Chapter-Three
Theoretical Underpinnings of the Study

3.0 Introduction

English language teaching and learning in any formal setting; not to mention separately about the tertiary level of education, is strongly influenced by varieties of factors. These factors are context specific broad socio-political factors at a given time, education and language policy adopted by a particular government/ board of education, language curriculum, infrastructural support/resources available to them for the pedagogic process to take place, teaching methods used, learning strategies employed by the teachers and the evaluation system. Apart from these, the status allocated to English language in that particular country or institution and the significance attached to the learning of this language are also highly important factors. Hence this chapter aims to focus on most of the above-mentioned issues and their interrelatedness in the following sections. Besides, attempts have been made in this chapter to address the relevant factors and theories that have predominantly influenced the theme of the current study. The present study i.e. “English Teaching Learning Practices in the Engineering Universities of Bangladesh” falls within the framework of English for Specific Purposes (ESP) as the whole language pedagogy in the context of engineering context takes an ESP approach. By ESP approach, the researcher means a context where both teachers and students are very much aware of their teaching and learning purposes and the learners know where and how to apply the learning output. Besides, the engineering students are very much aware of the fact that English language syllabus is included in their curriculum to enhance their study skills
which is very much required during their academic life, in dealing with comprehension of
English lectures conducted by the subject lecturers, comprehension of their subject text
books/ reference books written in English, understanding the culture of the engineering
textbooks, and especially the information processed in engineering texts.

Since most of the fastest growing world is trying to enrich and update its English language
curricula for its stakeholders’ development of communication skills which is required both
for study and job purposes, the present study has also been undertaken with a view to
explore the teaching learning situation in these engineering universities of Bangladesh and
hence suggest for further modifications and changes. Since within the purview of this
study, ESP or very specifically English for Academic Purposes (EAP) falls under the
broader perspectives of Applied Linguistics and ELT, the researcher will use the terms
synonymously either as ESP or EAP. Hence the following sections deal with the origins,
various definitions, characteristic features, types and other influences of ESP in the context
similar to the current study.

The wide range of purposes and contexts in which English is used has made English for
Specific Purposes (ESP) an eclectic discipline. Typically trained in the area of writing or as
language teachers, ESP teachers work outside of their own disciplines, and must become
ethnographers, exploring unfamiliar language varieties, disciplinary cultures and modes,
and drawing on scholarship from a wide range of fields to do so. These include
sociocultural studies, literacy studies, Second Language (L2) writing studies, rhetoric, and
systemic functional linguistics. Perhaps because of the rapid expansion of English for
Science and Technology (EST) in the last 50 years, science and technology was an early
focus for ESP researchers (e.g. Barber 1988; Bazerman 1984, 1988; Braine 1989; Halliday 1993a; Herbert 1965; Swales 1971, 1988 as cited in Parkinson, 2013). The initial interest of EST teachers and researchers was on linguistic forms, with later emphasis on skills, a more recent focus has been on disciplinary socialization, and most recently a critical perspective, which considers how literacy practices express societal or disciplinary power differences. In tracing out this expansion, Hyland (2006) notes that each expanded focus comprehends rather than replaces prior ones.

Henceforth, the issues related to curriculum are discussed in a broader perspectives followed by discussion on the narrowed down and specific ESP curriculum design. The following extract focuses on the goals and objectives of universities and higher education in the 21st century.

3.1 Goals of University and Higher Education in the 21st Century

Traditionally universities were established for discipline-based knowledge, its development and dissemination. The academics used to train and reward its stakeholders for the optimal development in particular discipline areas and its dissemination of the foundational knowledge in these areas to students who are believed to carry forward the legacy of the acquired knowledge. There was time when the university education was offered only to the minor elite class, the practice was effective for the development and dissemination of knowledge and understanding within that small interconnected elite class. But in this modern day university education, the trend has drastically changed as most universities in the 21st century look for offering job and career oriented programs under instrumentalist curriculum so that the stakeholders draw the explicit benefits from education in terms of
materialistic success. As of now, they serve for the growth and ‘the economy’ of the country. The prosperity of the modern nation depends not just on its ownership of lands and resources, but also on the productivity of its people. In the knowledge economy, productivity will relate closely to the effectiveness of education at all levels. In the nineteenth century, universities had to adjust to the needs of the trends of industrialization, and reform their curricula towards greater emphasis on science and technology. In the later part of the twentieth century, they had to adapt to the rise of managerialism, communication skills, soft skills, career skills, and to introduce more job oriented courses to satisfy the corporate demands and to make their graduates employable in their respective job sectors.

Universities have always offered a provider-led curriculum and internal procedures governing teaching, research and staffing have developed accordingly. But this is no longer sustainable if they are unable to play their role in responding to the needs of the economy and society as a whole. The curriculum and its transaction must become more responsive to external pressures. At the same time, universities must continue to follow the demands of their discipline; because that is the insurance for the future- that the development of independent understandings of our society and its world will continue. Hence, in this enterprise, English being the global language has the potential to exploit available resources and tools of the instrumental curriculum in empowering the learners with sound communication skills which is also the sole objective of teaching English for Specific Purpose (ESP) curriculum.
3.1.1 Higher Education and World Organizations

The very start of the 21st century has seen a direct correlation between higher education and the real world of work based on the expectation that the university graduates with sound knowledge and communication skills only can find themselves well placed over there. Hence now-a-days, while designing curriculum, the curriculum designers have to tune themselves to the recent needs and perceptions of the world. At this juncture, one cannot even think of working in world organizations like World Bank, International Monetary Fund (IMF) and United Nations Organizations (UNO) etc. without sound communication skills in English.

In its 1995 report entitled ‘Higher Education Lessons of Experience’, the World Bank highlights the gap between higher education and employment as one of the key components of ‘higher education in crisis’. In 1997, the International Labour Organization (ILO) pointed out to major challenges for all spheres of education and training just because of the globalization of the economy. The Organization of Economic Co-operation and Development (OECD) addressed the shift from higher education to employment in one of its largest projects in the early 1990s (OECD, 1992, 1993 as cited in Victor, 2007), and continued to point to significant agenda of higher education and career in the OECD Jobs Study (1994) and its thematic appraisal of ‘Redefining Tertiary Education’ (OECD, 1998 cited in Victor, 2007). Hence it is quite evident here that there is a definite tendency to devote more attention to issues connected with the social relevance of higher education, including the links between higher education and the world of work. Hence it is imperative that when all the international organizations such as UNICEF, World Bank, ILO, OECD and many more donor agencies underscore the importance of the connection between the
syllabus, curriculum and nature of higher education with that of the world of work, the implication is very apparent i.e. higher education is meant for employment and ESP always looks into how to make effective and time befitting courses of studies that can potentially help our learners in employment sector and make the learners competent enough for employment and career. This is one of the reasons that EAP /ESP is always offered at the higher education sector.

The following section deals with the various definitions of curriculum and its distinctions from syllabus.

3.2 Defining Curriculum and Its Distinction from Syllabus

The distinction between curriculum and syllabus is very complex because there are as many definitions as there are writers in this field. It can go anywhere along the range from a list of subjects for a course to the perception of the ultimate goal of education as a whole. What is required when referring to the term is “the grasp of the basic notions education involves as well as the structural organization every author states within this definition for the term curriculum” (Moreno, 2000: 11). This is very much evident in the following lists of definitions as defined by various authors (Kabir, 2013). Curriculum can be defined as an educational program which states:

(a) The educational purpose of the program (the ends)

(b) The content teaching procedures and learning experiences which will be necessary to achieve this purpose (the means)

(c) Some means for assessing whether or not the education goals have been achieved.

(Richards, Platt and Platt, 1993: 94)
Curriculum is the document of educational philosophies, principles and policies of a country or an educational institute. According to Stake (1967):

“A curriculum is an educational program that can be informally organized: what a craftsman teaches an apprentice; or formally organized; what is taught in an instructional film. A curriculum defined in this way, could be a mere lesson, or it could be the curricular program of a comprehensive high school, or the entire educational program of a nation. A curriculum may be specified in terms what the teacher will do, in terms of what the student will be exposed to or in terms of students’ achievement.” (Stake, 1967)

Allen (cited in Nunan, 2000) observes, “Curriculum is a very general concept which involves consideration of philosophical, social and administrative factors which contribute to the planning of an educational program.” (Allen quoted in Nunan, 2000: 6)

“The term ‘curriculum’ is North American. It is meant to document whatever goes into the planning of an educational programme. In a national educational system a curriculum generally originates in the policy-planning body (e.g. the ministers and his advisors in the cabinet ministry of Human Resource Development in New Delhi) which is meant to interpret and uphold national goals and objectives. That body also sets into motion the machinery for educational decision making including syllabus planning, materials development, and if necessary, some broad guidelines on the preferred methodology of teaching and testing.” (Tickoo, 2003: 233)

White (1988) observes:
“Curriculum theory encompasses philosophy and value systems; the main components of the curriculum: purposes, content, methodology and evaluation; and the process whereby curricula are developed, implemented and evaluated.”

(White, 1988: 19)

Miller and Seller (1985) define curriculum incorporating both the ends,

“At one end curriculum is seen merely as a course of study; at the other end, curriculum is more broadly defined as everything that occurs under auspices of the school. In the middle of the spectrum, curriculum is viewed as an interaction between students and teachers that is designed to achieve specific educational goals…..”

(Miller and Seller, 1985)

Schubert (1986 as cited in Kabir, 2013) makes an attempt to incorporate all the possible shades that have been integrated, in the following eight major components:

- Curriculum as content or subject matter;
- Curriculum as a program of planned activities;
- Curriculum as intended learning outcomes;
- Curriculum as cultural reproduction;
- Curriculum as experience;
- Curriculum as discrete tasks and concepts;
- Curriculum as an agenda for social reconstruction; and
- Curriculum as the interpretation of lived experiences.

Kabir (2013:50-52)

Curriculum in a narrower sense is conceivable and concrete set of guidelines derived from philosophy of education for use through certain phases of implementation for facilitating
education to fulfill the needs of an educational institution and its learners. Thus, curriculum is superordinate to other ideas mentioned above. In fact, aims and objectives, syllabus, methodology, materials, classroom pedagogy etc. are the fundamental components of a curriculum. Thus they are subordinate to the concept of curriculum. On the other hand, the entire process from the beginning to the end mentioned above can be called a curriculum in a broader sense. Such a narrow and broad approach towards curriculum often leads to confusion of the term. In the following extract, attempt has been made to clarify the confusion about this term ‘curriculum’ and has been distinguished from the term ‘syllabus’.

Curriculum and syllabus are often used synonymously and casually or used without much concern. However curriculum and syllabus “are used differently in either side of the Atlantic…[S]yllabus refers to the content or subject of an individual subject whereas curriculum refers to the totality of the content to be taught and aims to be realized within one school or educational system. In the United States of America, ‘curriculum’ tends to be used as synonymous with ‘syllabus’ in the British sense of the term (White, 1988: 4)”.

Curriculum is “the program of activities…. The course to be run by pupils in being educated” (Hirst, 1969) and again curriculum is “all the learning which is planned and guided by the school, whether it is carried out in groups or individually, inside or outside the school” (Kerr, 1968: 16).

Allen (1984) defines, “…curriculum is a very general concept which involves consideration of the whole complex network of philosophical, social and administrative factors which contribute to the planning of an educational program; syllabus, on the other hand, refers to
that sub-part of curriculum which is concerned with a specification of what units will be taught.”

White (1988: 4) presents the house metaphor for curriculum as proposed by Sockett (1976: 22) in three different views where curriculum has been compared with house in different forms and use/ functions.

a) It could be seen as a plan of a house yet to be constructed. Here it is like syllabus. Here ‘curriculum/ house = plan’ is concerned with objectives and content.

b) It could be seen as plan of how to build the house. Here the emphasis is on system. Here ‘curriculum/ house = construction system’ includes methods of achieving the ends or objectives to be achieved, a feature emphasized in the process view of curriculum.

c) It could be seen as a view of the house after it has been completed and is a dwelling for its inhabitants. Here modified and needs-based use of the already existing materials is indicated. Here ‘curriculum/ house = dwelling’ includes a crucial element; evaluation, and thus leads to the concept of the situational curriculum.

Among these three views, the first two are concerned with the future directives whereas the third one is more concerned with the present situation. In most of the cases, curriculum development or innovation takes place within the existing curriculum; it does not occur in vacuum.

However, White (1988: 19) distinguishes curriculum from syllabus in the following manner:
“Curriculum theory encompasses philosophy and value systems; the main components of the curriculum purposes, content, methodology and evaluation; and the processes whereby the curricula are developed, implemented and evaluated. And because curriculum studies are so all encompassing, it is a characteristic of the curriculum development that it involves a wide range of issues and people. It is the breadth and depth of curriculum development which distinguishes it from syllabus design, whose concerns and implications are restricted to questions of content.”

(White, 1988: 19)

Therefore, it is clear that syllabus, which chiefly defines the content of a specific subject, its grading, sequencing and course of development is a sub-part of curriculum which is more detailed and inclusive of issues of educational stakeholders and hence liable to them. The perception of syllabus is technical and more concrete when curriculum is perceived as a more philosophical and less concrete entity. From this point, the study focuses on the various sources of curriculum that have shaped the educational curriculum until today.

3.3 Various Sources of Curriculum

The focus of this section is to address on the various sources of curriculum that have been traditionally used and practised in various types of educational institutions across the world. The researcher mainly discusses the epistemological, learner-based, objective-based and society and problem centered sources of curriculum. The following extract elaborately discusses these sources of curriculum development.
3.3.1 **Epistemological Source of Curriculum**

Out of the options for designing a curriculum, one of the most significant approaches is to design with reference to its epistemology: its knowledge or subject base. This stands on two main pillars: the traditional “disciplines” or “forms of knowledge” approach and “fields of knowledge,” defined by their subject knowledge, rather than their distinctive “form,” for example geography, sociology, psychology etc. The advocates of this traditional approach to curriculum argue that these disciplines and subjects will develop ethics, characters and qualities of mind in the learners (Kelly, 1989).

3.3.2 **Learner-Based Sources of Curriculum**

Some have argued that curriculum design should be based upon the level and requirement of the learners in a given context. The source of curriculum in that case would be the learners’ needs, interests and human development of the individuals. From the time of Comenius, there has been a concern for the students, rather than the subject, as a source of planning. The child-centered movement begins with thinkers such as Erasmus, Comenius, Rousseau, Froebel and Pestalozzi and has culminated in a modern progressive theory promoted by Dewey, Montessori, A. S. Neil and others. Hence the personal–progressive model of curriculum is based upon what is important for the student for his growth as a person.

3.3.3 **Objective-Based Sources of Curriculum**

The objective model derives from a view that efficient technology, teaching and resources aid the attainment of specific outcomes. This output or “product” idea of education is based on behavioral change in students that transfer learning into new dimensions in students’
behaviour. Tyler, for example, has stated “the most useful form for stating objectives of a curriculum is to express them in terms identifying both the kind of behavior to be developed in the students and the context or area of life in which this behavior is to operate” (Tyler, 1949). With this view of curriculum in mind, ESP has its strong connection with the objective-based approach to curriculum as ESP curriculum also moulds the learners and their knowledge in English as per their requirements in the right context and this product or performance oriented approach is the sole priority in designing the ESP curriculum.

