CHAPTER ONE

THE ROLE OF ENGLISH IN INDIA AND
THE EMERGENCE OF ESP IN LANGUAGE TEACHING

INTRODUCTION

Chapter One offers an overview of the development of English Language Teaching (ELT) and the emergence of English for Specific Purposes (ESP) in India. The discussion relates the status of English with political and historical events that were responsible for the sustenance of the language as integral to the present day Indian identity. A brief description of the British policy on English, along with its social acceptance and promotion from 1835 to the pre-independence years, is followed by a diachronic narration of the post-independence government policy on language as apparent in Reports of Commissions and Education Policy documents. The place of English in Indian education and its slow evolution is traced from the inception as the language of interpretation to one of power, a link language, a library language and finally the medium of intra- and international communication. The chapter proceeds concentrically from a macro view to a focus on ESP research studies in India. Traditional English teaching in Maharashtra is described and linked with relevant remarks on the Government Education Policy, particularly with reference to special needs contexts. A review of seven ESP research studies is included in the chapter in order to explain that
although ESP studies had been undertaken previously, their purview had been limited in many respects and was not seen to be adequately specific for the purpose of designing an ESP syllabus for a polytechnic setting. The chapter concludes with establishing the place of polytechnics in the hierarchy of education and showing how the unique status demands a correspondingly unique treatment, incorporating the latest concepts of ESP methodology.

A HISTORICAL SURVEY:

1.1.1 **THE INCEPTION OF THE PRESENCE OF ENGLISH IN INDIA:**

The history of the presence of English language in India begins with its purely utilitarian function as a means of communication between the foreign traders of the East India Company and the Indian business community, in the early decades of the seventeenth century. As the importance of the English traders, both in commercial and political terms, grew to pervade the Indian scene, the English Language gained a special connotation as the language of power and opportunity. It became the medium of communication between the ruled and the new rulers, whose strength and influence on the Indian populace grew steadily as British hegemony got firmly established on the subcontinent.

Even before the famous request was made by Raja Ram Mohan Roy to Lord Amherst, to introduce the teaching of English in partial substitution of the traditional languages
of Sanskrit, Persian and Arabic, an English Officer laid, in 1792, the foundation for the functional role of English in India. Charles Grant of the East India Company urged the promotion of English as a "vehicle of imparting western ideas,... the key which will open to them a world of new ideas." This concern for bringing to the Indian populace, the vast store of western learning and discovery, may be seen as conceptually different from that which prompted Thomas B. Macaulay's Minutes on Indian Education in 1835. Macaulay's Minutes announced the intention "to form a class who may be interpreters between us and the millions whom we govern." This was a swing back to the interpreter role of the language. Notwithstanding differences in the nature of the roles perceived by the English rulers, the consequences were identical. English was introduced in schools as a subject of study and was prescribed as the medium of instruction for the S.S.C. -- a status that was sustained until 1937, throughout the Indian subcontinent.

In 1844, Lord Hardinge announced the bold policy of giving preference in government employment to 'English Speakers' thus stressing the role of English and its significance as the language of authority. Sir Charles Wood's Educational Dispatch seemed to combine the liberal social purpose of Grant and the purely utilisation approach of Macaulay. The despatch recommended teaching the English Language "where there was a demand for it" -- this was perhaps the first proposal for needs-based teaching of English in India.
1.1.2. **PRE-INDEPENDENCE INDIA: THE BRITISH RAJ:**

A further impetus to education in general was given by the establishment of the three universities of Bombay, Calcutta and Madras, soon after the rude shock to the British rulers, given by the Indian Mutiny in 1857 which brought the realisation to them that benevolent welfare and developmental measures would have to be taken if they wished to retain their position of authority. Gradually, knowledge of English began to be considered essential in "educated Indians", consistent with Macaulay's wish to produce a new class of Indians who would be English in behaviour, opinion and lifestyle. Educationists like Ishwar Chandra Vidyasagar corroborated these ideas by declaring that Indian texts and traditional commentaries in India Languages were of little relevance to "modern living". He took the revolutionary step of introducing English as a subject of study in his Sanskrit College. English Language assumed considerable importance in social as well as political terms, during the 'golden' period of the Raj, as English-medium educational establishments proliferated and as the cultural influence of English Language and English life-styles infiltrated the minds of the educated and ambitious anglicized Indians. Despite the upsurge of nationalism and the thrust of the freedom movement, English retained its importance as the medium of political dialogue and education and as a symbol of social prestige.
1.1.3 POST-INDEPENDENCE INDIA: THE BRITISH LEGACY

1947 TO 1967:

Soon after India gained independence, the University Education Commission (1948) was constituted to enquire into all the aspects of educational needs at every level. In 1949 Maulana Abulkalam Azad declared the government policy on education, a section of which was concerned with teaching Indian languages and the treatment of English as a study subject. His comment about English seems to be relevant even today. He described English as the 'open sesame to the wealth of science and literature of Europe and America'. The Constitution of India (1949) guaranteed the continuance of English "upto November, 1964 and even beyond" interalia because, in Azad's words, "If Indians have distinguished themselves so far in the field of science, it is entirely due to the study of English." This was one of the first declarations by educationists and policy makers of the essential place of English as an international medium of communication for scientific development.

