CHAPTER I

Background of the Study

English Language Teaching in the Polytechnics

English is an associate official language in India. It is the language of the Parliament and the Law Courts. English is the medium of instruction in most of the universities and institutes of higher education. English has been taught in Assam as a core or compulsory school subject since 1858. The ELT scenario of the State has undergone drastic changes especially after the independence. However, changes have been noticed more in syllabus design and materials production than in actual classroom practices. The impact of the communicative approach to language teaching has also been felt in the syllabuses now in force in the schools of the State.

The English language teaching scenario in the Polytechnics in Assam is no different from other traditional institutions of the state. There are nine Polytechnics in the State, namely:

- Silchar Polytechnic, Silchar
- Nowgong Polytechnic, Nagaon
- H.R.H. the Prince of Wales Institute, Jorhat
- Assam Engineering Institute, Guwahati
- Girls’ Polytechnic, Guwahati
- Bongaigaon Polytechnic, Bongaigaon
- Golaghat Residential Girls’ Polytechnic, Golaghat
- Dibrugarh Polytechnic, Dibrugarh
- Assam Textile Institute, Guwahati.

All these Polytechnics come under the purview of the Directorate of Technical Education, Govt. of Assam. These institutions follow a common curriculum in all the branches of studies including humanities and social sciences.
In these Polytechnics, English is the only medium of instruction. All examinations including the sessional and class tests are conducted in English. Practical, project works, laboratory works and viva voce – all are well managed and maintained through the medium of English. The libraries in these institutions have books on various branches of studies written in English. Thus it has been observed that the English language in these institutions has been given much importance.

In these Polytechnics, English is taught as a core Course in the first two Semesters. The title of the compulsory English course in the Polytechnics of Assam is *Communication in English* - I & II for Semesters I & II respectively, carrying 100 marks in each Semester, the total contact hours being 45 in each Semester. The following table illustrates the distribution of marks and duration of contact hours of the existing syllabus:

<table>
<thead>
<tr>
<th>Table 1: Distribution of marks and duration of contact hours</th>
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</thead>
<tbody>
<tr>
<td><strong>SEMESTER—I</strong></td>
</tr>
<tr>
<td><strong>A. Total marks—100</strong></td>
</tr>
<tr>
<td>i Theory (End Term Exam.)—70</td>
</tr>
<tr>
<td>ii Internal Assessment - 30</td>
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<tr>
<td><strong>B. Total Contact Hours—45</strong></td>
</tr>
<tr>
<td>i Theory—30</td>
</tr>
<tr>
<td>ii Tutorial— 15</td>
</tr>
<tr>
<td><strong>C. Credit—3</strong></td>
</tr>
<tr>
<td><strong>D. Contents—</strong></td>
</tr>
<tr>
<td>i Grammar—10 hrs.</td>
</tr>
<tr>
<td>ii Reading— 10 hrs.</td>
</tr>
<tr>
<td>iii Listening—15 hrs.</td>
</tr>
<tr>
<td>iv Speaking— 10 hrs.</td>
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</table>
In Semester II one of the components of the compulsory English Course is “Writing” which has the following tasks:

To structure and integrate information into cohesive and coherent paragraphs and texts for target audience while

- Writing General--- Specific paragraphs
- Writing process—Descriptive paragraphs
- Writing problem—Solution paragraphs
- Writing data—Comment paragraphs
- Writing technical reports (short)
- Writing letters--- asking for quotations, placing orders of complaints, of adjustments
- Writing job applications—Covering letters and Curriculum Vitae

**Needs for and Objectives of English Language Teaching**

As communication at the national and international levels through the medium of English has increased in the aftermath of globalization, the demand for communicative competence in English for technical students has also increased in the country. Keeping in view the opportunities for higher studies especially in the field of science and technology and the requirements of the chosen professions of the students after the completion of the three-year diploma programmes, the importance of developing students’ ability to communicate through English cannot be overemphasized. A diploma holder from any of the Polytechnics has to communicate with his/her peers, seniors and juniors. Technical report writing forms an important activity of the diploma students. Emphasizing the importance of communication skills for engineers Riemer (2002) has said:

Communication skills are essential for an engineer who aspires to carry out his/her professional practice in the global arena. Engineering communication skills basically constitute several core
elements such as the fluency in the English language and the fundamentals of visual communication (p.91).

