Chapter 1

Introduction

1.0 Background

The present research aimed at measuring the second language vocabulary growth of first year engineering students. As vocabulary is crucial for effective communication, engineering students need to be proficient in the use of appropriate vocabulary. If not, their word-choice will be limited which leads to poor communication. The current research arose from the observations of the research scholar as an English lecturer in a private engineering college. It was noticed that engineering students were not using appropriate vocabulary in their speech and writing. As a result, their communicative purposes were not properly realized. It was also observed that learners who were good in their lexical choices were scoring more marks than those who could not do so, even though the content was the same. Even the campus interviewers were dissatisfied with low vocabulary knowledge of a large number of students.

Campus interviews are generally held when students are in their third year of engineering. As English is prescribed as a course of study only in the first year, either the English textbook should be able to help students in their lexical growth; or, learners should be able to improve their levels of vocabulary through incidental exposure to their subject textbooks. So, the present research wanted to assess the effects of incidental and intentional vocabulary learning of first year engineering students. The specific research
questions are stated in section 3.1. As English is learnt as a second language in India, a brief discussion of it seems relevant.

1.1 English Language Teaching in India

Over the years, English has attained the status of an international language facilitating communication across the world. It has been acquired as a first, a second or a foreign language and has been used for internal, external and international purposes. It is the world’s main language of communication in books, learned journals, newspapers, computers, science and technology and so on. As the world has become global, anyone can study, get employed and live in any other country. So, in many countries, English is learnt as a second or a foreign language. In fact, we find a large group of non-native speakers of English whose number is quite overwhelming in relation to the number of native speakers of English. Non-native speakers need to communicate effectively in English to be understood by the native speaker or another non-native speaker coming from a different country.

As a result, teaching English as a second language has become relevant and important. India is one of the countries where one can find a number of learners who learn English as their second language. Hence, India, an erstwhile colony of the British Empire, has a history of development of English and English Language Teaching.

The English language was introduced in India for the purpose of trade and commercial benefits of the British Empire. Slowly, a systematic English teaching programme evolved. The first blue print on English education in India was prepared by
Charles Grant, a director of the East India Company. He recommended the introduction of English as the medium of instruction to teach literature, natural sciences etc. Then came Macaulay, who wanted to educate Indians in Western literature and moral code through English education. Following Macaulay’s Minute, a declaration was made to promote European Literature and science among the natives of India. English was made the official language of education in 1835.

But, slowly, the Indian Universities Commission of 1902 found that many students were not proficient in English even after university education. They were not proficient in their native language either. As a result, the Government of India Resolution of 1904 recommended that English should not be taught as a language until the learner has become proficient in his/her mother tongue.

Immediately after independence, the university Education commission was formed under the chairmanship of Dr. S. Radhakrishnan who recommended the continuation of English in India so that Indian students could acquire sufficient mastery of English to gain access to ever-growing knowledge in the world. Later, Prof. D. S. Kothari, who headed the Kothari Commission, was the first person who saw the necessity of teaching English as a skill and as a subject of study. Prof. V. K. Gokak submitted the report of the study group on English suggesting that men, materials and methods were necessary for the successful promotion of proficiency in English among the learners. In India the first step towards teaching English according to the needs and requirements of the students was taken by this report which recommended the introduction of special
courses like “Course in Spoken English”, “Course for Teachers of Spoken English”, “Course in Commercial English” etc.

After India got independence in 1947, some decisive steps were taken to strengthen the English language teaching situation in India. The British Council in India brought in the Structural Syllabus prepared by the London School and introduced it in Madras in 1952. The Structural Approach to teaching was accepted in India and the Government of Tamilnadu introduced teaching materials prepared by Indian teachers of English. The first English Language Teaching Institute (ELTI) was established in 1954 in Allahabad with the help of the British Council. The Central institute of English (later CIEFL, now EFLU) was started in Hyderabad in 1958. Its objectives were stated very clearly. They were to provide necessary training to teachers of English, to produce teaching materials, thus improving the standards of teaching English in India. The Regional Institute of English – RIE -was started in Bangalore with financial support from Andhra Pradesh, Karnataka, Kerala and Tamilnadu to improve the standards of teaching English in the South. Another RIE in Chandigarh and a number of ELTIs across the country were established subsequently.

In the 1960s, scholars from the USA and the UK started arguing against the Structural Approach. It was pointed out that the structural approach failed to enable learners to use English appropriately. The Communicative Approach was thought to be the appropriate approach to teaching English.

In the 1970s, a project called the Communicational Teaching Project (CTP) was undertaken by Prabhu and his team. The CTP aimed at proving that learners could learn a
language better if their attention was not on the language but on the task it was used for. The syllabus that resulted from the successful completion of the project was called Procedural Syllabus which deals with real-life or life-like tasks to be dealt with by the learners in the class. In short, we can say that English language teaching in India has gone through three different phases – the Traditional phase (up to Independence), the Structural phase (after Independence to 1970s) and the Communicative Phase (1970s to date).