Prof. Gokak remarked in his oft quoted book 'English in India: its present and its future' 1965 that English continued to be an integral part of education in India because it functioned as, (i) the language of trade and industry, (ii) the vehicle of access to modern scientific and technological knowledge, (iii) the contact link with western 'latest thought' (iv) the medium for non-English speakers, through translation, of accessing world knowledge and (v) the medium for interpreting India to the world.
Pandit Jawaharlal Nehru voiced a similar opinion of English when he described it as "the most important language in the world today. The whole success of our development scheme depends upon training manpower. It is patent to me that this manpower for industrial, scientific and agricultural purposes cannot be trained in any of the Indian Languages in the foreseeable future. It is absolutely clear to me, and it is not an arguable matter, that the scientific and technical training has to be given in English. it is an absolute necessity" (quoted by Venkateshwaran 1995:4). Such powerful advocacy of English by our first Prime Minister was however, in contrast with the opposition that emerged from the exuberance of patriotism in the early post-independence days. Parochial hatred for English raised its head and initiated efforts to remove English and popularize the use of Hindi in every facet of life. Staunch supporters of Hindi and Sanskrit, such as Dr.Raghuvira made vigorous attempts to evolve a practicable substitute for English, for post-secondary and higher education as well as for social parlance. However, these attempts were not of any consequence other than to mark a social resurgence favouring the development of Indian languages and the national language in particular. Concurrently, the Kunzru report (1957) supported the prominent role of English and English in education. The report foresaw English as a major pre-university and university subject. It is worthy of note that the report also linked the study of English literature to the study of English language and sought major expansion
in the study of linguistics at all levels. There were several hurdles in the resolution of the language problem. No single Indian language was seen to be capable of substituting English. The 1961 Census Report listed 1652 'mother tongues', of which only 51 were reckoned to be spoken by more than 100,000 people. While the G.C. Banerjee Committee of Experts endorsed the long-term status of English in the country as an 'instrument of scientific learning', the general public opinion varied in Hindi speaking and non-Hindi speaking states about the imposition of a language formula and of one official language for the entire country. Linguistic chauvinism also appeared in several non-Hindi areas. Such agitations drew attention to the linguistic diversity within the country and the consequent urgent need for a pan-Indian language formula. In 1962, the National Integration Council endorsed the University Education Commission's ruling that permitted the use of the 'federal language' (English at that time), as a medium of instruction.

A significant shift in approach was seen in the Report of the Education Commission in 1964, which unequivocally supported taking energetic steps for adopting regional languages as media of education at the university stage. Smt. Indira Gandhi's statement in 1963 presaged the language policy that was adopted in 1967. "In the present day, we cannot afford to live in isolation, therefore there should be three languages, regional, national and international".
THE LANGUAGE POLICY AND THE GENESIS OF THE ESP APPROACH.

The language conundrum was sought to be solved first, by the Official Languages Act 1967 which declared English as an 'additional' language along with Hindi, and subsequently the New Education Policy 1968 which declared the three-language formula. This formula evolved out of reactive domestic issues such as political thought and the practical consideration of global development in science and technology.

An Education Ministry publication (1968:2-3) defined the three language formula involving the mother tongue and two other languages. One of these was English and the other was, Hindi for the non-Hindi speaking states and another modern Indian language, preferably one of the southern languages for Hindi-speaking states.

The element of the three-language formula which defined English as a 'link language' was less inflammatory than the concomitant which imposed Hindi on the non-Hindi states such as Karnataka, Tamil Nadu, Kerala, Andhra Pradesh and southern languages on the Hindi-speaking states such as Uttar Pradesh, Madhya Pradesh, Bihar. Agitations were sparked in many states; language became a sensitive issue and the position of the English language remained uncertain in such circumstances.
The varying positions of English in different states and conversely the demand for the language were measured by Dr. D. S. Kothari, Chairman of the University Grants Commission in his report. English was reinstated as an associate language and a 'library language'.

The vital role of English in this context is still indisputable, particularly considering the socio-political and economic developments in the past decade in India. The significant place of English in India today is a direct consequence of the rapidly changing politico-economic scenario in India as well as abroad. Early post-independence years had seen a nationalistic fervour that struggled with the pressure of Raj legacies. Missionary schools, established colleges and universities continued the earlier traditions that gave prominence to English literature and used English as the medium of instruction. At the same time, regional languages received substantial political and public support so that many schools, colleges and universities chose to accept the additional options of non-English media of instruction.

In his comprehensive study of English Language in India, Kachru referred to the continuation of the significant role of English in independent India. Numerous socio-political influences as stated earlier, framed circumstances by which, despite official/government efforts
to impose Hindi, English has remained the popular pan-Indian medium of communication, particularly among the educated. A survey showed that in the early 70's, of 97 universities, 23 were monolingual English medium, 1 Hindi-medium, 2 Sanskrit-medium and 1 Gujarati-medium; 53 universities were bilingual with English as one of the two languages. Almost all the universities that offered monolingual medium of instruction in Engineering, Technology, Medicine, Pharmacy and library science, relied on English.

A review commission in Karnataka reported its findings in 1979. It spoke of the need to impart to students the ability to communicate in English and the need for the effective teaching of English, so that "students develop greater confidence in the use of language and do not have any reason to feel handicapped on this account at any stage in their educational and later career" (Jayaraman 1993:107). The dual requirement of English, as a medium of learning and as a system of communication that was needed for career development, came to be recognized in the early 80s. The functional role of English and the focussed role of English for specific communicative purpose was acknowledged repeatedly, leading on to the corresponding statement in the New Education Policy 1986, about English and its uses, at every level and for every discipline of education.
1.2.2. **THE NEW EDUCATION POLICY (NEP) 1986 IN PROGRESSIVE INDIA:**

Relevant points in NEP 1986 concerning language emphasized: the development of various regional languages using them as media of instruction, the vigorous implementation of the three language formula, the promotion of Hindi as the link language according to Article 351 of the Indian constitution. In addition to this recognition of the premier status of Hindi, there as also an important directive regarding the strengthening of the study of English and other foreign languages. A discussion of the reasons given in the NEP for the continuation of English as a medium of instruction for higher education, would be relevant to the present study. The NEP states that instruction for professional subjects and subject-related activities would continue to be English and that there was no proposal to change that. The NEP 1968 had described a shortage of suitable pedagogical material in Indian languages. NEP 1986 reiterated this comment. In addition, it was admitted that the preparation and production of texts and books had not been synchronized with needs. Most of the literature on specialized subjects was available only in English. Consequently, English had established itself as an important 'library language'. The NEP 1986 points out; 'Special emphasis needs to be laid on the study of English and other international languages. World knowledge is growing at a tremendous pace, especially in (sic) science
and technology. India must not only keep up this growth but should also make her own significant contribution to it. For this purpose, study of English deserves to be specially strengthened" (Shukla 1988:138).