3.3.4 Society and Problem-Centered Sources of Curriculum

Society and problem-centered curriculum is based on the real life challenges, sufferings and difficulties of living and it attempts to design a form of life-adjustment education system using personal, group and institutional issues and problems. Curriculum addressing social problems and issues such as racism, inequality, terrorism and so on usually come under this approach.

At this juncture, the researcher brings in the different models of curriculum as theoretical discussion of this study. To understand the depth of any English language teaching learning practices, one must pay attention to the relevant discussion of the various models of curriculum.

3.4 Various Models of Curriculum in Practice

Different sources of curriculum design have been addressed in the previous section. This section addresses various models of curriculum which are the reflections of these ideologies.
3.4.1 Rational model

The rationale of this model is associated with Taba (1962) and Tyler (1949) as it assumes a four stage cyclic sequence with goals at its beginning. It is called the rational planning model as it’s rational to engage into a work when its end is specified (Taylor and Richards, 1979: 64). Here Taba (1962) makes a distinction between goals, aims and objectives. Goals are general and broad whereas aims are specific and long-term. The outcomes of aims are objectives, attained through the completion of lessons, units, and courses within school programs (Taba, 1962: 196). A flow-chart representation of the Taba-Tyler curriculum model (as cited in White 1988: 28) is presented below:

Diagram: (01) Hybrid Tyler-Taba Model (1960)

For Bell (1981: 50), aims are ‘key objectives’. Objectives are short to medium term goals. In Bell’s definition, they are ‘critical’ or ‘specific’. Widdowson (1983:7) has also
differentiated between ‘objectives’ and ‘aims’ in the similar tone. He defines objectives as ‘the pedagogic intentions of a particular course of study to be achieved within the period of that course and in principle measured by some assessment devise at the end of the course’, and aims as ‘the purposes to which learning will be put after the end of the course’ (Widdowson, 1983: 6-7). According to Mager (1962), objectives are traditionally stated in behavioral terms that can be measured. He further talks about three components of objectives: behavior, conditions and standards. The attempt to translate objectives into behavioral terms in the 50s classified objectives into three domains: the cognitive domain is concerned with intellectual abilities and operations; the affective domain is concerned with attitudes, values and appreciation, and the area of the motor skills important in technical contexts. However, Steiner (1975) talks about terminal course objectives that must provide clear guidelines to the users, be relevant to them, and be feasible in terms of achievement.

Despite immense popularity, behavioral objectives have faced severe criticism. Socket (1976: 50) opposes this way of defining objectives for its prescriptive nature. Stenhouse (1975: 82) holds the view that “education as induction into knowledge is successful to the extent that it makes the behavioral outcomes of the students unpredictable.”

Eisner (1972), one of the critics of curriculum, talks about three types of objectives to be used in curriculum design: instructional objectives that can be formulated in behavioral terms, expressive objectives, that focuses on personal responses and are not responsible for behavioral specification, and finally type III objectives that specify problems, the solution to which are subjected to learners’ initiative and justification. Stenhouse (1975 quoted in White, 1988: 32) also mentions four aims of education: induction into knowledge; initiation
into social norms and values; training and instruction. To Stenhouse (1975), the specification of goals of training and instruction can be expressed in terms of behavior but that of induction and initiation is not possible as education is speculation of ideas, not mastering behaviors.

Though attempts to formulate the value systems of education within the purview of goals, aims and objectives through behavioral terms in the rational planning model are criticized, the concepts of breaking down the abstract ideas of education for their reflections in the more tangible documents like syllabus and textbook have larger impact on the relevant literature.

### 3.4.2 The Process Approach

Taylor (1970) has found similarities between the process approach and the teachers’ planning of their course, which is different from the rational planning as is shown in the diagrams below.

![Diagram: (02) Process Approach and Teachers’ Planning (from White, 1988:33)](image)

In the earlier model, aims and objectives have been defined in the beginning, and then the learning experiences and evaluation follow them in a linear way whereas in the later one,
teachers consider the context first, relate it to the learners’ interest and then set the aims. Here aims come at much later stage. Supporting Socket (1976), Kelly (1977: 34) observes:

“It may be that they have just come to realize long before the curriculum theorists got onto it, that to state one’s objectives in advance in terms of intended behavioral changes and to stick rigidly to such a plan or program is to fail to take account of the complexities of the curriculum and of the importance of the individual context in which every act of teaching occurs.”

(Kelly, 1989: 34)

The process approach prioritizes the personal and professional autonomy of the teachers and hence promotes flexibility in the curriculum. It is basically school and classroom based. Here producers rather than content or behavioral products are approached. In fact, it is more concerned with process rather than product. It is closer to the second view of the curriculum as presented by White (1988), i.e. ‘curriculum/ house = construction system’. The process has its psychological background in the works of Piaget (1967) and Bruner (1960) who voice for cognitive development of the children as learners go through social interaction and experiencing the active experience. Here the teacher’s role is to stimulate the learners and to use the things that they already know so that they can master their existing knowledge. The results of both MACOS (Man = A Course of Study), as discussed in Bruner (1960) and the Humanities Curriculum Project and in Stenhouse (1970) show how process approach is implemented in language teaching/ product approach. Though Stenhouse (1970) does not accept it to be a means-ends approach, Hirst (1975) still finds the presence of ends in this approach, though not in behavioral terms.
Process approach of curriculum offers a significant alternative to the means-ends approach. “Language use cannot be predicted in advance and the prepackaging of language, implicit in the objectives model, is similarly rejected in a process curriculum (White, 1988: 35).” However, the ‘means-ends approach’, though unavoidable, through the linear growth in the traditional language curriculum definitely undergoes crisis when it meets the challenges of the process approach where language learning progresses through a non-linear and organic kind of growth.

3.4.3 The Situational Model

Context is prior in the situational model proposed by Skilbeck (1984) who begins with the analysis of the school situation itself. This model is close to the third perspective of ‘curriculum/ house = dwelling’ as presented by White (1988). It emphasizes neither the product approach nor the process approach and thus invites teachers’ intervention into the curriculum. Skilbeck’s (1984) concern with the school based curriculum is defined as “the planning, design, implementation and evaluation of a program of students’ learning by the educational institution of which these students are members (Skilbeck, 1984: 2).” He believes in the development of curriculum to occur internally, not externally. Skilbeck (1984: 5) further states that:

“Imposed change from without does not work, because it is not adequately thought out, or it is not understood, or resources are not available to carry it through, or because it is actively resisted. Within-institution change is by its nature, situation specific, often piecemeal, incomplete, of mediocre quality and so on. Each process
requires the other, in a well worked out philosophy and program of developments.”

(Skilbeck, 1984: 5)

Skilbeck’s model (from 1984: 231) for school-based curriculum is presented below:


Though Skilbeck (1984: 232) himself criticizes this diagrammatic representation for simplifying things, he observes four benefits of such a representation: a kind of resume to get handy idea quickly, the basis of agreed upon action and usefulness for encompassing crucial and productive kind of action and finally, success if proposal match with the target group needs. His model does not consider the objectives and hence ends up being contradictory with process model. The positive characteristics of this model include important features; it approaches the existing situation and also makes an account of the possible problems to be encountered in implementation. Finally, his school based approach supports the involvement of local initiatives for change in curriculum as opposed to the national dominance. Thus, the situational approach becomes the third approach where juxtaposition of both the process approach and means-ends model mostly occurs.
3.4.4 The Development model

Johnson (1989) outlines four developmental stages in curriculum:

1. Curriculum planning
2. Ends/means specification
3. Program implementation and finally
4. Classroom implementation

In the following chart, Johnson attempts to relate the developmental stages to the decision makers towards the products.

*Table: (02) Johnson’s (1989) developmental Model in Curriculum Design*

<table>
<thead>
<tr>
<th>Developmental stages</th>
<th>Decision-making roles</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Curriculum planning</td>
<td>Policy makers</td>
<td>Policy document</td>
</tr>
<tr>
<td>2 Specification: ends/Means</td>
<td>Needs analyst</td>
<td>Syllabus</td>
</tr>
<tr>
<td></td>
<td>Methodologists</td>
<td></td>
</tr>
<tr>
<td>3 Program implementation</td>
<td>Materials writers</td>
<td>Teacher training programme</td>
</tr>
<tr>
<td></td>
<td>Teacher trainers</td>
<td></td>
</tr>
<tr>
<td>4 Classroom implementation</td>
<td>Teacher</td>
<td>Teaching acts</td>
</tr>
<tr>
<td></td>
<td>Learners</td>
<td>Learning acts</td>
</tr>
</tbody>
</table>

Thus, Johnson’s model defines hierarchical relationships among different stages, different agents and different kinds of outputs. Though his model provides individual importance to agents in each phase, he does not clarify how to negotiate between top-down and bottom–up approaches within the system.
Thus it can be realized that each of the models has its strengths and weaknesses and hence attempts have been made to incorporate all the positive traits of the other contemporary and earlier models into the newly emerged models to overcome certain limitations.

Since the present study mostly focuses on the English language teaching learning practices in the engineering universities of Bangladesh, to provide a theoretical backbone to this study, a discussion of language curriculum and innovation is required. Hence, the next section throws lights on the language curriculum and the possible innovation that takes place in such context.

3.5 Language Curriculum and Innovation

The section mainly focuses on language curriculum and innovation. Prior to that, it is important to define the key word ‘innovation’ in the context of curriculum development. In this regard White (1988) observes:

The introduction of new textbooks, changes in forms and procedures of assessment, the substitution of new methods for old, the provision of new equipment (e.g. video recorders, computers) are all aspects of curriculum innovation, though they are often dealt with in a largely unplanned manner. (White, 1988: 113)

Stenhouse (1975) says, “change most often comes through conflict within the staff.” However, curriculum innovation involves issues ranging from international to institutional to personal levels, hence from the local to the national and from the local to the global. Thus, the necessity for innovation can be felt by different bodies but the most affected or the closest stakeholders in the whole process i.e. the teachers and the students, have to be
considered very carefully as they are the centre of the process. Innovation is not synonymous with change as it seems superficially. When change is any difference in anything between at least two occasions, innovation involves planning in alteration. Nicholls (1983: 4) explains innovation as “an idea, object or practice perceived as new by an individual/s, which is intended to bring about improvement in relation to desired objectives, which is fundamental in nature and which is planned and deliberate,” She further remarks that any innovation in curriculum is most likely to invite changes in teachers’ attitude, behavior and practices, increase their work load, and increase in funding and to involve evaluation. In the same tone, Stenhouse (1975) says that there cannot be any curriculum development without teacher development. Hence the implication is very clear as he focuses on the importance of teachers’ training. Extending the same thought further, Sarnikar (1995) says,

“Change in the curriculum is not affected without some kind of changes in the teacher who is responsible for presenting the curriculum at the classroom level. What the teacher thinks, what the teacher believes, what the teacher assumes…… all these have powerful implications for the process of change. Thus the teacher is a very important agent as s/he delivers the curriculum at the classroom level”.

(Sarnikar, 1995)

After putting in the general discussion on language curriculum and innovation, the researcher now moves towards specific discussion on ESP curriculum.
3.6 ESP Curriculum

A paradigm shift has already taken place in the engineering institutions for teaching these students the kind of English they need either to fulfill their academic, communicative or professional needs. The shift has replaced the English for General Purpose (EGP) approach where the learners are not aware of the application of their education, with English for Specific Purpose (ESP) which specially focuses on learners various types of needs and hence the courses are designed taking learners’ needs and goals in mind. That is the reason ESP is defined a goal oriented approach. The discussion henceforth will mostly focus on ESP/EAP literature around the world that has directly or indirectly contributed in the instruction of technical/ engineering education and thus falls within the purview of this study. Hence the following section touches upon the English for academic purpose in relation to curriculum.

3.6.1 Curriculum and English in Academic Practice

Transaction of a curriculum takes place through various channels and modes at the level of classroom pedagogy. In any language program, especially curriculum transaction at the level of academic practice, time is the biggest constraint for teaching and completing the course contents. Since one single language course cannot accommodate the whole of its needs, course designers need to be very selective in choosing the contents for the course and that can best be done through prioritization. Hence one of the first and foremost problems is selecting items from the total corpus of the language and incorporate it in textbooks and teaching materials for pedagogic purpose. This came to be known as the problem of selection. “Selection is an inherent characteristic of all methods. Since it is
impossible to teach the whole of a language, all methods must in some way or the other, irrespective of one’s preferences, select the part of that language that they intend to teach which can best suit and suffice the aims and objectives of the prescribed course” (Mackey, 1965 as cited in Victor, 2007). The field of selection in language teaching deals with choice of appropriate units of the language for teaching purposes and with the development of techniques and procedures by which the language can be reduced to that which is most useful to the learner. All types of instructional procedures demand an informed choice of what will be taught from the total field of the subject knowledge, and the teaching of the language at any level and under any context requires the selection of certain components of the language and the intentional or unintentional exclusion of others.

The rise of English speaking countries and their language into a super power becomes quite evident in the post-World War-II era and so it has come into academic practice worldwide. The teaching of English as second or foreign language has become an increasingly important activity after World War-II. Immigrants, refugees, and foreign students have generated a huge demand of English in English speaking countries. The dynamic role of English as a language for international communication has expanded rapidly since the 1950s. There has been much greater mobility of people as a result of growth in air travel and international tourism. English is considered extremely important in international trade and commerce. The role of English has been supported by the growth of radio, film and television. In this connection, White (1988) quotes:

“Whereas in medieval times English was the language of an island nation and French was the language of a continental one, in the twentieth century English has
become the language of the world, thanks to the linguistic legacy of the British Empire, the emergence of the USA as an English speaking superpower and the fortuitous association of English with the industrial and technological developments of the 19th and 20th centuries.”

(White, 2000)

Hence at this stage, it is very essential to discuss the language philosophy in connection with language, literacy and its role in our society.

3.7 Language Philosophy

Vygotsky (1978) viewed language as a tool of mediation, as part of mental functioning in his socio-cultural theory. He further that it is language as well as other sign systems that are primary to human behavior, yet they cannot be understood in isolation from the social and physical environment in which they occur. Thus, “context” ranges from the immediate face to face setting of the individual person to the wider culture and society. A basic assumption is that an action is mediated and cannot be separated from the social context in which it is carried out. Human actions, on both the social and individual planes, are mediated by tools and signs. Thus, the child learns to speak because of the desire to communicate, and later language is used to represent thoughts. The primary function of language is social, for communication leads to a view of literacy as communication, a form of using printed signs as the media for sharing meaning. Language also serves to mediate between environmental stimuli and individual response in school situations. Thus Vygotsky (1978, 1981) observes that language mediates thoughts and actions of human beings. If the primary function of language is to speak because of the desire to communicate, for living in society, one must be equipped with the minimum required level of literacy so that s/he can easily adapt and
function successfully in fulfilling the requirements of the society s/he lives. The following extract thus focuses on functional literacy.