After independence, in spite of all the problems, every effort has been made to teach English systematically which resulted in the demand for English. Mass media, Information Technology and developments in the areas of science and technology have created an international market for English. Technological development coupled with the development of computers and software has made English a tool for communication in international contexts. English has become a global commodity like oil and the micro chip; without the English language, the world will come to a halt. (Krishnaswamy & Krishnaswamy, 2006).

As a result, effective communication skills have got market value. Communicative competence has become one of the necessary qualifications for any profession. Proficiency in English is estimated from the standpoint of skill development, not from that of analyzing a literary text. English for facing interviews, writing resumes and reports, conducting campaigns, participating in meetings, discussions, conferences, interacting in social contexts, English for agreeing, disagreeing, convincing, narrating, requesting, ordering, explaining, apologizing, English for computer applications, business
transactions, call-centre training etc. have come to be the order of the day. It is communication skills in English that are useful globally, because English has become the language of business, media, IT-enabled services and so on (Krishnaswamy & Krishnaswamy, 2006). One’s proficiency in English often opens gates to better employment opportunities.

Long before all this has happened, Indian realized the importance of becoming self-reliant in the areas of science and technology. They understood that one of the important means to continue being independent of foreign rule was to improve the country’s technical and technological might. To promote technical education in the country, All India council for Technical Education (AICTE) was established.

1.1.1 AICTE

Technical education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of the country. In India, technical education is imparted at various levels such as craftsmanship, diploma, degree, post-graduate and research in specialized fields, catering to various aspects of technological development and economic progress.

The All India Council for Technical Education – AICTE – was set up in November 1945 as a national level Apex Advisory Body to conduct a survey on the facilities of technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, AICTE was given statutory
authority for planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country.

The statutory All India Council for Technical Education was established on May 12, 1988 with a view to proper planning and coordinated development of technical education system throughout the county.

1.1.2 JNTU

JNTU – Jawaharlal Nehru Technological University - was established in the year 1972 with a vision to provide for the advancement of learning and knowledge in engineering and Technology, Physical and Social Sciences by teaching, research and experimentation or practical training. When the research was conducted, JNTU was a single body. But, now, it is split up into JNTU, Hyderabad; JNTU, Kakinada; JNTU, Ananthapur. On the whole JNTU has more than 350 private engineering colleges affiliated to it.

JNTU’s curriculum included English a subject of study in I B. Tech. the following two textbooks are prescribed for study.


The first one, *Learning English – A Communicative Approach*, is the text prescribed for detailed study and *Wings of Fire* is for non-detailed study.

The syllabus (Appendix A) states that it has been designed to develop linguistic and communicative competence of engineering students. It is also mentioned that the stress in this syllabus is on skill development and practice of language skills. It can also be noted that one of the objectives of the syllabus is to improve the language proficiency of the students in English with emphasis on LSRW skills.

As the name of the textbook itself suggests, teachers are expected to follow communicative language teaching techniques. The textbooks are specifically designed for the students of engineering and hence come under the realm of English for specific purposes.

The next two sections discuss the rubrics of Communicative Language Teaching and English for Specific Purposes.

1.2 Communicative Language Teaching

Communicative Language Teaching – CLT – dates back to the late 1960s when the functional and communicative potential of language was discovered. Mastery of structures was no longer part of the objectives of a teaching course; developing
communicative proficiency became the order of the day. By mid 1970s, CLT was seen as an approach that aims to make communicative competence the goal of language teaching and to develop procedures for the teaching of the four language skills that acknowledge the interdependence of language and communication (Richards & Rodgers, 1986). The approach is flexible by nature. Practitioners from different educational background can interpret it in different ways and adapt it according to their requirements.

On the whole, the bottom line is that CLT starts from a theory of language as communication. It focuses more on the functional aspects of language like receiving or sharing information, negotiation, comprehension, participation in speech acts and so on. But, it is not totally devoid of structural aspects of language. As Littlewood (1981) states, one of the most characteristic features of communicative language teaching is that it pays systematic attention to functional as well as structural aspects of language. The goal of language is to develop what Hymes (1972) referred to as communicative competence.

1.2.1 Communicative Competence

The term communicative competence is defined by different persons differently. Hymes’ theory of communicative competence was a definition of what a speaker needs to know in order to be communicatively competent in a speech community (Richards & Rodgers, 1986). Canale & Swain (1980) state that grammatical competence, sociolinguistic competence, discourse competence and strategic competence form what is known as communicative competence. Littlewood (1981) thinks of four domains of skills which make up a person’s communicative competence.
• The learner must attain as high a degree as possible of linguistic competence. That is, he/she must develop skill in manipulating the linguistic system, to the point where he/she can use it spontaneously and flexibly in order to express his/her intended message.