The NEP 1986 reflects the impact on all facets of life, of the technological awakening in India and stresses the importance of promoting efficiency and effectiveness in public endeavour. The policy aims at offering educational opportunity at the secondary and higher level -- as a 'major instrument of social change and transformation'. Language as means of communication found prominent recognition in the scheme of education announced by government.

1.2.3 SOCIO-POLITICAL AND TECHNOLOGICAL INFLUENCES ON ELT:

The diachronic discussion above, of the evolution of English from a language of interpretation to language of communication particularly for science and technology, requires a corollary discussion of successive changes and representative opinions on ELT in India.

The implementation of NEP 1967 resulted in the introduction of a variety of patterns for introducing English in schools, ranging from Std. III to Std. IV. Different combinations of first, second and third languages were adopted in various parts of the country. Whereas in the first two decades after independence, English had been
the medium of instruction for most schools, it was seen that regional languages began to replace English overwhelmingly. As a direct consequence of the NEP 1967, use of Indian languages as the medium of instruction was permitted by several universities for liberal arts courses at the undergraduate level. Further, in the past decade, Public Service Commissions have relaxed rules to allow the use of Indian languages for certain core papers. Despite these concessions favouring Indian Languages, it has to be noted that, English has remained the medium of instruction at the post-graduate level as well as for education in the science and technology stream. It is seen that the position of English has endured political onslaughts, gained from reviews of the contemporary needs in a developing nation and has now achieved an independently strong position in higher education as well as employment. The NEP 1986 remarked that the "curricula of technical and management programmes will be tagged on (sic) current as well as the projected needs of industry". (Shukla 1988:21)

The industrial growth of India, the advent of the "computer age" following the impetus given by the Rajiv Gandhi liberalization policies have together resulted in the widespread realization that English is the appropriate medium of instruction for science and technology. An earlier Review Commission (Karnataka 1979) had spoken of the need, as quoted in 1:2:1, to impart to students the ability to communicate in English.
A study of factors shows that changes in political perspectives caused parallel changes in the world of industry and commerce. The Nehru-imposed segregation of India, as a nation struggling for indigenous industrial growth, altered in the early 60s. The subsequent three decades saw massive changes in the economic policies of the country. The consequence of the increasingly liberal economic policies was that industrial production, employment opportunities and expectations regarding proficiency grew to mimic western parameters. Today, computerization in industry, the 'global village' concept, easy international satellite communication and total quality management standards have brought with them the allied concepts of efficient and effective communication. Educationists now recognize the importance of English for easy access to technical literature and for felicity of communication. Students also now identify proficiency in English with employment opportunities and greater mobility within and outside the country. This point will be seen to be corroborated by responses from alumnae (of the Premlila V. Polytechnic) to questionnaires administered for data collection. (Chapter IV). In a recent newspaper article, Shashi Deshpande speaks of "the paradox of the use of English in our country. Puzzling, contradictory, anachronistic. Growing, despite the constant chorus of disapproval and numbers." (Times of India, April 1995). She describes succinctly, the bitter truth of the
"necessary-evil" identity of English in India. "English is no longer a language of servility but of use because of the mobility, both vertical and horizontal, that it confers. It is the language that links many of us in our own country. Any language that does those things should be welcome," (ibid). Thus it is observed that the uneasy presence of English in the post-independence era has now been replaced by a well-defined and acknowledged presence of the paramount medium of communication. Foreign collaborations, partnerships, technical knowledge exchange, the heightened pace of development, liberal economic policies and allied political perspectives have given a powerful connotation to English as a world language; it is a presence which is an integral part of the socio-economic identity of India.

1.2.4 SALIENT FEATURES OF ELT CONVENTIONS AND ESP:

English language teaching in India has been coloured by the changing hues of socio-economic growth. The present study does not seek to review ELT materials and texts used in India from the pre-independence days to the present. However, ESP materials and textbooks of independent India are reviewed in Chapter V. At this point it would be germane to refer briefly to the continuous concern among educationists for standards of teaching and related issues. Education Review Commissions have repeatedly commented on teaching methodologies and their effectiveness. They have stressed the need to reform the language curricula in order to suit the needs of the learner. These comments were found
to be closely relevant to the study of ESP in India. Several factors which affect the unique problems of English teaching in India have been acknowledged.

The large numbers of students, paucity of funds, poor infrastructures, inadequate library facilities and small numbers of trained teachers, are perpetual problem factors. In recent years, experts have tried to deal with these factors and have examined curricula and teaching standards. Syllabus revision and suitable teacher training have been recommended. (Relevant theories and published materials are discussed in Chapter V). Textbooks at the primary, secondary and tertiary levels of education have been revised in keeping with current principles of ELT.

Earlier, English texts were predominantly 'literature focussed' -- i.e. British Literature. There is a very pronounced shift now to Indian Literature in English. Several ELT Institutes have been established, the CIEFL in Hyderabad being the pioneer. However, the demand for trained teachers far outweighs the number of teachers trained by these institutes. Consequently, the teaching of English continues to be severely handicapped by the attitude of teachers whose purely literature-based education and archaic belief in prescriptive grammar, do not condition their minds suitably for teaching language skills. It has been observed that mechanical drills, discrete discussions of grammatical terms and usage, traditional prose and poetry
explanations continue to dominate the English classroom activity. Attempts have been made periodically, to restructure syllabuses, to use Indian themes and Indian prose and poetry selections, to prescribe workbooks that seek to give 'practice in English use' -- but these have largely been ineffective measures. Jayaram (1993:108) observes, "even in those states where English is taught as a compulsory subject the curriculum of English and the method and orientation of teaching it are observed to be defective.... there is an urgent need to reform the language curriculum by giving it a functional orientation and to train teachers to teach the redesigned curriculum". It is important to note the repeated references to the practical purpose of using English and the consequent alteration in the pedagogical focus. In addition, it should be noted that educationists have now come to accept the crucial role that English language plays in the scheme of education. It is imperative that all aspects of English as a subject be examined. The syllabus, the theoretical principles and pedagogical techniques must be scrutinized to arrive at indications for improvement in language programmes. A pragmatic approach is essential in an ESP research study such as the present one. Perception of language as a communicative activity -- based on context, user background and actual purpose -- should be the basis for syllabus design and preparation of teaching materials and classroom activity, particularly for an ESP programme.
The NEP 1986 echoes this thought: "It is important that universities pay adequate attention to language as a means of communication either through the courses included in the curriculum or through remedial teaching programmes or other special courses using modern techniques of language teaching" (Shukla 1988:150).

