RESEARCH ARTICLE

ANALYSIS OF THE USE OF CALL APPLICATIONS FOR TEACHING ACADEMIC VOCABULARY BY THE ESL TEACHERS IN THE TECHNICAL INSTITUTES IN INDIA

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ABSTRACT

This paper analyses the use of Computer Assisted Language Learning (CALL) applications (software & web-based) by the Indian ESL (English as a Second Language) teachers for teaching academic English vocabulary. The study evaluates the level of awareness about the availability and use of CALL applications among the teachers teaching ESL in the technical institutes in India. It also explores the teachers attitudes towards using such applications for their day to day teaching. The study was carried out using the survey method. Fifteen teachers were interviewed to study their teaching practices of ESL, general and academic English vocabulary, and use of CALL applications for the same. The analysis of the survey has been statistically presented in detail. The paper brings to the fore significant issues such as the level of awareness, extent of use of the CALL applications, attitudes towards using CALL applications for teaching ESL and, general and academic vocabulary. Thus, the study attempts to analyse many essential issues related to the use of CALL applications by the Indian ESL teachers and makes recommendations to ensure the effective use of web-based applications for teaching academic English vocabulary.

Keywords: CALL applications, web-based applications, academic vocabulary teaching, ESL, survey.

INTRODUCTION

As Nation (2001) remarks 'Deliberately teaching vocabulary is one of the least efficient ways of developing learners' vocabulary knowledge but nonetheless it is an important part of a well-balanced vocabulary programme' (p.1), the idea of a focused and deliberate approach to vocabulary teaching/learning sounds logical and suitable for the English as a Second Language (ESL) & English as Foreign Language (EFL) learners. It is justified that the deliberate teaching of vocabulary is not as effective as the incidental learning of vocabulary but the incidental learning is not a focused approach to vocabulary building. Therefore it does not facilitate the learner to set specific vocabulary goals. Students in technical institutes have to master a particular set of academic vocabulary which helps them improve their academic communication and performance. Therefore, identifying such significant vocabulary and giving suitable exercises formally becomes crucial. As Bowles (2004) observes 'One key component to second language acquisition (SLA) is vocabulary acquisition. In order to use second or foreign language effectively, a broad lexicon is crucial' (p.541), it is hence essential to identify the target academic words most needed by the students

to broaden their academic lexicon. This asks for a focused approach to teaching vocabulary which involves preparation of an academic word list and its focused teaching with ample exercises through multiple meaningful contexts. Vocabulary teaching is not as popular as teaching other linguistic elements such as grammar, pronunciation and the LSRW skills but nevertheless it is a significant part of second language teaching/learning. There are a number of methods and strategies adopted by the ESL teachers for teaching vocabulary in the classroom.

GeethaNagaraj (1996, p.168) says 'We do vocabulary learning whenever we come in contact with a new language and try to use it. The given statement exemplifies vocabulary learning as an implicit part of the process of language learning. Therefore, the most popular approach to vocabulary teaching is the context-based approach through which target words are presented in a variety of meaningful contexts. The Contextual teaching of vocabulary is implicit and is considered more effective than any other formal method of vocabulary teaching. Vocabulary teaching methods adopted by ESL teachers vary according to the different learning levels of ESL learners. One also needs to understand what constitutes a vocabulary of the language. In general, vocabulary of a particular language is a vast collection of words and it is next to impossible to teach all of it at a particular level of learning. It is also not possible to teach such vast vocabulary following one particular method because different methods prove successful at different levels. For example, Teaching through context may not prove to be very effective at the preliminary level but could be quite enriching at the higher level of learning. Hence a holistic approach and the mindset to accept and welcome new approaches are imperative to make vocabulary teaching/learning a fruitful process.

Use of the Direct Method for teaching vocabulary at the primary level is one of the popular conventional approaches. The teacher shows different objects or pictures to the class and tells the students what they are called through the target language (L2) without any intervention of the mother-tongue (L1). The traditional Grammar Translation (GT) method is also used on a larger scale to teach vocabulary at the primary and secondary levels. Here the words from the target language are translated into the mother-tongue of learners in order to convey meaning. Text based method is also used to teach new words in which teachers conduct activities such as highlighting the new words in the given text and then asking students to find out their correct meanings with the help of a glossary or synonyms.