• The learner must distinguish between the forms which he/she has mastered as part of his/her linguistic competence, and the communicative functions that they perform. In other words, items mastered as part of a linguistic system must also be understood as part of a communicative system.

• The learner must develop skills and strategies for using language to communicate meanings as effectively as possible in concrete situations. He/she must learn to use feedback to judge his/her success, and if necessary, remedy failure by using different language.

• The learner must become aware of the social meaning of language forms. For many learners this may not entail the ability to vary their own speech to suit different social circumstances, but rather the ability to use generally acceptable forms and avoid potentially offensive ones.

To achieve this communicative competence, we need to look at language as a system of expression of meaning. The primary function of language is for interaction and communication and the structure of language reflects its uses. The primary unit of language is not its structural feature but its functional and communicative meaning (Richards & Rodgers, 1986).
1.2.2 CLT – Syllabus

Different models of syllabus have been in vogue through the evolution of CLT. Starting from the notional syllabus, from the idea that discourse should be the centre of attention, to grammatically based syllabus, to task specification and organization, CLT has sustained many practices (Richards & Rodgers, 1986). Some have also pointed out that the syllabus concept be abolished altogether in its accepted forms, arguing that only learners can be fully aware of their own needs, communicational resources and desired learning pace and path and that each learner must create a personal, and implicit, syllabus as part of learning (Richards & Rodgers, 1986).

A communicative syllabus is learner-centred aimed at language learning as independent of teachers as possible resulting in language acquisition rather than language learning. Nagaraj (2008) describes the features of communicative syllabuses as follow:

- They aim at making the learner attain communicative competence i.e. using language accurately and appropriately.
- They focus on the learner. The teacher is a facilitator managing the environment and materials which in turn help the students become autonomous learners.
- They depend on authentic materials.
- The tasks set are purposeful and meaningful. This, in turn, means that the task can be judged by the learners for its success.
- Functions of language are stressed upon rather than the rules.
- The tasks aim to make learners fluent as well as accurate in their use of the target language.
1.2.3 CLT – Role of the Learner

As CLT is more learner-centred, the role of the learner becomes paramount. He/she is an active contributor of ideas who follows a give-and-take policy. Breen & Candlin (1980) describe the role of the learner as a negotiator between the self, the learning process and the object of learning. They also suggest that learners should learn in an interdependent way - gaining and contributing. Students are expected to communicate by communicating. They should make themselves understood even though they have inadequate knowledge of the target language.

1.2.4 CLT – Role of the Teacher

The teacher is seen as a facilitator who manages classroom activities. He / she should help the learners take part in activities which promote communication. Breen and Candlin (1980) describe the three important roles the teacher has to play in the classroom. The first one is to facilitate the process of communication among all the participants in the classroom. The second role is to be an independent participant within the teaching-learning group. The third one is to be a researcher and learner, contributing in terms of appropriate knowledge and abilities.

1.2.5 CLT – Vocabulary

It is surprising that CLT which gives importance to communicative competence achieved through appropriateness of language use does not give due recognition to vocabulary. It is a well known fact that appropriate use of language consists of appropriate grammatical structures and appropriate vocabulary. As Wilkins (1974) states,
knowledge of a language demands mastery of its vocabulary as much as its grammar. The learner is expected to get as much exposure to vocabulary as possible. CLT believes that as vocabulary development is natural in L1 through contextualized language, it will be natural also in L2 through communicative exposures.

1.2.6 CLT – Testing

As teaching and testing are mutually dependent and mutually influential, a discussion of CLT will not be complete without a look at how to test the communicative competence of learners. Weir (1990) suggests that the design of a test should be interactive and direct reflecting realistic discourse processing activities. Tests and tasks should be relevant to the intended situation of the target population. Ability should be sampled within meaningful and developing contexts and the test should be based on an explicit a priori specification. While appreciating that the conditions for real life communication are not replicable in test situations, one should still try and make tests as realistic as possible in terms of that situation.