The professional profile of a modern qualified engineer should include well-developed communication skills and high English language proficiency to help him achieve success in the highly competitive and modern global work arena. In the process of educating future engineers special emphasis on English for Science and Technology (EST) becomes necessary. Students of Engineering and Technology are the main stakeholders of EST. Huckin and Olson (1983) referred to the survey conducted by the American Society for Engineering Education to determine which academic subjects were needed for engineering careers in industry. The findings of the survey revealed that communication skills were given top priority.

National Knowledge Commission, Govt. of India (2008) also observed that in the current scenario, an understanding of and a command over the English language have emerged as important determinants of access to education, employment possibilities and social opportunities. NCERT (2006) in the position paper of the National Focus Group on the Teaching of English has suggested 'a comprehensible, input-rich curriculum that lays the foundation for spontaneous language growth with the understanding of spoken and written language as precursors to language production (speech and writing)' (p.5).

Researchers such as Elley and Manghubai, 1983; Krashen, 1985; Prabhu, 1987, etc. have stressed on the meaning, not on the form for learning a language. The result of this shift of focus from form to meaning was the emergence of innovative methods/approaches: Bangalore Project or Communicational Teaching Project (Prabhu, 1987), the Communicative Approach (Widdowson, 1978) and the Natural Approach (Krashen and Terrell, 1983). In the area of literacy acquisition, researchers such as Adams, 1990 and Stanovich, 2000 have focused on both skills and meaning.
The title of the compulsory English course for the Polytechnics in Assam suggests that the designers want to develop the abilities of the learners to communicate in the target language to meet the challenges in the real life situation. In the professional life, students have to encounter many such situations where their communicative ability can help them in reaching the goals. Seen from this perspective, the prescribed compulsory English course in the Polytechnics does not appear to develop in the students the required communicative skills, especially the skill of writing.

**Problems of ELT in the Polytechnics**

Traditionally, the engineering curriculum focuses on the instrumental competence, that is, the competence in the students’ chosen branches of specialization. Engineering students are taught the basic disciplines and they learn to apply their knowledge in their chosen field of engineering. Schools for management and policy train their students in all kinds of knowledge and capabilities implied in the strategic competence. Most students in engineering disciplines have access to lessons in strategic behaviour too. In addition, some elements of the communicative competence are part of their training.

The diploma-engineering students use English in different settings and for different purposes. The aim of the compulsory English course is to impart to the students the skills that they need in their academic, and later in their professional life while performing the duties in their professional career. But the conventional course materials and the methodology of teaching (classroom lecture) are not conducive to the development of study skills and communicative competence.

Research has revealed that engineering professionals face several challenges in the job market in this age globalization and liberalization. The main reasons behind this lacuna are as follows:

a) Lack of proficiency in English language.

b) Casual attitude towards oral and written skills.

c) Low level of confidence and exposure
d) Less emphasis on reading skills.

e) Scarcity of skillful trainers.

The contents and methodology adopted by teachers of the Polytechnics do not appear to fulfill the requirements of the learners’ communicative competence in this age of globalization and science and technology. Students are more concerned with doing well in their technical subjects and give less importance to English because they have just to secure pass marks in the subject. Hence it is necessary to motivate and induce the learners to develop their writing skills because such skills can not be neglected in view of their future academic and professional needs. The use of appropriate technology can be effectively used for developing students’ language skills in order to enable them to communicate by using a variety of media and formats. Computer-assisted language learning (CALL) can play an important role in this. CALL and language-learning are valuable intellectual pursuits in themselves. Besides, administrators value CALL for enhancing and extending learning at times of economic restrictions and reorganizations.

**Importance of Using Computer in Teaching Language**

Information Technology in language teaching and learning has been acknowledged as one of the driving forces in shaping the new generation of young learners for real life situations, for example, in academic or corporate life, and in intercultural interaction or cross-border trade and commerce. Researchers and practitioners now realize the important role that computers play in learning and teaching English as a second or foreign language and look for effective ways to integrate them into various types of English language courses.

Many researchers have discussed the reasons for using information technology (IT) in the teaching profession. Smith and Baber (2005) have underlined a number of reasons for using information technology to empower a teacher and improve his/her teaching (p.11):
a. IT facilitates access to up-to-date teaching-learning materials on any topic.
b. It can help the teacher to utilize classroom time more meaningfully as he/she can produce reusable learning and practice.
c. Incorporation of IT helps students to study at their own pace.
d. As IT can be intrinsically motivating, students may learn faster and can enjoy learning.