3.7.1 Functional Literacy

The term functional literacy is used to refer to those whose literacy skills are adequate for carrying out those actions required of them by their society. The aims of a program based on the acquisition of functional literacy may be summarized in one sentence ‘to make people become more efficient and productive citizens and workers under the prevailing governments’. Functional literacy programs help people to apply for jobs, fill-in their income tax forms, understand documents from authorities and generally practice the language skills verbally and in written form. But the purpose behind such program is an economic one ‘throughout a diversity of situations the main functional literacy remains basically the same; to mobilise, to train, to educate the still insufficiently utilized human capital to make it more productive’. As a consequence, functional literacy programs may be defined, “intensive rather than extensive, selective rather than widespread, geared to employment rather than culture, and as a first step towards producing qualified and skilled manpower.”

But Freire’s (1981) concept of literacy entails a quality of consciousness. What literacy teaching must do is veer away from the notion of verbally individualistic reflective activity, and come instead to see literacy as a form of cultural production. It is not simply the gaining of technical skills which enable us to read and write.
The following section is a shift from functional literacy which is the minimum requirement to adapt in a society towards vocationalisation of learning and role of English language which is the instrumental purpose of education and learning.

### 3.7.2 Vocationalisation of Learning and Role of English Language

The integration of work and learning is seen as essential in workplace environment and increasingly in educational institutions. In workplaces it is now taken for granted that while working we learn, and in post-secondary and higher education, employment and production of workers are understood to be central of learning programmes. Indeed, communication skills in English, employability skills and engagement with employers, a current focus of government education policy, highlights an agenda for educational institutions that encourages the integration of the business of work and employment with the outcomes of English language teaching and learning programmes.

In this connection, the term new vocationalism (Symes and McIntyr, 2000), both contextually and conceptually refers not only to the distribution of vocational learning across education sectors, but it also captures the idea that work in contemporary workplaces has changed in many different ways. Work is no longer understood to be just about technical knowledge and skills but also involves ongoing learning, especially English as essential medium of communication in professional settings and the learners having a particular kind of attributes and attitudes. Besides, the main motto of vocationalising of education is to create a potential human resource for the world of work which exactly matches the enterprise of ESP world as well. They also distinguish conceptual reference of
vocationalising which is equivalent to that of training and empowering with necessary skills against that of education inculcating the theoretical value of knowledge.

Over the centuries, in both societal and governmental space, a distinction has been made between human being on the basis of class, caste, religion etc. This distinction particularly with reference to class has favoured the upper and middle classes. The outcome is that the poor working classes have been discriminated against the realms of education, job opportunities, and more importantly access to the culture of capital and remained left out from the main stream privileges. If anyone looks at the current scenario of the education sector in Bangladesh, it would not be difficult to understand the huge gap between the English teaching in general universities and engineering universities. The discrimination exists in term of focus, concentration, syllabus and funding. Since the government of Bangladesh has a huge expectation from these future technical manpower in terms of their myriad and creative contribution towards the infrastructural and economic growth of the nation, it is imperative that English teaching-learning practices in these engineering universities in Bangladesh should follow an ESP approach so that the engineering graduates should not face any problems in their professional communication.

At this juncture, the researcher moves towards the discussion of English for Specific Purposes (ESP) since the present context of the study is an exact blueprint for such an approach. Therefore, it is essential to highlight the theoretical foundations of ESP to draw insights for understanding the nature of teaching-learning practices in the engineering and other similar institutions where the ESP instructional approaches suits well. This integration has important pedagogical consequences for the practicing teachers and course designers.
3.8 A Paradigm Shift in Language Teaching due to Register and Discourse Analysis

Throughout the 1970s, English for Specific Purposes (ESP) as an approach in language teaching has heavily depended on register and discourse analysis to regulate the linguistic features of different disciplines such as medicine, engineering or science. A register is a variety of language determined according to its use. According to Halliday (1978), types of linguistic situations differ from one another, broadly speaking, in three respects: first, as regard to what is actually taking place; secondly, as regards to the role played by language; and thirdly, as regards to who is taking part. These three varieties, put together, determine the range within which meanings are selected and the forms are used for their expression. In other words, these three aspects determine the ‘register’ (Halliday, 1978). Register analysis studies the language of such fields as journalism, medicine, or law for distinctive patterns of occurrence of vocabulary, verb forms, noun phrases and tense usage.

As register analysis focuses primarily at the level of words and sentences and seeks to identify the register that characterizes different usage of language, the weakness of this approach has soon been exposed. Hence, in order to identify the linguistic structure of longer text, discourse analysis comes into existence in the 1970s. It is based on the analysis of units of organization within the texts (e.g. narratives, instruction, reports, and business letters) or speech events. It examines patterns of rhetorical organization such as definition, identification, and comparison. Jordan (1997) describes the scope of discourse analysis in the following extract:
“It examines the communicative contexts that affect language use, for example, in social transactions, the relationship between the discourse and the speakers and listeners. It looks at how, for example, the choice of verb tenses or other grammatical features affect the structure of the discourse. The analysis also looks at the relationship between the utterances, for example, aspects of cohesion, and the discourse markers or cohesive devices that are employed”. (Jordan, 1997)

The globalization of English as an international language has come about, and continues with the same speed, because it functions in a range of institutional and professional domains of an academic, economic, and political kind. These domains surpass, and may indeed challenge the national boundaries, and the more particular concerns of primary communities. Widdowson (2003) observes, “we might think of English as an international language not in terms of the distribution of stable and unitary set of coded forms, but as the spread of a virtual language which is exploited in different ways for different purposes” (Widdowson, 2003). As the language has globalized, it has inevitably diversified into different registers, different encodings of the virtual code potential, particularly with respect to lexis, specially adapted to required communication. It has been suggested that since this is the reason for the continuing spread of English, it should logically provide the primary reasons for learning it, in which case the specific set of learning objectives for a particular subject might be proposed. Therefore, English should be formulated with reference to the registers that serve these global commitments.

Both the register and discourse analysis have further been discussed under the subtitle ‘theoretical influences on ESP’ (see 3.13).
3.8.1 Communicative Language Teaching

Conventionally any language is taught in a linear way where a language teacher gives knowledge of language to the students and leaves them to experiment with it in real life situations. This process becomes more difficult with the second language when it is an international language and is required for the wider communication within and across countries and used for academic pursuits.

As the importance of English is increasing day by day, the teachers of English have to rethink about the methods they are employing to teach English language and its use. As language is more than simply a system of rules and is a dynamic resource for the creation of meaning, it is necessary to distinguish between ‘knowledge of a language’ and the ‘ability to use the language’. The students can be structurally competent but may not communicate appropriately. The major step to solving this problem is to teach language in relation to use. So the traditional sequence of “present day drill-practice in context” can be replaced by a strategy in which the students first communicate with the possible resources and then are presented with language items which are necessary to practice. Johnson (1982) observes:

“Using language involves the ability to participate in meaningful discourse, and the goal of second language teaching is to assist learner to use the language”.

Johnson (1982)

The conventional techniques provide useful structural practice but do not involve communication and do not encourage the processes of interaction to take place. Breen and Candlin, (1980) viewed language as a “means of communicating messages” rather than a “system of rules”. They further asserted, “Language learning may be seen as a process
which grows out of the interaction among learners, teachers, texts and activities”.

(Breen and Candlin, 1980: 95)

Campbell and Wales (1970) have found some weaknesses in Chomsky’s competence as the later did not address adequately on the linguistic ability such as to produce or understand utterances which are not much grammatical but more important, appropriate to the context in which they are made; and by the term ‘context, they mean verbal context of utterance’. Hence Hymes (1972) is of the same opinion as Cambell and Wales (1970) that in addition to linguistic competence, the native speaker has another rule system without which the rules of grammar would be useless. In the similar context, Dubin and Olshtain (1986) state that since Hymes’ (1972) paper presentation on “the concept of communicative competence”, it has continued to develop. A generally accepted definition begins with the idea that communicative competence entails knowing not only the language code or the form of language, but also what to say to whom and how to say it appropriately in any given situation. It deals with the social and cultural knowledge that speakers are presumed to have which enables them to use and interpret linguistic forms. It also includes knowledge of who may speak and who may not in certain settings, when to speak and when to remain silent, how to talk to persons of different statuses and roles. A well-known description of communicative competence has been that it includes knowledge of what to say, when, how, where, and to whom. In effect, it takes in all of the verbal and non-verbal mechanisms which native speakers use unconsciously to communicate with each other.”

(Dubin and Olshtain, 1986)
The learning materials to study can only be mastered by the learners engaging themselves in the social encounter, or by experiencing the social behaviour of their personal roles in the target culture- almost like a play within a play. Thus the language classroom becomes a place to rehearse, to try out, and try on new cultural roles and identities, at least extensions of old ones. Therefore, the communicative language teaching framework promotes such spontaneous behavior in classroom (Dublin and Olshtain, 1986). Due to its purpose and application related orientation; CLT is considered to be the well spring of ESP today.

The following extract addresses on the instrumental purpose of learning and using English in occupational setting.

### 3.8.2 English as Employability Skills

The existing competitive job market requires good communication skills in workplaces. Within that, increasingly under globalisation, English as communication skills plays a crucial role in employment (Dustmann & Fabbr, 2003; Erling, Sargeant, Solly, Chowdhury & Rahman, 2012; Kossoudji, 1988; Rivera-Batiz, 1990; Shields & Price, 2002; Tainer, 1988 as cited in Roshid and Chowdhury, 2013) across the world.

Most often, English language plays the key role in deciding the scope of higher package in employment sectors (Bleakley & Chin, 2004; Casale & Posel, 2011; Chiswick, 1991; Chiswick & Miller, 1995; Davila & Mora, 2000; Dustmann & Fabbr, 2003; Tainer, 1988 as cited in Roshid and Chowdhury, 2013) and in organisations with higher productivity (Tainer, 1988). On the other hand, people who are incompetent in English face difficulty in finding jobs, especially well-paid jobs (Carliner, 2000; Leslie & Lindley, 2001). Lack of English fluency leads to loss of earning (Dustman & Fabbr, 2003; Leslie & Lindley, 2001).
Proficiency in English therefore, is needed for employees to advance in both local and multi-national companies and to improve their technical knowledge and skills. It provides a foundation for what has been called “process skills” - problem-solving and critical thinking skills that are needed to cope with the rapidly changing environment of the global workplace, where English plays an increasingly important role (Roshid and Chowdhury, 2013). Hence, it is quite evident at this stage that English has become the most desired occupational necessity and the credit for the speedy growth of ESP goes to this occupational requirement of English.

3.9 English for Special Purposes and Genre Analysis

It can be argued that, in many senses, all the usage of language is purpose oriented in the sense that they are designed to communicate by keying in to particular contexts of mutually shared conventions. Communication as seen most often is not simply a matter of issuing semantic indications of assigned meaning. It also involves using the resources of the language code indexically, to indicate specific traits of shared schematic knowledge of ideational patterns of conceptualization and interpersonal patterns of communication. In a way, it involves engaging with the shared assumptions, values, beliefs and conventions of behavior that define the culture of particular discourse communities. So another way of conceiving of variety is in terms not of text types or registers but of discourse types or genres, the culturally informed ways of thinking and communicating that are realized by these texts. Registers are linguistic constructs, and difference between them can be directly identified as linguistic features from the textual data themselves. Genres are cultural
constructs and differences between genres can only be drawn indirectly by interpreting the textual data as discoursal evidence.

Swales (1990) and Bhatia (1993) have done a volume of studies on genre analysis with an aim to identify the particular norms of language use in certain spheres of professional and occupational enterprise. It has drawn a huge inspiration from register analysis because it deals with discourse and not just text: it not only tends to reveal what linguistic forms are manifested but also how they realize, negotiate between the conceptual and rhetorical structures, modes of thought and action, which stands as convention for certain discourse communities. Genre analysis is, therefore, not exclusively about the English for Engineering, Medicine, Business etc., but about the conventions of thoughts and communications that take place in that particular community setting and how meaning and communication is negotiated within such environment.

These genres have developed to meet the needs of particular communities, and will obviously continue to vary at par with the changing demands. Victor (2007) asserts that the conception of genres as stable entities is only a convenient fiction: they are in reality the socio-cultural processes, continually in flux. So it would be preferable to think not of the English of computers or commerce, as if it were fixed in advance, but English for Computer Science, or Commerce which are changing in all manners as these activities develop.

(Victor, 2007, p. 75)

3.10 Theoretical Foundations of English for Specific Purposes (ESP)

The term English for Specific (or Special, Specified, Specifiable) Purposes (ESP) refers to any type of language learning which has its focus on all aspects of language pertaining to a
particular field of human activity (Wright, 1992: 3). In other words, it is an approach to teaching English for specialized subjects with some specific vocational and educational purposes in mind. In ESP syllabus, the teaching content is geared to the special language 'repertoire' pertaining to the specialized aims that are required of the learners. ESP is a relatively new discipline within Applied Linguistics that bids a new learner-centered approach to English language teaching whose methodology is based on the specific needs of the learner. Kennedy and Bolitho (1984: 3) point out that ESP is based on “an investigation of the purposes of the learner and the set of communicative needs arising from these purposes”.

3.10.1 Theories of ESP

Bloor and Bloor (1986) states that a discussion of the theory and practice in the teaching of Language for Specific Purposes (LSP) focuses on the ways in which LSP experience, and especially experience in English for Specific Purposes (ESP), compels a new evaluation of certain theoretical positions in Applied Linguistics and Second language learning. It concludes that: (1) the major problem in identifying the theoretical base of ESP stems from the confusion between a model of a theory of language and a model of a theory of language learning; (2) the success of LSP may be accounted for only when it is understood that linguistic competence comes from language in use in specific situations; (3) LSP uses teaching strategies that are incompatible with certain language learning theories; (4) Language can be learnt in a varieties of ways but the use of language is learnt in an appropriate contexts; and (5) in most cases, the teaching of language involves more than providing the optimum circumstances for acquisition, and the teacher is also responsible for
teaching aspects of language use that must be taught even to native speakers: cultural
customs and usages of literacy. Though there are as many opinions in favour
of ESP theories as many against it; many other experts believe that ESP is a social
phenomenon and hence there is no theory behind its growth and success. For them, the
social needs and communicative patterns lead to the growth of ESP today.

Bloor and Bloor (1986, 6) further state that in spite of the rapid growth of ESP/LSP in
Europe and around the world, there have been problems in establishing a theoretical basis
which can (a) account for its success and (b) be extended to other types of language
teaching. Though second language acquisition has understandably ignored LSP/ESP as a
separate phenomenon, writers like Bloor & Bloor (1986), Dudley-Evans and St John
of some accepted model and theories of ESP.