1.2.5. **ELT IN MAHARASHTRA:**

The present study is concerned with developing an ESP syllabus and teaching materials to be used at the polytechnic level in Maharashtra. It would therefore, be relevant to refer briefly to the traditional system of English teaching in this state, for non-English medium schools and polytechnics. Post-independence English textbooks as well as those published by the Maharashtra State Textbook Bureau, followed the traditional pattern of prose and poetry selections and grammar workbooks. Grammar textbooks such as by Wren and Martin: *School English Grammar and Composition*, Nesfield: *English Grammar Series*, and Stannard Allen, *Living English Structure* were used extensively; thereby continuing the discrete and cognition-based teaching that had been used for decades. Mother-tongue translation explanations are still popular and rote-memorization continues to be the learning strategy for English. This point is substantiated in Chapter IV. Examination papers are styled to suit the learning habits and course content -- they usually seek content-based answers, testing recognition
of matter rather than recall, based on internalisation of memory rather than skills. At the secondary and tertiary levels, changes have been attempted in texts as well as syllabus design, signifying an awareness of the need for constructive amendment of methodology. It must be pointed out that these amendments have been found to be cosmetic i.e. presentational rather than incisive and integral. It is beyond the purview of the present study to make a detailed evaluation of ELT materials. The comments above have been made with the intention of emphasizing that radical changes are necessary in order to implement the recommendations enshrined in the NEP 1986.

In 1994, the Maharashtra State Board of Secondary and Higher Secondary Education introduced a course book in English for Std. XI, followed in 1995 by another for Std.XII, 'with a view to realizing the goals and aspirations envisaged in the NEP 1986. (Foreword 1994:5) The course books were "designed to emphasize the role of the learner in the process of learning" (ibid). Objectives of teaching English at the +2 stage were to enable the student to acquire communication skills in English and to "use the English language as a means of life-long education". Suggestions to teachers to 'facilitate' the activity of participative learning were included. The restructuring of the English syllabus and the preparation of the course books are significant events in the field of English teaching in Maharashtra — noteworthy as purposeful applications of
modern principles of communicative ELT principles.

Reference to the new Course books for Stds. XI and XII was considered necessary because they mark a radical change in the concept of textbook and syllabus design and seem to approach the concept being formulated in this study. Verma (1993:119) quotes some recommendations of the U.G.C. that reflect the importance of introducing need-based courses and providing programmes 'relevant' to the needs of other subjects and of equipping "students for using English language effectively for professional and communicational purposes". ELT centres are expected to "prepare curricula, instructional materials for different courses from the very elementary ones to the relatively advanced ones from skill-related courses to ESP courses -- for professional needs".

It must be stated that as a result of such recommendations, surface changes have been made in syllabuses for English teaching at polytechnics as well. ELT centres have been conducting teacher training programmes and materials production workshops, but language teaching practices themselves do not seem to have been altered more than superficially. This opinion is substantiated in Chapter IV during a review of question papers which are illustrative of the point that setting of objectives does not necessarily guarantee their achievement.
Some ESP textbooks produced by the Technical Teachers Training Institute (TTTI) Eastern Region, and by the Anna University (in collaboration with the British Council), are landmark attempts at ESP materials production. It is pertinent to consider these developments in ESP textbook publications because they reveal the overall temper of linguistic pedagogy and the tenor of voices that announce improvement in ESP pedagogy and because some of them have been used as texts.

An ESP situation needs very careful handling on account of the delicate balance between learner knowledge and the language teacher's lack of familiarity with the mainstream subjects. Therefore, a transparency of purpose would enable the learner to orient herself/himself positively to the learning activity; the acceptance by the teacher of the learner-focussed methodology would result in an effective teaching-learning situation. These issues will be discussed in subsequent chapters dealing with syllabus design and ESP concepts. This discussion which is restricted to referring to the evolution of the ESP concept within ELT in India, will now attempt a description of seven ESP research studies in India, conducted between 1978 and 1994. These research theses have been chosen as examples of the continuous search among discerning teachers of English for effective teaching materials and methodology, particularly for specific areas of learning.
The present study includes a description of some ESP research studies in India, in order to show how ESP methods have gained from ELT theories, and to stress that needs-analysis based course development is essential, and must be undertaken at every educational level and for every discipline.

ESP RESEARCH STUDIES:

1.3.1. USHA NAGPAL: ENGLISH FOR BUSINESS: AN ANALYSIS

M. LITT. CIEFL 1979:

Among the earliest ESP studies in India was Nagpal's research which sought to analyze what goes into the making of English for business. The study aimed to devise materials which were expected to be relevant to the needs of Commerce students. The materials were fashioned so as to be relevant to the business 'register' without 'posing teaching problems for the English teacher'. Nagpal wished to redefine the term 'Business English' by asking three questions about (i) the need for a course in Business English (ii) the responsibility of the English Department and (iii) the designing of a text book for Business English. With the intention of locating sources of business language, she looked at course books, sought guidance from Commerce teachers and collated 'actual commerce material'. Her aim was to design a course for Commerce undergraduates, i.e. for those who need English for primary tasks in business writing, and to give a sound foundation for business
sophisticates". The course was not meant for persons training for clerical and secretarial practice jobs. The course was to be geared to the needs of prospective business executives.