The Directorate General of Education and Culture (n.d.) in the report *The Impact of Information and Communications Technologies on the Teaching of Foreign Languages and on the Role of Teachers of Foreign Languages* has summarized the reasons for using technology in foreign language teaching as follows. Technology facilitates:

- exposure to ‘authentic’ language
- access to wider sources of information and varieties of language
- opportunities to communicate with the outside world
- a learner-centred approach
- development of learner autonomy

The use of information technology in teaching does not at all mean the replacement of traditional teaching rather it can play a complementary role in fulfilling the requirements of the traditional teaching. de Szendeffy (2005) has said that teachers can not be replaced by computers, rather “...teachers actually take on more responsibilities in a CALL environment than in a teacher-centered, lecture-based class” (p.7).

Today computers are used in teaching all other subjects and no field is kept outside the scope of using computer in teaching. As Kenning & Kenning (1983) have observed, “Computer, like any other electrical or mechanical gadget. such as trench-digging machines or public-address systems, provides a means of amplifying, or extending the effectiveness of, our natural talents and capabilities” (p.1).

Teachers should pay serious and considered attention to the use of computer technology in their teaching profession. As Subbiah (2008) has said:
“Engineering teachers have enormous responsibilities in producing competent and readily employable graduates with good communication skills, who would experience a smooth transition from the college environment to corporate life” (p.17). Computers can be used as an important aid, not as a substitute to teachers. “It is not a self-sufficient means of language teaching, but rather a valuable aid which should take its place alongside other already established devices for helping the language learner” (Ahmad, Corbett, Rogers, & Sussex, 1985, p.10).

There is a great vision of the future of English language teaching as a result of the rapid development of the technology. Chapelle (2003) has discussed three perspectives on technology and its implication for ELT in the following manner:

Table 2: Perspectives on technology and its implications for ELT

<table>
<thead>
<tr>
<th>Vision of the …</th>
<th>Focus on…</th>
<th>Perspective…</th>
<th>Implications for ELT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technologist</td>
<td>Technological potentials</td>
<td>Rapid advances in technology suggest pervasive access to and use of technology in a very different high-tech life style.</td>
<td>Teachers and researchers should be educated about possibilities of improve or change their work.</td>
</tr>
<tr>
<td>Social pragmatist</td>
<td>Human practices in technology use</td>
<td>Imperfect technologies and normal human working practices act as constraints affecting technology use.</td>
<td>Teachers and researchers should carefully analyze their real options in view of the experience of others and their own context and experience.</td>
</tr>
</tbody>
</table>
It is essential to examine the ways in which technology helps English language learners, their teachers, and teacher education.

**Review of Literature**

In the late 1960s ELT experts and practitioners highlighted the limitations of the Grammar Translation and the Audio-lingual approaches to language learning and teaching. The methods and materials developed by following these approaches have failed to meet the needs of the learners in developing their communicative ability in real-life situations. The communicative approach was a revolt against the structuralist approach to language description as well as the behaviourist theory of language learning which had characterized teaching methods like Audiolingualism (in America) and the situational language teaching (in Britain).

In the 1970s and 1980s, communicative language teaching, henceforth, CLT, approach highlighted learners’ ‘communicative competence’ (Hymes, 1972). The term ‘communicative competence’ was first used by Hymes in deliberate contrast to Chomsky’s linguistic competence which was felt to be limited in its concern since it ignored the use of language in social contexts. Hymes’ ‘communicative competence’ involves:

a. Whether (and to what degree) something is formally possible.
b. Whether (and to what degree) something is feasible in virtue of the means of implementation available.

c. Whether (and to what degree) something is appropriate (adequate, happy, successful) in relation to a context in which it is used and evaluated.

d. Whether (and to what degree) something is, in fact done, actually performed and what its doing entails.

Communicative competence can be defined as the learners’ ability to efficiently express what they mean or intend to mean in the target language and successfully achieve communication in real-life situations. The history of language teaching reveals that communication has always been the goal of language courses, though orientations and methodology have changed over the years. The communicative approach developed its framework (syllabus) from within the notional-functional syllabus. Thus CLT emerged as a reaction to the limitations of the grammar-translation and audio-lingual approaches. CLT approach has ‘emphasized the communicative activities that involve the real use of language in daily life situation’ (Huang & Liu, 2000). Howatt (2004) has very succinctly pointed out that: “The notion at the heart of the ‘communicative movement’ in applied linguistics and language pedagogy after 1970 was the conviction that language teaching should take greater account of the way that language worked in the real world and try to be more responsive to the needs of learners in their efforts to acquire it” (p.326).

