meetings
_ Take minutes and notes at business meetings
_ Instruct someone on how to operate a machine
_ Follow instructions on how to assemble a piece of equipment
_ Read reports in specialized field
_ Deal with letters of specialized content

_ Write letters, reports, articles or papers within one's specialized field

_ Take telephone messages

2) **Methodology** is an expression of 'how' objectives. It answers the questions of how the learner's terminal needs can be most effectively achieved, how to bridge the gap between what the learners already know and what they need to know, how the learners' learning styles and preferences can be catered for and promoted, how to influence the speed at which learners learn, how the learning experience can be both productive and interesting to the learner, how students' interaction can be increased, how performance and achievement can be assessed, how to provide the learner with the ability to continue progressing on his own after the language course has finished, and so on.

These objectives might, perhaps, be best realized within a task-based methodology. According to Yalden 1987, 'tasks' might seem the best to use for

_ identifying learners' needs
_ defining syllabus content
_ organizing language acquisition opportunities
_ measuring student achievement

Tarone and Yule (1989) note that learner motivation and, therefore, learning speed might increase via a task-based methodology; for "we are typically more

interested in what we, as individuals, say and do than in what some anonymous textbook characters might say and do" (p. 119).

Methodological tasks will be informed by 'what' tasks and will allow for individual preferences and learning freedom in approaching the given task. Examples of methodological tasks are role simulations and information-gap activities for developing aural-oral skills and strategies and practising the kind of language needed, information-transfer tasks for improving reading comprehension skills (See Widdowoson 1979: 173-181), instructional tasks in which the learner is required to follow an account of a procedure in order to perform, say, an assembly task, grammatical tasks (eg. correcting target language sentences with errors in them), pronunciation tasks (eg. read minimal pairs), descriptive tasks (eg. describe a tool or an apparatus), filling out forms, answering questionnaires, listen to a tape-recorded meeting conversation and 1. identify communicative functions used by speakers 2. recognize liguistic forms used for the realization of those functions, and so forth (adapted from Tarone and Yule 1989).

3) **Materials**. The learning materials to be used, adapted or written by the language teacher, have, of course, to be compatible with both 'what' and 'how' objectives. It is noteworthy, however, that there is not likely to be a single coursebook which would meet the individualized needs

of the learning group. The teacher will have to rely, in most cases, on a number of sources and/or to produce her own learning materials. The learning materials employed will have to answer the language needs of learners whether these needs are general or specialized. Further, learners should be encouraged to fetch into the English class texts and learning materials which appeal to them and which, thus, reflect their particular needs. This would lead to greater learner involvement in the learning operation and develop in the learners an awareness that the onus of learning lies on them.

Technical aids to be used will also have to be considered when specifying syllabus objectives and deciding on learning materials.

It might further need to be noted that the 'learning syllabus' is not to be viewed as being a separate component from the needs analysis. Decisions on all aspects of the syllabus are to be negotiated throughout the needs-analysis process. And change in needs, as mentioned earlier, demands revision and modification of syllabus components.

CHAPTER FOUR

IDENTIFYING LEARNER NEEDS WITH

REFERENCE TO EAP: CASE STUDY

1. <u>INTRODUCTION</u>

The purpose of the study was to explore how adult language learners envisaged their needs and, thus, recognize how far they could act as useful informants regarding the content of the language course and the teaching/learning methodology. Therefore, the study was not concerned with analyzing the formal or functional features of academic texts, nor with conducting a target situation needs-analysis. However, collecting information about the needs of the learners in their academic situation seemed a necessary initial step. It contributed towards providing us with a framework within which to construct our questionnaire and against which the students assessed their needs and priorities.

The study was motivated by our belief that when adult learners define their needs, they do so according to the forces that act upon them as social agents (eg. society, profession, academic discipline, sponsoring company, etc.) and the forces that act within themselves as individuals. These forces direct the learning behaviour towards specific goals and urge the learners to look for

means to satisfy them. This accords with Richterich's and Chancerel's observation:

> If a learner wishes to choose learning objectives..., he will be able to do so only subject to pressures and influences brought to bear by establishments and institutions and by society. Even the self-taught student will be subject to them by reason of the material he has chosen (1987: 5).

The study was also based on the conviction that any attempt made at identifying learner needs should necessarily involve examining learner learning variables: the learners' established learning modes and habits, preferred learning techniques and activities, attitudes towards the different language skills, expectations of teacher/learner role, etc. Such factors, as mentioned in the previous chapter, would need to be examined in advance and taken into consideration if learning is to be optimized and motivation to be sustained.

Such variables were brought to light as a result of a pilot study in which we also tried to investigate learners' awareness of their needs and which was directed at three Libyan students studying English for occupational purposes. One of the remarks made by those students was that, "the teacher knows exactly what our needs are, knows everything, but does not know how to communicate this knowledge to us." The teachers' inability to induce efficient learning in that specific situation seemed to have stemmed from unfamiliarity with the students' learning modes, taking into account that the students came from a non-European background.

It follows that any study of needs centered on the learner involves considering the following:

1) What drives the learner to learn the foreign language?

2) What <u>direction</u> and what <u>pattern</u> does learning take? Does learning take a narrow, restricted direction, or does the learner aim at achieving general communicative competence? Does the learner like to learn individually or with a group? Does the learner like to learn by reading, by listening to tapes, by aural-oral interaction, etc.? What degree of autonomy has she developed in language learning ? What factors influence her learning style?

3) How to maintain or widen learning direction and/or learning style system?

2. THE STUDENTS

They were a group of **ten** science students (males and females), of different nationalities (Chinese, Syrian, Spanish), aged 21-30, who were studying a range of subjects (Mechanical Eng., Electronic Eng., Chemistry) at D.C.U. The students fell into the following categories on the basis of their subject-study achievement:

a- Five students were studying for higher degrees.
b- Three students were undergraduate who had finished their first three years in their own countries, but were doing their graduation projects in the host community.

c- Two students had got their first degrees in their country, but were having a three-month course in their subject studies at D.C.U.

All of the students were already engaged in their academic work at the time of the study. Further the study was done two weeks after the students had embarked on a language course intended to serve the needs of foreign students studying at the university. This had perhaps made the students more clearly aware of their language needs, and more readily able to express their attitudes and ideas about the means to fulfilling their objectives. As Richterich and Chancerel observe, "It may be supposed that the learner's vague ideas about his objectives will alter and become clearer as the course proceeds. The fact of learning a modern language will, indirectly, alter his first idea" (1987).

3. <u>METHODOLOGICAL PROCEDURES</u>

The students were supplied with a **questionnaire** which included a set of multiple-choice and open-ended questions (The questionnaire format used is presented in Appendix B). The questions addressed the learners' entry-proficiency levels, their purpose for learning the foreign language, their language needs in their academic situation, the various uses they wanted to put the language to, their purpose for taking the language course and the skills they particularly wanted to improve in the course. The questionnaire was also a tentative attempt to assess the

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learners' attitudes towards the different language skills, their perceptions of teacher/learner role, and their preferred learning procedures and activities.

An **interview** was conducted to verify and elaborate on the information obtained from the questionnaire. The students were interviewed individually and their speech was tape-recorded because it seemed that note-taking would have been distracting to both learners and interviewer. The students were asked to account for their answers and preferences. The tape was played back several times in the data-analysis stage to avoid biased interpretation.

4. FINDINGS AND DISCUSSION

4.1. LEARNING PURPOSE

The question that addressed the learners' purpose for learning the target language was an open-ended question: 'why do you require English?' The students answers can be formulated as follows:

a- **Long-term goals**
- Professional needs (stated by the ten students)
- because English is the language of the international community (stated by the ten students)

b- **Short-term goals**
- Academic progress (the two students who fell under category 'c' above referred to it as being unnecessary).
- Immediate social needs (stated by the ten students)

4.2. TARGET LANGUAGE NEEDS AS SPECIFIED BY LEARNERS

_ Reading specialty literature

_ Reading general texts

_ Writing academic texts (reports, research papers), professional texts (business letters) and general texts

_ Listening to lectures and taking notes

_ Giving and receiving instructions in a science lab. or a workshop

_ Taking part in seminars and meetings

_ Talking to professional experts

_ Operating in various social situations

The learners' target needs were revealed to be multiple, diverse and, perhaps, conflicting which reflected the multiform nature of their learning purpose and the dynamic nature of 'need' itself. This accords with Rossoun's definition of the concept of 'need' mentioned in the previous chapter: "need could be regarded as the expression of a project.... This project may be onerous and conflict with other projects". Thus, their needs were revealed to extend beyond the boundaries of their academic situation.

4.3. SKILLS TO BE IMPROVED

The students were asked to list the skills they wanted to improve in the language course in terms of priority. The result is illustrated in the table below:

	Skills to be improved	No. of students
First priority	Speaking Listening Writing Reading	7 3 0 0
Second priority	Listening Speaking Writing Reading	5 2 3 0
Third priority	Writing Listening Speaking Reading	7 2 1 0
Fourth priority	Reading Writing speaking listening	10 0 0 0

As shown in the diagram above, speaking is ranked by students as the first primary skill they hoped to promote in the language course_ taking into account that speaking is usually de-emphasised in many EAP courses based on target situation needs- analysis. Now, how far were the students right in identifying their priorities of needed skills?

One faculty member in the school of mechanical engineering commented that the students' emphasis on oral fluency stemmed from their desire to look "smart" or "brilliant". He further remarked that since the students were already exposed to an English-speaking environment, there would be a less need for classroom training in the aural-oral skills, and that their language course should aim in the first place to improve the students' writing.

From an academic point of view, writing is no doubt a vital skill for academic achievement, since the students are required to write reports, term papers or dissertations. And it was equally stressed by students as being an essential skill to their needs, though it was ranked below aural-oral skills. However, the question remains: is it true that aural-oral skills should be played down in classroom training because the learners are already exposed to an English speaking environment?

As Schumann argues, in the case of adult language learners, living in the target language community does not necessarily result in good language learning. Adult language learners, he argues, are very likely to undergo a more severe language shock and culture shock which might result in psychological distance between the learner and the speakers of the target language and, thus, "put the learner in a situation where he is largely cut off from target language input and/or does not attend to it when it is available" (1978: 267). Add to this the social distance created between students and people of the target community due to the heavy load of the students' academic study. Therefore, the students' demand for classroom training in aural-oral skills is solidly grounded.

Moreover, as seen in the discussion about long-term and short-term goals, the students seemed to be strongly motivated by their desire to become a member of the international English-speaking community and, more, by

their need to achieve future professional success. No doubt
aural-oral skills are pre-requisites for fulfilling such
aims.

Some students stated that most of the jobs they would
have to apply for after graduation would postulate that the
applicant should be a proficient speaker with English, and
they referred to multi-national companies.   They further
expressed awareness that future professional success is very
much dependent on efficient communication skills of which
aural-oral skills form a major component. The fact that
speaking and listening skills are major functional tools for
professional communication is shown in the diagram below,
taken from an article by Draskau 1988:

Listening & Speaking

49%

8%

Listening

4%

Speaking

3%

19%

Listening & Writing

17%

Reading

Writing

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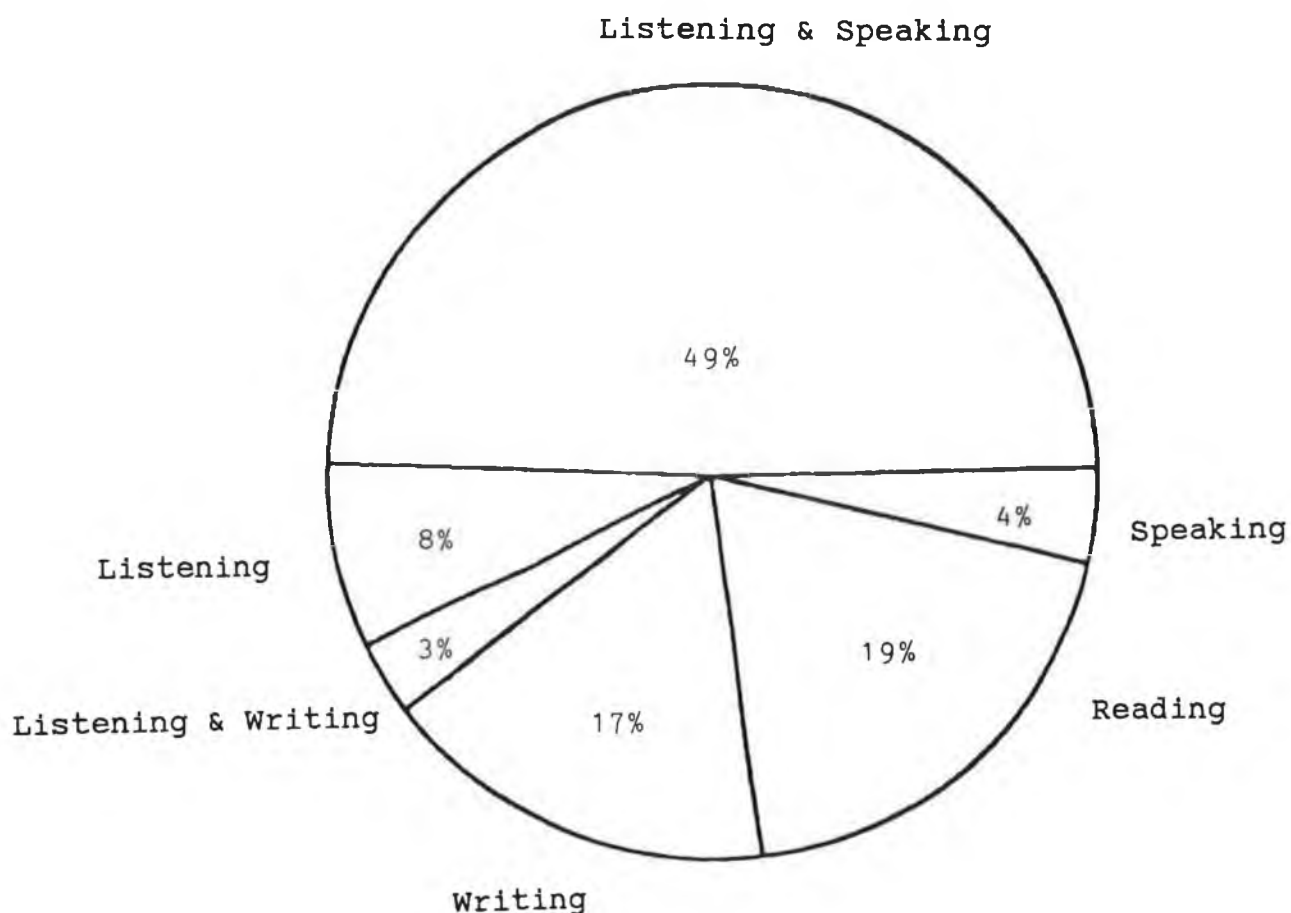
The diagram was originally taken from a report produced by the London Chamber of Commerce and Industry 1985. The report emerged, as Draskau indicates, from a questionnaire circulated among various non-British firms concerning their use of English. The questionnaire covered 10 job positions and 21 different communicative situations. The diagram shows the proportion of time devoted to language communication skills and their relative usefulness.