However, almost all ESP writers and practitioners agreed on the following theories that
have shaped the identity and route of ESP today. Hence the theories of ESP have been
discussed in the following sections.

3.10.1.1 ESP as a Superordinate Variety of English- Super Variety Theory

Bloor and Bloor (1986) propose an LSP model which serves as the perfect theoretical
model for ESP. For him, ESP is a variety of English other than general English. Hence
every ESP learner must engage himself either in engineering context, or medical context or
nursing or business where the purpose of learning English is different from that of general
English. In all such cases, s/he may need to have good command of either English for
engineers, or English for Medicine, English for nursing or English for Business. S/he may
need certain amount of specific language needs to better adapt in the given communicative settings. Hence the ESP learners face a tripartite structure of an overlap of minimum three language varieties such as one standard variety of English which is different from the second variety i.e. in the given speech community and finally the two varieties establishes a nexus with the third one i.e. very specific to the variety used in profession or work or study. Hence the LSP model suggests that the ESP learners must keep their focus on the common core variety of English first, then they should more from the common core to the specific variety of English language needs. They believe that a language learner is likely to acquire ‘the language’ from one variety as from the other but the use of language being geared to situation and participants is learnt in appropriate contexts. Finally they suggest that success of an ESP language learner depends on his/her level of mastery in the common core or general English.

Figure: (01) The LSP Model (Bloor & Bloor, 1986)
3.10.1.2  ESP as Function of Specificity of Purpose- the Continuum Theory

Bhatia (1986) proposes his theory of ESP in terms of its specificity of purposes. For him, purpose of learning and using English or a particular variety of English in the target context is specific and thus this particular specificity in that given context exists in continuum. Hence he has termed this theory as specificity continuum theory of ESP. This is the very problem the ESP course designers face while designing teaching materials and planning the appropriate teaching methodologies for an ESP course. In this connection, he suggests that the key to overcoming such difficulties is to understand that ESP materials do not need to be too narrowly defined and completely distinct from general English materials. Rather, ESP materials should be seen on the cline as shown in the figure below.

![Figure: (02) The ESP Specificity Continuum (Bhatia, 1986)](image-url)
He further demonstrates that teaching materials for freshman/sophomore, for example, should focus on more general skills that target learners require regardless of their field but unique to their super domain or core profession. This type of ESP, he deems as ‘general ESP’, in case of science and engineering, one might focus on listening to lectures, taking notes, understanding common structures of argumentation, supporting opinions with evidence, and representing abstract concepts visually using figures and tables. Materials for senior students in engineering university, on the other hand, would be in the realm of traditional ESP, focusing on more narrowly-defined skills such as technical reading, writing and presentation skills. In this way, ESP materials should be chosen keeping the purpose and its extent of specificity in continuum. That is the reason no ESP material works for two different set of people.

3.10.1.3 Discourse Oriented Theory of ESP

ESP as discourse oriented theory has been proposed by Thomas (1991, 1994) and Martin (1992). For Thomas (1991, 1994) and Martin (1992), ESP is shaped by the use of language in social context. Hence ESP is an orientation of social discourse being shaped by the blending of genre and resister. They refer to genre in this case as the context of culture and register as the context of situation. Therefore, in designing an ESP course or any ESP material for any specific set of learners, the inherent context of culture in match with the context of the given situation should equally be taken into consideration.
The theoretical influence of discourse analysis on ESP has been further discussed in the later sections.

3.10.2 Definition, Classification and its Branches

English for Specific Purposes (ESP) refers to the teaching and learning of English as a second or foreign language where the goal of the learners is to use English in a particular domain. The teaching of ESP, in its early days, was largely influenced by the need to communicate across languages in domains such as trade, commerce and technology. This has now expanded to accommodate other areas such as English for Academic Purposes (EAP), English for Occupational Purposes (EOP), English for Vocational Purposes (EVP), English for Medical Purposes (EMP), English for Business Purposes (EBP), English for Legal Purposes (ELP), and English for Sociocultural Purposes (ESCP) (Belcher 2009).

Hutchinson and Waters further illustrate their idea of the classification and origin of ESP using the ELT tree. In the picture, ESP is shown opposed to General English, usually taught
for exam purposes. Thus, the first conclusion we can draw is that ESP is teaching English for any other purposes, e.g. work or study. These two are usually called professional (also occupational or vocational) purposes and academic purposes.

Figure: (04) The ELT tree by Hutchinson and Waters (1987, p.17)

According to the division, most secondary schools teach General English simply because their purpose is a particular exam (a GE exam, of course, such as the FCE or the standard
Russian school exam). If a student intends to use English in their future profession or wants to continue their academic pursuits, they need another sort of English that ought to meet some particular needs. Therefore, all our universities and colleges deal with ESP in fulfilling the specific academic and professional needs of learners.

### 3.10.3 The Origins of ESP

A great deal about the origins of ESP has been addressed by many experts and contributors of ESP. Out of which, notably, three reasons traced by Hutchinson and Waters (1987) are of immense significance to the emergence of all ESP. In the following extract, these historical reasons are discussed in details.

#### 3.10.3.1 Historical Background of English for Specific Purposes (ESP)

Historically, the origin and rise of ESP is associated with three significant reasons: the demands of a Brave New World, a revolution in linguistics, and focus on the learner (Hutchinson & Waters, 1987).

Hutchinson and Waters (1987) state that two key eventful periods in the 1970s under the banner of ‘a brave new world’ breathed life into ESP. First, the World War II changed the whole face of the world which demanded an enormous and unprecedented expansion in scientific, technical and economic activity on an international scale for various reasons; most notably the establishment of the USA as economic super power in the post-war world. With this change, the role of international language for communication fell to English (Hutchinson and Waters, 1987, p. 6). Secondly, due to the Oil Crisis of the early 1970s in
the western countries, the western economy and knowledge started draining towards the oil-rich countries. The language for this sort of transfer of knowledge became English.

The result of this geographical, political and economic change and development has left huge pressure on the ELT profession to deliver the desired output. Whereas English has already decided its own destiny by then, now it does not remain as a sole property of the English teachers but becomes a subject to other people’s perceptions, desires and demands (Hutchinson and Waters, 1987 p.7).

The next key reason cited as having an impact on the rise of ESP is the revolutionary development in linguistics. The traditional linguists set out to describe the features of language, whereas the pioneers in modern linguistics have begun to focus on the ways in which language is used in real life communication. Hence the shift is from theory towards practice and from competence towards performance in English. Hutchinson and Waters (1987) point out that one significant discovery during this period is the ways that spoken and written English vary from each other. In other words, given the particular context in which English is used, the variant of English will change. This idea has been taken one step farther. If language in different situations varies, then tailoring language instruction to meet the needs of learners in specific contexts is also possible. Hence, since the late 1960s and the early 1970s there have been many attempts to describe English for Science and Technology (EST). Hutchinson and Waters (1987) identify Ewer and Latorre, Swales, Selinker and Trimble as a few of the prominent descriptive EST pioneers who have helped in shaping the world of ESP today.
The final factor Hutchinson and Waters (1987) refer to as having influenced the rise of ESP has less to do with linguistics and everything to do with psychology. Rather than simply focusing on the method of language delivery, more attention was given to the ways in which learners acquire language and the differences in the ways language is acquired. Learners were seen to employ different learning strategies, use different skills, enter with different learning schemata, and be motivated by their unique needs and interests. Therefore, focus on the learners' needs remain equally paramount important as the methods employed to disseminate linguistic knowledge. Designing specific courses to better meet these individual needs was a natural extension to this idea. Hence, to this day, the catchword in ESL circles is either learner-centered or learning-centered.

With this new trend of teaching English, pioneers like Mackay and Mountford (1978) and Perren (1974) attempt to define the meaning of special in ESP as until then ESP stood for English for Special Purpose compared to its current equivalence as English for Specific Purposes. For Perren (1974), special language and specialized aim are entirely two different notions. The following extract from Mackay and Mountford (1978) better clarifies this distinction:

“The only practical way in which we can understand the notion of special language is as a restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers requirements within a well-defined context, task or vocation.” *(Mountford & Mackay, 1978, 4)*

On the other hand, a specialized aim refers to the purpose for which the learners learn a language, not the nature of the language they learn *(Mountford & Mackay, 1978).*
Consequently the focus of the word ‘special’ in ESP ought to be on the purpose for which learners learn and not the specific jargon or registers they learn.

3.10.4 Distinction between ESP and EGP

The way ESP has been defined above, one may ask 'How and in what way is it different from English for General Purposes (EGP) approach?' Hutchinson and Waters (1987:53) answer this quite simply, "in theory nothing, in practice a great deal". In the 1980s, teachers of General English courses, while acknowledging that students having a specific purpose for studying English, rarely conduct a needs analysis to find out what is necessary to actually achieve it. Teachers nowadays, however, are much more aware of the importance of needs analysis, and certainly material writers think very carefully about the goals of learners at all stages of materials production. Perhaps this demonstrates the influence that the ESP approach has had on English teaching in general. Clearly the line between where General English courses stop and ESP courses start has become very glossy and impossible to demarcate. Rather ironically, while many General English teachers can be described as using an ESP approach, basing their syllabi on a learner needs analysis and their own specialist knowledge of using English for real communication, it is the majority of so-called ESP teachers that are using an approach furthest from that described above. Instead of conducting interviews with specialists in the field, analyzing the language that is required in the profession, or even conducting students' needs analysis, many ESP teachers have become slaves of the published textbooks available, unable to evaluate their suitability based on personal experience, and unwilling to do the necessary analysis of difficult specialist texts to verify their contents.
3.10.5 Key Notions about ESP

To clarify about the key notions, Gatehouse (2001) discusses about three key notions such as the distinctions between the absolute and variable characteristics of ESP, types of ESP and characteristics of ESP courses which are discussed in detail below.

3.10.6 Absolute and Variable characteristics of ESP

Strevens (1988) for the first time articulated the distinction between absolute and variable characteristics of ESP. He introduced four absolute and two variable characteristics:

I. Absolute characteristics:

ESP consists of English language teaching which is:

- Designed to meet specific needs of the learner;
- Related in content (i.e. in terms of themes and topics) to particular disciplines, occupations and activities;
- Centered around the language appropriate to those activities in syntax, lexis, discourse, semantics, etc., and analysis of the discourse;
- In contrast with General English

II. Variable characteristics:

ESP may be, but not necessarily:

- Restricted as to the language skills to be learnt (e.g. reading only)
- Not taught according to any pre-ordained methodology (pp. 1-2)

Anthony (1997 as cited in Gatehouse, 2001) notes that there has been considerable recent debate about what ESP means despite the fact that it is an approach which has been widely used over the last three decades.
Ten years after Strevens (1988) has proposed the absolute and the variable characteristics of ESP, Dudley-Evans and St. John (1998) in a Japan conference on ESP, offer a modified definition. The revised definition he and St. John proposed is presented below:

I. Absolute characteristics

- ESP is defined to meet specific needs of the learner;
- ESP makes use of the underlying methodology and activities of the discipline it serves;
- ESP is centered on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities

II. Variable characteristics

- ESP may be related to specific disciplines;
- ESP may use, in specific teaching situation, a different methodology from that of general English;
- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;
- ESP is generally designed for intermediate or advanced students;
- Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners (Dudley-Evans and St. John, 1998, pp. 4-5)

They have removed one absolute characteristic that ‘ESP is in contrast with General English’ and added more variable characteristics. They have also asserted that ESP is not
necessarily related to any specific discipline. Furthermore, ESP is likely to be used with adult learners although it could be used with young adults in a secondary school setting.

As for a broader definition of ESP, Hutchinson and Waters (1987) theorize, “ESP is an approach to language teaching in which all decisions as to content and method are based on learners’ reason for learning” (p. 19). Anthony (1997 as cited in Gatehouse, 2001), notes that, it is not even clear where ESP courses end and general English courses begin; numerous non-specialist ESL instructors use an ESP approach in that their syllabi are based on analysis of learner needs and their own personal specialist knowledge of using English for real communication.

3.10.7 Types of ESP Courses

Carter (1983) identifies three types of ESP:

- English as Restricted Language
- English for Academic and Occupational Purposes
- English with Specific Topics

English for restricted language specially focuses on developing restricted repertoire or limited competence. Such restricted repertoire is not about the whole of language but only the part of it just as a tourist phrase book is not the whole grammar book. Knowing a restricted ‘language’ would not allow the speaker to communicate effectively in a novel situation or in contexts outside the vocational environment. The language used by the air traffic controllers or by the waiters in a hotel are examples of English as a restricted language. The second type of ESP identified by Carter (1983) is English for Academic and Occupational Purposes (EAOP). Hutchinson and Waters (1987) propose a tree diagram of
ELT where ESP has been further broken down into three branches: a) English for Science and Technology (EST), b) English for Business and Economics (EBE), and c) English for Social Studies (ESS). Each of these areas has further been subdivided into two branches: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). An example of EAP for EST is the English courses proposed for the engineering and medical students at the graduation level to pursue their higher studies whereas the English for Technicians is an example of EOP in EST context.

Hutchinson and Waters (1987) further remark that there is no clear cut demarcating line between EAP and EOP: “people can work and study simultaneously; it is also likely that in many cases the language learnt for immediate use in a study environment will be used later when the students take up their profession” (p. 16). Carter (1983) here implies that the ultimate purpose of both EAP and EOP are one and the same i.e. employment. However, despite end purpose being identical, the means taken to attain the end is very different indeed.

The third and final type of ESP identified by Carter (1983) is English with specific topics. Carter notes that it is only here where emphasis shifts from purpose to topics. This type of ESP is uniquely concerned with anticipated future English needs of, for example, scientist requiring English for post graduate reading studies, attending conferences or working in foreign institutions. However, this is not a separate type of ESP; rather, it is an integral component of ESP courses or programs which focus on situational language. This situational language has been determined based on the interpretation of results from needs analysis of authentic language used in target workplace settings.
3.10.8 Other Characteristics of ESP courses

In general, the main characteristics of any concept or approach can be extracted from a study of its definitions. The absolute and variable characteristics of ESP have already been presented and discussed in detail in the seminal book in this area by Dudley-Evans and St. John (1998), as has already been referred earlier. Hutchinson and Waters (1987), Strevens (1988) and Robinson (1991) have all referred back to the earlier definitions of ESP in their work and the researcher has mentioned them earlier in this section.

Among the other characteristics of ESP courses, Carter (1983) has identified three features to ESP courses: a) authentic materials, b) purpose-related orientation, and c) self-direction. If one revisits, the claims made by Dudley-Evans (1997) that ESP should be offered at an intermediate or advanced level, use of authentic materials is perfectly feasible. Through a closer examination of ESP materials, one can easily understand that the use of authentic content materials modified or unmodified in forms, are indeed a feature of ESP, particularly in self-directed study and research tasks. For language preparation for employment in engineering sector, a large component of the student evaluation was based on an independent study of assignment in which the learners were required to investigate and present an area of interest where they were encouraged to conduct research using a variety of different resources, including the internet.