The communicative approach tries to ensure that the interactions which take place in the classroom are replications of or necessary prerequisites for a communicative operation. The focus changes from the production of isolated utterances to the fluent selection of appropriate utterances in communicative contexts. The learner is concerned with ‘using’ language rather than with its ‘usage’. As Sarma (2009) has said:

[CLT] it helps learners develop skills and strategies for using the repertoire
at their command to communicate in interpersonal situations and broader social contexts (p.455).

In order to do this, the learner takes on roles and interacts with other learners who also take up roles.

Communicative Language Teaching (CLT) approach has been developed theoretically and practically by many researchers (Brumfit & Johnson, 1979; Hymes, 1972; Nunan, 1989; Yalden, 1983; etc.). Littlewood (1981) has pointed out, “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, combining these into a more fully communicative view” (p.1). In this approach, the main aim is to develop the learners’ ability to take part in the process of communicating through language. Thus, it has been observed that CLT is usually characterized as a broad approach to teaching, rather than as a teaching method with a clearly defined set of classroom practices. As such, it is most often defined as a list of general principles or features. One of the most recognized of these lists is David Nunan’s (1991) five features of CLT:

i. An emphasis on learning to communicate through interaction in the target language.

ii. The introduction of authentic texts into the learning situation.

iii. The provision of opportunities for learners to focus, not only on language but also on the learning management process.

iv. An enhancement of the learner’s own personal experiences as important contributing elements to classroom learning.

v. An attempt to link classroom language learning with language activities outside the classroom.

In the classroom CLT often takes the form of pair and group work requiring negotiation and cooperation between learners, fluency-based activities that encourage learners to develop their confidence, role-plays in which students
practice and develop language functions, as well as judicious use of grammar and pronunciation focused activities.

The kind of impact CLT has had in India appears to be different from the impact it had in the West. As there was no ‘prescribed CLT methodology, communication skills classes were no different from the earlier talk-chalk based classrooms’ (Gupta, 2004, p.266). However, by the year 2000, CLT scenario in India began to change because of the impact of liberalization of the Indian economy and development of Information Technology especially the Internet and multimedia technology. The learners are now more aware than ever that the demands of the socio-economic context and of their professional career can not be met unless they acquire communication skills in English.

During this period, researchers also developed and framed modalities for using computers in teaching and learning especially in the field of language. Computer Assisted Language Learning, henceforth CALL, is an approach to language teaching and learning in which computer technology is used as an aid to presentation and reinforcement of materials to be learned. As Beatty (2003) has pointed out: “CALL essentially presents different kinds of learning opportunities from those available in a traditional classroom. There are also more opportunities for learners using the same CALL programme to study different things or study the same things in different ways” (p.145). Discussing the role of computers in teaching languages Ahmed et al (1985) have pointed out: “The computer can be used as the mainstay of a course, or for back up, revision, reinforcement, extension, or a variety of other purposes. It may communicate with the student visually by displaying text, graphics (diagrams, graphs, line drawings) or video images on a screen” (p.3). It has been observed that with the development of technology, there was a great change in English language teaching. As Chapelle (2003) notes, such international academic events as the IATEFL special conference on CALL in the 21st Century and such publications as TESOL Quarterly (Special Issue) have highlighted the changing features of ELT with its focus on technology (p.2).
EUROCALL (2010), in the Research Policy Statement 2010, has pointed out that ‘CALL is an established but rapidly evolving academic field that explores the role of information and communication technologies in language learning and teaching. It includes highly interactive and communicative support for listening, speaking, reading and writing, involving extensive use of the Internet, and a wide range of activities and initiatives in materials development, pedagogical practice, and research’.

The computer technology is distinguished from other pieces of equipment, such as tape recorders and film projectors, because of its ‘interactive capability’. The computer has the ability to interact with students and can also help them in solving their problems.

Kenning & Kenning (1983) have observed that computer ‘promotes the acquisition of knowledge, develops the learner’s critical faculties, demands active participation, and encourages vigilance’ (p.2-3).