Nagpal examined samples of written material and the tables of contents in commerce textbooks as well as prescribed formats, but did not study the written practices employed by the students of commerce whom she sought to train.

In her chapter on Register, Nagpal defined it as 'situationally differentiated variety of language' and distinguished the field of discourse as the subject matter of language activity. Nagpal conducted her research during the heydays of the 'new-wave' in applied linguistics, prominently explained by its chief exponent: Henry Widdowson. Consequently, the study repeated the theory that 'register' cannot be distinguished on the basis of lexicogrammatical features alone; the correct approach is semantic-based. When linguistic features constantly and recurrently correlate with certain situational features relevant to the meaning, a convention is formed and 'register' is the collection of these conventions. A further detail is specified by stressing that the language produced by a system should be focussed, not the language of individual users. The categorization of Register assumes a high correlation between linguistic features and subject
matter. This is assured in situations where role relationships and settings do not influence language greatly. It should be noted that Nagpal excluded the spoken medium from the purview of Business English, except for the conventionalized language that she identified.

Nagpal's study showed the obvious differences between ESP and literature based courses, by trying to establish what is special about ESP. She pondered whether ESP is teaching English or the subject (Commerce) and whether the teaching involved would be Business English or English for Business. She also tried to point out the difference between English for Science and Technology and English for Business. The conclusion drawn from these discussions was that an English for Business course should concentrate on language teaching not on lexis or syntax. Nagpal looked at register-based, skills-based, communicative competence focused and Notional approaches and reached the reaffirmation of her hypothesis that the course should use the Notional approach, should pre-assess the audience and aim at instilling communicative competence in Commerce students. The syllabus was based on the written materials which were analysed to select language features, vocabulary and conventions of language use. Heavy weightage was given exclusively to written materials, which were graded in a syntactic frame and a series of exercises was developed for imparting lexico-semantic knowledge. Sample materials and topic materials were also provided in support of the thesis.
Nagpal's research report was followed in 1981 by V. Saraswathi's study entitled 'Towards a Communicative Course Design in EOP: A Study in Applied Linguistics'. It was undertaken with the conviction that "communication always takes place for a specific reason", that the immediate goal in the Indian context is the provision of opportunities for the development of specialists and professionals for whom "a specialist education has greater relevance than the earlier kind of liberal education".

A major premise held by Saraswathi was that the ESP programme would be successful if it was treated as a 'cooperative venture' between the English teacher and the subject teacher. The Communicative Approach to Language Teaching (CALT) which Saraswathi advocated, was designed to build communicative competence for the required purposes. In support of that approach, Saraswathi quoted Brumfit (1977:72) "As soon as possible English for specific purposes needs to turn into specific purposes using English." Saraswathi developed an argument in support of a wide-spectrum CALT which would offer a large collection of communicative functions for which the teacher would focus on the contexts relevant to the learner. Saraswathi discussed Strevens' taxonomy of EST, ESP and EOP, seeing shortcomings there in failing to account for overlapping aims in the specific areas categorized. She explained the contrast
between English for Vocational Purposes (EVP) and English for Official Purposes (EOP). A further distinction was shown between restricted EOP such as required by airhostesses, pilots and waiters -- who need minimal competence, and elaborate EOP such as required by doctors and lawyers who need extensive competence. A cameo description discussed the difference between EOP for lawyers and EAP for lawyers. These distinct identities were delineated only for the purpose of listing the components of ELT programmes. Saraswathi avers: "Any ELT programme if it is to be relevant and successful should include all the components -- ESS, EAP, EVP and EOP, the level and proportion of which is determined by a prior analysis of learner needs". (1981:149) Basic criteria set by Saraswathi were that a) language has a set of conventions, b) Communication is a process, c) the holistic perspective rather than the atomistic perspective (of language) should be chosen and d) that language is discourse which has illocutionary force, needs coherence and rhetorical structure. A contrastive study of register-based, product-oriented courses (Close 1961, Brasnett 1968, Ewer and Latorre 1969, Irmack 1975, and Swales 1980) suggested the adoption of the flexible approach (Swales) whose virtue lay in being partly functional and partly grammatical. While accepting the soundness of a functional/notional approach whose major focus is communicative rather than linguistic, Saraswathi cautioned against oversimplifying the concept by assuming a parallel correspondence between form and function; she postulated
that flexibility had to be built into a truly functional approach.

The Saraswathi study reviewed Bates' advanced-learner-focussed Nucleus series, Allen and Widdowson's 'English in Physical science', Johnson's Communicate in writing'. The reviews commented systematically on major principles of language learning which would support her subsequent theorization that CALT would offer "the grammatical as well as rhetorical structure of the discourse" (ibid: 181). It was argued that a purely discourse-based selection of text would duplicate the flaws of a grammar-oriented approach; a skill-based approach which produced a set of activities, was also devalued for being only partially effective. An eclectic approach was promoted because it would present discourse in general terms and would enable the learner to infer the rules of use and usage -- i.e., 'learn by doing' (ibid: 189)

Saraswathi identified the communicative context and major communicative functions and tried to discover the rhetorical structure for each major communicative function. The EOP course was designed on the basis of a set of socio-linguistic conventions that were identified through a survey of specimens of official communication, in Tamil Nadu. The learner's entry and terminal behaviour were described and the major characteristics of EOP were listed, highlighting the findings that EOP used certain lexical and syntactical
categories for certain purposes. The register-based approach was abandoned for the 'specific-purpose' approach. Further, it was explained that EOP was characterized not only by functions "but also (by) the manner in which these communicative functions are expressed through English which of course is determined by contextual role relationships" (ibid: 383).

The Saraswathi study revealed the importance in ESP of identifying specific functions as well as specific contexts and purposes, and role relationships. The study also evaluated several books on Business Communication and correspondence and showed that most were 'geared to syllabuses of Indian Universities' and were 'mainly examination - oriented'. As a related facet, typical examination papers were reviewed. These seemed to have been based on the belief in essential factors such as knowledge of principles and ability to compose.