The implication, as derived from the students' responses, is that an EAP programme would need to accommodate the students' professional needs and aspirations, lest students should be left professionally crippled after graduation.

4.4. <u>COURSE CONTENT</u>

The students' attitudes towards the course content and the kind of competence they wished to achieve can be summarized as follows:

Nine students out of ten expressed their wish that the content of the teaching-learning materials should be related to the area of general English. For example, one student remarked, "I like to learn from every kind of book". Those students perceived that the route to fulfilling their multiform learning purpose would be achieving general communicative competence. However, one student preferred reading texts to be related to his specialized area.

Further, most students remarked that native speakers operating in the science lab. and within the university campus as a whole were more helpful and more sympathetic with them than native speakers outside. They stated that they encountered more language problems while operating outside their academic circle than inside. This made their need for general English more pressing.

They all seemed to agree that technical terms could be best learned through their own reading of specialty literature and in the place of work. This accords with Cowan's observation that learning the meanings of the specialized terminology "is an automatic consequence of studying the discipline" (1974). Inman (1978) also refers to the concrete nature of scientific vocabulary and their "frequent one-to-one correspondence to terms in the students' native language". Further, it is generally agreed that the ESP learner problems often proceed from inability to process specialized concepts rather than from ignorance of the specialized language itself: their problems are more communicative than linguistic (Draskau 1988). The ESP learner's problems may also stem from inability to draw on general English for encoding information when his knowledge of the specialty language fails him. This would seem to point to the need to reintegrate GPE into ESP programmes especially as far EAP is concerned, and to train the learner in exploiting whatever language knowledge available in his stock for processing information and solving problems. As Widdowson rightly maintains:

> Specificity is a suspect notion in relation to
> academic purposes, where students must be
> prepared to use their own initiative to solve
> problems which do not fit neatly into prescribed
> formulae (1983: 106)

In a reply to the question as to whether the students
needed training in report-writing, some Spanish students
replied that they had already written many scientific
reports in their native language, and that it would not be
difficult to write reports in English once their written
English has been improved. They remarked that the skills
involved in report-writing were more or less the same in
both languages. The other students stated that they could
develop their skills in report-writing through their own
exposure to ready- written models and by achieving
efficiency in writing in general terms.

Is it the case that these students were right in
claiming that the manner in which a report is structured in
English and Spanish is more or less the same? We came, in
the course of our research, across a comparative study done
by Mage (1978), cited in Chapter One, which supported their
claim. Mage, whose study was concerned with contrasting how
scientific information is organized in English and Spanish
observes:

> There appears to be a connection between certain
> well-ordered sequences of language and certain
> reasoning processes. These well-ordered
> sequences of language must be adhered to if one
> is to provide objective and accurate accounts of
> facts to be observed, experiments to be
> performed, accounts of processes to be

followed, and reasoned exposition of hypotheses
and theories to be considered (p. 164).

The implication provided by the students' answers is
that in a case where it has been proved that there are
similarities between the way written discourse is handled in
the learner's native language and in the target language,
and in a case where the learner is revealed to be competent
in handling the discourse conventions of his specialized
discipline in his first language, there would be a less need
to adopt a model-based approach in teaching EAP writing. In
other words, focus should not be placed on producing
genre-bound texts; but rather on improving the learner's
general writing capacity. Writing, then, would be
conceived of as "a powerful educational tool" and "education
should arrive at unpredicted destinations" (White 1988).
Therefore, it would appear that the students were right to
perceive that acquiring general writing efficiency would
serve their specialized needs, not vice versa.

4.5. ATTITUDE, EXPECTATION AND LEARNING STYLE

a) The students were asked to rank the macro-skills of
speaking, writing, reading and listening in terms of
difficulty and interest. The purpose was to explore the
students' attitudes towards such skills. The results are
shown in the table below:

Ranking of skills	Most difficult	No. of students	Most Interesting	No. of students
First place	Listening speaking writing reading	4 4 2 0	speaking listening writing reading	7 2 1 0
second place	speaking listening writing reading	5 4 1 0	listening speaking reading writing	6 2 2 0
Third place	writing listening speaking reading	7 2 1 0	reading listening speaking writing	8 1 1 0
Fourth place	reading writing speaking listening	10 0 0 0	writing listening reading speaking	9 1 0 0

The students' ranking of skills in terms of difficulty and interest was roughly consistent with their priorities of the language skills they wanted to improve in their English course. This probably shows how perceptive the students were of their language needs, and how determined they were on improving their aura-oral skills. The table also shows that the students seemed to be more inclined to learn through the aural-oral mode than through the written script, and that they were, perhaps, motivated by their desire to breathe life into the dead English they had learned at school or at the university in their home country. This was reflected by some students' remark that improving their spoken English made them feel "happy" and "self-confident".

b) The students were asked to rank their preferences for the qualities of the good language teacher. The purpose was to explore the students' expectations of the teacher-learner role and their perceptions of the language-learning process.

	No. of students
– Teacher explains and transmits knowledge – Learner comprehends, practices and stores knowledge	3
Teacher encourages learners to work out solutions to problems	5
Teacher constantly corrects learners' mistakes	2
Teacher helps learners to find their mistakes	7

The data in the first row of the table above represent how traditionally language teaching/learning has been conceived of: transmitting knowledge and putting knowledge in store. By contrast, the data in the second row reflect the theory behind the modern communicative approach which perceives language learning as a discovery procedure and as a "function of language in use" (Widdowson 1984). Accordingly, the learner would be engaged in interactive tasks and working out solutions to problems. The teacher interferes only in case of failure, or a model is provided subsequently after the learner has tested out his knowledge and experienced what needs to be learned. The data in the third row represents the traditional attitude to the 'making

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of errors' and obsession with accuracy. The last row reflects the current interest with the notions of 'awareness' and 'autonomy'. The learner's awareness of his language usage and evaluation of his own performance is thought to reduce the frequency of errors and increase language learning (Lian 1987).

However, it should be noted that there were individual differences in the number and kind of previous learning situations the students had been exposed to which might have influenced their choices. As Lian (1987) observes, "each student is different in many ways from every other student not only in his/her manipulation of language but in terms, or because, of the sum total of his/her experiences, his/her inferences drawn from these experiences...." The students' preferences, as shown in the table above, could be, thus, interpreted as the product of or a reaction against their previous learning situations, or as an individual disposition to learn in a given style reinforced by previous learning experiences.

One of the ten students marked the data stated in both of the two-top rows as being necessary for language learning. Perhaps this reflects that the student was willing to modify his learning style and accept new learning techniques; yet he was incapable of overcoming his old learning habits and beliefs. Perhaps such a student could gradually be weaned into new learning patterns and, thus, his learning style system could be extended. Another

student marked the data in all of the rows as being needed. When the student was asked to explain, she remarked "I need everything. I need the teacher to do all these", as if the teacher held the 'magic key' for language learning. Perhaps this reflects an inclination towards excessive reliance on the teacher and a need for developing a degree of autonomy in language learning.

The three students who gave their preference to a teacher who explained everything to them in advance and imparted knowledge did so on the grounds that problem-solving tasks would be time consuming and, thus, the amount of learning would be less. That is, they conceived of language learning in quantitative terms. Such learners might be described as 'item-collectors'. That is they learned by accumulating a received body of knowledge (lists of rules and vocabulary) (See Piepho 1981 for further details on learner types). Their learning-style might have been fostered by their previous exposure to traditional language teaching. However, their learning mode will need to be met, in agreement with Brumfit's observation: "Learners whose self-perception demands traditional procedures need to be taken account of" (1985: 153). On the other hand, the students who expressed preference to problem-solving tasks might have developed a heuristic-learning pattern, or might have been disappointed

with their previous traditional learning experiences and were disinclined to go through it all over again. In either case, the students' preferences should be met if learning is to take place and motivation to be maintained.

The seven students who gave their preference to a teacher who encouraged them to explore their own errors to that who engaged in correcting learners' errors stated that constant error correction is "boring, hard and distracting" to the learner. Such students might have inferred from their learning experiences that free use of language and free self-expression would improve their performance and increase their communicative ability. The other students stated that they liked their errors to be continuously corrected by the teacher. One student remarked, "how can I learn if I am not corrected?" In both cases the learners' wish would need to be fulfilled. Constant error correction might seem inappropriate to the language teacher due to the emphasis currently put on fluency and uninhibited language production. However, the students who demanded constant correction of their errors might have been naturally disposed to accuracy and perfection and/or might have inferred from their learning experiences that their learning increased when a positive or a negative feedback was continuously provided. Further, when error correction is provided in answer to students' wish, it ceases to act as inhibitor or reproof, but rather takes on an informative function (Rivers 1983).

It follows that the learners' perceptions of the teacher/learner role and their attitudes towards teaching/learning techniques and the different language skills should not be overlooked or be-littled. And in order that all learners should participate in and enjoy the teaching/learning operation the learners' individual learning styles and preferred learning procedures and activities should be answered. This can be achieved by a teaching/learning methodology which manipulates teaching techniques as varied as the diversity of the situation demands. In this respect, it seems tempting to quote Rivers: "Cooperative learning implies ... small group activity, large-group instruction, interacting in pairs, or leaving another individual alone if that is what he or she prefers" (1983: 78). By 'large-group instruction' we understand 'traditional teacher/learner role'. Individual differences can also be met by devoting a proportion of the English class to shared interests and activities and a proportion to individual needs and preferred learning tasks.

However, modifying the learner's attitudes and extending his/her learning-style system might sometimes seem favourable or advisable. However, this might need to be done gradually and after matters have been negotiated with the learner. Learners would need to be psychologically prepared and willing to accept change, and would need to feel secure. Further, it should be noted, as James argues, that "most overseas students at least some of the time will return to earlier more deeply rooted attitudes and patterns

of behaviour" under the pressure of their subject-study
load, alien teaching techniques and linguistic inadequacy
(1980:14).

5. **CONCLUSION**

The study suggests that adult language learners are a
rich resource for acquiring insight into the nature of
learner needs and the language learning process and,
therefore, can be reliable informants regarding the content
of the language course and the teaching/learning
methodology. These can be summarised thus:

- Students set themselves learning standards and need to
  live up to them.

- As the study suggests, the students' language problems
  might well reside outside their specialized discipline.

- A positive attitude towards general communicative
  competence, when detected, should be encouraged and
  reinforced in the ESP learner.

- The students' future professional requirements need to be
  taken account of when designing an EAP programme.

- Oral fluency needs to be given adequate attention in EAP
  courses, even if the learners' academic situation does not
  demand this. It does have importance from the students'
  viewpoint. It is worth re-mentioning that living in the

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target language country does not necessarily improve the students' speaking competence. However, it places more demands on the students and, thus, provides significant reasons for giving oral skills precedence in ESL language programmes.

CHAPTER FIVE

DEVELOPING RECEPTIVE AND

PRODUCTIVE SKILLS

1. INTRODUCTION

Though most language learners need the foreign language for understanding and producing spoken and written stretches of discourse, the "centre of gravity" will shift depending on the communicative activities one gets himself most engaged in (Corder 1973). This demands different levels of performance ability in the different kinds of skill areas (reading, listening, speaking and writing). For example, the air-traffic controller will be operating most in the listening and speaking skills; whereas, a medical doctor practising his profession in his home country may need English most for reading specialty literature.

However, these skills may be viewed as tips of the iceberg of a whole set of some internal cognitive mechanisms underlying the production and understanding of speech (Corder 1973: 320). Although the receptive skills of reading and listening have few outward noticeable realizations, this does not imply that they are passive. They are, rather, active mental processes which involve hypothesis making and negotiation of meaning (Corder, op cit.).

The question, therefore, that is posed is whether such skills should be handled in isolation. The needs analysis may reveal that a student needs the English course for increasing his reading skills, but does this mean that the ESP programme will be confined exclusively to the practice of that particular activity? Can the development of reading skills not be reinforced through listening, writing or speaking?

As Corder points out, the so-called four skills have a lot in common psychologically, and one cannot isolate the mental processes involved in reading from those involved in writing or listening. It follows that "the efficient learning of reading may also involve writing or speaking. One must not fall into an all too common confusion of ends and means" (Corder, op cit.). Similarly, Widdowson (1978) explains that if learning a foreign language is to be viewed as a matter of acquiring "an ability to interpret discourse, whether the emphasis is on productive or receptive behaviour.... it would seem to follow that any approach directed at achieving it should avoid treating the different skills and abilities that constitute competence in isolation from each other" (p. 144).

From a practical point of view, dedicating a learning class to the practice of a single skill area such as reading or writing etc. might result in boredom on the part of the learner and, therefore, decrease learning. Further, with reference to study skills, Candlin, Kirkwood and Moore

(1978) point out that any of the study modes involves more than one macro-skill. Reading comprehension, for example, involves note-taking and summarizing which act to facilitate meaning assimilation and the recall of information. Writing academic papers involves reading and discussion with subject tutors.

It follows that from a psycholinguistic and practical point of view, productive learning entails an integration of skills. Though the focus of learning tasks will be directed towards the promotion of the target skill area, these tasks should be designed in such a way so as to involve a combination of different types of skills in the learning process. As Stevick observes," The higher the quality of the image_ that is, the richer and better integrated it is_ the more easily we will be able to get back one part of it when we encounter another part" (Quoted in Hutchinson and Waters 1987:75).