1.3 English for Specific Purposes

The end of the second world war in 1945 threw open the gates to unprecedented development in the areas of science, technology and economic activity at a global level which in turn created a demand for an international language. As English became the international language, people started learning it to meet particular expectations. But, the existing course materials at that time were mostly literary in nature and were unable to cater to the professional needs of the learners. By the early 1960s, there was a growing
dissatisfaction across the world with the then language teaching practice which trained learners in literature irrespective of their aims, needs and demands. Students’ frustration at learning the language which did not prove to be helpful in their career was increasing. Strevens (1971, cited in McDonough, 1984) pointed out the irrelevance of literary training to large numbers of learners for whom English was a tool in their professions. There was an increasing demand for a more relevant and appropriate teaching programme. This demand for appropriateness in teaching materials resulted in the analysis of scientific and technological language. A structural and lexical analysis of the scientific texts was carried out and A Course in Basic Scientific English by Ewer and Latorre was published in 1969. This was the starting point leading to the development of materials considering the learners’ communicative needs, language skills, and professional demands and so on. Attention shifted from defining the formal features of language use to discovering the ways in which language is used in real communication (Widdowson, 1978). Research into these ways led to the view that language of one particular field of study was different from that of another one which in turn led to the idea that “if language varies from one situation of use to another, it should be possible to determine the features of specific situations and then make these features the basis of the learners’ course” (Hutchinson & Waters, 1987, p.7). Slowly, the utilitarian purpose of language (Robinson, 1980) has gained significance redirecting the literature-oriented, traditional language teaching to examine the linguistic and communicative demands of other subjects. As a result, the distinction between language as a subject and language as service had to be made (McDonough, 1984). The concept of language teaching in service of other subjects is viewed by some to be restrictive in nature. But, in reality, it is not in
service of the other subjects, but is essentially in service of the learner and his/her professional and communicative needs.

1.3.1 ESP – Learner Centeredness

The main thrust in the development of ESP is focusing on the learner while designing the course materials. Once a learner’s needs are identified, they will become the objectives of the course materials. Another significant development which has greatly influenced the ESP programme is a move towards the view of language as not only a set of grammatical structures, but also a set of functions (Kennedy & Bolitho, 1984). Effective, field-specific communication has become the guiding factor for all ESP materials.

In short, ESP starts with an analysis of the purposes of the learner and the communicative needs arising from that purpose. These communicative needs which help the learner to realize his/her purpose become the objectives of the teaching-learning process. Learners’ interests and requirements are taken into consideration while designing the relevant course materials. The success of ESP has largely been dependent on the learner-centred approach it has been following. It has also been thought that the relevance of the course structure improves the learner’s motivation and his/her efficiency in learning, thereby making “learning faster and better” (Hutchinson & Waters, 1987, p.8).
1.3.2 Aspects of ESP

A number of terms for the various types of ESP are in existence. These terms basically fall into two categories – one is English for Academic Purposes (EAP) and the second one is English for Occupational Purposes (EOP). If English is taught to listen to lectures, read relevant literature, present papers, exchange views, understand the course content, participate in seminars, write exams, then it comes under EAP. If English is taught to motivate others, to get things done, to supervise, to present a case, to present a problem to a senior/junior employee, to negotiate, then it comes under EOP.

In short EAP and EOP are not entirely two different aspects of ESP; but are the two sides of the same coin. EAP helps learners who need English to gain access to knowledge whereas EOP helps those who need English to communicate the knowledge they already have. EOP generally includes English for Airline Pilots, Air Hostesses, Hotel Staff, Secretaries, and Telephone Operators and so on. The list is almost endless. EAP includes English for Legal Purposes, English for Business Purposes, English for Medical Purposes and English for Science and Technology, the last being the most prominent one among others. Under EAP we also have independent ESP and integrated ESP. If English is a separate subject on the curriculum but with a related content to other subjects, then it called integrated ESP (Kennedy & Bolitho, 1984). Integrated ESP is also called content-based instruction.

1.3.3 English for Science and Technology

English for Science and Technology (EST) has become an important aspect of all ESP programmes as much demand for ESP has come from scientists and technologists
who need to learn English for a number of purposes connected with their specialisms (Kennedy & Bolitho, 1984). In fact, it is pointed out that English for Science and Technology has set the trend in theoretical discussion, in ways of analyzing language and in the variety of actual teaching materials (Swales, 1985, cited in Hutchinson & Waters, 1987). EST encompasses a list of vocabulary items, grammatical forms and functions that are common to the study of science and technology. For example, course books in science and technology generally use simple present tense and simple future tense. Passive constructions are preferred to the active ones. Conditional clauses and modal verbs are used in the books of science and technology. Coming to the lexis, vocabulary in the course books of science and technology is generally divided into three categories.

Technical vocabulary: Highly technical terminology special to the subject in question forms this section. Examples are diode, semi-conductor etc.

Sub-technical vocabulary: Words which take special meanings in certain scientific and technical fields come in this category. Examples are current, control etc.

General vocabulary: Regular vocabulary necessary for explaining things comes under this area. Examples are differentiate, integrate etc. These words appear across scientific disciplines though they are also part of general and academic vocabulary.