The course proposed by Saraswathi concentrated on letter writing and report writing. It did not include either an explicit grammar section or a separate section for summarizing and essay writing. The function-oriented course held form subservient to function. The pedagogical principle for the course being 'learning by doing', definitions or descriptions of features of 'good EOP' were not presented in the course. The course sought to train the learner to acquire the basic competence in EOP rather than to provide a "ready-reference instant-copy text".
This research study was undertaken by Jacob with the contention that most of the earlier research on teaching English for Science and Technology had examined only the area of 'target repertoire'. The earlier studies had shown that the academic needs of science students were limited to reading and writing skills. Jacob sought to prove that "the teaching of English has to be related to long term needs of the science student whose undergraduate training is pre-vocational and whose job opportunities and success in competitive situations are very much dependent on a general fluency with respect to English" (1989:Preface). Having said that, Jacob proceeded to enquire about "the scope of the instructional activity in relation to the communicative experience of the student". (ibid). The answer was sought through analysis of data collected by observing classroom activity and through "informal interviews with teachers and students," In addition, the observation of science lectures and the study of students' diaries contributed to the data corpus which yielded five basic units: communicative situations, communication events, macro-functions, topics and communicative acts. These units were analyzed. Jacob summarized some lectures, studied the aims of sample laboratory reports, examined subject assignments and reviewed sample examination questions (A similar modus operandi is seen in Malathy Krishnan's research study 1.3.7). From the analysis of the data collected, Jacob
concluded that an ESP programme for science students should be based on 'interaction'. The curriculum designed on this conclusion, comprised three sections for (i) Explaining and Understanding (ii) Verifying and Reporting and (iii) Questioning and Answering. Of these, the first (which was judged to need the major attention) dealt with activities such as deriving and describing, note abstraction, naming and labelling, and acknowledging information receipt. The second referred to laboratory activity and the third to lengthy explicit descriptions. The curriculum consisted of "Systematic transmission of interpretation from the teacher to the learner", through communicative functions such as "reading aloud, summarizing, paraphrasing, directing attention to specific words or sentences" (ibid: 56). Practice in note-taking, event reporting and grammar exercises were part of the activities prescribed. Jacob noted that the students are usually expected "to provide continuous descriptive answers to content-based questions on the prose text as well as answer (sic) to practical questions," and concluded that "the major portion of the communicative experience of the learner is one of acknowledging and accepting what was given within a role relationship of teachers as providers of facts and students as assimilators of facts" (ibid:63). It is important to note that the Jacob research circled exclusively around the academic setting. Although this was seen to be pre-vocational, the research did not seek to relate (or apply) the skills to professional needs. Therefore, the research
range fell short of the macroscale comprising future needs of students. Although the findings and consequent classifications of communicative functions of the Jacob research would be valuable for any ESP researcher, it must be stated that the 'long term needs' that had been mentioned in the Preface, do not seem to have been considered fully. Neither the data collection nor the curriculum design, touch the dimension of the repertoire of language skills required in professional life.

1.3.4. SANKAR NATH GHOSE: ACHIEVEMENT TEST FOR POLYTECHNICS: M.Ed. EXETER 1990:

A discussion of this M.Ed. dissertation has been considered pertinent because the research approach and theme was found to be relevant to the study field of this research. Ghose set out by defining a diploma holder as a "connecting link between the engineers on the one hand and the labourers on the other" (1990:6). He explained the use of English as a medium of instruction by giving three reasons: the near-exclusivity of text books in English for mainstream subjects, the existence of English as the medium of instruction for higher studies, and 'for job availabilities' elsewhere in the country. Ghosh surveyed the history of English pedagogy in West Bengal polytechnics. He critiqued the textbooks designed by TTTI Easter Region Calcutta, and highlighted the claim (in the 1984 editions) that the book was written after a "prior analysis of the communicative needs of the learner," in order to make the
process of learning technical English more effective and purposeful." Ghose described the TTTI textbook in detail — enumerating the tasks and `skills-oriented activities' — because he suggested that "unlike the traditional examinations, the tests based on communicative language teaching, demand that testing should reflect teaching" and that the texts used in the tests should be realistic, using "a maximum number of words upto (sic) 1100, needing, not more than five minutes". (1990:12). Types of test items, task purpose, task type, item format and instructions were prescribed by Jacob as described earlier in 1.3.3. The present study will discuss evaluation systems and test design for the target setting, in Chapter III.

It should be noted that Ghose's research focussed solely upon reading comprehension skills and their effective testing. Clearly, skill in Reading was considered to be of paramount relevance for the polytechnic diploma student, "of all the streams of Engineering". This study will show in later chapters the parallel requirement of other language skills.

1.3.5. Y.P. DESHPANDE: BRIDGE COURSE IN ENGLISH FOR STD. XII SCIENCE STUDENTS: M.Phil. CIEFL 1990.

The basic premise of the Deshpande study was that science students could gain considerably from a specially designed course that would bridge the gap between the level of reading proficiency in college entrants and that required for the Std. XI Science stream.
Deshpande composed the following nine units for his Bridge Course. The first, introduced the Reading Process and explained the procedure to be followed for reading effectively. The second unit explained the concepts of cohesion in text, cohesion and reference, and rhetorical cohesion. The units that followed, analyzed description, generalization, definitions, classifications, comparisons and contracts, analysis and synthesis. These course units were to be utilised through self-instruction assisted by guidance from teachers. Learning was expected to occur through solving set exercises prepared for the course.

The research report discussed students' answers to these exercises and gave 'model answers' to serve as guidelines for further study. Designing this course had involved the scrutiny of the target situation and an analysis of the skills required. Theoretical views on languages learning and related literature were reviewed. Syllabus materials were written along with suggestions for teaching methodology and evaluation. Although the Deshpande study is only marginally relevant to the present study -- which probes the academic and professional needs of the polytechnic disciplines for designing an appositive course (regular, not bridge) -- it has been discussed here because it offered a fresh outlook as a bridge course in reading skills, and because it catered to the needs of students of an equivalent stage in education, and because the course
enumerated a number of classifications of academic situations, that were observed to be similar to the Polytechnic situation.