The purpose of this chapter is to highlight some of the subskills and strategies involved in each type of the four major skills (listening, speaking, reading and writing) and, thus, provide some pedagogical implications with special reference to ESP learners. The importance of integrating skills will be emphasised.

2. ORAL COMMUNICATIVE COMPETENCE
ESP learners might need English in order to perform orally in formal as well as in informal environments. Though

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the two situations share much in common, still each maintains its own features and demands specific skills.

2.1. SPEECH USED IN INFORMAL SITUATIONS

In both formal and informal contexts, communication is usually either bi-directional or multi-directional and is mediated by paralinguistic features and feedback. However, informal speech tends to be redundant and elliptic, fragmented and inconsistent. It is mediated by repetitions, hesitations, false starts and pauses; and usually participants contribute in short turns due to the interruptions that normally take place in informal speech situations.

On the basis of a study of the language used in informal business meetings (where the participants know each other), Williams (1988) remarks:

> The language contained a large number of unfinished sentences, false starts, overlapping utterances, interruptions and fillers such as 'um', 'er', and 'you know' . A large proportion of the language contained comments, jokes, quips, repetitions.... The speakers did not generally speak in one-sentence utterances.... Overtly polite forms were not generally used in the real meetings... (p. 49).

Williams (1988) further points out that the language functions performed by participants in informal meetings are not necessarily realized explicitly: "Which function was being performed was clear from the presuppositions, situation, and context" (p.51)

There seems to be two language problems that especially need to be drawn attention to in relation to informal speech:

1) The ability to process unfinished sentences (ie. abbreviated utterances) whether receptively or productively. This has been pointed out by Cook (1978):

> ... it has always seemed odd to me that such a common feature of the spoken language should be carefully avoided.... Students often find it difficult to locate the referential 'root' of an incomplete sentence and their English is marked by an inability to formulate sentences in a natural way (pp. 103-4).

Cook (1978) notes that students should be trained in dialogues which involve the manipulation of incomplete sentences.

2) The ability to handle discourse strategies for performing language functions rather than excessive reliance on the formal exponents for these functions. Williams (1988) points out that L2 speakers worlde-wide tend to be over-explicit when they express speech acts. She holds published learning materials which proceed from the functional approach to be accountable for this phenomenon.

As a result of a comparative study of the language taught by business English books and that used in real business meetings, she explains that textbooks tend to present learners with an 'item-bank' of language functions

together with their over-polite, over-explicit linguistic realizations; whereas, in real meetings, many of these functions are covertly realized. Williams gives the example of 'expressing opinion' function. She explains that in the books examined, "28 ways for performing this function were taught. These were all explicit, and included items like 'I definitely think that'; 'I really do think that' ; 'as I see it'; 'I consider'; 'I feel'; 'in my opinion'". Comparing this to the way in which this function is performed in real situations, she notes: "Of the 59 expressions of opinion in the real meetings, 18 began with versions of 'I think', while 19 were statements that were not expressed explicitly, but were heard to be opinions" (p. 52). Williams observes that not only do such books teach students inaccurate expressions, but they train them to be over-explicit, as well: "We might be in danger of teaching our students to be over-explicit" (p. 52). Therefore, she recommends that teachers should rely more on authentic materials than on coursebooks and their accompanying tapes and films.

2.2. TAKING PART IN FORMAL SPEECH SITUATIONS

In a study of the speech that occurs in formal environments (academic seminars, committees, and formal business meetings), Deese points out that the language used_ being in most cases pre-planned_ tends to be more structured, formulaic, precise and consistent. Participants, Deese observes, usually contribute in long turns and speak in sentences which are relatively short and grammatically correct (cited in Ellis & Beattie 1986: 117).

It follows that structured long-turn speech is a feature of performance in formal contexts. And since the nature of communication is essentially transactional (ie. message-oriented), one is bound to relay information clearly, systematically and concisely: "Successful transactional speech often involves more use of specific vocabulary" (Brown & Yule 1983a: 13). The speaker is obliged to make conscious use of rhetorical acts and discourse procedures. One is bound to exemplify, define, describe etc. The speaker tends to make overt use of logical connectors (eg. consequently, on the other hand, as a result etc.) for organizing the flow of information. In this respect, formal speech shares many of the features of written language (cf. Brown & Yule 1983b: 14). On the other hand, the receiver, as Brown and Yule (1983a) note, "is conventionally expected to make notes in writing in order to from a permanent record" of what has been said (p. 13).

This implies that ESP learners need to be trained in the skills required for communicating information in long turns. As Brown and Yule (1983a) point out:

> The ability to produce long transactional turns, in which clear information is transferred, is, we claim, not an ability which is automatically acquired.... It is an ability which appears to need adequate models, adequate practice and feedback.... training the student to produce short turns will not automatically yield a student who can perform satisfactorily in long turns" (p. 19).

A long turn, as defined by Brown and Yule (1983a),

"consists of a string of utterances which may last as long
as an hour's lecture" (p. 16). The longer the turn, they
observe, the more demands are made on the language producer.
One form of long-turn speech that ESP students might need to
be trained in is 'talk delivery' where the speaker will be
fully responsible for the structure of the discourse.

Price (1977) Suggests a technique for training
students in structuring their presentation. She identifies
five stages in the presentation of a speech: a) general
introduction, b) statement of intention, c) information in
detail, d) conclusion, e) invitation for discussion.

The approach she proposes for training students in
talk delivery is to introduce them to the idea of the five
stages, discuss with them the function of each stage and,
then, provide them with a model talk. The students would be
asked to spot the five stages as they listened, and the
kind of language used for treating each stage. Vocabulary
and phrases appropriate for each function can be arrived at
through negotiation between teacher and learner. Then each
student would be asked to deliver a talk himself choosing a
topic from his specialised field.

In conclusion, in order that ESP learners should
perform appropriately in both formal and informal
situations, they need to develop an awareness of "the
social diversity of language" (Tarone & Yule 1989: 97).
Language use is not uniform. It changes in compliance with

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the features of the social situation, the purpose of communication, topic and relationship between speaker and listener.

3. LISTENING AND UNDERSTANDING WITH SPECIAL REFERENCE TO LECTURE AND LABORATORY SETTINGS

Listening practice is often stated as a priority need by ESP learners, students and businessmen alike_ which reflects lack of exposure to fluent spoken English as spoken by natives. In addition, there seems to be a relationship between the type of listening situation and the learner's listening ability. Listening on the telephone which is mediated by sound distortion and absence of visual support, processing the flow of information in a lecture and responding immediately to instructions in a science laboratory or a workshop demand specific skills on the part of the learner dictated by the characteristic features of the listening context. It follows that listening practice materials should be authentic and should exemplify the discourse procedures and physical features of the situation in which the learners need to perform.

Students required to follow a lecture in English medium about their specialty subject will need to be trained in the discourse procedures, verbal and non-verbal, used by the lecturer. The practice materials should concentrate on items that present problems to students such as the ability to handle logical connectors and anaphoric expressions (reference to an element previously mentioned which is

normally fulfilled by the use of pronouns, demonstratives etc. eg.); to interpret phonological features such as connective and contrastive forms, and colloquial idioms and expressions; and to get the gist of a lecture so as to get notes (Morrison 1978: 64). Items as such cannot be practised in isolation but in contextualised natural discourse.

Hutchinson and Waters (1980b) highlight some of the procedures that determine the structure of an EST lecture such as the conversational mode of presentation and the role of visuals. They maintain that visual display forms the axis of the discourse:

> Language ceases in effect to be the primary element in the communication: it takes an interpretive role_ explaining, highlighting or contextualising what is visually observable... The normal roles are reversed (p. 10).

Using genuine samples of lectures as a basis for practice can be too highly subject-specific and may not appeal to students. Television documentaries or radio broadcast discussions on general scientific topics can, as Morrison (1978) notes, well be utilised as a vital source for listening practice materials. These can serve, as well, as a genuine stimulus for subsequent oral discussion if they succeed in involving the student's attention and interest. Listening tasks can be backed up by written exercises which check and reinforce the assimilation of the pertinent items.

However, video recording lectures can be incorporated

into the ESP programme, not so much as a basis for language practice, but more to enable the student to build up a global picture of the structure of his specialty lecture and to provide practice in establishing the relationship between visual forms of presentation and spoken texts (cf. Kennedy and Bolitho 1984).

ESP students might also encounter comprehension difficulties when required to function in a workshop or a science laboratory in an English speaking community. This is often due to the nature of the input they are receiving which tends to be colloquial, elliptical, decontextualised and demands immediate response (Farrington 1981). In other words, the stretch of discourse they will be exposed to tends to be rapid, short and devoid of a clear verbal context as it is the case in oral directives and instructions_ where the receiver is required to respond immediately and where failure to collect the message correctly might bear unfavourable consequences. Farrington (1981) reflects on the nature of interaction in science laboratories and, thus, points out some comprehension problems that face L2 university students:

> Another thing that struck me was how important it was that the request, directive, warning should be understood exactly and first time. 'Sorry? What did you say?', perfectly acceptable in casual conversation, would be a very unfortunate response in many circumstances. I have in mind, for example, one occasion when a lecturer shouted at a Brazillian student, 'Get me the water bottle_ the red-topped one'. At the time of speaking, he had his back to the student, and also, between his teeth, he was holding a syringe... (p. 68).

Communication in such a situation forces the listener to rely more on her perceptive skills (identifying the surface structure of words, bit by bit, as heard) for deciphering the incoming data than on the clues provided by the verbal or situational context.

Moreover, as Rivers (1964) and Corder (1973) point out, a native speaker usually resorts to his underlying linguistic knowledge to predict and anticipate what a person's next utterance is going to be and even what the next sound is likely to be and fills in what is missing from the cues provided by the context. Deprived of this advantage, due to poor L2 knowledge, and faced with the nature of the input in the foreign science-laboratory situation, L2 university students will initially feel insecure and at a loss. The problem will be aggravated if the student is not listening orientated.

It follows that students expected to operate in a workshop or a science laboratory environment should be given sufficient practice for improving their hearing acuity and their perceptive skills. Stress should be placed, as Farrington (1981) observes, on the learner's ability to recognize unstressed grammatical forms such as pronouns, auxiliaries, particles, etc.

Learners should be exposed extensively to rapid colloquial speech and different regional variations.

Farrington (1981) remarks: "one of the things that struck me about the language I heard in the laboratories I visited was its informality rather than its technicality" (p. 67). Laboratory assistants and technicians, as Farrington notes, less used to talking in formal English, might feel reluctant to switch into a more or less standard style when communicating with the foreign student. Further, the habit of repeating the instruction once it is heard, as Farrington notes, should be encouraged in the learner. This may serve as a check for whether the learner has got it clear and as an aid for learning it. Moreover, repeating what one has heard aloud, as Henner-Stanchina (1982) notes, acts to increase the learner's "self-correcting reflex in listening". It allows the learner to test out his initial interpretation and reconstruct it in case it appears to be impossible. The reconstruction process is continued until a reasonable interpretation is achieved and confirmed by drawing upon one's existing syntactic and semantic knowledge of L2 and upon one's knowledge of the world (Henner-Stanchina 1982: 62).

Improving listening skills can, further, be facilitated and advanced by the use of printed materials (Rivers 1964). This allows the learner to examine the printed text at his own leisurely pace, and familiarize himself with its structure, vocabulary and organization (Rivers 1964). The printed material will serve as a tangible aid for the generalization of rules, apart from the fact that reading and listening comprehension share more

or less the same psycholinguistic skills.

TV. documentaries about communication in a workshop or a science laboratory might be integrated into the ESP programme. This may help to get the student acquainted with the psychological and physical background against which he is expected to operate, before throwing him at the far end of the workshop or laboratory.

4. READING COMPREHENSION SKILLS

Understanding a text_ as a structured piece of discourse_ pre-supposes the manipulation of a variety of skills. The main reading skills that are generally referred to are the learner's ability to anticipate or predict information; deduce meaning from context ignoring unknown words which do not hinder the recovery of the message; recognize word-formation; understand relations within and between sentences by identifying anaphoric expressions exploited in the text ; recognize discourse markers which are necessary for piecing the text together and understanding the communicative value of sentences (words that announce an example, an illustration, a supposition, a result, a contrast etc.); recognize the communicative function of sentences even when not introduced by discourse markers (eg. definition, comparison, classification etc.); scan a text for the purpose of extracting specific information; skim over a text to get the main ideas and discard irrelevant ones, and so on (see Grellet 1981 and Nuttal 1982).

However, to say that the learner's purpose for taking the language course is the acquisition of reading skills is not sufficient data about her needs. The uses the learner would make of her reading and the type of texts she would be exposed to should be specified accurately. Each type of reading activity has its own purposes and entails the fulfillment of specific skills. For example, reading reference works demands special skills such as the learner's ability to select books in a library and decide whether the contents are relevant to her needs, to look up references in an index or in bibliographies, to review journals or periodicals or to consult a dictionary or encyclopedia (Geddes 1977). Reading an advertisement requires different reading strategies from those involved in reading,say, a scientific article. Whereas extracting information from an advertisement requires the reader to go through the text quickly in order to extract relevant information, understanding a scientific article entails more detailed reading (Grellet 1981).

However, this section will be confined to the type of texts that commonly appear in language coursebooks and which are directed to develop the learner's reading comprehension skills, and to the kind of reading problems that are said to be encountered by learners using English for academic purposes.

Texts that are now commonly exploited for the development of reading comprehension skills are classified

by Widdowson (1978) into three text types:

1) **Authentic or genuine texts** . Examples are newspaper reports, scientific articles, letters or passages taken from the students' specialty subject textbook. As Grellet (1981) points out: "Authenticity means that nothing of the original text is changed and also its presentation and layout are retained" (p. 8).

2) **Simplified texts**. These are derived from genuine texts which are subjected to syntactic and lexical substitution. In other words, difficult lexis and structures are replaced by those which match with the learners' linguistic competence.

3) **Simple accounts**. A simple account, in Widdowson's words, "is the recasting of information abstracted from some source or other to suit a particular kind of reader.... a simple account is a genuine instance of discourse, designed to meet a communicative purpose, directed at people playing their roles in a normal social context" (p. 89). It is an original text written in the author's own words, and it presents information extracted from a single source or a number of sources.