The Contextual method makes vocabulary teaching/learning more meaningful than the other methods as the exact connotation and use of the word are acquired quite naturally. The learners are encouraged to comprehend the meaning of a new word through the context of the sentence or passage. This is a natural way of acquiring vocabulary and it helps retain the new word learnt as a part of the learner's active vocabulary. The approach proves to be more effective at the higher level when the learners have gained adequate command over the target language. This helps them identify a suitable substitute or a synonym to the new word. The ESL teachers also follow the communicative approach to teach vocabulary and conduct various activities such as vocabulary games and quizzes. This requires a more focused approach as the games can be designed on specific topics and situations only. The games that include crossword puzzles, quizzes, odd man out, filling the blanks, matching pairs, synonyms and antonyms and so on can prove to be effective if designed and conducted for a specific homogeneous group of learners. The higher or the advanced learners in a classroom situation are usually taught vocabulary through context. It is important that the vocabulary learning requirements of the advanced ESL learners are paid attention to by the teachers. There is need of a focused attention to their linguistic requirements as the advanced learners need to use language (L2) for specific purposes. Thus, teaching English for General Purposes (EGP) vocabulary would not be sufficient to them. A systematic needs analysis of the target learners has to be carried out before a plan for teaching vocabulary is made. The advanced learners need to be taught the English for Specific Purposes (ESP) vocabulary corresponding to their academic and professional fields. For example, students of engineering would need more precisely the knowledge of technical and business vocabulary

than the general vocabulary of the target language. The technical and business vocabulary is not taught with a focused attention using a precise method to teach a particular set of words. The reason for taking up a formal and deliberate approach to teach vocabulary to the advanced level EGP learners is that most of them still are the preliminary level ESP students. Secondly, for example, the Indian students of engineering do not possess the same level of linguistic competence as their schooling backgrounds differ. It is a heterogeneous group that stands at the different levels of language learning. There could be students who have had their schooling from a regional medium background or a convent school. The linguistic needs of the advanced learners of language are determined by the specific field of study they choose and also by their learning background. As stated earlier, the students of engineering would need knowledge of technical words, management students would require business terms and the medical students would need to acquire new medical terms. Hence the vocabulary teaching at the advanced level mostly is not related to EGP but ESP and because of this we need a focused approach to teach vocabulary at this level.

The major limitation that has been stated above is the lack of focused approach at the advanced level vocabulary teaching. The conventional methods seem to fall short for teaching ESP vocabulary at the advanced level. This is where the role of using CALL applications (software and web-based) becomes essential. CALL applications can integrate the conventional methods and develop new methods of vocabulary teaching with a focused approach. CALL applications can provide a wide range of exercises that can cover almost all the target words into a single programme. Many applications have been developed for teaching/ learning general and academic vocabulary and have been available for quite some time now. There are commercial software products as well as many free online web-based applications. Many CALL applications such as the web-based applications provide innumerable, interactive and interesting exercises on academic vocabulary (Hiray&Malshe, 2012) which are based on sound pedagogical implications. Teachers can

make use of such applications as a tool in their classroom teaching of academic vocabulary along with the conventional methods.

Objectives of the study

1. To review and analyse the level of awareness and use of CALL applications by the Indian ESL teachers for the purpose of teaching academic vocabulary.

2. To study the attitudes of the teachers towards using CALL applications for teaching academic vocabulary and make essential recommendations for the enhancement of teaching through authentic CALL applications.

Statement of the Problem

The teaching of academic vocabulary plays a significant role in developing the students' academic communication which consequently enhances their academic performance. The classroom teaching of ESL usually does not focus adequately on vocabulary teaching. In fact, vocabulary teaching is the most neglected area in the teaching of ESL. It is less popular and practised than teaching various other elements like grammar, LSRW skills and pronunciation. Many teachers are not aware of either the methods of vocabulary teaching or are confused about which words should be taught formally. They have to identify the words most needed to the students for enhancing their academic communication and therefore should prepare a wordlist of target words. Then these words should be taught through multiple contexts by giving adequate exposure to using the words in meaningful situations. The traditional methods fail to give ample exercises and the required amount of exposure to the learners. The teaching through CALL applications can give the students adequate exposure and practice in developing the required academic vocabulary. Therefore, it was essential to review and analyse the current teaching practices so as to know if the teachers are aware of the available CALL applications and if they use such applications in the regular teaching of ESL and vocabulary. Guidelines and recommendations on the appropriate use of web-based applications for teaching academic vocabulary can contribute to enhancing the effectiveness of teaching. Such analysis can give valuable insights into the key issues related to teaching academic vocabulary using CALL

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applications and most importantly the level of awareness among the teachers.