Some prominent researchers in the field of CALL are Ahmad et al, 1985; Chapelle, 2001, 2003; Hardisty, 1988; Higgins, 1988; Kern & Warschauer, 2000; Levy, 1997; Singhal, 1997; Taylor, 1980; and Warschauer, 1996a; etc. Chapelle (2001) has emphasized the need for the technology-mediated tasks: “[…] any one concerned with second language teaching and learning in the 21st century needs to grasp the nature of the unique technology-mediated tasks learners can engage in for language acquisition and how such tasks can be used for assessment” (p.2). Ybarra (2003) has suggested that computer can be used in vocabulary learning, improving reading ability and developing the writing skills of the students. Kern & Warschauer (2000), on the other hand, have discussed a specific form of CALL, i.e. network-based language teaching (NBLT) which involves the use of computers connected to one another in either local or global networks (p.1). Singhal (1997) has pointed out the importance of the use of the Internet and E-mail which is a specific feature of the Internet: e-mail can encourage students to use computers in realistic, authentic situations in order to develop communicative and thinking skills.
The works of Bax (2003), Hardisty (1988), Warschauer (1996a), etc. have shown that CALL had to undergo many changes since its inception in the 1960s along with the development of technology especially with the advent of multimedia and Internet in the 1990s (details have been discussed in the next chapter).

Since inception, a good number of studies on Computer Assisted Language Learning (CALL) have been conducted and many published articles provide us different ways of using computer in language teaching and learning. Many researchers in different regions of the world reviewed the effects of these studies. Quanyou (2008), in his survey on CALL studies from 1994-2005, found that 74% of the studies were theoretical (discussion on theory); mere 11% of them on ‘practice’ i.e. based on real applications of computer in language class and .03% of the studies were based on software and programming. Interestingly in 12% of the studies, CALL was included as one of the keywords but not many details on CALL were given.

Bangert-Drowns (2003) wrote a meta-analysis review of 32 studies on the effects of word-processor (one form of CALL) on writing skills and found that 20 of the studies contained quantitative information on overall quality of writing. Again in 13 of these 20 studies, the students who wrote with word processors produced higher quality compositions, but in 7 studies, the students who wrote with paper and pencil produced the better compositions. The report of SRI International prepared by James A. Kulik (2003) Computer Use Helps Students to Develop Better Writing Skills, has found that the use of computer tools for writing and reference helps students to develop better writing skills. The report has also found that effects of computer use are positive in each area (effects of word processor use, computer writing prompts, and computer enrichment programmes), but it also cautions that the improvements due to computer use, although statistically significant in most studies, are nonetheless small in many cases.

Research works have shown that computer has a positive effect on teaching and learning language, for example, Hegelheimer. et al. 1996; Sullivan & Pratte.
Hegelheimer, *et al* (1996) has reported that the computer was an effective tool for teaching language skills like writing. Cunningham (2000) had undertaken a study to assess students' attitudes towards the word processing experience in the EFL writing class. The findings indicated the following: (a) 88% of the students believed the computer helped them to improve their writing skills; (b) 53% found it was not difficult to learn to use the computer. He also indicated in his study that students, in general, found the word processing class to be challenging and non-threatening. These students believed that word processing benefited their performance in writing. They also felt that using word processing helped concentrate their attention on certain aspects of their writing (grammar, word choice, and organization).

Wright's study (1993) evaluated the effects of computerized workbook on language learning in a German course – for vocabulary and grammar study. Computerized and standard workbooks contained similar content and exercises, but the computerized workbooks also gave instant feedback and suggestions for finding correct answers. The study showed that the average scores were higher for the CALL group on all three chapter exams used as the criterion test.

Al-Asmari (2005), in his study, has found that while EFL teachers in the colleges of technology in Saudi Arabia showed limited use of the Internet they had positive perceptions of the Internet as a tool for pedagogical purposes.

Almekhlafi (2006) has investigated the effects of computer-assisted language learning (CALL) on elementary-preparatory students' improvement in English as a foreign language and their attitude towards the use of computer programmes. The study has revealed that students who used computer programmes achieved significantly higher scores than students who did not use these programmes. The study has also revealed that students in the CALL group had a positive attitude towards the CALL, believed the CALL helped them learn EFL, and had strong intentions to use the CALL in the future.