These three text types are, as Widdowson (1978) explains, "intended as demonstrations of language as use" which the "learner is invited to read as discourse and not simply as exemplificatory texts" (p. 79). In other words,

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they are intended to engage the reader in a communicative activity which entails negotiation of meanings and the manipulation of reading skills_ unlike the type of texts which have appeared in structural syllabuses and which, as Widdowson (1978) notes, have been used as a vehicle for sustaining and extending the knowledge of grammar and vocabulary. However, despite Widdowson's apt observations regarding the nature of the reading process, his simplified texts, as mentioned in Chapter Two of this thesis, have not lived up to his observations. They have failed to engage the reader in authentic language use since they are basically meant to be a vehicle for expounding rules of rhetoric.

Moreover, fulfilling the communicative end intended of any of these three text types hinges, to a greater or lesser extent, upon the learning activities constructed for the fulfillment of such a purpose. Reading exercises and appended comprehension questions, when uncarefully planned, might act to divert the learner from approaching the text in an authentic way and, therefore, hinder the development of reading strategies. The adoption of genuine texts, for example, does not necessarily guarantee authentic manipulation of such texts. Widdowson (1978), as already mentioned, explains that authenticity is not so much a matter of an authentic passage as it is "a characteristic of the relationship between the passage and the reader and it has to do with appropriate response" (p. 80). In pedagogical contexts, the development of such an authentic relationship between the learner and the set text is so much

a function of learning activities and methodological procedures as it is a function of the type of text employed.

In Appendix (C), a learning unit is reproduced_ taken from the language coursebook still currently taught to secondory school students, science option, in Syria: English for Secondary Schools: Book Two, Scientific.In addition to revealing how the written text forms the axis of the learning operation in Syrian school ESP contexts, it is presented to elaborate on the point mentioned above and to highlight some of the comprehension skills that need be established in the learner.

The reading text exploited in this learning unit is extracted from Penney's Everyday Heat, Light and Sound (1946). The book was originally aimed at a particular type of reader as indicated by the stylistic features of the text and, therefore, might fall under, what Widdowson calls, a 'simplified account'. It represents an actual instance of 'language in use'. However, teaching methodology and appended exercises and comprehension questions have rendered it an instance of 'language as usage' and have stood in the way of exercising and increasing communicative skills.

Reading as an interactional process, "involves inferring what propositions sentences are used to express and how they inter-relate", that is, working out what the text is about or what message the writer wants to convey

(Widdowoson 1978: 68). It "involves also the ability to infer what illocutionary acts these propositions are used to perform", that is, what the writer is doing (eg. reporting, illustrating etc.) (op cit). Reading is also a matter of 'discrimination', that is, the ability to distinguish between sentences which carry the main message and sentences which play a supporting role: "It is the ability to discriminate relative significance which enables us to take notes and summarize" (op cit.). Interactive reading presupposes the ability to anticipate information and make predictions. The strategies that underlie these two processes are, perhaps, best clarified by Tadros (1984):

> Anticipation involves guesses on the part of the reader, but prediction involves a knowledge that a commitment at one point in the text will produce another subsequent linguistic event. Thus if there is a signal, the reader can predict what the writer will do; if there is no signal the reader may anticipate what the writer will do, making use of his own common sense, knowledge of the world etc.... Indeed without such assumptions no interaction can proceed (p. 54).

Further, effective reading entails critical thinking, that is, evaluating the value of what the writer says, agreeing or disagreeing with or commenting on what he proposes. It demands feedback on the part of the reader.

However, as seen in the learning unit presented in Appendix (B), the learner is deprived of the opportunity to fulfill such strategies and to carry out his role as an active reader.

At the very outset of the learning unit, the learner is presented with an introductory sentence telling him explicitly what the text is about or what the writer is doing. This has acted to prevent the learner from capitalizing on whatever clues presented in the text which would enable him to find out this for himself. Reading is neither perceived as a discovery procedure nor as a process of inference.

However, though the introductory sentence is an explicit statement of what the writer is doing and is, thus, put to facilitate the learner's understanding of the passage, it is inaccurate and loosely put. It contributes, therefore, towards misdirecting the reader and increasing the learner's comprehension difficulties. The reader is made to believe that the core-topic of the text is about 'early experiments in measuring the speed of sound'; whereas, in actual fact, this has turned out to be a sub-topic. In the first three paragraphs, the author is mentioning ways in which sound is transmitted. In the fourth paragraph, the reader is invited to reflect on the speed at which sound travels through the air. In the fifth paragraph, the writer is describing early methods in measuring the speed of sound. In the sixth paragraph, he mentions deficiencies of early methods and how the speed of sound is measured nowadays. In the last paragraph, the author mentions the relationship between the speed of sound and the fall/rise of temperature.

Further, the learner is presented with a list of the new vocabulary occurring in the text together with their dictionary meanings. In the Syrian learning context, such a list is taught, and in many situations learnt by heart, before students embark on their reading activity. The list is taught and learnt in abstraction from the reading passage and is, therefore, rendered a learning activity in its own right. Again, this has resulted in preventing the learner from exercising his reading strategies for sorting out meaning from context. As Widdowson (1978) observes: " ... by giving him a meaning in advance we might be inhibiting this process.... If the learner is to acquire the communicative ability of reading he must develop an interpreting strategy whereby he is able to derive meaning from context" (pp. 85-6).

The learning unit presented illustrates, as well, how comprehension questions are simply used as a tool for testing the learner's understanding of the given passage, instead of questions being developed for promoting reading comprehension skills (cf. Widdowson 1979)_ in which case many students are encouraged to lean heavily on commercially produced translations of the set texts in order for answering comprehension questions. In other words, comprehension is often achieved in the learner's native language. Prediction questions at the outset might have encouraged students to use existing knowledge in the comprehension of the text and might have acted to establish appropriate reading attitudes.

Further, the demand made of the students by the set comprehension questions is to examine the surface structure of the text and to recover meaning at the sentence-level. The learner is trained to perceive the text in terms of discrete units and is hindered from recognizing the inter-relationships that obtains between sentences and paragraphs within the same text. This has further made many learners adept in cutting out the right literal surface-structure answer without necessarily having to understand what it means or what the question means in the first place. Instead of comprehension questions being conceived of as a learning procedure, they have come to be viewed as the prime reading end.

The rest of the exercises illustrate how the text is exploited as a tool for increasing the learner's knowledge of linguistic elements. However, the exercises reveal that the text is not effectively exploited even for achieving this end. The text is made use of in a rather superficial way. Pedagogical procedures, for example, have failed to capitalize on the text for sensitizing the learner to the relationship that exists between grammatical choices and rhetorical functions (cf. Lackstrom et al 1973)_ though the text provides a fertile soil for achieving this learning goal. For example, in the first three paragraphs, the author is using the present tense because he is stating facts. In the fifth paragraph, he switches to the past tense because he wants to describe past practices. That is, the rhetorical function has made a demand on the writer in

his choice of the kind of tense. Exploiting the text in such a way might have made the teaching of grammar more comprehensive and more efficient and, at the same time, increased reading comprehension skills.

Therefore, though the text, as mentioned above, is written for a communicative purpose which entails the fulfillment of reading strategies, the way the text is dealt with pedagogically has turned it into a vehicle for the learning of linguistic elements. Pedagogical procedures have produced in the learners certain stereotypical habits in handling a text in the foreign language. This has further hampered the transfer of reading skills already acquired in L1 to L2 reading.

However, what is said of the learning situation in Syria is, perhaps, largely true of how learning is still practised in some other parts of the world. As Ticko (1981) puts it: "There is still a lot of resistance to radical change and apprehension of the possible consequences of throwing away the pedagogic baby with the behavioristic bathwater" (p. 155).

This is reflected on the students' reading abilities and is accentuated by the reading problems that ESP learners are said to encounter in handling their academic texts. Tawfiq (1984), for example, comments on some of the reading difficulties that face students in the Faculty of Medicine in Iraq:

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I have inferred from student's interaction that they had difficulty in separating what is essential and non-essential in a text. This probably would lead them in turn to face difficulty in deciding on relevant notes to pick up for future reference (p. 93).

Tadros (1984), at the University of Khartoum, remarks:

Years of experience have shown that students are heedless of certain clues basic to the understanding of what they read. These clues, if made use of, would enable students to proceed ahead of the text. It is necessary for any ESP programme to develop in the students the skills of prediction which will help both their reading and writing. Many problems arise because students are unable to exploit predictive signals while reading nor fulfill a prediction they set up while writing (p. 63).

Therefore, proper reading entails interaction, and learning activities should aim at promoting the learner's involvement in what she reads; so that reading would make sense, the language system would be exploited in an authentic way and the learner is permitted to exercise her reading strategies and reasoning processes (Widdowson 1978-1979).

Relationship between learner and text can further be enhanced and organized by linking reading activities to other language skill areas (writing, speaking and listening). On the other hand, the establishment of appropriate reading strategies might result in the student's ability to produce an effective piece of writing and might have bearing on the student's overall communicative competence.

Concentrating on the practice of reading for developing reading skills might not lead to optimal language learning. In this context, Ticko (1981) warns teachers against reliance on coursebooks which are specifically designed for increasing reading skills, in isolation from the other communicative skills:

> 'Reading only courses' (1) do not appear to involve the teacher where he or she can operate best (2) cannot provide for sufficient interaction among learners... (3) do not allow for the teacher-learner living dialogue that largely sustains good teaching (p. 157).

A point that seems to be worth re-mentioning is that although the students' specialized situation might reveal that the students need English most for reading specialty literature, this does not mean that the language course should necessarily be designed for developing reading skills. As Sawales (1978) notes:

> It seems to me, however, that it does not necessarily follow from the fact that reading has been identified as being the greatest need that it should be assigned the largest proportion.... decisions about course priorities should be partly based on an assessment of the circumstances under which teacher intervention in the learning process is essential, where it is useful and where it is of marginal advantage" (p. 45).

Finally, learning materials used for promoting reading skills need not be confined to specialist texts. The learner should be given the opportunity to expand his reading competence into broader areas of language use. Further, a

point that need to be drawn attention to is that the students' reading problems might lie outside his specialized texts. The student might well be familiar with the properties and conventions of his specialty literature, but confront reading problems when required to read general texts or semi-specialist texts such as scientific popularizations due to their colloquial and idiosyncratic features (cf. Latorre and Kaulen 1985).

5.WRITING SKILLS WITH REFERENCE TO ACADEMIC NEEDS

Students across disciplines are very likely to be called upon at any stage of their academic study to produce extended written assignments such as essays, term papers, project reports, theses or dissertations. What does this task imply? What skills and strategies does it involve? How far are L2 students equipped with such skills? What factors underlie their writing problems? And what teaching procedures to be adopted to enable L2 students to perform such a task successfully and comfortably?

5.1. THE PROPERTIES OF THE WRITING TASK

Producing a lengthy piece of written work is a formidable task which demands the investment of a great deal of mental energy and the fulfillment of high-level writing skills. As Breiter and Scardamalia (1983) observe: "Writing a long essay is probably the most complex constructive act that most human beings are ever expected to perform" (p. 20). Unlike oral production, they point out, the writing activity requires the writer to produce

language, generate content and continue a line of thought without the prompting and support that come from speech participants. The writer is required to plan large chunks of discourse instead of simply planning the next utterance. Producing extended texts, they further note, presupposes that the writer is trained in dealing with the major requirements of writing such as stating purpose, getting ideas down on paper or playing one's thoughts, organizing information, holding on to a criterion of relevance , attending to the relationship between what one means and what one writes, operating within the bounds of genre and register, revising both in relation to one's scheme and in relation to audience which implies acting as one's own reader, and so on.

Understanding of the features of written texts and writing skills is much indebted to the work done in the field of discourse analysis. The switch of attention from writing as being sentence-based to writing beyond the sentence level has brought to light some concepts essential to the understanding and learning of writing: **cohesion vs coherence** , **text vs discourse**, and **product vs process** .

The term 'cohesion', associated with Halliday and Hassan's Cohesion in English (1976), is used to refer to the interconnection between sentences in a printed text as signalled by formal cohesive markers which are said to force co-interpretation and, thus, constitute textual coherence. As Halliday and Hassan put it: "a text has a texture and

this is what distinguishes it from something that is not a text.... The texture is provided by the cohesive RELATION" (1976: 2). Cohesive markers include anaphoric devices and expressions like 'but', 'so', 'in addition', 'however', 'finally' etc. The following example is given by Halliday and Hassan (1976): "Wash and core six cooking apples. Put them into a fireproof dish." Halliday and Hassan explain: "It is clear that them in the second sentence refers back to (is anaphoric to) the six cooking apples in the first sentence. This ANAPHORIC function of them gives cohesion to the two sentences, so that we interpret them as a whole; the two sentences together constitute a text" (p. 2).

However, literature on discourse analysis has pointed to the inadequacy of cohesive markers as a basis for recovering the relationship between sentences and for establishing textness. They are generally viewed to form lower-order elements of 'coherence'.

Brown and Yule (1983) point out that the writer/reader tends to build up a coherent picture of the series of events being presented, and fuse the events together rather than work on cohesion markers alone (p. 193). Theory of cohesion, they note, is only concerned with describing data on the printed page. It does not account for how data is processed by both producer and receiver (Brown and Yule 1983: 25).

Widdowson (1978) remarks: "... discourse is not

dependent on overt cohesion of this kind" (p. 27). According to Widdowson, "language does not mean the production of sentences in sequence but the expression of propositions through sentences" which combine to perform "illocutionary acts" such as stating purpose, mentioning, reporting, defining, calssifying, warning, and so forth (1978: 27). It follows that, as Widdowson explains, 'cohesion' is the <u>overt</u> relationships between propositions (meanings conveyed) as signalled by formal markers and which, therefore, form a 'text'. 'Coherence', on the other hand, is the <u>covert</u> relationships between propositions as inferred from the interpretation of illocutionary acts these propositions are used to fulfill and which, therefore, constitute 'discourse'.