1.3.4 Content-based Instruction

Content-based instruction aims at facilitating language learning coupled with learning the subject matter which is of interest and value to the learner. Krashen (1985) calls this type of instruction sheltered language teaching which provides a bridge between language class and academic mainstream. The sheltered class is a subject matter class
made comprehensible to the second language learner. Sheltered classes need not be taught by professional language teachers. Subject-matter teachers who are familiar with the process of language acquisition, who are tolerant of student output errors, and who are sensitive to the learners’ comprehending abilities are very much appropriate for teaching a sheltered language class (Krashen, 1985). “Content-based second language instruction is based on the assumption that language can be effectively taught through the medium of subject matter” (Gaffield-Vile, 1996, p.114). Integration of subject-matter content and second language learning, generally responds positively to the needs and interests of the second language learners. “There is also evidence that content-based approaches promote L2 proficiency and facilitate skill learning in ways that are relevant and important to the academic and professional goals of the L2 learners” (Pica, 2002, p.3). Content-based approach is more captivating than independent courses because learners learn to use language by using it in real contexts. At the end of the course, learners may experience a sense of accomplishment for learning two things simultaneously – language and subject-matter content.

1.3.5 Limitations of ESP

Even though ESP and its important constituent branch EST have gained considerable ground in the sphere of English Language Teaching, they have some limitations which exist with respect to the scope of EST and the ESP teacher.

EST refers to English for Science and Technology. But, it is too broad a term to be of any help in designing course materials which should cater to the needs of the learners. Because, an aerospace engineer’s communicative needs are very different from
those of a chemical engineer or a nuclear scientist or a micro-biologist. To meet the demands of these individual learners with one common ground – EST – is not in any way helpful to the learner. If one is to go by the ideology of ESP in a rigorous fashion, specific courses and teaching / learning materials should be developed for each branch of science and technology. And one can never predict the number of ways a scientist or an engineer needs to use language in his/her profession to realize his/her purposes. One may have to present a paper, read journals, write a paper, exchange views informally, participate in group discussions, and take part in video-conferences and so on. The teacher has to deal with all these skills with respect to a particular field of study. And this brings us to the premises of the ESP teacher. The ESP teacher is expected to have considerable knowledge in the subject in question and in the rubrics of English Language Teaching. The latter may not be a problem; but, the former, to have sound knowledge in a field of science and technology is often beyond the abilities of a language teacher unless he/she is specifically trained to be an ESP teacher. Or, an ESP class should be dealt with collaboratively by a language teacher and a subject teacher.

At this juncture, one needs to remember that ESP is not a separate discipline per se, but only a part of the ELT which has moved towards a more communicative basis for teaching and learning. So, concentration on improving the communicative abilities of the learners to cope with any given situation or with respect to particular functions of language seems to be a desired and achievable goal.
1.4 The Importance of Vocabulary

“Vocabulary knowledge constitutes an essential part of competence in a second or foreign language” (Boggards, 2001, p. 321). Even in one’s L1, vocabulary knowledge almost always lead to effective communication. Often, one’s language ability is associated with his/her mastery of vocabulary. “Vocabulary is widely acknowledged as one of the key components necessary for second language proficiency” (Schmitt, 1999, p. 189). So, to speak fluently, to listen attentively with understanding, to write clearly, logically and effortlessly, to read and comprehend, to chat freely, to be a part of a team, an individual needs to have a good amount of vocabulary.

There has been considerable amount of research done with respect to the importance of vocabulary knowledge for second language learners in reading (Haynes & Baker, 1993), listening (R. Ellis, 1994), speaking (Joe, 1998), and writing (Laufer & Nation, 1995).

Schmitt (2000) observes that second language learners need to know 2,000 words to maintain conversation, 3,000 word families to read authentic texts and 10,000 words to understand challenging academic texts.

1.4.1 Vocabulary in Reading

No text comprehension is possible, either in one’s native language or in a foreign language without understanding the text’s vocabulary (Laufer, 1997a). This does not mean that the other factors like the main idea of the text, relevant background knowledge, application of general reading strategies do not play a role. They do, but not as significantly as the role played by vocabulary. Generally, an improvement in reading
comprehension is attributed to the improvement in lexical knowledge because understanding a text’s content is dependent upon the reader’s ability to understand, grasp, guess the meanings of the words used. If a word is not known, then what that word suggests or means is also not known which in turn results in confusion and inability at comprehending the whole text. Haynes & Baker (1993) came to the conclusion that the most significant problem for the second language learners is insufficient vocabulary in English. It does not mean that every word in the text should be known to the reader. But, 98% of the words used should be known for effective and trouble-free comprehension. As lexical problems obstruct successful comprehension, increasing one’s vocabulary knowledge is almost inevitable.