Survey: Analysis and Findings

The survey was conducted to study the vocabulary teaching methods with a special emphasis on academic vocabulary teaching methods adopted by the fifteen ESL teachers at the technical institutes in India, and to know if they used CALL applications for teaching ESL, general and academic vocabulary. This section of the paper attempts to study the following issues related to the classroom teaching of ESL and especially academic vocabulary:

a) ESL teaching methods adopted by the teachers

b) Vocabulary teaching methods

c) Teaching of academic vocabulary

d) Evaluation of students' vocabulary needs

e) Use of CALL applications for ESL teaching

f) Use of CALL applications for academic & general vocabulary teaching

g) Students' responses to teaching ESL and vocabulary through CALL applications

h) Effectiveness of CALL applications

The analysis of the data collected through the survey may be presented through the two broad points given below:

1. ESL & Vocabulary teaching methods

2. Use of CALL applications for teaching ESL and academic vocabulary

ESL and Vocabulary teaching methods

Firstly, the teachers were asked about the methods they used for teaching ESL. The results show that 6 teachers follow only the communicative approach to teaching ESL whereas two practice the Direct method only and one follows the Grammar Translation (GT) Method exclusively. A few teachers use a combination of approaches and methods depending upon the content of teaching. Two teachers use the GT method and communicative approach whereas two other use the GT method, Direct method and Communicative approach. One teacher follows the Communicative as well as behaviourist approaches as the other one uses communicative and deductive approaches. These facts suggest that 12 teachers out of 15 prefer using the communicative approach for the teaching of ESL. The GT method is followed by five teachers whereas the Direct method is preferred by the four.

• Communicative Approach
  •Direct Method
  •GT Method
• Behaviourist approach
  • Deductive Method

These statistics above indicate the preferences given by the teachers to various approaches for teaching ESL. It also shows the popularity of the communicative approach among the teachers for teaching communicative English to the students. It is notable that five teachers use the traditional grammar translation method which encourages the intervention of the mother tongue or L1 of the student for the explanation and translation of words and sentences in English. The teaching of ESL is practically a teaching of communicative English which is imparted through various classroom activities such as Public speaking, Group discussions, debates, formal power-point presentations, role plays etc. These sessions are usually conducted for smaller groups of students. A class of about 60 students is divided into three batches and each batch is given two hours every week for the sessions. The general aims of teaching ESL in the technical institutes are enhancing students' communication skills in English with a special emphasis on speaking and writing and also to enable them to do well during the campus placement interviews. Therefore the focus upon improving their academic English is less.

When asked about the methods used by them for teaching vocabulary, the most common answer was the context-based method. Thirteen teachers use the context-based method for teaching vocabulary out of which eight exclusively use the method whereas the other five use it in combination with the methods such as communicative and grammar translation method. One teacher uses the Direct method whereas the other one uses the grammar translation method exclusively.

1 Context-based Method

2 GT Method

3 Direct Method

4 Communicative approach

These details above indicate that the context-based method is the most popular and practised method as it is used by the most of teachers. Usually the

focus is upon teaching EGP (English for General Purposes) vocabulary which is needed for the day to day communication in different situations.

The focus upon teaching academic vocabulary is much less than the EGP vocabulary. Eight teachers teach academic vocabulary only sometimes during the semester whereas two of them never teach academic vocabulary. Two teachers said that they always taught academic vocabulary whereas the other three mentioned that they often taught it. These statistics indicate that the focus upon teaching academic or technical vocabulary is much less than upon teaching the EGP vocabulary.

The teachers conduct class tests, give classroom assignments and also evaluate the students' oral and written communicative competence to know their current vocabulary knowledge and needs. Ten teachers prefer studying the students' oral and written communicative competence and also conduct class tests and give classroom assignments in order to know their vocabulary knowledge and needs. The remaining teachers prefer conducting only class tests and giving classroom assignments for the same. These facts indicate that the teachers do conduct diagnostic exercises to know the students current vocabulary knowledge and their needs.