Widdowson (1979) has made a distinction between 'text analysis' and 'discourse analysis' and, thus, pointed out the difference between two aspects of language use: **'product'** and **'process'**. Widdowson glosses that text analysis and discourse analysis are "two ways of looking at language beyond the limit of the sentence. One way sees it as text, a collection of formal objects held together.... The other way sees language as discourse, a use of sentences to perform acts of communication..." (p.98). The former, according to Widdowson, is concerned with the product, that is, it aims at developing formal linguistic knowledge. The latter is concerned with the process, that is, it aims at creating awareness of how language is used to perform meaningful communicative acts.

However, where early work in discourse analysis has sought to keep a balance between product and process as has been accentuated by Widdowson (1979): "text analysis and discourse analysis are different but complementary ways of looking at language.... language teaching ... should be as much concerned with discourse as with text" (p.98)_ the procedural and interactive aspect of language use has been given primacy in recent studies. This tendency is expressed by Brown and Yule (1983): "... unless we believe that language users present each other with pre-fabricated chunks of linguistic strings (sentences), then we must assume that the data we are investigating is the result of active processes" (p. 25).

Accordingly, writing is viewed to be reader-based. The writer is seen to be engaged in procedural activities for making information accessible and fulfilling the reader's expectations. The writer is seen to be continuously editing, adding and re-writing, so that understanding is achieved and the reader is not confused nor his intelligence is insulted. The writer is viewed to be all the time drawing upon the reader's existing schemata (Widdowson 1983, White 1988).

'Schemata', as defined by Widdowson (1983), are "cognitive structures which the individual uses to organize behaviour" (p. 46). And again,"[schemata] are used to project an order on experience and to provide for the orderly management of new information " (op cit).

The notion of 'schemata' has become the driving force in discourse analysis and a major source of insight for current language teaching. The question of coherence has come to be explained on the basis of interaction and convergence between two schemata, the writer's and the reader's. This view is expressed by Widdowson (1983): "The bridging, adding, and restructuring procedures are directed at assembling the information provided into schematic patterns, and their success in doing so, this is a measure of the coherence of discourse" (p. 70). And learning to write in the target language is conceived of as a matter of getting access to L2 schemata as a basis for organizing information. As White remarks, L2 students "will have problems producing discourse according to schemata which are alien to them" (p. 12). Widdowson (1983) points out that "ethnic interaction involves [bridging] the gap between schemata which are very different" (p. 45).

However, since the writer uses formal cohesion in order to organize knowledge and, therefore, facilitate decoding; and since inappropriate use of cohesion markers might disrupt the process of interpretation as noted by Widdowson (1978): "... difficulty might arise because the form of a sentence represents an inappropriate arrangement of information in respect to what has preceded" (p. 26)_ the term 'cohesion' will be, henceforth, referred to as an aspect of 'coherence', following the example of Johns (1986). Therefore, 'schemata' will be viewed to refer to the individual's existing knowledge regarding frames of

reference (ideational knowledge), rhetorical patterns (the arrangement of information to fulfill illocutionary acts), as noted by Widdowson (1983: 49)_ and also regarding rules of cohesion and the conventions of ultimate layout of information as a whole (ie. information layout-format).

Moreover, performing an academic written assignment will not be simply viewed as a writing activity. As Bloor and St John (1988) point out: "The writing aspect is only the culmination of a series of related processes that involve both the receptive and the productive use of language" (p. 86). It involves reading selectively with a specific aim in mind, summarizing, taking notes, paraphrasing, sifting of information gathered from various sources and incorporating it into the written assignment so as to support argument and develop content (op cit.).

5.2. STUDENTS' WRITING PROBLEMS AND UNDERLYING FACTORS

Performing a lengthy academic assignment is not infrequently seen by L2 students as a road full of 'menace', and their writing is often revealed to suffer from the symptom of 'incoherence'. Apart from their linguistic inadequacy, L2 students generally seem to suffer from lack of confidence in their abilities to fulfill the major writing skills and to reduce writing obstacles. When the task is accomplished, it is usually not done with comfort and is often said to be seriously flawed.

Johns (1986), at San Diego State University,

comments on the writing problems of overseas students: "students's academic writing is often 'incoherent', a feature which appears to cover a number of perceived weaknesses" (p. 247). Johns (1986) points to some writing difficulties which encounter L2 students and which, therefore, conspire to produce incoherence: the ability to integrate information derived from references into their writing, to provide obvious formal markers to signal which information is the student's own and which is reference information, and to revise large units of discourse. Johns notes that most students continue to revise at the sentence level, that is, removing grammatical and lexical errors. According to Johns (1986), students' writing problems are the product of drawbacks in EFL materials students have been exposed to:

> Numerous EFL textbooks present sentence level grammar in a discourse context.... published textbooks ... do not provide sufficient introduction to the depth and variety of coherence features necessary for proficient writing (p. 251).

Bloor and St John (1988), at Warwick University and the University of Aston, argue that despite the fact that many students have performed extended tasks in their native languages (Arabic, French and German), as part of their first degrees, "few of them have considered the overall purpose and structure of their writing" (p. 91).

Holes (1984) points out that the writing problems of advanced Arab students writing in English seem to reside in

one aspect of coherence, that is, textual cohesion and in what he refers to as 'text tone', that is, writer-reader relationship. Commenting on a project essay composed by a Yemeni student, Holes (1984) notes:

> The text contains many instances of non-standard punctuation and over-long sentences ... it lacks variety in logical connectors.... the writer addresses his audience in the first person, mostly using active verbs... (p. 231).

Holes explains this on the basis of differences between Arabic and English. He maintains that, in an English and Arabic academic text, "The bricks of textual information ... may be laid in the same order, but the textual cohesion devices and the mediation of writer-reader relationships, which hold the bricks together, are not the same" (p.229-30). Holes condemns language teaching procedures for failure to tackle the problem. He points out that language teaching expends much energy on hunting grammatical and lexical errors ignoring writing problems at deeper levels:

> ... this type of correction, which Arab students understand and expect because it panders to their stereotype of the language teacher as monitor of superficial grammatical correctness and expounder of word- and sentence-level grammatical rules, does not attack the source of the feeling of textual inappropriateness (p. 231).

Houghton (1980) reflects on the writing problems of Iranian students writing in English: "An experienced teacher can often identify peculiar Iranian mistakes in

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their writing in English, ranging from common grammatical and lexical errors to the use of strange paragraphs or essay organization" (p. 79). Houghton attributes this to linguistic and rhetorical differences between Farsi and English and to the students' inappropriate study modes, as well. However, Houghton cites Dehghanpisheh (1972) who, on the basis of a comparative analysis of Farsi and English paragraph structures, advocates that the most common English paragraph matrix does exist in Farsi but it is not used much by students. Students tend rather to produce paragraphs that would seem strange to a British tutor (cited in Houghton 1980: 85).

Dudely-Evans and Swales (1980) also touch on the incoherence feature which seems to characterize the writing of students who come from the Middle East. They cite Kaplan (1966) in arguing that although many overseas students are proficient in the grammatical structures of English, their writing is often considered by tutors to be badly organized. Dudely-Evans and Swales account for this in terms rhetorical differences between English and Arabic: " ... the Arab student is trained in conventions and traditions of writing that differ markedly from the traditions of composition and argumentation in Britain" (p. 95). To illustrate the point, they quote a journal article taken from an Arabic newspaper together with its English counterpart. They also refer students' writing problems to their deeply-rooted habit of rote-learning.

However, it might need to be noted that the English paragraph model does exist in Arabic, at least as far as academic texts are concerned, as suggested by Holes (1984) and it seems to exist in Farsi, as well, as suggested by Dehghanpisheh (1972) above. Holes (1984) points out that the rhetorical differences between Arabic and English depend "a lot on the type of text selected" (p. 228). He further notes that the similarity between the English and Arabic academic text, as far as the structuring of information is concerned, could be partly attributed to the influence of Western education on the Arabic educational system. Yet, students' writing is often considered to be poorly organized by British tutors. The point to be made, however, is that the students' writing problems in English seem to transcend the scope of linguistic, rhetorical and cohesion differences between L1 and L2 to involve high-level writing problems that could be encountered by untrained student-writers , native or non-native_ taking into account the fact that writing, as a cognitive process, involves universal writing strategies (White 1988). In other words, students seem not to have been trained in their native languages in high-order skills required for producing an extended piece of coherent prose.

The writing difficulties of students who come from the Middle East, and the fear they experience when confronted with a writing task in a British university, seem to substantially stem from the fact that they have not been attuned to appropriate study modes.

However, while Dudely-Evans and Swales (1980) refer the students' inappropriate study styles to the influence of their Koranic practices, these can much more satisfactorily be attributed (and in some situations solely attributed) to socio/institutional factors and teaching traditions. These demand that the student reproduce the 'precious pearls' delivered by the teacher, either during lecture or in teacher-produced notes and will necessarily breed students who are addicts to memorization and rote-learning. This also discourages students from consulting other sources of information (eg. library sources) and from thinking critically. Further, the teacher's assessment method, whereby high value is placed on the student's ability to reproduce the bits and pieces of accumulated knowledge, while the student's ability to organize information is almost ignored, has shaped the student's perception of the writing task and has unfavourably influenced his writing ability. It is, therefore, the teacher's unreadiness to give up his authoritative role which feeds off the persistence of mistaken study habits which, in turn, allow for the teacher to cherish his self-image as the provider and controller of knowledge.

Students, therefore, have been deprived of the opportunity to develop the communicative skills that underpin academic writing (eg. reference skills) and to establish strategies that would facilitate the writing process and lead to coherent writing. Further, students who have become essentially rote-learners might find it

difficult to selectively re-call information stored in this way and, thus, fail to use it efficiently for supporting a particular line of argument (Dudely-Evans and Swales 1980: 94). This contributes towards their failure to produce coherent texts.

5.3. TEACHING PROCEDURES AND THE PROMOTION OF WRITING SKILLS

Conventional EFL methods, which are still largely practised, are often held as being responsible for the students' writing problems or attacked for sustaining or failing to tackle these problems, as seen above.

Traditionally, emphasis has been focussed on writing as a means for practising grammatical structures and, therefore, producing well-formed sentences. This has caused students to perceive writing in the foreign language as being sentence-based and to view the English paragraph as a string of separate sentences. Writing in the foreign language has come to be viewed as a matter of adherence to a stiff system of grammatical rules rather than as a pragmatic means for self-expression and exchange of meanings. This accounts for the difficulties students encounter in piecing their writing together and in manipulating acquired language knowledge for conveying meanings. This has also caused students to perceive the revision procedure as a matter of cleaning up grammatical and lexical errors.

More recently, teachers_ inspired by Halliday and Hassan's Cohesion in English (1976)_ have come to be

pre-occupied with the teaching of cohesion markers in order to improve the students' coherence problem. Textbooks have tended to present learners with a plethora of exercises in which such devices are taught in the context of short paragraphs or isolated pairs of sentences. Some textbooks have even tended to present learners with lists of semantically related cohesion markers. For example, causal markers (eg. so, for this reason, consequently, it follows from this etc.) would be grouped together.

Cohen et al (1979) has pointed out that pre-occupation with the teaching of cohesion markers might force students to "attend too much to overt markers", with the result that they will not be ready for texts which do not use them (p.560). This might also cause students to produce texts that flood with unnecessary cohesion markers and which would, thus, read inappropriate by a British tutor. Students would be trained to over-rely on formal devices for achieving coherence and fail to recognize higher-order coherence strategies.

Candlin and others_ cited in Cohen et al (1979: 560)_ have warned against the clustering of formal markers in terms of their semantic relationships. Candlin points out that the meaning each item conveys depends on the nature of discourse, that is, the same cohesion marker may be used in a new context to perform a different communicative function.

Johns (1986) cite Faigley (1981) where he warns

teachers against the teaching of cohesion markers in abstraction from a complete text and the overlooking of other aspects of coherence:

> Coherence conditions_ conditions governed by the writer's purpose, the audience's knowledge and expectations, and the information to be conveyed_ militate against prescriptive approaches to the teaching of writing. Indeed [our] exploration of what cohesion analysis can and cannot measure in student writing points to the necessity of placing writing exercises in the context of complete written texts" (cited in Johns 1986: 249).

It follows that learning to produce correct sentences and practice in the use of cohesion markers are not sufficient procedures for acquiring writing skills. Moreover, confining students to composing short texts does not give them the opportunity to develop the skills and strategies required for extensive writing: fluency in the ability to generate and manipulate ideas and high-order coherence skills. As Blue (1988) notes: "students need some training in writing longer pieces" (p. 96).

It might need to be noted, however, that the technique adopted in the English in Focus and then pursued in the Reading and Thinking series, though focus is placed on the procedural aspect of language use, has been accused of failure to take students far beyond the limit of the sentence. Robinson (1981) observes that the texts studied are short and the rhetorical functions are few in number. Bloor and St John (1988) point out that the approach

followed in such a series does not fully prepare students for their academic writing needs:

> We do not beleive that the best way to learn extensive writing is to be asked to read passages of a few hundred words and to write isolated paragraphs, although these may, of course, be useful supporting activities for training in the control of limited aspects of language use" (p. 93).

Further, since reference skills are characteristic of EAP writing, learning activities should encourage students to use reference information for developing their own writing (Blue 1988, Bloor and St John 1988, Johns 1986).

However, while Bloor and St John (1988) emphasise the need for engaging learners in procedural activities of an extensive kind, they argue that the learning task should ideally mirror the reality of the specialized situation: "the learners would be engaged in work exactly replicating the target situation" (p. 89). The length of the written task , they note, might mount up to eight thousand words, depending on the duration of the language course; and the content should be directly related to the learner's specialized discipline.

Their arguments might appear to some students like transferring the 'menace ' of the target situation into the language class. And as Hutchinson and Waters rightly observe:

> The learners' motivation in the target situation will not necessarily carry over to the ESP

classroom. They may well have to read very dull
texts in their work or studies.... This does
not imply that they will accept to learn from
dull texts in ESP (p. 61).

Producing that long a piece of writing might mean for
some students, as Blue (1988) notes, exerting "nervous
energy". Therefore, the scope of the work will need to be
substantially reduced. Blue suggests a limit of two
thousand words. Further, since the purpose of the writing
task is to develop the students' writing skills and
strategies, the crucial criterion for content specification
would to be to allow for maximal student involvement in the
writing activity. As Widdowson (1983) puts it: "if we
cannot engage their interest we will not engage their
learning.... The language learners' interest is an
intrinsic part of the language using process itself" (p.
91). The student might choose to write about a topic within
his specific field; yet he might choose a subject related to
his personal interests. This is his own right.