1.4.2 Vocabulary in Listening

Of all the four language skills – listening, reading, speaking and writing – listening is the most difficult and demanding task especially when one is listening for meaning. It is difficult and demanding because the listener cannot control the speed of the information input. If one is reading a text, one can always go back to the previous page or section for better understanding. This is not possible in listening. While reading, one can look up a difficult word in a dictionary which is not possible in listening. One can read a text at his/her own pace. But, one has to listen and comprehend the information at the pace of the speaker. So, listening comprehension is not easy, and successful comprehension presupposes attention from the listener, sufficient background knowledge coupled with good vocabulary knowledge, especially knowledge of confuses words like judicial-judicious, ingenuous-ingenious, official-officious and so on. There are a number
of minimal pairs in English like *affect-effect, construct-constrict, prescribe-proscribe* etc. Lack of knowledge of these words results in confusion. Generally, listening does not allow time for guessing. In many instances, either one understands a word or one does not. Hence, a large amount of vocabulary is indispensable for successful listening comprehension.

1.4.3 Vocabulary in Speaking

Spoken language has become more important in language teaching with emphasis on language for communication (McCarthy & Carter, 1997). Speaking requires lexical competence. Speaking is always geared towards the listener. If the listener is not able to grasp the meaning of what is spoken, the whole communicative event becomes invalid. So, the speaker must have an appropriate estimation of the target listener’s size of vocabulary and then should be able to modify his/her utterance. So, a speaker should have both breadth and depth of vocabulary. If the speaker understands that the listener is finding it difficult to understand the message, then, he/she should be able to communicate the message using a different set of words. The speaker should also have a rich store of defining or supporting vocabulary to help the listener understand the message. The speaker should also have correct pronunciation of the words to avoid any kind of misinterpretation. Above all, the speaker should know the use of discourse binders such as *even though, on the contrary, in fact* etc. which help the listener prepare for the content of the next idea. The speaker should also use gap fillers like *er, mm, erm* etc. to maintain discourse connectivity. These may not be words in the term’s fullest meaning; but, they are in the top 20 of the frequency of occurrence (McCarthy & Carter, 1997).
1.4.4 Vocabulary in Writing

Spoken and written utterances are considered the productive use of vocabulary. While speaking, the speaker can take the help of gestures, body language, and intonation for clarity in communication. Writing does not have this advantage. Feedback is almost instantaneous in spoken communication and is almost unavailable for written communication excluding class progress tests and leave letters. So, the writer needs to be very careful in presenting the material in a clear and logical manner which is achieved through appropriate use of vocabulary and suitable grammatical structures. Use of formal vocabulary is important in writing. Words like *chap*, *guy* etc. should be avoided totally. Errors in written communication are taken rather seriously because it has a particular advantage. One can always read what has been written and make corrections if necessary. Excluding exam papers and leave letters, most of the time, the target readers are not known to the writer. So, the writer should carefully select the words he/she is going to use. Excluding serious academic writing, it is always advisable to use those words which are understood by a large number of people.

1.4.5 The Need for Vocabulary Growth

“Lexical knowledge is central to communicative competence and to the acquisition of a second language” (Richards, 2000, p. xi). Even without taking much help from grammar, vocabulary alone can enable an individual to communicate his/her message. As the world is revolving around effective communication skills, one needs to improve his/her size and depth of vocabulary i.e. one should know as many words as
possible and one should know different aspects like meanings, synonyms etc. of the words known. To achieve sufficient mastery over the required amount of vocabulary, one needs to engage oneself in constant development of the number of words and aspects of word knowledge. Though one’s vocabulary knowledge is increased without any deliberate effort, those who want to aim for higher education and/or professional advancement need to develop their vocabulary volitionally.

Appropriate use of vocabulary is an important component of effective communication. As Swift states one has to use proper words in proper places. Inappropriate use of words mars the communicative event. When it comes to discourse, the selection of words is decided by the context or situation. Widdowson (1993) gives an example. If a wife asks her husband, *Have you put out the small domesticated furry feline animal?*, definitely the utterance is contextually out of place. Similarly, “Pass the sodium chloride, please” is a valid utterance in a chemistry laboratory but totally out of place at the dining table unless it is used deliberately to elicit laughter. Use of collocations also comes under the realm – appropriacy. For example, the phrase *strong coffee* is a valid collocation, but not *weak coffee*. Similarly, *heartfelt* is mostly used with *thanks* and *condolences*, not *congratulations*.

So, as vocabulary is central to one’s communicative competence, sustains rudimentary communication, makes a communicative even effective, helps one in successful reading and listening comprehension, enables one to write lucidly, second language learners need to focus on their vocabulary growth.
1.5 Purpose of the Study

The purpose of the study was to measure the incidental and intentional learning capacities of engineering students before and after a course. This knowledge will help the teachers, syllabus designers and paper-setters in getting a better understanding of the amount and nature of vocabulary students need. So that, syllabus designers will include those aspects of vocabulary which are needed by students; teachers will change or modify their techniques of teaching vocabulary; paper setters will include the necessary vocabulary items while developing question papers. At the end, students will be able to improve their existing levels of receptive and productive vocabulary.