Finally, self-direction is characteristic of ESP courses in that the “... point of including self-direction... is that ESP is concerned with turning learners into users” (Carter, 1983, p. 134). In order for self-direction to occur, the learners must have a certain degree of freedom to decide when, what, and how they will study. Carter (1983) also adds that there must be a systematic attempt by teachers to teach the learners how to learn by teaching them about learning strategies. According to many ESP experts, what these adult engineering learners require is learning how to access the right information in a new culture. Devitt (2004) has also argued for one reasoned way to cope with the teaching of critical awareness of how genres operate in a particular context so that the students can learn the new genres they encounter with rhetorical and ideological understanding (p. 194).

Belcher (2009) states that ESP does have some prominent distinguishing features that added uniqueness to ESP as an independent discipline are needs assessment, content-based teaching methods and content area- informed instructors have been considered as essential to ESP (p.135).

### 3.10.9 ESP- a Portal to Systematic Literacy

Martin (2004) has conducted many studies among Japanese students in the area of ESP to improve students’ communication skills in English and has finally ended up to lament on the huge amount of investment, time and effort but everything went in vain when he realized that not a single Japanese student can effectively communicate what they write in their paper and be able to give explanation of any question when asked in any conference. Researchers believe that this significant failure among the Japanese adult learners to acquire the desired communication skills even after all these efforts is partly due to the
“Katakana effect”-the more angular forms of syllabic writing mostly used in Japanese, for words of foreign origin, affecting the listening and speaking skills. Hence the need to initiate change was recognized by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), which announced an Action Plan ‘Regarding the Establishment of an Action Plan to Cultivate “Japanese with English Abilities”’ in 2002. The official recognition of a need for change has led to a shift toward more focused English teaching at universities. By 2010, Noguchi (2010) pointed out that 60% of the job notices on the Japanese Association of College English Teachers (JACET) website in the autumn were for positions related specifically to the teaching of EAP skills, rather than general English, reading or “English communication.” This certainly is a movement in the right direction but the question arises of whether this is enough to really “cultivate Japanese with English abilities.” EAP skills do not necessarily form a direct bridge to career skills. To realize a successful transition from an academic environment to a real-life environment, we need to equip our students with an awareness of systemic literacy and the viability of ESP bilingualism (Brown, 2008; Noguchi, 2010 as cited in Bhatia et al., 2011).

ESP as an enterprise has always attracted attention from contexts where it has room for application; hence ESP is all about practical application and not the theoretical competence of English. This is especially clear from Belcher’s (2004) review article which traces the development of ESP along socio-discoursal, sociocultural and socio-political tracks. In other words, ESP is always concerned with the “socio” or the society in which the language functions. Belcher emphasizes more on ESP research which will ultimately need to identify and deal with the complex networks underlying the surface texts that applied linguists and English instructors are trying to teach. She concludes by stating “I would characterize the
goals as aimed at a multidimensional knowledge of where discourses and their communities, as well as the ESP professionals are committed to understanding and teaching them, are situated in the world at large” (Belcher, 2004:178).

This connection of language and community is described as “systemic literacy” by Brown (2008), and Noguchi (2009) has borrowed this term to suggest that this is what ESP practitioners always aim for when they talk about acquiring the disciplinary knowledge necessary to, for example, *Write like a Chemist* (Robinson et al., 2008). Brown (2008: xi) points out that what an educated public needs in this complex and globally interconnected world is “a new, systemic literacy. This new literacy requires an understanding of different kinds of feedback systems, exponential processes, the unintended consequences inherent in evolving social systems, etcetera.” Those who teach ESP often become engrossed in the technical vocabulary and grammatical structures or very often get too much involved in dealing with learners’ disciplinary themes or topics which are outside the purview of genre texts. In this connection, Miller (1984) arises the original idea of ‘genre’ which was acknowledged by Swales (1990). Noguchi (2009: 40-41) has used this to develop a heuristic definition of a genre text as including the essential elements of the action (impact on the community in which the text is to function), the substance (knowledge, information the text carries) and the form (the rhetorical, grammatical and technical elements of the text itself). Without any of these elements, a text would not be a “genre” text, as noted by Miller (1984 as cited in Bhatia et al., 2011).
3.11 Research on Teacher Education and Training

Teacher education on ESP merely exists in Bangladesh. But before going into the through discussion on these issues, first, it important to discuss the terms subsumed with the term teacher training such as teaching, learning, training and education. According to Tight (2002), both education and training are categorised under the banner of lifelong learning. This implies that learning is identified as the overall umbrella term for all types of education and training whether for adults or children. It is an innate ability to acquire the forms of knowledge. Merium and Brockett (2007) argue that “adult learning is a cognitive process internal to the learner; it is what the learner does in a teaching learning transaction, as opposed to what the educator does. Learning also includes incidental learning that is part of everyday life (p. 5-6).” This is due to the fact that people are engaged in the process of learning everyday either intentionally or unintentionally. So, development, training and education are the different stages of the learning processes during the lifespan of an individual. Teaching is best exemplified as the intention to bring about learning or the means through which the process of learning takes place. Normally, teaching requires the teachers to provide the learners with the technique to achieve a certain type of learning; this type of learning may take the form of education or more specifically, training, “education and training may be seen as opposing terms, the former broad, knowledge-based and general, the latter narrow, skill-based and specific” (Tight, 2002, p. 12). This distinction implies that education is a broader and deeper learning activity than training which is usually involved with developing specific identified skills.
In this connection, Tight (2002) mentions three levels of professional development; macro, meso and micro. All these three levels of development are related to human learning and some implication for some professions. For example, education and training in the teaching profession contribute to develop the skills of individuals such as teachers and students and hence their output and productivity in turn contributes to develop both their institutions and communities. Richards and Farrel (2005: 3) view teacher education having a wide scope within which training and development take place. They further state that, “Two broad kinds of goals within the scope of teacher education are often identified as training and development.” What distinguishes training from development, according to Richards and Farrell (2005: 4) is the duration and type of the goal.

Teacher ‘training’ is more specific to including “activities directly focused on the teacher’s present responsibilities and is typically aimed at short-term and immediate goals.” Whereas the focus of ‘development’ is on general growth of teachers, it is a long-term goal and seeks to facilitate growth of teachers’ understanding of teaching and themselves as teachers.

More recently, some terms have been coined under the term continuing education like:

- Professional development
- Continuing professional development
- Continuing professional education
- Continuing education and professional development
- Continuing professional education and development

As a matter fact, many professions and educational institutions use such terms for all types of in-service training. Jarvis (2004) argues that the term Continuous Professional Education (CPE) has become widely accepted in all forms of in-service training. For example, Oxford
University has initiated a centre for Continuing Professional Development (CPD) to provide world class post graduate education and professional development through flexible part-time courses. Accordingly teacher education and training as a learning activity that leads to teachers’ growth and thus professional development can be well placed in one of the four settings such as (i) formal education and training, (ii) non-formal education and training (iii) informal learning and finally (iv) incidental learning.

3.11.1 ESP Teacher Education and Training

Hardly, we can identify an ideal role exemplifying ESP teaching profession due to the fact that ESP programmes are varied in their scope and content. This diversity makes it impossible to prepare teachers in all possible subjects in ESP. Nevertheless, some traits and teaching skills have been reflected through literature as important for success in teaching ESP: flexibility, adaptability, creativity, resourcefulness, inter-personal and cross-cultural communication skills, problem-solving and decision-making skills (Hutchinson and Waters, 1987; Jackson, 1998; Robinson, 1991). Moreover, some researchers have been trying to identify the core training areas for all ESP practitioners. The concept of teacher training is based on the premise of clearly predefined competences and skills that teachers need to develop in order to deal with predictable problems and requirements. Training is mainly skills-based whereas teacher education aims at the development of defined competences as well as a general capacity to deal with settings and requirements that are not fully predictable (Richards and Farrell, 2005; Huttner et al, 2009; Feng, 2010). Therefore, in this study, the researcher is in favour of focusing on the importance of ESP teacher training in the present context.
3.12 Versatile Roles of ESP Teacher

Pedagogically speaking, general and specific English language teachers do share the ground in many respects. Both should possess adequate proficiencies in ELT competences. McDonough (1984: 127) argues that “ESP teachers obviously have much in common with any language teacher. The ESP teacher needs to take into account the developments of linguistics and learning theory, aims to keep up with current views on the place of the learners in the educational system, and has to confront the new technologies offered as aids to the improved pedagogy.” Nevertheless, ESP is characterized by its diversity with constant emergence of new fields and sub-fields. This leads to another diversification in ESP teacher’s role which has been identified as a distinctive feature in ESP. For example, McDonough (1984) argues that each stage of ESP programme planning may require a particular role. First, ESP teachers may be involved in gathering initial information from various stakeholders such as sponsors of the ESP programme, employees, subject-teachers and administration. Second, they might be involved in the needs analysis which requires designing and administering questionnaires, interviews and observations. Third, course design requires collecting relevant raw materials for teaching, adapting materials as per the context and learners’ level, writing tailor-made materials when needed, collaborating with other teachers, planning classroom strategies and writing/ administrating the tests. He maintains that such roles are amenable to change depending on different contexts of ESP teaching. Nevertheless such duties are:

“Part of the teacher’s potential role and as such none of them can be ruled out. In the rapidly changing world of ESP, there is no guarantee that the teacher’s role,
firmly delineated as it might be today, will not expand tomorrow-no indeed that the ‘broad spectrum’ role will not soon contract.”

(Jo McDonough, 1984, p. 128)

As ESP teaching is extremely varied and involves distinct role from that found in EGP, some researchers (Swales, 1985, Hutchinson and Waters, 1987, Dudley-Evans and St. John, 1998) use the term “practitioner” rather than “teacher” to draw the attention that ESP profession involves much more than mere teaching. Hutchinson and Waters (1987: 163) mention three types of knowledge that distinguishes ESP teachers from the EGP ones: 1) a positive attitude towards the ESP content; 2) knowledge of the fundamental principles of the subject area; and 3) an awareness of how much they probably already know. Gueye (1990) argues that in developing countries, ESP teacher’s task lies in encouraging students to understand their roles in the educational and social development of their nations, so the need for a more specialized foreign language teaching has expanded. Most of these teachers who are in fact EFL teachers or mostly from literature background, have a tendency to include both linguistic and thematic knowledge in their ESP courses since courses are usually offered without prerequisites. While describing the role of ESP teachers, Kennedy and Bolitho (1984) argue that one of the most favourable method for ESP teachers is to design and plan teaching materials “based on semi-technical materials and common core language, neither of which demanded too much experience in one particular area or discipline, but, quite the opposite, skilled handling of a middle academic ground in science and technology with which to operate in ESP courses.” So, with the undecided scope on content and unpredictable learners’ backgrounds, the challenge is undoubted on teachers’ shoulders to carry out ESP teaching tasks. Berrios-Escalante (1993) argues that in ESP
situations learners who are involved in institutions either in work or in study are usually seen as ‘clients’. In this case, the role of the ESP teacher is seen as a ‘project manager’ because he is in-charge of successfully developing a ‘product’ (typically a complete whole course or some course materials) that will be delivered according to the specifications agreed upon in advance. Hutchinson and Waters (1987) argue that beside the normal teaching tasks, ESP teachers have to deal with needs analysis, syllabus design, materials preparation or adaptation and evaluation. They draw the attention to three problematic areas (related to the role of ESP teacher) that requires further training: 1) the lack of an ESP orthodoxy to provide a ready-made guide; 2) the new realms of knowledge that the ESP teacher has to cope with, and 3) the change in the status of English Language Teaching (Hutchinson and Waters, 1987, p. 158). Therefore, ESP teachers as practitioners have to play several roles as discussed in Saif (2013):

3.12.1 English Language Teacher in ESP Context

Little success in ESP instruction is expected if it is not based on good general English competences. Hence, apart from their role as ESP teachers, there is a tendency to build up students’ communicative skills, introducing them to the best strategies of acquiring language with ease and confidence. In subject-oriented ESP course, teachers have the opportunity to draw on students’ knowledge of the content to generate more communicative tasks in the classroom. Furthermore, teaching ESP involves using some language skills and sub-skills to serve specific tasks in different areas of writing, reading, speaking and listening.

“ESP teaching goes beyond teaching of just language, it also involves teaching skills involved in the macro skills of reading, writing, speaking and listening, such
as the importance of listening or reading for meaning, the importance of writing for an audience, and developing learners’ awareness of communicative strategies involved in the activities that they undertake.”

(Dudley-Evans, 1998, p. 7)

This implies that to be successful in classroom teaching, ESP teachers must make use of various teaching methods. Hutchinson and Waters (1987) urges ESP practitioners to adapt an eclectic teaching approach making use of best features of available approaches, “choose a behaviourist approach to teach pronunciation, a cognitive approach to the teaching of grammar and use affective criteria in selecting your texts.” (Hutchinson and Waters 1987, p. 51)

3.12.2 Course Designer and Materials Developer

ESP materials aim at offering enough exposure to the authentic use of English language through spoken and written texts. If they fail to capture this aim then there is very little chance of facilitating learners’ language acquisition at any level. Since it is almost not possible to use a particular textbook without the need for supplementary materials, ESP practitioners often have to provide teaching materials for their course. Developing teaching materials may include selection of published materials, adapting them if not suitable, or writing new materials. ESP teachers also need to assess the effectiveness of the teaching materials whether it is published or self-produced. Do ESP textbook really exist? This is the central question Johns (1990: 91) addresses. One of the core dilemmas that he presents is that “ESP teachers find themselves in such a situation where they are expected to produce a course that exactly matches the needs of a group of learners, but are expected to do so with no or very limited preparation time”. Developing materials has been tackled as feature in
ESP, Allwright (1990) advised teachers to: ‘use no materials whether published or unpublished, actually conceived or designed as materials for language teaching’. So, almost all ESP teachers find themselves involved in materials writing, because ready-made and textbooks are very rarely seen or written to suit a particular group of learners. The main focus of ESP materials is on aspects of English specific to subject area. While developing ESP materials teachers should ensure that materials meet target needs and that the language of the materials should also match the language they will use. Besides, they should put emphasis on developing specific skills and strategies mostly used in the ESP context. So, providing materials is one of the main key roles in ESP teaching. It represents the supreme end of devising needs analysis as a means of deciding on any ESP course objectives and aims. This requires teachers to spend most of their out-of-class work time on developing and experimenting with new materials.

The processes of creating new materials and modifying the existing one are very similar. Hutchinson and Waters (1987) suggest a framework for materials design which includes both adaptation and creation. This model reflects the instructional roles of materials and emphasizes the fact that materials lead to a task. The resources of language and content that students need to successfully complete this task are supplied by the input. The following model is adapted from Hutchinson and Waters (1987: 108-9).