9 teachers form groups of learners according to their learning levels before teaching vocabulary and conduct classroom activities accordingly. Upon asking how they evaluate students' vocabulary learning, the teachers mentioned the following practices:

a. Giving students classroom assignments on vocabulary.

b. Conducting communicative activities such as interactions, interviews, extemporaneous speeches and tests on oral and written communication.

c. The teachers also conduct various tests such as class tests, formative tests and even online and offline tests.

Seven teachers give classroom assignments to students to evaluate their vocabulary learning whereas four teachers mentioned conducting tests. Only one teacher mentioned conducting online tests. The remaining teachers conduct communicative activities to evaluate the students' ability to use the learnt words in meaningful sentences. 10 teachers give remedial exercises to students in order to improve their learning.

Use of CALL applications

This section of the paper discusses the use of CALL applications by the teachers at the technical institutes in Pune for teaching/learning ESL and academic vocabulary. To begin with, the teachers were asked how frequently they used CALL applications for teaching/learning ESL. Seven teachers use these applications only sometimes whereas three teachers never use them. Three teachers always use CALL applications whereas the other two mentioned using them quite often. The use of CALL applications appears to be quite less as only five teachers mentioned using them regularly. Given below indicates that only a few teachers use CALL applications regularly.

1. Regular 2. Irregular 3. Never

It was also interesting to know which elements of the ESL were taught by these teachers using CALL applications. Four teachers use CALL applications for teaching all the elements of ESL whereas three use them for teaching vocabulary and pronunciation. Two teachers prefer using CALL applications for teaching pronunciation and the other two use them for teaching grammar. One teacher uses them for teaching grammar, vocabulary and pronunciation. Three teachers do not use CALL applications at all. These details indicate that only four teachers out of fifteen use CALL applications for vocabulary teaching. The results also show the more inclination towards teaching pronunciation as six teachers prefer using the CALL applications for the same.

The teachers were further asked about which software applications they used for teaching ESL. Four teachers use the Lingua-phone software and two use the Orell language lab. The Globarena language lab, MTNL software for language learning & the Acen software are used respectively by one teacher each. Six teachers do not use any software application for the teaching of ESL.

It was interesting to know if the teachers used any specific software for vocabulary teaching. Three teachers use the Linguaphone software for teaching vocabulary; two use the Orell language lab whereas the Globarena, MTNL &Acen software applications are used by one teacher each. Seven teachers do not

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use any software for teaching vocabulary. The software applications mentioned by the teachers offer exercises on EGP vocabulary. There is very limited focus on academic and technical vocabulary.

The teachers were asked if they used any specific software for teaching academic (technical) vocabulary. Ten teachers do not use any software for teaching academic vocabulary. Two teachers use Linguaphone, two use Orell language lab and one uses MTNL for teaching academic vocabulary. As mentioned earlier, these programmes do not focus upon academic vocabulary. They provide exercises mostly on the EGP vocabulary.

Further, the teachers were asked if they used the internet for teaching ESL to which nine of them replied negatively. Four said that they used the internet occasionally whereas only two said that they used the internet regularly for teaching ESL in their day to day sessions. However, 11 teachers did not know any web-based applications for teaching ESL. Two mentioned using the youtube videos for teaching ESL in the classrooms. The other two mentioned using a few ESL sites. One of them mentioned using the following ESL sites:

a. www.vocabsushi.com

b. www.esl.com

c. www.aztrivia.com

d. www.funbrain.com/detect

The other teacher mentioned using:

a. www.esi.com

b. www.vocabulary.com

c. www.englishgrammar.com

These results indicate that only four teachers make use of the internet for teaching ESL.

Many technical institutes today have well established set ups which provide the teachers and students with adequate access to the computer systems and the internet. 12 teachers mentioned conducting their sessions either in the computer or the language lab for taking sessions using computer technology. Although these resources are available, they are not utilised fully as there is limited awareness about the availability of good software as well as web-based applications among the teachers. The teachers though seem to have a positive attitude towards using computer technology as 9 of them feel that using technology can be very

effective for teaching ESL and vocabulary. However, 4 teachers feel that it can be effective only for teaching a few elements such as pronunciation and vocabulary. Therefore using computer technology may not prove to be effective for teaching all the linguistic elements.