Engineering students study English in their first year alone. After that, they encounter English only as a medium of instruction. If the students are able to acquire vocabulary knowledge incidentally, there will not be any problem. If they are not able to do so, explicit vocabulary instruction should be provided to learners throughout their course of study. The pre-test gives an understanding of the vocabulary level of the students before the course begins and the post-test shows us the effect of instruction and the ability of the students to acquire words through incidental exposure.

Knowledge of students’ level of vocabulary helps the teacher in paying systematic attention to the aspect of lexical development of students. The teacher may devise regular exercises and conduct regular exams on vocabulary, so that learners will have attained a considerable mastery of the words they need to know.
It is obvious that a top-down syllabus is almost always dealt with in the classroom keeping in mind the requirements of the question paper. If vocabulary is not given importance in the examinations, students and teachers will not be willing to spend time on it as it is not going to be assessed. Students’ lexical knowledge will help the paper-setter in including relevant aspects of word knowledge in the question paper.

A brief description of the first year English syllabus, textbooks, testing pattern etc will help us understand the need to measure the effect of explicit vocabulary instruction and the importunities for, if any, incidental vocabulary acquisition.

Though all the second language learners need to improve their communicative abilities, students of engineering need it more than others because as future engineers, they have to work at different places in different countries, have to interact with several people coming from diverse language backgrounds. So, in order to help the students become effective communicators, the syllabus is designed more or less as per the principles of Communicative Language Teaching.

1.5.1 The Syllabus

CLT syllabus (1.3.2) generally aims at helping the learner attain communicative competence drawing on materials that emphasize the functions of language rather than the rules.
Accordingly, the syllabus for the prescribed English course work (Appendix A) also aims at improving the linguistic and communicative competence of the students with special emphasis on LSRW skills.

As one can see from one of the tasks included in the textbooks, it is understood that functions of language are, indeed, given prominence. One of the tasks contains a list of expressions used in both formal and informal situations to make requests and to respond to the latter. For example:

- Excuse me, could you help me, please.
- I am sorry to trouble you; but I need your help.
- Certainly, I shall be glad to help.
- Of course, by all means.
- Thanks a lot.
- You are welcome.

After listening to the expressions, students are asked to write and enact any one of the given situations. One such situation is given here.

Mr. Joseph has just arrived in Guntur and asks a traffic policeman for directions to a hotel where his office has made arrangements for his study.

1.5.2 Role of the Learner

CLT (1.3.4) looks at the learner as an active participant who looks forward to learn in an interdependent way by contributing to the development of others and gaining from what others have to offer. The tasks in the textbook are set to make the learner cooperate and collaborate with the other students.

Write well-constructed paragraphs on any two of the following topics. Use examples, arguments or explanations to amplify the statements. Discuss the topic with a partner before you start writing.
1.5.3 The Teacher

CLT asks the learner (1.3.5) asks the teacher to be a facilitator of learning offering advice as and when necessary. In the same way, the syllabus prescribed for the English course work, does not rely on any traditional methods of teaching such as lecture method.

1.5.4 Vocabulary

CLT (1.3.6) does not advocate paying any explicit attention to the teaching of vocabulary on the grounds that vocabulary is best learnt through contextualized language use. In this respect, the English syllabus prescribed for the first year engineering students deviates a little from the ideology of CLT. One unit of the syllabus is given for explicit discussion of vocabulary items such as one-word substitutes, phrasal verbs, idioms, words easily confused etc. Some tasks in the textbook also call for explicit discussion. Instructions given for the tasks make the point clear.

- Give the noun forms of the following with -ion, -ism, -ity etc.
- Add prefixes to convert the following words to their opposites.
- Give one-word substitutes for each group of the words below.
- Mark the right meanings or synonyms of the words in the sets given below.
- Match the words in column A with the meanings in column B
- Give abstract nouns corresponding to the following verbs.
1.5.5 Testing

CLT suggests that a test (1.3.7) should be as realistic as possible reflecting realistic discourse processing activities. But, the test design of the English course work does not confirm to the practices of CLT. It, in fact, goes totally out of the realm of CLT testing patterns. In doing so it also goes against the objectives of the syllabus itself.

JNTU makes use of both continuous assessment programme and end-examination pattern. Of the 100 marks, 20 marks are for continuous assessment and 80 marks are given for end-examination. Through out the year, three online exams and three off-line exams are conducted. On-line exams are conducted by the JNTU itself. The questions in these exams are objective in nature. Off-line exams are conducted by the respective colleges and the teachers concerned set the papers. Questions in these papers are mostly descriptive in nature. There is no scope for assessing the vocabulary knowledge of the students in the off-line exams. Online exams have twenty (20) questions and are conducted for twenty (20) minutes. The minute a student presses the submit button, his/her score is displayed on the monitor. On-line question-paper sometimes has one or two items on vocabulary assessment.