1.3.6 MAIMOONA JABEEN: ENGLISH FOR ENGINEERING AND TECHNOLOGY: M.Phil.:CIBFL 1992

Jabeen studied the linguistic needs of B.E./B.Tech students. The hypothesis was that "if a course is designed which caters specifically to the needs of the students without the use of subject specific materials, it would meet the needs of the students and maintain their interest in class" (1992:ii). Jabeen suggested a broad taxonomy of approaches: Language-centred, Skills-centred and Learning-centred. A Language-centred approach is learner-need initiated and is content-based but does not consider learning factors. A Skills-centred approach is process-oriented, and aims at developing skills. The learner is considered a user of language. The Learning-centred approach considers the learner at every stage, designs a non-linear curriculum which has built-in feedback channels. Acquisition of competence is achieved through a syllabus negotiated with the learners. Jabeen adopted a learning-centered approach and examined learner needs, teaching methods, the evaluation pattern and teacher-perception of needs. She expected the needs-analysis to identify the "multiplicity of affective and cognitive variables" (1992:44). Data were collected by means of a questionnaire administered to students and teachers, structured interviews
with them, and the examination of tasks in specialist subjects and situations. Questions were posed about the need to learn English, the kinds of exercises commonly encountered, the assessment scheme and the question types in tests. Analysis of data revealed that three special skills were needed by undergraduate Engineering and Science students. They are (i) Writing reports and papers, (ii) Listening to lectures on specialist subjects, and (iii) discussing specialist subjects. Other needs mentioned were writing applications, solving crosswords, impressing friends, reading books and journals -- social functions of language. Responses from English teachers ranked listening to lectures as the most important activity; note-taking was ranked second among the skills; chart-making was rated an important skill but not for information storage. In addition, teachers spoke of the need for effective communication skills for writing competitive examinations in future after the degree course, preparing reports, appearing for interviews and interestingly, 'educating children'. Subject teachers presented a narrow focus, limiting the skills required, to practical academic needs such as receiving instructions, writing papers and reports, and participating in engineering discussions as well as preparing for post-graduate courses. Based on the responses, a syllabus was designed by Jabeen. It had four aims: (i) improving oral as well as written discourse through actual use of language, (ii) training in appropriate use of the language in performing various functions and in
expressing concepts of technology, (iii) giving an understanding of discourse structures and strategies in technical communication and (iv) equipping the student with skills for the end-of-course examinations and later for competitive examinations. The course was to be taught in 80 to 90 hours (at 4 hours per week), spread over one year. It claimed to teach learning strategies, providing for flexible individualized learning, using informal discussions, group work, tutorials, seminars and debates.

Among the research studies discussed thus far, it was felt that Jabeen's seemed the closest to the present study in terms of research methodology, mode of data collection and flexibility. However, significant differences should be noted. Jabeen's target population comprised undergraduate engineering and science students; data were not obtained from alumnae or employers; the research focus was limited to academic needs despite incidental references to later social uses; the course materials borrowed explicitly and extensively from tasks prepared for the Anna University textbook (5.1.5) and 'Interact' the textbook edited by Gunasekhar and Sasikumar and published by State Board of Technical Education, Hyderabad.

The present study is more comprehensive in comparison with the Jabeen study, obtains viewpoints and valuable parameters from employers of polytechnic alumnae, as well as junior and senior alumnae. It seeks to rationalize previous
syllabuses for three different disciplines and demonstrates the pragmatic value of periodic needs-analysis for effective syllabus design.

1.3.7 MALATHY KRISHNAN: PROBLEMS OF TEACHING ENGLISH TO JUNIOR COLLEGE COMMERCE STUDENTS:
Ph.D., Bombay, 1994:

This socio-linguistic study of the problems of teaching English to a specific group of students, is the most recent ESP research, conducted in Bombay. The enquiry into the pre-degree Commerce student's needs of English, attempted "to provide a conceptual framework for a teaching course" which would be centred and based on readings of source materials and evaluation techniques. The research outcome expected to bring about change in the ELT methodology at the Junior College level.

The present study is seen to be similar to Krishnan's research in terms of educational level, theoretical approach, the wide-angle investigation range as well as the intention of designing a syllabus. However, there are several points of divergence. While the Krishnan target population was at the pre-degree stage, the present study is concerned with polytechnic students who undergo professional training and are not at an intermediate stage but at a stage preparatory to professional life. Another difference is that the Krishnan study focuses upon one stream of learning, while the present research investigates the linguistic
pedagogic scenario for three streams within the Polytechnic.

Krishnan discussed the problems faced by teachers and students in the Junior College of Commerce such as large classes, mixed ability groups, materials that do not serve the objectives of the course and invalid evaluation processes. The Polytechnic class size is limited to forty students, thus it is not a problem factor. All the other problems identified in the Krishnan study would be found in the Polytechnic as well. Krishnan's recommendation was that English should be taught as required for its functional role, particularly on account of its unique status in India. She also stated that the syllabuses for English 'had not really changed' in India despite the continuous evolution of ELT theories. Krishnan applied the Brumfit model of communicative competence, in accordance with ESP principles that indicated the restriction and selection of teaching materials suitable to need and purpose. Contemporary ESP and Communicative Language Teaching (CLT) perspectives have been shown by Krishnan to be relevant to the research topic.