- **Input.** Typically a written text, an audio dialogue, video, pictures, etc. This provides:
  - A stimulus for thought, discussion and writing
  - New language items or the re-presentation of earlier items
  - A context, a topic and a purpose of writing
• Genre models and exemplars of target texts

• Opportunities for learners to use and build on prior knowledge

❖ **Content focus.** Topics, situations, information and other non-linguistic content to generate meaningful communication

❖ **Language focus.** Opportunities for analyses of texts and for students to integrate new knowledge

❖ **Task.** Materials should lead towards a communicative task, in which learners use the content and language of the unit.

In the real world, many ESP developers are not provided with ample time for needs analysis, materials research and materials development. There are many texts which claim to have the potential to meet the ESP courses. Jones (1990) observes that there is no ESP textbook that can be used constantly since the ESP needs keep on changing every moment. He suggests that the only real solution is that a resource bank of numerous materials available to all ESP instructors. Such resource includes authentic materials, ESP materials and teacher-generated materials. Besides, teachers can make use of commercial textbook as source for building up and developing new materials. As Hyland (2006: 96) suggests “even where the materials are not set as class texts, many teachers dip into them as a source of ideas for course structure, practice activities and language models.”

### 3.12.3 Evaluator

Evaluating and assessing both the students and textbooks are essential practices in ESP teaching profession. Teachers are often involved in testing their students, evaluating their courses and teaching materials to cross check whether the programme is going in the right
direction or not; whether any sort of changes need to adopt to achieve the goals. Tests are conducted to assess whether their students have already acquired the necessary language and skills to undertake a particular academic course or career. McDonough (1984: 111) states that testing in ESP is essential practice; it is based on “an analysis of the target situation, and on the language needs of the learners expressed in communicative terms, is both predictable and a logical development”. Evaluation of a course design and teaching materials should be done periodically during the lifetime of the course in order to assess the progress learners could achieve through the course. Evaluating published textbooks in ESP plays a crucial role in selecting the most suitable materials. Hutchinson and Waters (1987) argue that evaluating ESP materials allows the teachers to deduce if learners’ needs are well represented in the available textbooks or there exists a need to developing in-house materials. Unfortunately, most ESP practitioners usually neglect their role as evaluators since it is highly time consuming. St. Johns and Dudley-Evans (1991) also argue that there have been few empirical studies available today that really test the effectiveness of ESP courses.

3.12.4 Researcher

A strong emphasis has been placed on ESP teachers’ capability of conducting various types of research activities. Sometimes they find themselves involved in carrying out needs analysis, designing a course, or writing teaching materials. Evaluating ESP syllabuses involves using various methods of research such as questionnaires, interview, checklists and observations. Besides, ESP teachers should be able to conduct classroom-based research or action research as means of reflection on teaching and CPD practices (Huttner et. al, 2009, Chen, 2000).
In this connection, Dudley-Evans and St John, (1998) state that a typical ESP practitioner as a researcher will have to:

“Go beyond the first stage of needs analysis-Target Situation Analysis (TSA) which identifies the key target events, skills and texts- to observe as far as possible the situations in which students use the identified skills, and analyse samples of the identified texts.” (Dudley-Evans and St John, 1998, p.15)

3.12.5 Collaborator and Negotiator

In planning course objectives, tasks and assignments in ESP, some engagement with the subject department is essential. This helps to contextualize instruction, make the ESP course as relevant and supportive as possible, create greater equality between subject and language courses, and facilitate two-way interaction to ensure that L2 learners’ concerns are taken into account. It is important that this relationship should offer more opportunities for real collaboration in constructing curricula and designing syllabuses or while supplementing existing textbook with extra materials. Dudley-Evans and St John (1998) base this type of collaboration on three progressive stages which they term as cooperation, collaboration and team-teaching. For them cooperation “involves the language teacher taking the initiative in asking questions and gathering information about the students’ subject course” (Dudley-Evans and St John, 1998. p. 42-43). Cooperation is thus “characterised by informal trade-offs and by attempts to establish some reciprocity in the absence of the rules” (Mulford and Rodgers, 1982 as cited in Hyland, 2006, p. 187). Collaboration involves formative negotiation and occurs between two teachers. Finally, team-teaching is the last of the stages, in which each of the teachers focuses on their field, the ESP teacher on English language communicative skills and the content teacher on the
professional skills (Dudley-Evans and St John, 1998). They have introduced four stages for collaboration:

1. The content teacher provides the language teacher with the topic ‘career content’. This topic acts like a reference point through which the language teacher introduces the linguistic aspect i.e. ‘real content’.

2. The ESP teacher prepares the students as far as language is concerned, to have the necessary competence either in academic or professional situations.

3. The content teacher guides the ESP practitioner as regards the topics selected by the latter.

4. The last stage involves team-teaching; each teacher focuses on his field, the ESP teacher on English skills and the content teacher on professional skills.

When team-teaching is not possible, the ESP practitioners can establish collaboration rapport with the learners who usually have more familiarity with the field specialized content of materials than with the ESP teachers themselves. Such collaboration can further be extended to include learners’ current and possibly target needs. The researcher has already made it clear that collaboration of this nature is very rarely seen in Bangladeshi context.

3.12.6 Awareness of the Specialized Subject Content

The importance of ESP teachers’ awareness of the knowledge of their learners’ subject content and disciplinary culture is deeply rooted in the history of ESP teaching. It was first reflected in Ewer’s (1983) who is a pioneer in the early ESP/ EST teacher training. He suggests that EST teacher should be ready to “acquire the intelligent laymen’s outline
knowledge of the disciplines his students are studying” (Ewer, 1983: 10). ESP teachers’ awareness about the content subject matter is agreed upon almost by all researchers and ESP teacher educators. What is debatable is the amount of knowledge an ESP teacher should have and how many disciplines s/he should become familiar with. The same question was raised early by Abbott (1983: 35) showing a skeptical attitude towards ESP teachers familiarity with even two different fields, commenting that ESP teacher would have to “burn the midnight oil for many months.” Hutchinson and Waters (1987) state that any approach to ESP teacher training should try to dispel the fears and hostility that many English teachers have towards ESP subject matter. They argue that ESP teachers do not need to learn the knowledge of the specialty. They need to be aware only of three things; (1) a positive attitude towards the ESP content, (2) knowledge of the fundamental principle of the subject area and (3) an awareness of how much they probably already know. Such knowledge is best utilized through the ‘what’ rather than the ‘how’ a certain process or a machine works (Hutchinson and Waters, 1987: 163).

Teaching ESP, particularly in EFL contexts, does not require teachers to possess wide range of knowledge of the subject matter. All they need is the openness, readiness and interest in the subject matter (Adams-smith, 1983, Dudley-Evans, 1997). Some researchers draw ESP teachers’ attention to take advantage of their learners’ specialized knowledge, or co-teaching strategies with content subject teachers, which is to some extent true but limited to some other factors as well. For example, it is less effective in various EFL contexts where the mother tongue is widely used as a tool for instruction rather than English. In those situations, an ideal solution would be integrating more authentic subject driven materials within which the specialist discourse operates. Another possibility would
be feeding some information in the teachers’ handbook or ESP teaching manual about how education works in the field, how teachers and students in a particular discipline organize their academic work and how they interact with each other. Furthermore ESP materials designers need to be aware of this situation and help defending teachers’ lack of content subject knowledge. This will help both ESP teachers and learners to understand the right context in which the language is to be used and will ensure that the language learning process exploit the learners’ earlier experiences. The following extract focuses on the technophile role through which ESP teachers can positively exploit the motivation of ESP learners.

3.12.7 Technophile- a Soft Corner for ICT

The current era of science and technology witnesses a rapid expansion of using the World Wide Web (WWW) providing alternatives to the traditional teaching and learning methodology. The various usages of Information and Communication Technology (ICT) in modern digital classroom have been a special area of concern in pedagogic research during the last two decades. ICT, specifically in a language classroom, refers to the use of such devices by both teachers and students for preparing, delivering and practising language teaching/ learning process. The use of ICT in ESL/ EFL contexts of education has developed from the earliest stages in the form of audio tapes, word processing, and CD-ROM (Becker et al., 1999 as cited in Dogoriti and Pange, 2012). The main purpose has always been to facilitate the process of teaching/ learning. Currently, the research on using ICT in ELT is flourishing increasingly. International Conference on Information and Communication Technologies in Education (ICICTE) is held annually (http://www.icicte.org). The 2012 conference took place in Greece where more than 60
different papers were presented on various applications of ICT in education in general and ELT in particular. More increasingly, regarding the importance of using technology in ELT, world has gone beyond its applications as a tool of teaching and learning into a discipline by itself as the case in Warwick University where MA in English Language Teaching (ELT) programme is offered with a specialization in ICT and Multimedia.

Apart from general ELT, there is a real demand for using applications in teaching ESP. One of the major contributions has been incorporated integrating IT into ESP is by Macia et al. (2006). “From the prospects of LSP teachers and learners, information technology plays a pivotal role in developing teaching strategies for effective communication, both in academic and professional settings” (Macia et al., 2006, p. 10). The whole volume is devoted to the various applications of IT in the field of ESP teaching pedagogy, learning and research. It provides a wide collection of papers and projects carried out by ESP teachers and researchers including thematic areas that link IT to ESP; corpus-based studies, using computer-mediated communication for ESP teaching, exploring specific technology based projects in different education settings, using IT to promote learner autonomy and terminology and lexis for ESP teaching and translation.

According to most education experts, most of ESP practitioners use ICT in their daily life but do not apply it in the classroom practices due to lack of awareness and training.

“However, employment of New Technology based learning in foreign instruction is slow and faced with reticence by many ESP teachers due to the lack of awareness, more comfort with text environments, deficient computer literacy and contentedness that technology alone does not deliver educational success.”
The lesson from the above discussion is to bring to notice the fact that to become successful in today’s world of ESP in the context of engineering education, the English teachers have to keep abreast of ICT and develop an awareness of the cultures and themes of engineering register and discourse to exploit its full advantage in this enterprise.

### 3.13 Theoretical Influences on ESP

Benesch (2001) observes the theoretical influences from various fields that have shaped the world of ESP in general and EAP in particular, throughout its 30-years history include: linguistics; applied linguistics; sociolinguistics; communicative language teaching; writing across the curriculum; learning theory; and genre studies. However, the growth of ESP as an approach to language teaching either in academic or non-academic context has not arrived through a smooth passage. It has endured a series of criticism and changes to have reached the existing stage. For example, McDonough (1986) has criticized that the focus of early EAP was only on teaching the lexical items and students were not adequately prepared to deal with the kind of text, they were to pursue in their studies. Hence she emphasized more to focus on classroom based pedagogical research in EAP so that EAP teachers will be in a better position to prepare the learners to independently deal with their future academic challenges based on the relevant findings from classroom research. As part of theoretical influences on ESP/ EAP, Benesch (2001) further reveals how register analysis, rhetorical analysis, study skills and needs and genre analysis have guided the world of ESP/ EAP up to this stage.
Along with the above mentioned theoretical discussion as a solid foundation to this study, Hyland (2007) observes; the following six different issues must also be taken into consideration in support of the theoretical foundation to ESP. These issues are such as (a) needs analysis (b) ethnography (c) critical perspectives (d) contrastive rhetoric (e) social constructionism and (f) discourse analysis. Though Hyland (2007) does not separately address the issue of register analysis, many authors and scholars in the field of ESP believes that the origin of ESP must be credited with register analysis. Henceforth, all these influences have been discussed in detail.

3.13.1 Register Analysis

Register analysis has started in the early 60s and 70s with the focus on the nature of lexis, vocabulary and syntax of a given text of specific discipline of study such as Science, Engineering, Medicine and Law. The sole purpose of analyzing and identifying the specific characteristic features of scientific texts of various registers is to provide relevant contents designed around the learners’ needs and goals. Hence register analysis has been a move to motivate the learners by providing suitable and relevant content to them. Due to these versatile focuses, Register Analysis is believed to be the first theoretical influence on ESP/EAP.

The early history of EAP begins with the emergence of English for Science and Technology (EST). The pioneers associated with this trend are Strevens (1971b), Ewer and Lattore (1969) and Swales (1971). Swales (1971) terms it “lexicostatistics” and Robinson (1991) calls it “frequency analysis”. EST, at that time, was intended to provide an alternative to English language teaching as humanities, preparing students to read literary
texts. The goal was to move away from “language teaching as a handmaiden of literary studies” toward “the notion that the teaching of language can be deliberately matched to the specific needs and purposes of the learners” (Strevens, 1977, p. 89).

The postwar boom in funding for science and technology by the United States and the United Kingdom has included subsidies for English language teaching (ELT) and teacher training. The response of ELT specialists has been to shift instruction away from the traditional focus on grammar and literature toward greater attention to features of scientific English (Benesch, 2001, p. 25-26). Attempting to capture and characterize the uniqueness of scientific English, EST research during this period consists primarily of frequency studies of lexical items and grammatical features in scientific texts to incorporate in the materials design. Huddlestone (1971), for example, has carried out a 4-year longitudinal linguistic study of 135,000 words of scientific English, looking for patterns in single sentences and clauses (cited in Macmillan, 1971a). Thus register analysis is the basis of EST instruction for students who has usually acquired a degree of proficiency in reading English. Hence it is quite apparent here that in the early years of ESP, the focus has been mostly given on reading compared to other required skills.

Though register analysis starts as a solid foundation for ESP instruction, due to its narrowed-down emphasis on lexis and vocabulary, it loses its popularity in the later years due to its narrow focus on vocabulary and sentences. Hence this approach has been taken over by discourse analysis which has been discussed later in this section.
3.13.2 Needs Analysis

Needs analysis (NA), as often synonymously termed as needs assessment, plays a key role in designing and carrying out any language course, whether it is English for Specific Purposes (ESP) or general English course for a particular set of learners. Apart from its predominant role in effective course design, it has also been acknowledged by a number of scholars and authors such as Munby (1978), Richterich and Chancerel (1987), Hutchinson and Waters (1987), Berwick (1989), Brindley (1989), Tarone and Yule (1989), Robinson (1991), Johns, (1991), West (1994), Allison et al. (1994), Seedhouse (1995), Jordan (1997), Dudley-Evans and St. John, (1998); Iwai et al. 1999; Hamp- Lyons, 2001; Finney, 2002). Though, every one of the above mentioned stalwarts has not referred to needs analysis in the same notion and approach, all of them have expressed the centrality of NA especially in language course design; more essentially in case of ESP course design. In addition, Nunan (1988) and Strevens (1977) have also underscored the importance of learner needs in the designing of a learner-centered curriculum.

Richards (2001) refers needs analysis as the most reliable procedure used to collect information about the needs of learners. Brown (1995) has provided a more sophisticated definition of needs analysis as it refers to the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular institutions that influence the teaching learning situation.

While not unique to ESP, needs analysis is a defining element of its practices and a major source of its interdisciplinary nature (Dudley-Evans & St. John, 1998). However, according
to them, the use of systematic procedure in NA includes to define the specific sets of skills, texts, linguistic forms, and communicative practices that a particular group of learners must acquire is central to ESP while informing its curricula and materials and underlining its pragmatic engagement with academic, occupational and professional realities. Hence NA plays a crucial role to establish a link between perception and practice, helping ESP to keep its feet on the ground by tempering any excesses of academic theory building with practical applications.