It might need to be noted, however, that the mere
engagement in the writing activity does not in itself
guarantee substantial development of writing skills.
Learners need to be sensitized to the properties of the
writing task, that is, the skills and problems involved in
the writing process. As Breiter and Scardamalia (1983)
note: "The teacher's collaboration does not extend to
supplying content or language, but it does extend to
conceptualizing the writing task" and helping learners "to

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operate in light of that conceptualization" (p. 32). White (1988), in agreement with Weiss (1980), suggests that teachers should write themselves and show students how the task is done with all the false starts that might occur and decisions that are made in the process of writing. The teacher, as White notes, would be simulating the process, not the product, and would be acting to "demystify" writing (p. 14).

Creating awareness in the learner should operate to improve students' writing problems at all levels. In a case where students' writing problems rest at the level of cohesion caused by differences in cultural schemata between L1 and L2_ as it is the case with advanced Arab learners_ Holes (1984) notes that such awareness can be developed by examining with the student a few English texts and, if possible, comparing an Arabic text with a parallel English text containing the same information (p. 234). Holes (1984) further remarks: "Unless a student can learn to analyse for himself, and understand why a text is deviant, there is little reason to think he will ever achieve any lasting improvement" (p. 241).

In conclusion, then, answering students' academic needs and improving their coherence problem demand training students in writing activities of an extensive kind. This demands awareness on the part of the learner at all levels of writing. However, though conventions and mode of organization are very important for EAP writing, focus

should be first placed on the process then on the form. In this context, Polanyi's observation is most apt: "By concentrating on his fingers, a pianist can paralyze himself; the motions of his fingers no longer bear then on the music performed, they have lost their meaning" (cited in Ticko 1981: 162). The point to be made is that concentration on form and conventions might similarly bear "a paralyzing effect" on the student's ability to communicate through writing and impair the development of originality and individual writing style (Ticko 1981: 162).

To summarize, this chapter has aimed at exploring some of the subskills and strategies involved in the four skill areas (listening, speaking, reading and writing) in connection with some specialized situations. As far as oral skills are concerned, we have pointed out some skills which we believe are overlooked in classroom oral training. We have referred to the need of training students in handling incomplete sentences (abbreviated utterances) when required to perform in informal situations, and in manipulating discourse strategies for expressing language functions. We have also emphasised the significance of training students in long-turn speech such as talk-delivery. Long-turn speech is not only confined to talk-delivery. The language user not infrequently performs in long turns in informal situations, as well. The longer the turn the learner is required to perform, the higher the level of discoursal competence required of the learner.

In relation to listening competence, we have pointed out some of the discourse procedures that typify the presentation of academic lectures, verbal and non-verbal features: the colloquial mode of presentation and the role of visuals in communicating information. We have also touched on some of the difficulties that overseas students encounter when required to function in a laboratory environment.

As far as reading is concerned, we have noted that developing reading comprehension skills is not a matter only of the type of text chosen. It also depends on the kind of exercises devised for the purpose. We have also referred to the importance of exposing the ESP learner to general and semi-specialist texts, so as to extend the scope of her reading competence.

The section related to writing has aimed at investigating some of the processes involved in producing an academic essay and some of the factors that underlie the students' writing problems. The emphasis is placed on the importance of training students in performing extended written tasks and on the significance of sensitizing the learners to the properties of the writing process and to their particular writing problems.

CHAPTER SIX

CONCLUSIONS AND IMPLICATIONS

The purpose of this chapter is to sum up the main points which have been discussed and, thus, highlight the implications which this research provides for ESP instruction and course design.

Contemporary ESP practices have resulted in a dichotomy between ESP and GPE. ESP has come to be associated with the learner's specialist subject-matter and technical jargon. The contention still exists in language teaching that the ESP course should be a replication of the target situation. Some ESP course designers have gone to the extreme of modelling the language course on the students' science syllabus, as is the case with the 'ELC' courses currently given at K.A.A.U in Jeddah. Widdowson (1981) has suggested adopting a process-oriented approach in terms of the intellectual structures and cognitive styles associated with the learner's specialized discipline.

However, the contention which has informed our work is that learning a foreign language is a realization of a number of needs and that ESP learners and university students are not necessarily instrumentally motivated. Learners' terminal needs are in many cases multiple and diverse. Their needs do not fall into a single pattern and,

therefore, cannot be answered by a language course which mirrors the target situation. This thesis is supported by the responses of the participants in the case study carried out at D.C.U. Therefore, we reject the belief which equates ESP with the learner's specialized processes and conventions. What defines ESP is the learner's awareness of her needs and the purposes for which she is learning the foreign language or taking the special language course_ whether these needs relate to her specialized situation or to a wider range of situations. This suggests allowing learners to have a greater voice in determining their learning objectives and selecting learning materials. As Rivers (1983) observes: "We must work with our students in establishing what they are really seeking in learning the language rather than imposing on them our view of their needs" (p. 76). This also calls for moving from narrowly-focussed ESP programmes to programmes which accommodate broader learner needs and provide for a wider range of competencies.

As suggested by the participants in the case study, the learners' language problems might well reside outside their target situation. As a result of their immersion in their specialized studies or exposure to professional encounters in the foreign language, ESP learners become very familiar with the properties and stylistic conventions of their specialty literature. Their language problems might spring from an inability to draw on the area of general English when their specialty language knowledge

fails them. This point has been referred to by Latorre and Kaulen (1985). Latorre and Kaulen cite a case in which the research papers of some foreign academics were turned down because of language problems_ despite their firm command of scientific English. Their problems, as Latorre and Kaulen note, arose from a gap in their linguistic competence which needed to be filled in by a general knowledge of English, independent of the specialty field:

> Many of them had gone through the experience of seeing well-researched papers returned on the grounds of poor English. The bulk of the problems occur at phrase and sentence levels: prepositional usage, subject-verb agreement, use of modals, in addition to subtler problems of stylistic choice.... Notice that all these are not register-specific but are more related to gaps in the knowledge of common-core syntax and morphology (Latorre and Kaulen 1985: 102).

This again points to the need to expand the scope of ESP programmes. Language production implies creativity, and this requires a rich linguistic potential to be drawn upon freely and confidently. This can be only acquired by exposing the learner to a wider range of the foreign language input.

As has already been noted, ESP has been orientated towards restricting the language programme to the practising of the language skills most demanded of the learner in his specialized situation. In EST/EAP situations, reading has often been over-emphasised and considered a priority need_ regardless of the learner's existing reading competence and

ignoring the other skills, especially speaking skills.   The
written text and the practising of the linguistic elements
related to it still govern language instruction.   Further,
the contention has been that if a learner needs English for
reading specialty literature, the language class should be
confined to training students in this activity. This view
has been expressed by Cowan (1974), cited in Chapter One,
and has represented ESP practices.   In other words, the
development of a given language skill has been carried out
in isolation from the other skill areas.

We have pointed out the significance of training
students in the required skill area in relation to the other
skills since   the   four   skills,   psycho-linguistically
speaking, share much in common and are related in practical
use. Corder (1973) has argued against isolating the four
skills in language training and against confusing the end
with the process.

Further, if EAP/EST is to be viewed from an
educational perspective, oral skills should be given
adequate attention. As price (1980) remarks:

> In terms of satisfying university requirements
> then, a student could get by without opening his
> mouth ... but we would be foolish to ignore oral
> skills totally since we are concerned   to
> 'educate' in the fullest sense (p. 62).

Though oral skills might appear to be less needed when
considering the formal requirements of the EST/EAP student,

oral skills become very significant when considering the informal discourse that occurs among science students. Romani (1985) mentions Bondi and Joseph who point up the importance of informal communication in science and that private discourse among scientists is vital for the development of scientific knowledge and for facilitating public communication. Overlooking oral skills implies depriving overseas students of this advantage. Further, as already mentioned, EAP/EST courses should take into account the students' future professional needs, and oral skills, as seen, are substantial for the students' future professional success.

With reference to reading, the major criterion for selecting reading texts is that the chosen text should succeed in involving the learner's interest. Nuttal (1982) encapsulates the view that:

> ... readability is not a matter only of grammatical complexity and lexical difficulty. It depends also on the interest of the text for the reader. A text that grips the reader will carry him along in spite of its difficulty. The opposite is also true: dull material will produce plodding readers and is not likely to contribute much to the development of reading competence (p. 29).

We have pointed out that in order for the text to engage the learner's interest, it should have originally been written for communicating information. The chosen text should address the learner's conceptual repertory rather than his linguistic or discoursal knowledge (ie. how

rhetorical acts are handled in discourse). The acquisition of linguistic and discoursal competence is the natural by-product of the ideational interaction between the learner-reader and the writer. And engaging the learner's psycho-linguistic reading processes entails the learner's awareness of the authenticity of the learning activity. This is not to say that the text is not to be capitalized on for increasing the learner's awareness of certain linguistic and discoursal aspects of language use. Further, as already mentioned, teaching procedures and learning exercises adopted act to enhance or impair the authenticity of the reading process and the development of reading skills.

With reference to writing, we have pointed out that answering students' academic writing needs implies engaging the student in the processes involved in producing a given task. This entails sensitizing the learner to the properties of the writing task and to her particular writing problems. Focus should be placed on the process then on the form and the stylistic conventions.

We have emphasised throughout this work the importance of the learner's active involvement in the needs-analysis process and in structuring his own learning syllabus. Our view of needs analysis implies considering both the learner's terminal needs and the process-learning needs, that is, the learner's preferred learning styles and the pragmatic needs of the classroom-learning situation. It implies bridging the gap between content and methodology.

Needs analysis and course design, as depicted in our work and in agreement with Hutchinson and Waters (1980a), become a function of the learning operation itself.

In conclusion, ESP programmes should be based on the students' actual needs rather than on predicted needs. As Draskau (1988) remarks: "The ideal adult study programme should be based on needs and competencies rather than concentrating on the subject itself, qua academic discipline". Put otherwise, a reconciliation needs to be drawn between "daffodils and the daisy wheels" (Holborow 1987).

REFERENCES

Adams - Smith D. (1987) "Variation in field-related genres". Dudley-Evans T. (ed.) *ELR Journal: Genre Analysis and ESP*, Vol. 1, 10-30.

Allen J.P.B. and Widdowson H.G. (1978) "Teaching the communicative use of English". Mackay and Mountford *English for Specific Purposes*. London: Longman.

Bates M. (1978) "Writing 'Nucleus'". Mackay and Mountford *English for Specific Purposes*. London: Longman.

Bates M. and Dudley-Evans T. (1976) *Nucleus: General Science*. London: Longman.

Bereiter C. and Scardamalia M. (1983) "Does learning to write have to be so difficult?" Freedman A., Pringle I. and Yalden J. (eds.) *Learning to write: First Language/Second Language*. London: Longman.

Bloor M. and St John M. (1988) "Project writing: the marriage of process and product". *ELT Documents 129 Academic Writing Process and Product*. Modern English Publications in association with the British Council.

Blue G.M. (1981) "Self-directed learning systems and the role of the ESP teacher". *ELT Document 112- the ESP Teacher: Role, Development and Prospects*. London: The British Council.

Blue G.M. (1988) "Individualizing academic writing tuition". *ELT Documents 129 Academic Writing Process and Product*. Modern English Publications in association with the British Council.

Bourke J.M. (1988) "The 'Grammar Gap'". *Teangeolas*, No. 25, 7-9.

Breen L. (1987) "Contemporary paradigms in syllabus design", Part I and Part II. *Language Learning*, 20.2- 20.3.

Brown G. and Yule G. (1983 a) *Teaching the spoken Language*. Cambridge: CUP.

Brown G. and Yule G. (1983b) *Discourse analysis*. Cambridge: CUP.

Brumfit C. (1985) "Creativity and constraint in the language classroom'. Quirk R. Widdowson H.G. *English in the World: Teaching and Learning the Language and Literature*. Cambridge: CUP.

Canale M. & M. Swain (1980) "Theoretical bases of communicative approaches to 2nd language teaching". *Applied Linguistics* Vol. III, pp. 1-47.

Candlin C.N. (1985) "Teacher, centred training: costing the process". Quirk and Widdowson (eds.) *English in the World: Teaching and Learning the Language and Literature*. Cambridge: CUP.

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Candlin C.N., Kirkwood J.M. and Moore H.M.(1978) "Study skills in English: Theoretical issues and practical problems". Mackay and Mountford (eds.) English for Specific Purposes. London: Longman.

Candlin C.N., Bruton C.J., Leather J.H. and Woods E.G. (1981) "Designing modular materials for communicative language learning; an example: Doctor-Patient Communications Skills". Selinker L., Tarone E. and Hanzeli V. (eds.) English for Academic and Technical Purposes: Studies in Honour of Louis Trimble. Rowley, MA.: Newbury House.

Chamberlain D. (1985) "The teacher-centred learner". ELT Documents 128 - ESP in the Classroom: Practice and Evaluation, (1988) . London: The British Council.

Chambers F. (1980) "A re-evaluation of needs-analysis in ESP". The ESP Journal , Vol. 1, No. 1.

Coffey B. (1984) "State of the art: ESP English for Specific Purposes". Language Teaching ,Vol. 17, No. 1 (CUP).

Cohen, Glasman, Rosenbaum-Cohen, Ferrara and Fine (1979) "Reading English for Specialized Purposes: discourse analysis and the use of student informants". TESOL Quarterly Dec., vol.13, No.4.

Cook R. (1978) "A social survival syllabus". Mackay R. and Mountford A. (eds.) English for Specific Purposes. London: Longman.

Corder S.P. (1973) Introducing Applied Linguistics. Harmondsworth: Penguin.

Coulthard M. (1977) An Introduction to Discourse Analysis. Harlow, Essex: Longman.

Cowan J.R. (1974) "Lexical and syntactic research for the design of EFL reading materials".TESOL Quarterly Dec. Vol. 8, No. 4, 389-99.

Cruickshank R.W. (1982) "The theory and practice of teaching English for special purposes". Studies in Language Learning , 4, 98-119.