The year-end exam is conducted for eighty (80) marks. To reduce copying and to make the students go through the text more thoroughly, JNTU prepares four sets of test papers (Appendix B). Eight (8) questions are given to the students and any five are to be answered. One of these eight questions deals with items on vocabulary, grammar etc. One can see from the Appendix that the test design is not in accordance with the CLT
testing patterns. The questions do not replicate any realistic use of the target language.

Look at some of the questions.

- Describe Datta and his modern framework.
- Kalpana dreamed of reaching the stars. Did her dream come true?

Learning answers to these questions cannot have any possible use to the learners. Also, looking at these answers cannot give the teacher any idea of the linguistic or communicative information a student may have possessed. Vocabulary assessment part is also not well-constructed. The eighth question in Set No. 1 from May/June, 2006 question paper is repeated in Set No. 2 and 3 of the same year. Worse, the same question is repeated in Set Nos 1 and 4 of the year 2007. Eighth question in Set no. 4 of 2006 is repeated in Set No. 3 of 2007.

The negligence shown in setting a question paper to students studying in more than 200 colleges does not give any serious reason for the students to pay enough attention to the English course work. And the communicative tasks which are expected to increase the communicative competence of the students become almost meaningless. Learning these does not help the students get good marks in the examination. As a result, the whole teaching/learning situation which is supposed to be an interactive one becomes dull and vapid and lacks the spirit of the communicative approach.
1.6 Conclusion

Generally, in all private educational institutions, teachers are held responsible if students do not get good marks. Hence, the teacher’s focus is shifted from helping the learners develop their language skills to preparing the students to write the exams well. As the test-tasks do not reflect what should be taught, teaching tasks aim at what is tested and how it is tested. As a result, teachers of English working in engineering colleges do not focus on the objectives set by the syllabus nor do they follow the instructions given in the textbooks. Their ultimate goal is to explain every paragraph in the classroom; so that students will not lose marks in the examinations.

Even though a good number of vocabulary items are not included in the test papers, teachers give meanings or synonyms of the difficult words as part of their mission to help learners get through the exams successfully and more importantly to safeguard themselves from the accusing looks of the management who constantly supervise the coverage of the syllabus and take regular feedback from the students on what is explained in the classroom and how it is explained. So, one can safely conclude that explicit vocabulary instruction is done in the English classroom.

But, for the students of engineering under the purview of JNTU English is prescribed as a course of study only in the first year. After that, even though English is the medium of instruction students do not receive any explicit instruction. As they have to go through their subject textbooks regularly, there are plenty of chances for incidental vocabulary acquisition to occur. If the students are capable of incidental vocabulary acquisition, there will not be any problem. If they are not, then explicit focus should be
given to vocabulary acquisition activities which help students to acquire vocabulary incidentally.

So, the research aimed at assessing the effects of incidental and intentional vocabulary learning on the first year students of engineering. If vocabulary is learnt through interaction in and with the language, it is called incidental learning. If vocabulary is learnt deliberately it is called intentional vocabulary learning. This can be done in a de-contextualized manner as in providing dictionary meanings to the words in a list or in a contextualized fashion as in reading comprehension. A detailed discussion of these terms is provided in section. The present research aimed at measuring the lexical growth of engineering students under the influence of different variables such as medium of instruction, reading habits of the learners, learners’ assessment of their own interests towards the different aspects of the language, help rendered by the English textbook, factors such as effect of word class and length of the word on the word’s learnability etc. If the students do not have a rich store of vocabulary they go on clutching their lexical teddy bears (Hasselgren, 1994). Lexical teddy bears are the words which form part of the very basic vocabulary. For example, many second language learners use good in place of the underlined words in the following utterances.

- It is a comfortable journey.
- The teacher is very understanding.
- This is an interesting book.
- It is a pleasant evening.
- He is a generous person.

As long as the learners are in the safety zone of their basic vocabulary, they cannot communicate freely. Fluent and confident communication is the requirement of the day.
It has been discussed how knowledge of vocabulary becomes almost indispensable in making use of LSRW skills. All second language learners, especially students of engineering, need to discover that their lack of vocabulary knowledge impedes their ability to comprehend or express themselves clearly in English (Folse, 2006).

Since vocabulary is the focus of this dissertation, the next chapter deals with the different aspects of word knowledge, importance given to vocabulary development by various teaching approaches and methods, work done in vocabulary development, advantages of vocabulary instruction and vocabulary acquisition.