Shudooh (2003) conducted a study on the impact of computers on the progress in writing classes in a college of Midwestern University and found that
the application of computers gave the students a lot of flexibility to do the course work at a suitable time. The study also revealed that ‘writing with the computer was more convenient than the traditional way of pencil/pen and paper’ (p.64). In their study on the relationship between prior computer use and their performance on extended test on computer, Russell and Plati (2001) has found:

Students accustomed to writing on computers perform significantly better when open-ended tests are administered on a computer, (p.28).

Ritzenthaler (2009) conducted a study on how educational technology was implemented in the classroom in the general teaching environment. The data were gathered through online survey and it was found that technology-based tools including databases, spreadsheets, desktop publishing, and the Internet were used to complement certain instructional events focused on the analysis, synthesis, and assessment levels. The study also revealed a basic level of implementation and a minimal integration of educational technologies in the classroom.

Latio (2009) conducted a study on teachers’ use of computers and their barriers in integrating computers into classroom instruction and learning in Ohio Public High Schools. The result has shown that 77% of the participants considered themselves well prepared, and 83% were proficient in computer technology integration. The study has also revealed that although the majority of the participants had attained the necessary computer skills, teachers’ use of computers for classroom learning was low and sporadic.

Navaruttanaporn (2010) has investigated whether computer-based learning (CBL) could help students improve their English proficiency and the result showed that students participating in the CBL did not score significantly higher on the English Language Learning and Instruction System (ELLIS) Test than those who participated in the text-based learning (TBL). But at the same time, Navaruttanaporn also found that majority of the students preferred using computer programmes as learning tools in language classroom because it encouraged and motivated them to learn English.
Justification of the Study

The review of relevant literature in the previous section shows that though a number of works on CALL were undertaken in the Western and European countries, not much research on this area has been conducted in India. In India, a number of studies have been conducted on CLT and also on the theoretical aspects of CALL in the Indian context. However, studies combining the two fields- CLT and CALL- are not common. There has been no research on CALL in the North-Eastern Region of the country so far.

The government of Assam started a computer literacy scheme namely, Rajiv Gandhi Computer Literacy Programme at the secondary level in 2004. The nine Polytechnics of the State which are the subject of the present study received extra financial grant both from the Central and the State Governments to set up state-of-the-art computer laboratories. It has been observed that over the last decade, the availability of and the access to computers in educational institutions, especially in the technical institutions, has increased rapidly. The researcher thought that this was the time to introduce to the students the benefits of CALL which is not much used in the educational contexts in Assam.

The findings obtained from this study would show whether the use of CALL improves students’ English language proficiency especially their writing skills. In addition, this study would provide information about students’ attitude towards English in the curriculum of the Polytechnics and also towards the use of CALL. Such information might help the language teachers to initiate certain changes in their roles as teachers of English in technical institutions.

Objectives of the Study

The objectives of the study are to:

a. analyze the attitude of the teachers and the learners of English in the Polytechnics of Assam towards the application of computer in
teaching and learning English especially in developing writing skills in English.

b. explore the possibilities of integrating CALL into the syllabus especially for developing writing skills both in and outside the classroom;

c. to work out a model and suggest an alternative or modified syllabus for using CALL in developing writing skills among the students of the Polytechnics in Assam in order to make them use the skills in real-life situations;

d. to conduct an experiment among two groups of students to see the efficacy of the modified syllabus.

**Null Hypothesis**

The null hypothesis of the proposed study is:
The use of CALL has no effect on the teaching and learning of English, especially for developing writing skills of the students of the Polytechnics of Assam.

This null hypothesis will be supported or will not be supported on the basis of the findings of the experiment.

**Research Design**

While undertaking the research, the researcher adopted the following methodology:

(a) Survey: The researcher conducted a survey among the students and teachers of the Polytechnics of Assam with the help of questionnaires and interviews to understand:

i. Students’ attitude towards CALL

ii. Students’ and teachers’ attitudes towards the application of CALL in teaching English especially for developing English communication skills (written).
iii. Students’ and teachers’ attitudes to the contents of the existing syllabus and their perception about the needs for modification.

(b) Experiments: Experiments were conducted with the modified syllabus among selected students of Nowgong Polytechnic, Nagaon and Girls’ Polytechnic, Guwahati on the use of CALL as an additional tool in the traditional scheme of teaching English, especially in the teaching of writing skills in the Polytechnics of Assam. Students were given practice in the use of CALL while trying to improve their writing skills.