Crystal D. and Davy D. (1969) Investigating English Style. London: Longman.

Dam 1985, cited in Lancaster Practical Papers in English Language Education (1987), Vol. 7. Prentice-Hall International (UK) Ltd and Lancaster University, p. 13.

Davies P.M. (1984) "ESP and the occupational context". Swales J. and Mustafa H. (eds.) English for Specific Purposes in the Arab World. Birmingham: The Language Studies Unit, University of Aston .

Davis R. (1977) "All protein and no roughage makes Hamid a constipated student". Holden S. (ed.) English for Specific Purposes. Modern English Publications.

Draskau J. (1983) "Is there a scientific/technical register?". Unesco ALSED-LSP Newsletter, The Copenhagen School of Economics, Nov. Vol. 6, No. 2.

Draskau J. (1988) "LSP for Engineers_ Gateway to the fourth production factor". *Special Language-Fachsprache*, 10, 1-2, 40-49. Coden: SPLAEO.

Drobnic K. (1978) "Mistakes and modification in course design: an EST case history". Trimble et al *English for Specific Purposes: Science and Technology*. Corvallis, Oregon: Oregon State University Press.

Dudley-Evans A. And Swales J. (1980) "Study modes and students from the Middle East". *ELT Documents 109- Study Modes and Academic Development of Overseas Students*. London: The British Council.

Early P. (1982) "Designer's needs versus learner's needs: conversation in L2 classroom". *ELT Documents 113- Humanistic Approaches : Empirical View*. London: The British Council.

Ellis A. and Beattie G. (1986) *The Psychology of Language and Communication*. London: Wiedenfeld and Nicholson.

Escorcia de Blanca A. (1985) "ESP and beyond: a quest for relevance". Quirk and Widdowson (eds.), op. cit.

Ewer J.R. and Latorre G. (1969) *A Course in Basic Scientific English*. London: Longman.

Farington O. 1981 "The first five seconds: the ESP teacher and `out of the blue' language". *ELT Documents 112- the ESP Teacher: Role, Development and Prospects*. London: The British Council.

Firth J.R. "The treatment of language in general linguistics". Palmer F.R. (ed). (1968) *Selected Papers of J.R. Firth 1952-59*. London: Longmans.

Firth J.R. "Linguistics and translation". Palmer 1968, op cit.

Flowerdew J. (1986) "Cognitive style and specific purpose course design". *English for Specific Purposes*, Vol 5, No. 2, 121-9.

Freire P. (1970) *Pedagogy of the Oppressed*. New York: Herder and Herder.

Frelick A. and van Naerssen M. (1984) "Professional cultural orientation in ESP". *Language Learning and Communication*, 3.2. 151-60.

Gardener and Lambert (1972) *Attitudes and Motivation in Second Language Learning*. Rowley: Newbury House Publications.

Geddes M. (1977) "Reference skills". Holden S. (ed.) *English for Specific Purposes*. Modern English Publications.

Graham J.G. and Beardsley R. (1986) "English for Specific Purposes: content, language and communication in a pharmacy course model". *TESOL Quarterly*, June, Vol. 20, No. 2.

Grellet F. (1981) *Developing Reading Skills*. Cambridge: CUP.

Gumperz J. (1972) "The speech community". Giglioli P. (ed.) *Language and Social Context*. Penguin.

Hacker R.G. (1984) "A hierarchy of intellectual development in science". *British Journal of Pschology*, Vol. 54, Part 2, 137-151.

Hakim. N. (1984) "Arab students' learning problems". Swales J. and Mustafa H. (eds.), op cit.

Halliday M.A.K. (1975) *Learning How to Mean Explorations in the Development of Language*. London: Edward Arnold.

Halliday M.A.K. (1978) *Language as Social Semiotic: the Social Interpretation of Language and Meaning*. London: Edward Arnold.

Halliday M.A.K. (1989) "Register variation". Halliday M.A.K. and Hassan R. *Language, Context, and Text: Aspects of Language in a Social-Semiotic Perspective*. Oxford: OUP.

Halliday, MacIntosh and Strevens (1964) *The Linguistic Sciences and Language Teaching*. London: Longmans.

Halliday M.A.K. and Hasan R. (1976) *Cohesion in English*. London: Longman.

Harper D. (ed.) (1986) *ELT Documents 123- ESP for the University*. Oxford: Pergamon Press in association with the British Council.

Hatch E. (ed.)(1978) *Second Language Acquisition: A Book of Reading*. Rowley. Newbury House Publications.

Hatch E. (1978) "Discourse analysis and second language acquisition". Hatch E. (ed.), op cit.

Henner-Stanchina C. (1982) "Listening comprehension strategies and autonomy: why error analysis?". *Melanges Pedagogiques* , 53-64.

Hitchcock J. (1978) "Reading and scientific English: prospects, problems, and programmes in Iran". Trimble M. et al (eds.) *English for Specific Purposes: Science and Technology*. Oregon State University.

Holborow M. (1987) "Daffodils and the daisy wheels". A paper delivered at The First National Conference of Teachers of English as a Foreign Language held in D.C.U.

Holes C. (1984) "Textual approximation in the teaching of academic writing to Arab students". Swales J. and Mustafa H. (eds.),op cit.

Houghton D. (1980) "Writing problems of Iranian students". *ELT Documents 109- Study Modes and Academic Development of Overseas Students*. London: The British Council.

Howatt A.P.R. (1984) *A History of English Language Teaching*. Oxford: OUP.

Hudson L. (1974) *Contrary Imagination*. Harmondsworth: Penguin.

Hutchinson T. and Waters A. (1980a) "ESP at the crossroads". *Swales J. (1985) Episodes in ESP.* Oxford: Pergamon.

Hutchinson T. and Waters A. (1980b) "Communication in the Technical Classroom: you just shove the little chappie in here like that". *ELT Documents Special Projects in Materials Design.* London: The British Council.

Hutchinson T. and Waters A. (1987) *English for Specific Purposes: A Learning Centred Approach.* Cambridge: CUP.

Hutchinson T. (1985) "Making materials work in the ESP classroom". *ELT Documents: 128,* (1988). London: The British Council.

Inman M. (1978) "Lexical analysis of scientific and technical prose". *Trimble et al (1978) English for Specific Purposes: Science and Technology.* Oregon: Oregon State University.

James K. (1980) "Seminar overview". *ELT Documents 109 Study Modes and Academic Development of Overseas Students.* London: The British Council.

Johns A. (1986) "Coherence and academic writing: some definitions and suggestions for teaching". *TESOL Quarterly,* June, vol. 20. No. 2.

Kennedy C. and Bolitho R. (1984) *English for Specific Purposes.* London Macmillan.

Konecni E. (1978) "Contrastive analysis of the rhetoric of scientific and technical English and Macedonian". *Trimble M. et al (eds.) English for Specific Purposes: Science and Technology.* Oregon State University.

Lackstrom, Selinker and Trimble (1973) "Technical rhetorical principles and grammatical choices". *TESOL Quarterly,* No. 7, 127-36.

Latorre G. and Kaulen M.A. (1985) "From 'hard-core' to 'soft-core' ESP: A case study". *The ESP Journal,* Vol. 4, 101-9.

Lian A.P. (1987) "Awareness, autonomy and achievement in foreign language learning". *Revue de Phonetique Appliquee,* 7000 Mons, Belgium, 1987, 82-84: 191-208.

Mackay and Mountford (1978) "The teaching of English for Special Purposes: theory and practice". *Mackay and Mountford (eds.) English for Specific Purposes.* London: Longman.

Mage T. (1978) "Contrastive discourse analysis: EST and SST". *Trimble M. et al (eds.),* op cit.

Maley A. (1982) "Exquisite corpses, men of glass and oulipo: harnessing the irrational to language learning". *ELT Documents 113 Humanistic Approaches: An Empirical View.* London: The British Council.

Maley A. (1984) "Constraints-based syllabuses". J.A. Reads (1984) *Trends in Language Syllabus Design*. Singapore: SEAMEO, Regional Language Centre.

Maslow A.H. (1970) *Motivation and Personality*, 2nd. ed. New York: Harper and Row.

McDonough J. (1984) *ESP in Perspective: A Practical Guide*. London: Collins ELT.

Morrison J. (1978) "Designing a course in advanced listening comprehension". Mackay & Mountford (eds.), op cit.

Munby J. (1978) *Communicative Syllabus Design*. Cambridge: CUP.

Munby J. (1984) "Communicative syllabus design: principles and problems". J.A. Reads (ed.) (1984) *Trends in Language Syllabus Design*. op. cit.

Nunan D. (1988) *Syllabus Design*. Oxford: OUP.

Nuttal C. (1982) *Teaching Reading Skills in the Foreign Language*. London: Heinemann Educational Books.

Piepho H. E. (1981) "Some psychological bases for learning strategies and exercises in the communicative teaching of English". Candlin C.N. (1981) *The Communicative Teaching of English: Principles and Exercise Typology*. Harlow: Longman.

Prabhu N. S. (1985) "Coping with the unknown in language pedagogy". Quirk & Widdowoson (eds.), op. cit.

Prahbu N.S. (1987) *Second Language Pedagogy*. Oxford: OUP.

Price J. (1980) "The structure of postgraduate taught courses in Engineering: some implications for course design". *ELT Documents 109- Study Modes and Academic Development of Overseas Students*. London: The British Council.

Price J. (1977) "Study skills_ with special reference to seminar strategies and one aspect of academic writing". Holden S. (ed.), op cit.

Quirk R. and Widdowoson H.G. (1985) *English in the World: Teaching and Learning the Language and Literature*. Cambridge: CUP.

Richterich and Chancerel (1987) *Identifying the Needs of Adults Learning a Foreign Language*. London: Prentice-Hall International.

Rivers W. (1964) *The Psychologist and The Foreign Language Learner*. Chicago: The University of Chicago Press.

Rivers W. (1983) *Communicating Naturally in a Second Language*. Cambridge: CUP.

Robinson P. (1980) *ESP (English for Specific Purposes)*. Oxford: Pergamon.

Robinson P. (1981) "The Contribution of discourse analysis to ESP and of ESP practitioners to discourse analysis". _ELT Documents 112- the ESP Teacher: Role, Development and Prospects_. London: The British Council.

Romani E. (1985) "Developing a course in research writing for advanced ESP learners". _ELT Documents 128 ESP in the Classroom: Practice and Evaluation_ (1988). Modern English Publications and The British Council.

Romani, Esther, Chacko, Thomas, Singh and Glendinning (1988) "An ethnographic approach to syllabus design: a case study of the Indian Institute of Science, Banglore". _English for Specific Purposes_, 7, 2, 81-90.

Rossiter A. (1980) "Ecology, the environmental and the ESP class". _English Language Teaching Journal_, 34, 4, July, 259-62.

Savignon S.J. (1983) _Communicative Competence: Theory and Classroom Practice_. Reading, Massachusetts: Addison-Wesley Publishing Co.

Schumann J.H. (1978) "Second language acquisition: the pidginization hypothesis". Hatch E. (ed.), op cit.

Strevens P. (1977) _New Orientations in the Teaching of English_. Oxford: OUP.

Sugimoto E. (1978) "Contrastive analysis of English and Japanese technical rhetoric". Trimble M. et al (eds.), op cit.

Swales J. (1978) " Writing, writing scientific English". Mackay & Mountford (1978), op cit.

Swales J. (1980) "The educational environment and its relevance to ESP programme design". _ELT Documents: Special_. London: The British Council.

Swales J. (1985a) "The heart of the matter or the end of the affair?". Quirk & Widdowsom (eds.), op. cit.

Swales J. (1985b) "A genre-based approach to language across the curriculum". Tickoo M.L. (ed.) (1985) _Language Across the Curriculum_. SEAMEO/RELC.

Tadros A. A. (1984) "Prediction as an aspect of the structuring of didactic text and its implications for the teaching of reading and writing". Swales J. and Mustafa H. (eds.), op cit.

Tarone E. and Yule G. (1989) _Focus on the Language Learner_. Oxford: OUP.

Tawfiq A.S. (1984) "Designing a communicative EST reading skills course for students of the Faculty of Medicine in Iraq: A case study". Swales J. and Mustafa H. (eds.), op cit.

Ticko M. L. (1981) "ESP materials in use: some thoughts from the classroom". Selinker, Tarone and Hanzeli (eds.) (1981) _English for_

Academic and Technical Purposes. Rowley, Massachusetts: Newbury House Publications.

Van Naerssen M. and Kaplan R.B. (1986) "Language and science". *Annual Review of Applied Linguistics*, Vol. 7, (CUP).

White R. (1988) "Academic writing: Process and Product". *ELT Documents 129- Academic Writing Process and Product.* Modern English Publications in association with the British Council.

Widdowson H.G. (1978) *Teaching Language as Communication.* Oxford: OUP.

Widdowson H.G. (ed.) (1979) *Reading and Thinking in English: Discovering Discourse.* Oxford: OUP.

Widdowson H.G. (1979) *Explorations in Applied Linguistics.* Oxford: OUP.

Widdowson H.G. (1981) "English for Specific Purposes: criteria for course design". Selinker, Tarone and Hanzeli (eds.) (1981) *English for Academic and Technical Purposes: Studies in Honour of Louis Trimble.* Rowley: Newbury House.

Widdowson H.G. (1983) *Learning Purpose and Language Use.* Oxford: OUP.

Widdowson H.G. (1984) *Explorations in Applied Linguistics.* Oxford: OUP.

Widdowson H.G. (1985) "The teaching, learning and study of literature". Quirk and Widdowson (eds.), op cit.

Wilkins D. (1976) *Notional Syllabuses.* London: OUP.

Wilkins D. (1977) "Current developments in the teaching of English as a foreign language". Holden S. (ed.), op cit.

Williams M. (1988) "Language taught for meetings and language used in meetings: Is there anything in common?". *Applied Linguistics*, Vol. 9, 145-58.

Witkin, Moore, Goodenough and Cox (1977) "Field-dependent and field-independent cognitive styles and their educational implications". *Review of Educational Research*, Winter (1977), Vol. 47, No. 1, 1-64.

Yalden J. (1987) *Principles of Course Design for Language Teaching.* Oxford: Pergamon.