Experts in the field of ELT and ESP stress the importance of conducting a rigorous Needs Analysis before designing an ESP course, producing a syllabus and its transaction and implementation in class (Hutchinson and Waters, 1987). According to them, needs analysis includes determining to what extent, in what ways, and for what purposes students will use English in their university program and later in their jobs, along with the “significant characteristics of the language in these situations,” such as vocabulary, grammar, rhetorical structures, and discourse devices for both oral and written texts (Orr, 1998).

However, before conducting a thorough needs analysis, English teachers need to be aware of the various components of NA. These components are related to language planning, teaching, learning and development of pedagogical methodology. Many ESP practitioners suggest that Target Situation Analysis (TSA) as coined by Chambers (1980) and Present Situation Analysis (PSA) are the two fundamental components used for identifying the language needs of the learners. The framework of target situation analysis includes ‘Why the language is needed’, ‘How the language will be used’, ‘What the content areas will be’, ‘Who the learner will use the language with’, ‘Where the language will be used’, ‘When the
language will be used’. It is obviously necessary to obtain the answer to these questions from a variety of sources and then ESP teachers can negotiate for a satisfactory platform. Hutchinson and Waters (1987) further suggest that it is more useful to look at target situation in terms of necessities, lacks and wants. On the one hand, it has moved to include learner needs, or what the learner must do in order to learn, incorporating both the learners’ starting point and his/ her perceptions of needs (Hutchinson and Waters, 1987).

According to Robinson (1991: 8), “Present Situation Analysis (PSA) seeks to establish the current profile of students at the start of their language course, investigating their strengths and weaknesses”. Dudley-Evans and St. John (1998: 124) state that PSA estimates strengths and weaknesses in language, skills and learning experiences. Richterich and Chancerel (1980) formulate the most extensive range of devices for establishing the PSA. They suggest that there are three basic sources of information: the students themselves, the language-teaching establishment, and the user-institution; for example the students’ place of work. For each of these, English language teachers seek information regarding their respective levels of ability; their resources; and their views on language teaching and learning. ESP practitioners might also study the surrounding society and culture: the attitude held towards English language and towards the learning and use of a foreign language.

Only recently, a third component of needs analysis i.e. Learning Situation Analysis (LSA) has been acknowledged as a valid category that determines the route to obtain all these information as the earlier two components were concerned only with the goals and destinations. The whole ESP enterprise is concerned not with ‘knowing’ or ‘doing’ but with
‘learning’. Therefore, ESP practitioners should take into account the route or the ‘how’ of reaching the destination. Hence, in ESP context, tasks should be selected based on their potential factors such as generative, enjoyable, fulfilling and manageable.

Most recently, the question of ‘whose needs?’ has been asked more critically, raising questions target goals and interests they serve rather than assuming they should exclusively guide instruction.

Thus to link language study to learners’ future use, some information on the purposes for which the target language to be used are of great value. Yalden (1987) states: “A forecast of the settings for use of the target language will be available which influences the course design.” She argues in favour of adopting the principle of language use as the primary one in second language course design. It also provides useful information regarding topics for communication. “However in order to spark communication in the classroom, or anywhere else, one must have something to communicate about, and needs analysis procedures can contribute greatly in determining what topics might be of learners’ interest” (Yalden, 1987).

To conclude, needs analysis has become the identity code in language teaching enterprise either in ELT or ESP. Hence to make any teaching learning program successful, there is no alternative to conducting NA before the start of any language course.

3.13.3 Ethnography

One of the most important influences that have left a legacy of impact on ESP has emerged more recently and has created significant impact on the ways people understand both language use and learning. The shift away from a selective focus on texts to the norms that
surround their use has immensely manipulated by ethnographic studies. Ethnography is a type of research that offers an individual participant’s description of his/her longitudinal cultural practices. In most cases, it focuses on a complete explanation of communicative behaviour by focusing on the conceptual framework of insiders themselves. Members of discourse communities and the physical setting in which they work thus become the primary focus of the ethnographic study, with detailed observation of behaviours together with interviews and the analysis of the texts, to present a longitudinal description of the real-life affairs. As Hyland (2007) states, Ethnography has been essential in ESP in three different ways. First and foremost, it has started to demonstrate significant insights into target writings, serving to distinguish the digressive practices include the creation, dispersion, and utilization of writings as exemplified in the works of Flowerdew and Miller (1995) to study L2 academic listening in Hong Kong. Secondly, ethnographic approach has traditionally been valuable in investigating student practices, exposing how they take part in their learning, engage in discourse with their teachers and experience their involvement as subordinate members to the new communities. Hyland further referred to the pragmatic work of this type offered in Prior’s (1998) studies of the disciplinary enculturation of graduate students through writing and their discourses with fellow learners and instructors. Thirdly, ethnography has been utilized to argue for pedagogic appropriacy in context where international students study in countries where English is L1 or where Anglo instructors and curricula are utilized in international settings.

Holliday’s (1994 as referred in Hyland, 2007) longitudinal ethnographic research in English for Academic Purposes (EAP) project in Egypt, for instance implies the need for
developing positive attitude towards local teaching methods, models, teaching materials and expectations. Hence, it is apparent that Ethnography has a strong influence on ESP.

3.13.4 Critical Perspectives

The influence of critical perspective on ESP has started very recently to leave an impact in this discipline, but now they are having an increasing impact on the ways teachers see and practice their profession. Hyland (2007) notes that, in its early years, ESP was largely concerned with identifying and describing formal, quantifiable text features without a great deal of social awareness. The evolution of a more socially cognizant approach, however, has also conveyed a greater inclination to question the assumptions on which theory and practice are based. Though it has a multi-layered influence on language pedagogy, Hyland (2007) believes that critical perspectives has a very specific link to ESP for two reasons; firstly, it has helped to develop an awareness in ESP that a social-theoretical stand is an imperative to understand what exactly happens in institutions to make discourses the way they are, which was further supported by Hyland (2000), and secondly, it reminds one that ESP instruction itself is not a politically unbiased activity which was further approved by Pennycook (1997) and Benesch (2001) as well. Lately, Benesch (2001) has made his argument that ESP course at the university level can achieve its aims more efficiently by incorporating issues of power, describing a teaching approach that tries to modify target setting rather than emphasizing conventionality. Hence the central view of critical perspectives is that the existing teaching practices in the universities should be less conventional to prevailing political and institutional orders, helping the learners to achieve the best they can while simultaneously “encouraging them to interrogate and mould the
education system they are receiving” (Benesch, 2001, p. 17). Ferguson (1997) questions the issue of the volume of content knowledge good enough for the ESP instructors while taking a highly specialized ESP course. However Dudley-Evans (1998) and Robinson (1991) suggest that rather than focusing on specialized content knowledge, the ESP practitioners should demonstrate a positive attitude towards learner’s existing knowledge and perceptions, develop intellectual inquisitiveness and enjoyment of improvisational problem-solving in class. Therefore, Critical Perspective is very relevant in ESP both in developing students’ positive attitude towards language learning and in motivating them in solving critical issues independently which is also an agenda of ESP.

3.13.5 Contrastive Rhetoric

The influence of Contrastive Rhetoric in the field of ESP is highly significant. It is basically concerned with the ways in which the first language and culture influences the second language writing of the learners. It has immensely contributed to the understanding of the favourable patterns of the writing samples of different cultural groups (Connor, 1996) and has also positively manipulated the study of academic and professional customs. He has further defined culture as “a set of patterns and rules shared by a particular community” (Connor, 1996, p. 101). In another article, Connor (2002) further states that Contrastive Rhetoric examines the differences and similarities in ESL and EFL writing across language and cultures as well as across such different contexts as education and commerce. Therefore Contrastive Rhetoric considers texts not merely as static products but as functional parts of dynamic cultural contexts. Since the last decade, the field of EAP has addressed heterogeneous students’ cultural issues seriously. This is due to the fact that early
interpretations of Contrastive Rhetoric have been seen as rather ethnocentric and prescriptive, and partly because of a unique scientific culture expressed by a universal rhetoric in this very discipline. Therefore, very recently ESP course designers have started realizing that learners’ culture and L1 has to be taken into consideration during and prior to designing ESP course and teaching materials.

Hyland (2007) observes, the view that discoursal and rhetorical features of writing might reflect the cultural experiences of individuals has been enthusiastically adopted by the ESP practitioners in different areas, exposing the discursive uniformity of social and professional communities. Each discipline and profession can be seen as constituting a separate culture with its particular norms, nomenclature, bodies of knowledge, sets of conventions and modes of inquiry (Bartholomae, 1986; Swales, 1990 as cited in Hyland, 2007).

However, Ventola (1992) proposes a separate academic genre writing course based on university learners’ preferred discipline. He further stresses the need for introducing specific courses for teaching both written and spoken academic genres at the beginning of their university career. Hence, ESP teachers now take the issue of appropriate models for EAP and English for Occupational Purposes (EOP) seriously, exploring how far the professions, corporations and disciplines in which they work tolerate the differences in rhetorical styles (Hyland, 2007).

3.13.6 Social Constructionist Theory

The root of Social Constructionist Theory goes back to the symbolic interaction of Mead (1934) and has developed within social-psychology and post-modern philosophy. This
theory of social constructivism is probably the mainstream theoretical perspective in ESP and EAP research today. The perspective has mainly gained prominence in ESP through research on scientists’ lab activities by those working in the sociology of scientific knowledge (Gilbert & Mulkay, 1984; Latour & Woolgar, 1979 as cited in Hyland, 2007). Besides, this theory has further gained prominence in the world of ESP through the rhetorical analysis of scientific texts by Bazerman (1988), Myers (1990), and Swales (1990).

Hyland (2007) believes, social constructionism basically suggests that knowledge and social reality are created through everyday interactions between people and particularly through their discourses. It takes a critical stance towards taken-for-granted knowledge and, against positivism and empiricism in traditional science. This perspective questions the idea of an objective reality. It says that everything we see and believe are filtered through our theories and our language, sustained by social processes, which are culturally and historically specific. Discourse is therefore central to relationships, knowledge and scientific facts as all are rhetorically constructed by individuals acting as members of social communities. The goal of ESP is therefore to discover, how people use discourse to create, sustain, and change these communities; how they signal their membership through intelligible code of communication; how they persuade others to accept their ideas; and so on. Stubbs (1996) succinctly addresses all these important issues into a single question:

“The major intellectual puzzle in the social sciences is the relation between the micro and the macro. How is it that routine everyday behavior, from moment to moment, can create and maintain social institutions over long periods of time?”

(Stubbs, 1996, p. 21)
Social construction has thus become the central theoretical underpinnings of work in ESP. It sets a research agenda focused on revealing the genres and communicative conventions that display membership of academic and professional communities, and a pedagogic agenda focused on employing this awareness to best help learners critique and participate in such communities. Swales (1990) notes that social constructionism is highly relevant to those engaged in the field of ESP as it offers them “an enhanced place in the study of academic tribes and territories” (p. 48), putting discourse at the centre of human endeavor and elevating the role of those who study it. However, many ESP practitioners may not embrace the correlative view dovetailed truth and social discourse; especially to those who prefer a less tenuous connection between reality and accounts of it, not least the scientists, academics, and professionals they study. The recent research has sought to address the explanatory and prognostic power of the concept by substituting the idea of a predominant force that regulates behavior with that of the accepted norms in which a nexus of various beliefs and customs overlap and intersect (Hyland, 2000).

3.13.7 Discourse and Genre Analysis

Discourse Analysis is probably considered as the most important item in the ESP toolbox. Discourse Analysis takes a variety of different forms, but in ESP it has traditionally involved attention to features of texts and their rhetorical purposes as a basis for pedagogical materials. The first phase of discourse analysis that was mostly preoccupied with register analysis as the main focus of language merely focuses at the sentence level. The next stage experiences a sudden shift of focus towards the level above the sentence and towards longer text. In fact functionally discourse analysis begins at that second stage only.
From this stage of development in linguistics, ESP has become closely associated with discourse analysis.

This approach has been strongly influenced by *Systematic Functional Linguistics* (Halliday, 1994), a refined theory of language concerned with the relationship between language and the function it uses to perform in social nexus of communication. In this view, language consists of a set of systems from which users make choices to most effectively express their intended meanings, and this fits neatly with ESP’s aim to elucidate the academic and professional genres that will enhance or determine learners’ career opportunities. Genre analysis has thus become the principal form of discourse analysis in ESP, providing a very much focused method and enabling researchers to identify the structural and rhetorical features that distinguish the texts most relevant to particular communities and contexts.

Genres are abstract, socially recognized ways of using language that we draw on to respond to perceived repeated situations. In ESP a fruitful line of research has been to explore and identify the characteristic lexico-grammatical features and rhetorical patterns of particular genres. This has helped to reveal how texts are typically constructed and how they relate to their context of use through specific social purposes, as well as providing valuable input for genre-based teaching. Genre analyses also characterize the processes by which texts and events are mediated through relationships with other texts, drawing on the concept of intertextuality (Bakhtin, 1986). The idea that any instance of discourse is partly created from previous discourses and reflected in the subsequent ones is an important way of conceptualizing cultures of that particular genre. It also helps us to understand the ways that texts cluster to constitute particular social and cultural practices, networked in a linear
sequence, as in the case of formal job offer for instance, or more loosely cohering as a repertoire of options, for example, in the choice of press advertisement, poster campaign, or mail shot to announce a product launch.

Discourse analysis has thus been greatly entertained in recent years by the use of large text corpora and computer concordancing programs, which make reliable quantitative analysis more feasible. Researchers can now collect representative samples of texts differentiated by both genre and field and, with frequency counts and collocational analysis, produce more targeted and more plausible linguistic descriptions. Thus these types of textual descriptions have the potential to predict and define the kind of English required by these university graduates today.

In addition to being a valuable research tool, discourse analysis has also become a central teaching method in ESP, with a commitment to exploiting relevant and authentic texts in the classroom through tasks which increase awareness of their purpose and their linguistic and rhetorical features. More generally, providing students with an explicit knowledge of relevant genres is seen as a means of helping the learners gain access to ways of communicating that has accumulated cultural capital in particular communities. Genre approaches, in fact, also seem to offer the most effective means for learners to critique cultural and linguistic resources (Hyland, 2002). The provision of a rhetorical understanding of texts and a metalanguage to analyze them allows students to see texts as artifacts that can be explicitly questioned, compared, and deconstructed, so revealing the assumptions and ideologies that underlie them.
3.13.8 Dorney’s Theory of Motivation in Teaching/Learning L2

Many ESP experts now-a-days make attempt to find the theoretical connection of ESP learners’ motivation with the motivational framework of Dorney (2001). In this connection, he states, “motivation is a mental operation and propensity of mind that drive the learners to learn a second or foreign language”. In the field of ESP also, the first and foremost enterprise to consider the issue of designing a focused and highly relevant language course that either fulfills the learners academic or professional needs and thereby leads them towards high motivation for more participation and contribution in the learning process. While trying to capture the learners’ different types of motivation based on the different types of needs, ESP practitioners try to design various authentic teaching materials which were never used for teaching English language before. When learners find the purpose of such a course and the teaching materials relevant to their goal, the teachers’ job becomes easy to exploit the learners’ motivation to teach and develop different learning strategies and fulfill the goals of the whole enterprise. Hence, Dorney’s motivational framework has a strong influence on ESP teaching-learning.