Data were collected by Krishnan, from a learner group survey conducted through a questionnaire, the study of authentic business documents and a review of existing evaluation measures. Vocabulary, grammatical features, functional acts and discourse texts were analysed to obtain lexical items, grammatical categories, communicative functions and discourse features that were judged to be
required by students. Krishnan prepared a protosyllabus which had modified the objectives of the existing syllabus and suggested with sample units, five teaching areas that would cover, the four skills of language communication as well as grammatical items, discourse features and functions. Theoretical aspects and practical applications of good testing were discussed and a Std. XII English question paper was critiqued, using criteria of effective testing. Inadequacies were pointed out. A model question paper was composed, using items similar to those provided in the sample units. Krishnan concluded with the claim that the conceptual framework provided by her study could facilitate course design for other faculties adducing instructional materials prepared by her for the Polytechnic students to establish the validity of subject - specific and communicative activities. Krishnan's laudable attempt may contribute to a restructuring of the Junior College Commerce syllabus for English. But it was felt that the conceptual framework in the Krishnan study would not be fully acceptable for the present enquiry setting. An independent research study was necessary for investigating the specific language skills needs of polytechnic syllabuses for English and for producing suitable teaching materials along with suggestions for requisite improvement in teaching methods.
POLYTECHNICS IN THE INFRASTRUCTURE OF EDUCATION

1.4.1 THE STATUS OF POLYTECHNICS:

At this juncture of national development, India faces a host of difficulties which need resolving. High standards of education would play a pivotal role in reorienting and strengthening positive elements, to deal with many socio-economic issues that the country is facing today. In this age of aggressive ambition, increasing exposure to international influences, heightened aspirations for international recognition, and rapid urbanisation -- the need is for streamlining systems, including that of education. Pragmaticism of approach and formative evaluation of existing courses is essential. Suitable pedagogical frames should be formulated for every discipline in education. The field of education has a very rich history and can boast of numerous institutes of repute at every level of the hierarchical pyramid structure (3.1.1). The pre-independence hierarchy, from pre-primary to post-tertiary levels, has seen some alteration in post-independence India. Technical institutes and Polytechnics have been established, giving cognisance to the need for imparting technical skills to persons with vocational ambitions. Job-oriented short-term courses are offered for post-S.S.C. students. Until recently the curricula in such institutes did not always include the teaching of English. The fact that English has now been included as a compulsory component in the polytechnic courses is illustrative of the
fact that policy makers have acknowledged its importance at least as a medium of instruction and as a library language, if not as essential in professional life.

It would be apposite to refer to the school systems that lead to the polytechnic population. Several different systems exist for school education, each with different syllabuses for every subject as prescribed by the S.S.C., I.C.S.E. and C.B.S.E. X Boards. Prescribed texts and test types differ at the next higher level as well, as set by the H.S.C., I.S.E and C.B.S.E. XII Boards. Products of these systems are entrants at polytechnics.

Degree courses in Science, Arts and Commerce and specialized courses in 'professional' areas (Medicine, Engineering, Law, Architecture) stand separate from shorter term polytechnic courses. The present study is concerned only with the courses in polytechnics and the teaching of English (LCS) in that unique setting.

Just as there is a lack of standardization in the teaching of English at the degree level, English in polytechnics has also been a virtually neglected area. Some attempts at implementing modern ELT theories have not succeeded fully in developing reliable pedagogical procedures for imparting practical knowledge of English and skills in language communication. Lacunae are visible
particularly because polytechnic education itself is at a fledgling stage.

1.4.2 ESP : THE CATALYST IN POLYTECHNIC EDUCATION:

A research study by Kalindi Randeri (1973) investigated the relevance today of a liberal arts education for women in comparison with a profession-oriented education. The study stressed the swiftly growing demand for trained, skilled personnel. It called for establishing specialized training facilities at the tertiary level in the technical faculty. Such institutes concentrate on the essential components of the discipline, offering compact and intensive skill-based courses. Conventional English courses would be of little consequence. This study shows that custom-designed courses for specific language skills, focusing on the specific needs of specific learners must be taught at these polytechnics. The LCS course would serve as the pervasive force catalysing the other components of the curriculum. The present study seeks to meet the urgent need for specific syllabuses for institutes that could be projected as the centres of privileged education. ESP could play a very visible role and would be recognised as a core subject if suitable syllabuses are prepared. The prejudices of learners and subjects teachers could be transformed if the ESP curriculum is revised to ensure goal-related and purposeful linguistic development at the pre-professional stage. The need had been perceived for several years, for developing
goal-oriented syllabuses for English depending upon the requirements of each branch of the polytechnic faculties. However, attempts at preparing such course books have not been entirely successful. This was one of the factors which were responsible for retaining the image of English, as an ancillary subject in the polytechnic curriculum. Despite the fact that English is the medium of instruction in polytechnics and that future professional roles are seen to require a command of English, there is a paradox. On the one hand, polytechnic students from non-English school backgrounds are deficient in English and on the other, the English syllabus that claims to be goal-oriented and needs-based, fails to enthuse them and is rejected as being irrelevant to their discipline. This is seen in students' responses to the questionnaires distributed for this study as will be discussed in Chapter IV. The need for a fresh look at ELT will be substantiated in the discussion of Polytechnic philosophy and brief history of its development in Maharashtra, in Chapter III.

This chapter stressed the need for dealing with an unsolved puzzle in the Indian ELT paradigm: English for polytechnic education. The puzzle consists of prejudices about English among students and subject teachers, multilevel heterogeneous student groups, the preferences for literary texts among English teachers, absence of comprehensive needs-analysis and the consequent paucity of quality teaching materials, a predilection for rote
memorization among students and for the lecture methodology among teachers. Incisive and extensive research would provide a holistic view that would assist in identifying the essential elements for building a pragmatic syllabus. A syllabus that would exclude the non-essentials, include the essential components, prescribe suitable techniques and present transparency of objectives, would contribute substantially towards vitalizing an increasingly potent constituent of professional education.

Chapter One established the ELT background in India and described the early efforts at applying ESP concepts for teaching at various levels, and reviewed ESP research studies undertaken in India in recent years. The next chapter looks at ELT theories in general and delineates the evolution and depth of ESP concepts. An examination of contemporary thought on the validity of those concepts, has been considered necessary on account of the variety of approaches which must be considered, prior to defining a theoretical foundation for designing ESP syllabuses for three Polytechnic departments.