APPENDIX A

INFORMAL NEEDS ASSESSMENT

Student assignment: assessing your needs for writing In your field

(from Tarone & Yule 1989, originally taken from Hanges 1982)

Assignment

Each of you will do an informal needs assessment of the type of writing you must do In your field of study at the University of Minnisota. Your findings will be presented in the form of a report.

Purpose

In doing this needs assessment, you will find out how much writing Is required of you, and you will discover what kind of writing you will have to do. Although It might be impossible to find out about every writing assignment you will have In your graduate program, you should be able to get a general Idea of the major type of writing that are required of you.

procedure

In order to get the most accurate picture of the kind of writing assignments you will have, It is best that you consult as many sources as possible. It is recommended that you talk not only to

professors but also to other students. You may also want to ask the department secretary for additional information on degree requirements. Listed below are some suggested steps:

1. Make sure that you have all of the current information on degree requirements. If you are working toward a master's degree, are you on Plan A or Plan B? If you are a Ph.D. candidate, do you have to submit a proposal for your thesis? Are there courses on writing that your program offers?

2. Make an appointment to see your advisor or another professor. Ask him/her to tell you as much as (s)he can about the writing you will have to do in required courses. Listed below are some of the kinds of writing usually done in academic classes. Ask your advisor which of these you will have to do as a graduate student at this university. Also try to find out which of these you will do more frequently than others.

summaries and abstracts of books and/or journal articles

critical reviews of books and/or journal articles

research papers that use secondary sources (literature reviews)

lab/experimental reports

annotated bibliography

proposals

problem-solving projects or reports

answers to essay questions or tests

MA qualifying papers

Master's thesis

Ph.D. thesis

other types of writing (these are often field specific)

3. Ask the professor if (s)he has examples of the types of writing assignments that you can see.

4. Also ask the professor if there is a recommended style guide that you should use when writing papers. A style guide is a source that explains what form footnotes and bibliography entries should take. Sometimes professors have condensed style guides that they hand out to students; ask the professor if (s)he has one of these that you could have.

5. Find out from your advisor or from someone else if there is a file of old tests that you can look at. If such a file is available, try to get a copy of one or two tests or copy down some representative test questions.

6. Talk to foreign and American students about writing assignments in your program. Students can provide you with information about how difficult assignments are and how long they take to do. They may also have examples of writing assignments that you can see.

The report

All of the information that you collect will be presented in a report. How this report should be written and the form that it should take will be discussed in class at a later date.

Keep in mind that you are collecting this information primarily for your own benefit. However, because your report will be read by other people in this class and by ESL teachers who want to know more about academic writing assignments, it is important that you do a thorough job of collecting data for this report.

Suggested outline for your report

1. Introduction

    (a) Subject

    (b) Purpose

    (c) Brief outline of the rest of the report

2. Body

    (a) Who you interviewed

    (b) What you asked

    (c) What they said

        i Type of writing you will do

        ii Frequency (how often) of each type

    (d) Examples of writing assignments or test questions that you

have collected

(e) How familiar you are with each type of writing

3. Conclusion

(a) Briefly summarize what you said in (c) and (e) in the body of your report.

(b) Tell what types of writing you will have to concentrate on most.

Examples of a student's report on his own needs for English writing skills (from Tarone & Yule 1989, originally from Hanges 1982)

Civil engineering

The report concerns typical writing that students of civil engineering need to do during their graduate studies. It is believed that this report will make writing of these reports easier because the author will be able to concentrate his attention on the specific kinds of writing that are required to the author's field of study.

The rest of the paper is going to deal with types, frequency, volume, and arrangement of the writing.

The sources of presented information are:

1. Interview with Professor X, author's temporary faculty advisor (types and frequency of writing)

2. Interview with Professor Y (volume and arrangement of writing)

3. General Information Bulletin for Graduate Students, Department of Civil and Miniral Engineering (differences between the thesis of Plan A and B)

4. Orientation lecture for graduate students of civil engineering (differences between the thesis of Plan A and B)

The most frequent types of writing are:

1. Reports on original research

2. Bibliographies

3. Research papers using secondary sources

4. Master's thesis:

   (a) Plan A, or

   (b) Plan B (kind of research report)

Less frequent types of writing are:

1. Summaries of readings

2. Summaries of lectures

3. Book reviews

4. Critiques of journal articles

5. Proposals

6. Preliminary written examination for the Ph.D. degree

Average volume of some kinds of the writing are shown in the table below:

Kind of writing	Approximate number of pages (without computer data)
Research paper (for 3 credits)	20
Master's thesis: Plan B	50
Plan A	100
Ph.D. dissertation	300

One side of each sheet of the writing is blank. Most of the research papers contain computer printouts.

Typical arrangement of MS thesis or Ph.D dissertation is as follows:

1. Acknowledgement

2. Contents

3. Introduction

4. Background (it occupies approximately 25 per cent of the volume)

5. Body of the writing (diagrames aree included in the body)

6. Evaluation of applied theories, practical applications, conclusion, suggestions

7. Photographs (if included)

A7

8. Appendixes (If included)

9. References

For further studies the most promising source of information seems to be professor Y and the rest of the faculty. Fellow students asked about the subject failed to give any information.

APPENDIX B

A questionnaire format used in the case study conducted at D.C.U.

```
Name      ...........................................................
Age       ...........................................................
Nationality  .......................................................
Native language  ..................................................
Other languages  spoken (not Including English) ....................
...................................................................
Educational background    secondary ......... tertiary .............
Please specify:
University  ........................................................
Technical college    ..............................................
Other     .........................................................
Current/Intended occupation    ....................................
How long have you studied English?   Years ....... Months ..........
When did you last attend an English class? ........................
Have  you  done any formal English examinations? If yes, what  level
were they? (Please specify): ......................................
...................................................................
...................................................................
```

Estimate your level of English (please mark)

	Elementary	Intermediate	Good
Understanding			
Speaking			
Reading			
Writing			

In view of your previous/learning experience, rank the following skill areas according to difficulty and interest: writing, reading, listening, speaking:

	Most difficult	Most Interesting
1		
2		
3		
4		

Learning purpose: Why do you require English? (Please specify):
```
...................................................................
...................................................................
...................................................................
```

Please number the language skills you like to improve in the English course in order of priority:

Listening |____| Reading |____| Speaking |____| Writing |____|

Communicative skills and activities

1. Reading

A. Can you use a dictionary? A little _____ Very well _____

B. What do **you need** to read in English? Please tick:

Magazines	Academic texts
Holiday brochures	Reference works
Letters from friends	Library catalogues
Simple stories	Technical catalogues
Bills and receipts	Workshop manuals
Bus timetables	Professional journals
Bank forms	Scientific articles
Advertisments	Reports
Newspapers	Business letters
	Diagrams
	Tables and charts

2. Writing

A. What do **you need** to write in English? Please tick:

Letters to friends	Reports
Fill in forms	Summaries
Notes	Lecture notes
Composition (general topics)	Research papers
	Business letters
	Essays (specific topics)

3. Listening and speaking

A. Do you need English to

_ Participate in social talks
_ Take part in seminars
_ Participate in conferences and meetings
_ Give formal talks
_ Talk to professional experts
_ Give and receive instructions in a workshop or a science lab.
_ Listen to lectures
_ Give and receive telephone messages
_ Listen to the radio
_ Watch TV.

B. What are the most important for you to learn now? Please number the items <u>above</u> in order of importance (<u>only</u> those relevant to your needs)

B2

Do you like to learn from a textbook? If yes, do you prefer the textbook to be relevant to your speciality area?
....
....

Do you prefer to follow a one-to-one course or to learn with a group? Please specify your reasons: ....
....
....
....

Do you like the language teacher to

A-Explain everything to you in advance and supply you with knowledge
B-Give you problems to solve
C-Constantly correct your mistakes
D-Help you find your mistakes

Please tick the activities below which were used in your previous language courses only. Please indicate their usefulness.

1 = Very useful   2 = Useful   3 = Fairly useful   4 = Useless

Repetition and memorization   _____
Group work   _____
Pair work   _____
Individual work   _____
Role play   _____
Discussion sessions   _____
Games   _____
Grammar explanation   _____
Translation tasks   _____
Listening comprehension   _____
Reading general texts   _____
Reading specialised texts   _____
Language lab   _____
Written home assignments   _____

Language learning speed: Slow ....   Average ......   Fast.....

Interests: eg. hobbies, sports, leisure activities ....
....

What do you hope to achieve from the English course? ....
....
....

In your opinion how necessary is English in your specific profession after graduating/finishing the training course? Please specify:
Very Necessary   ....   Useful ....   Unnecessary ....

Course length: ....
Intensity: .....   Hours per week

A learning unit taken from <u>English for Secondary Schools: Book</u>
<u>Two, Scientific</u> (1967), still currently taught in Syria.

The Speed of Sound

A.C. Penney

This passage is taken from
<u>Everyday Heat, Light and</u>
<u>Sound</u> 1946, a book reprinted
in 1947 and 1949. The author
was Headmaster of a County
Modern School for Boys when he
wrote it. Another of his books
is <u>Everyday Electricity and</u>
<u>Magnetism</u>.

**Here he is discussing early
experiments with sound, and
its speed through the air.**

Solids transmit sound very well. Try holding a wooden stick
against part of a machine, and place your ear against the stick.
The movement of the ball-bearings can be clearly heard. This is a
good way of finding the exact source of trouble in a motor-car
engine which sounds as if it is wrong and yet gives no information
of where the trouble is.

The cocoa-tin telephone system is another proof of the way in
which solids transmit sounds. Two tins, connected by a string
fixed through a hole in the bottom of each tin and stretched tight,

form a good telephone over a few yards. A message whispered into one tin held against the mouth is clearly heard by your partner if he holds his ear against the other tin.

It is probably a good thing that sound cannot travel through a vacuum, for we are thus limited to earth-made sounds. The violent disturbances which are seen occasionally in the sun, for example, may affect our magnetism and our radio; they do not affect our ears, which is a very good thing for our peace of mind.

If we have used our eyes and ears, we have already realized that sound takes time to travel through the air. The sound of thunder nearly always follows the lightning flash although they happen together. And the appearance of a white cloud above a distant ship or train tells us, before anything is heard, that its whistle has sounded. Just how fast does sound travel through the air?

In the earliest experiments guns were fired to produce the sound and also a flash, which at night acted as a signal to show that the experiment had started. An observer standing, say, twenty miles away started his stop-watch when he saw the flash, and stopped it when he heard the explosion. The time taken by light to travel a distance as short as this can be ignored, so the time noted was that required by sound to complete its journey. The speed was easily calculated. It was found to be greater with the wind than against it. To overcome this difficulty, guns were fired at an

agreed time at both ends of the measured distance, and the average of the two speeds was taken. If one experiment was helped by the wind, the other was hindered to an equal extent.

At first sight it is difficult to see why improvements on this method were necessary, or even possible. Yet many have been made giving more accurate results. The observer had to notice the flash and then start his watch; he had to hear the report and then stop his watch. A very short time may pass between the receipt of the signals and the results on the watch. In more modern experiments, the human observer is not used. The time of the firing of the gun, and the time of the arrival of its sound at the distant station are both recorded electrically.

The speed of sound in air at ordinary temperatures is about 1,100 feet per second, which is about one mile in five seconds or about 700 miles per hour. The speed of sound increases slightly with a rise in temperature and falls with a decrease in temperature. It is not affected by the pressure of the air.

A glossary of new vocabulary

To transmit: to send to another place

Ball—bearings: rings of balls round an axle so that a wheel may turn easily.

Source: first cause of anything.

Partner: one who works or plays with another.

Vacuum: space with no air in it.

Disturbance: trouble; disorder.

Occasionally: happening only at times.

Thunder: loud sound heard in the sky in a storm.

Signal: sign, mark which sounds for an idea.

To ignore: to take no notice of.

Average: middle value.

To hinder: to prevent.

Accurate: correct.

Report: noise.

Receipt: receiving.

Slightly: to an unimportant degree.

Questions

1. How can we prove that solids transmit sound well?

2. What connects the two cocoa-tins in the home-made telephone?

3. Why can we never hear anything that happens on the sun?

4. Why does the sound of thunder always follow the lightning flash?

5. How did early scientists measure the speed of sound?

6. Why could the time taken by the light to come from the gun be be ignored?

7. Why did the observer start his watch a little late in this experiment?

8. How many feet per second does sound travel through air at

ordinary temperatures?

9. What is the speed of sound in miles per hour?

10. If the temperature rises, does the speed of sound rise or fall?

Exercies

1. Fill each space with a word from the list in its right form:

transmit, ball-bearings, stretch, vacuum, occasionally, lightning, observer, explosion, accurate, affect.

a- The proffessor of mathematics said that our answers must be absolutely _____ .

b- The temperature of the air _____ the speed of sound in the air.

c- The radio station was _____ a programme of music.

d- He _____ the piece of elastic so much that it broke.

e- No one was hurt in the _____ at the factory, but some of the machine were damaged.

f- This wheel turns very easily because it runs on _____ .

g- If we are going to need a ___ , we shall need a pump to make it.

h- In the silence of the night the _____ was looking through the immense telescope and watching the strange behaviour of the planet.

i- He is good at mathematics, but he _____ makes a mistake.

j- The house was struck by _____ but there was no one in it at the time.

2. Give the opposites of the following

hindered, necessary, stop, ancient, very well, right, a few yards, a very good thing, limited, appearance.

3. Insert the correct prepositions in the spaces:

a- Hold a wooden stick _____ part of the engine.

b- Sound travels _____ the air but not _____ a vacuum.

c- "We are limited _____ ,000," said the secretary.

d- This acted as a signal _____ night.

e- The time taken _____ light to travel a short distance is very small.

C6

f— We shall record the time _____ the firing _____ the gun and also the time _____ the arrival _____ its sound _____ our station.

g— The speed _____ sound _____ ordinary temperatures is about seven hundred miles per hour _____ the air.

h— With a decrease _____ temperature, the speed decreases.

i— The scientists then took the average _____ the two speeds.

j— What were the results _____ his health when he overworked for three months.

4. Form nouns from the following words: All the nouns are in the passage:

Press, inform, arrive, receive, observe, disturb, explore, improve

****