3.13.9 Communicative Competence

Since the sole purpose of the whole ESP enterprise is to inculcate in the learner what and how to communicate the right set of information using the right channel-which is the primary purpose of communication, the theory of communicative competence coined by Hymes (1972) is of immense relevance in this regard. In this connection, Hymes (1972) observes, “A person who acquires communicative competence also acquires both knowledge and ability for language use.” In the same tune, Canale and Swain (1980) have
identified four dimensions of communicative competence: grammatical competence in order to inculcate grammatical and lexical capacity in the students; sociolinguistic competence; an understanding of the social context in which communication takes place, discourse competence; the interpretation of individual message elements in terms of their interconnectedness and of how meaning is represented in relation to the entire discourse of text; strategic competence; the coping strategies that interlocutors in communication employ to initiate, terminate, maintain and redirect communication. Shu and Zhuang (2008) observe, the cultivation of communicative competence means cultivating all the LSRW skills. Since the core purpose of ESP instruction is to enhance the performance of ESP learners in the areas under LSRW skills, it is the communicative competence that sets the foundation of learners’ performance in communication which is the last word in ESP. Hence the link between ESP and communicative competence must be acknowledged.

3.14 Different Language Teaching Approaches

A number of authors (Stern, 1983; Richards & Rodgers, 1986; Larsen-Freeman, 1986) have reviewed L2 ‘approaches’ in detail grouping them into various ways. Hence this present discussion is structured around three major perspectives on language: (a) Language as grammar; (b) Language as communication, and (c) language as social practice. The last two are of great relevance to this present study.

3.14.1 Language as Grammar

In the early 1950s and 60s, the genuine purpose of learning L2 is to be able to read literature efficiently to make out the critical summary, literary appreciation and the overall message conveyed in the text. Hence, to read literature, students need to be thorough with
the grammar rules and vocabulary. In such a construct of L2 instruction, teachers enjoy a monopoly of authority, enjoys more talking time compared to that of students’. Hence the class becomes a teacher-centred one. In contrast, students play a very mute and passive role as they do whatever they are asked to do. As a consequence, the whole teaching-learning enterprise bears the testimony of translation practice from L1 to L2 and vice-versa. Grammar is taught deductively and students’ main task is to memorise the vocabulary from L1 to L2. Under this approach, language of literature is viewed as superior to that of spoken variety used in daily communication. Due to all these features, this approach loses its popularity at a juncture when language is viewed as communication and thus it has never been entertained in ESP instruction.

3.14.2 Language as Communication

The second perspective considered here is language as communication. From the early 1970s, the communicative approach inspired by linguists such as Halliday, the linguistic anthropologist Hymes (1972), and L2 theorists such as Widdowson (1983) have broadened the language base of L2 teaching from sentence grammar to a framework including semantic, discourse structure and sociolinguistic competence. The major expansion of perspective on language in the communicative approach has generally meant reliance on a broader range of understanding on how learners learn language. At the broadest level of applications, the communicative approach has been the development of a framework for foreign language teaching in the European community. Also in a world where formal L2 training is increasingly used to address needs in social and economic contexts (travel, international business, vocational training, refugee, settlement, and so on), the focus on
learner needs of communicative approach is useful in tailoring L2 programs for many situations. Hence, the ESP enterprise has a deep rooted theoretical connection with this approach as it views language primarily as a tool for communication.

### 3.14.3 Language as Social Practice

The third perspective for discussion is language as social practice. It is related to social concepts of discourse from theorists like Foucault, and has been more directly influenced by the work of Freire (1995) and Street (1983) in the realm of adult literacy. The focus is on the empowerment of learners through critical analysis of the social situations, language and the development of life, career skills to address power differences.

Thus various language programs have been challenged where the communicative competences and target situations in which these competences are to be performed are chosen without consultation with the learners. This is one of the fundamental reasons that gave birth to needs analysis which has become an inevitable tool to be used before designing any language programs. Therefore, this second perspective has rather directly influenced the field of ESP which cannot be imagined without such needs analysis. At this stage, the researcher shifts his focus towards the contribution of technology in the world of higher education.

### 3.15 Impact of Technology in Education

Information technologies provide with a variety of opportunities and forms of learning; therefore it sometimes receives the highest attention from any national government in these recent days which bears its unquestionable role in education world as well, influencing
learning from the cultural, social and value perspectives (Hennessy, S., Ruthven, K., Brindley, S. 2005 & Heemskerk, I., Brink, A., Volman, M., Dam, G, 2005).

Higher education in the 21st century has taken shift from the industrial age towards the age of knowledge where learners are becoming new millennium technocrats and teachers—the 21st century knowledge workers. Moreover, these changes pose questions that cannot be given readymade answers. Research concerning ICT use for language learning is becoming a question of the day. Complexity of learners’ attitudes and expectations that help understand language learning aspects is highlighted in literature on foreign language teaching (Hurd, 2003).

Countries irrespective of rich and poor are trying to afford more in connecting their higher educational institutions through building rapport with manufacturers of tablets as digital educational device for their stakeholders; Aakash is a recent example in India in providing an e-learning platform for the students. Besides, 21st century learners mostly prefer technology based educational curriculum. This is more applicable in case of ESP learners as they are adult learners. Besides, ESP learners prefer the use of technology in English class due to its potential to offer learner autonomy, varieties of learning and authentic materials and draw positive attitude and motivation from them and hence use of technology in ESP class positively influences their learning style.

Hennesy et al. (2005) highlight the significance of ICT as a cultural artefact that is gradually influencing pedagogy in parallel with changes in teachers’ practice, thinking, approach, roles, and methods of technology use. Some authors claim that learning outcomes depend on the following: learning environment, learners’ attitude to the aim of a
task and motivation (Harper et al., 2000). Rapid changes in the technological area challenge educational traditions in teaching. The application of ICT for teaching/learning purposes is becoming one of the major issues of contemporary education.

Prensky (2008) argues that “today’s students think and process information fundamentally differently from their predecessors”. He further states that “future” content is to a large extent digital and technological. The use of technology enhances student motivation for language study by enabling them to choose activities, media sources and content topics most appropriate to their interests and learning styles. Another educationalist Warschauer (1996) considers that hypermedia creates authentic learning environment and allows “to combine reading, writing, speaking and listening in a single activity”. Technology also contributes to the authenticity of the learning process by enabling the approximation of “real life” situations and exposure to authentic cultural artefacts. Hence the ESP teachers especially in engineering institutions have to keep abreast of the emerging trends in the field of learning theories, teaching methodologies and educational technology.

3.15.1 Technology in Language Pedagogy

The globalization of world Englishes has already changed a lot in the recruitment pattern, and the emergence of new technological literacies are mutually enforcing trends of the global informational economy, and some common approaches can be adopted for better tuning up. A key pedagogical concept that responds to these growing needs is multiliteracies. The multiliteracies concept recognizes the inadequacy of educational approaches which limit themselves to “page-bound, official, standard forms of national language” and suggests instead that students should learn to negotiate a multiplicity of
discourses. Any pedagogical approach that attempts to meet such challenges should incorporate the following components (New London Group, 1996).

1. **Immersion in situated practice:** Practice in authentic communicative situations is required for students to learn how to collaborate with partners, negotiate complex crossroads of communication skills, and critically evaluate information as it applies to particular meaningful contexts. At the same time, such authentic situations can give students the opportunity to new literacies in meaningful contexts.

2. **Overt Instruction:** The kinds of sophisticated communication skills required in 21st century will seldom develop through practice alone. Students need the opportunity to step back under guidance of the teacher or mentor to critically analyze the content, coherence, organization, pragmatics, syntax and lexis of communication.

3. **Critical Framing:** Effective cross-cultural communication and collaboration, including making effective use of information found in online networks, necessitates a high degree of critical interpretation. The instructor’s overt role thus should extend beyond narrow language items to also help students learn to critically interpret information and communication in given social context.

4. **Transformed Practice:** Transformed practice allows students to hone their communication skills by raising their practice to new levels based on prior practice, instruction and critical framing. This involves working toward higher quality outcomes within particular contexts and also to transfer what has been learned for application in new social and cultural contexts.

(New London Group, 1966, 85-88)
Such a framework goes far beyond linguistic syllabi that are most common today, based on collections of syntactic or functional items. It also goes beyond the notion of task based learning, at least when task-based learning is interpreted as consisting of a progression of narrow tasks designed principally to assist learners in grasping particular grammatical forms. If there is a key concept that should motivate our understanding of English teaching in the 21st century, it is that of agency. Due to changes in globalization, employment and technology begun in the last 30 years and intensifying in the new century, second language speakers of English will use the language less as an object of foreign study but more as an additional language of their own to create a further impact and change the world. They will use language together with technology, to express their identity and make their voice heard. There is no need to choose between the integrative discourse, which views English as a door to international commerce, tourism and technology and science as empowering discourse which views English as an ideological instrument of unequal power relations (Cox and Assis-Peterson, 1999). English is what its speakers make out of it and those speakers are mostly from developing and newly industrialized countries in Asia, Africa and the Middle East. Hence being a developing country, all universities especially the engineering universities in Bangladesh should develop its pedagogical practice in such a shape that the students can easily connect the theory into practice and be able to communicate both in the academic and professional settings grounded on technology in all spheres of life. The researcher now moves towards the discussion of ESP course design.
3.16 Principles of ESP Course Design

Designing any language course usually goes through certain principles. In case of ESP course design, it is a mandatory one. Designing an ESP course is the ultimate aim of ESP curriculum. Hence in case of designing an ESP course, the following components should be taken into account:

- Identify the learner groups
- Define course objectives
- Conduct needs analysis
- Design courses/ syllabus
- Decide on the teaching methods and implement in teaching learning practice
- Design suitable materials
- Define the assessment procedure
- Evaluate the program through both formative and summative evaluation system

As mentioned earlier, ESP is a highly varied and flexible approach to language teaching. Sometimes, diversity in ESP goes beyond the possible sub-classifications to incorporate learners with different level of competences.

Thus all these components interact with each other in a complex nexus as demonstrated in the following figure.
Hence according to the above figure, the first step to initiate an ESP course design can be needs analysis. The process of needs analysis may include all the stakeholders; especially the learners, teachers, present situation, target situation and language and communication needs of the students. Once information on the various types of needs is obtained, a syllabus/ course contents are designed based on those identified needs along with the aims and objectives the course. At this stage, the appropriate teaching materials are designed keeping learners’ profile in mind and suitable teaching methods are also determined. Hence the syllabus is implemented in the classroom for instructional purpose. Next to this stage in this nexus, assessment comes into play to assess the whole context, syllabus contents, learners’ progress and teaching materials, methods and transaction of the contents in class. Mostly the assessment takes place either implicitly or explicitly along the progression of the programme of study. However, any programme of study ends with evaluation of the whole enterprise which plays a very vital role in determining the success of the programme. It is the stage of evaluation where any type of change and modification in the whole system is brought about to achieve the target aims, goals and objectives.
“Any ESP course may differ from one another in terms of its selection of skills, topics, situations and functions and also necessarily so, and may be at any level of competence in the language: beginner, post-beginner, intermediate, etc.” (Robinson, 1980, p. 13).

In an attempt to identify and incorporate diverse learner needs into course design, it becomes essential to integrate several approaches and methods. According to Dublin and Olshtain (1986):

“Course designers who carefully consider the various approaches to syllabus design may arrive at the conclusion that a number of different ones are needed and the best one combined in an eclectic manner in order to bring about positive results. Thus it may be necessary to use a structural/ situational syllabus for the first years of study, moving to a functional plan of organization, followed by a notional/ skill combination, leading finally to a fully communicative design for the final phases of the course. The most important feature of any modern language syllabus is therefore, is its inherent potential for adjustment based on careful decision making at each level within the course”. (Dublin and Olshtain, 1986)

However, ESP centers around the learner and the process of learning in the target context. Such centeredness in ESP has been reflected in following four different approaches mostly used in various types of ESP course design:

a) Language Centered

Language centered approach that uses needs obtained from the nature of the target situation performance as a basis for designing the ESP course. It is the most familiar type of ESP
course design. It is more oriented towards teaching restricted areas of language use in the target subject-matter situation.

b) Skills Centered
Skills centered approach looks for the process that enables learners to perform in the target situation; such processes are used as a basis for the ESP course design. It is basically based on two fundamental principles, as Hutchinson and Waters (1987) point out, one theoretical and the other pragmatic. Theoretically any language behaviour involves skills and strategies which the learners use in order to perform or comprehend discourse. Pragmatically the skills centered approach to course design is set to enable learners to come up with the constraints and what they can achieve within those constraints.

c) Learning Centered
Learning centered approach as adopted by Hutchinson and Waters (1987) that looks beyond the ‘what’ of competence that enables a learner to perform in the target situation. Rather this approach looks into the “How” of the acquisition of competence as the building blocks for designing the learning centered ESP course. Here ‘methodology’ is applied not to the language itself but to problem-solving activities which are designed to prompt language contingently. Learning as claimed by Hutchinson and Waters (1987),

“... is not just a mental process, it is a process of negotiation between individuals and society. Society sets the targets (target situation in ESP) and the individuals must do their best to get as close to the target as possible (or reject it). The learners determine their own route to the target language and the speed of which they travel
the route but that does not make the target unimportant.”

(Hutchinson and Waters, 1987: 72)

d) Learner-centered approach

Learners-centered approach to ESP course design focuses more on learner than the teachers. The learners are involved in possibly almost all stages of course design. Nunan and Lamb (1996: 30) describe learner-centeredness through five levels of learners’ contributions:

- Learners are made aware of the pedagogical goals and content of the course
- Learners are involved in selecting their own goals and objectives from a range of alternative offers
- Learners are involved in modifying and adapting the goals and the content of the learning programme through intervention
- Learners create their own goals and objectives
- Learners go beyond the classroom and establish links between the content of the classroom and the world outside

3.17 Conclusion

The discussion in this chapter has significantly contributed to the development of an insight into the study and further towards the direction of the study from here onwards. The theoretical discussion thus helps the researcher in chalking out the kind of theories and relevant influences that have shaped the English language teaching learning practices in the similar education context in today’s world especially in Bangladesh. The review of
literature and the theoretical underpinnings have helped the researcher in identifying the gaps and in preparing the necessary tools for his research data.

As this study deals with various components of English language teaching learning practices, issues like curriculum design, teacher training, theories of ESP, ESP pedagogic practices, assessment, materials design, evaluation of ESP programme, versatile roles of ESP practitioner etc. have been thoroughly discussed. At this juncture the researcher moves towards the research design of the present study.