The teachers also agreed that the students' response to the computer-aided teaching of ESL is very good. They attend the sessions regularly and exhibit great enthusiasm and interest in performing the tasks given. Their improved performance in the tests and their communication in English indicate that they find these activities quite effective. Students enjoy their lessons and give positive feedback about the activities. The teachers who make use of the software programmes for teaching ESL also find the programmes quite effective. They are satisfied with the quality of the programmes they use for teaching ESL.

The teachers feel that the multimedia software programme should be designed according to the students linguistic needs and learning levels. The examples and exercises incorporated in the programmes should be related to the day to day lives of the students so as to enable them enhance their communicative competence at the earliest. The teachers expressed that the multimedia programme should be student oriented, activity-based and interesting. It should facilitate easy access to its activities and support smooth navigation. The programme should also offer immediate feedback and precise evaluation of students' learning. It should monitor the students' performance and should have provision for the course-end evaluation. It should offer exercises on multiple linguistic skills and should also have a class controlling function by giving common instructions to all users.

Upon asking if they check the credentials of the programme authors, eight said that they did whereas the other seven said they did not. The eight teachers mentioned that they studied the reviews by experts, teachers and users before buying a software programme. They also verify if the programme is licensed and is designed by an expert in the field of ESL. Some of them also said that the effectiveness of the learning material too was an

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important factor to determine the authenticity of the material.

When asked if they found the use of technology better than the conventional methods of vocabulary teaching, 10 replied positively whereas 4 supported the conventional methods. One teacher said that it was situational. He opined that sometimes the conventional methods of vocabulary teaching such as the context-based method could prove to be better than the use of technology.

The teachers were also asked to mention the difficulties they face in using technology in the classroom. The teachers mentioned the following difficulties:

a. Technical barriers such as system breakdown, connectivity, compatibility of a programme, slow systems, short power supply, availability of labs etc.

b. Students' inadequate knowledge of computer technology. Some students find it very difficult to use computers easily.

c. Students with vernacular schooling background find it difficult to understand the instructions given in English clearly.

d. Some programmes are quite complex in nature and are not that user-friendly.

e. Time required for conducting these sessions is comparatively much more than the regular sessions due to the technical barriers.

f. Teachers also need adequate training in using the programme. Sometimes they are unable to explain the programmed instructions to the students.

The study indicates that the teachers' attitude towards using technology is quite positive although they feel that there is need of more knowledge about good software and web-based applications. They also strongly feel that academic vocabulary can be taught effectively if good applications are used by the teachers.

To sum up, the survey of teaching practices for ESL and vocabulary threw light upon the key issues related to the current practices and the use of CALL applications. The data collected and analyzed can be useful to make necessary recommendations for the enhancement of teaching of academic vocabulary using web-based applications.

CONCLUSION

The survey highlighted key issues in teaching ESL and academic vocabulary in the technical institutes in India. The study above also presented a detailed discussion and statistical results on the use of CALL applications such as the software and web-based for teaching ESL and academic vocabulary. The concluding remarks may be presented as follows:

a) The most popular approach followed by the teachers is the communicative approach for teaching ESL in the technical institutes in India. The grammar translation and the direct method too are used by some of the teachers for teaching ESL. There is more emphasis laid on teaching communicative English in order to enhance the students' overall communicative competence.

b) The most practised method for teaching vocabulary is the context-based method. However the major focus is on teaching EGP vocabulary. Less attention is paid to the teaching of academic vocabulary.

c) Many teachers do conduct diagnostic tests for evaluating the students' current vocabulary knowledge and their vocabulary needs.

d) A very few teachers make use of the CALL applications in their regular classroom teaching of ESL

e) The number of teachers using CALL applications for teaching vocabulary is very less.

f) No teacher uses any kind of specific CALL applications (software or web-based) for teaching academic vocabulary.

g) There is very limited awareness about the availability of good CALL applications for teaching ESL and academic vocabulary.

h) Many institutes have set up language laboratories, which deal with fundamentals of grammar, pronunciation and general vocabulary. Commercial developers develop these applications and therefore many lack a sound pedagogical framework.

i) The teachers do feel that using technology makes the teaching more effective and interactive as the students response to such activities is more positive than the regular classroom sessions.

j) The teachers' attitudes towards using technology is positive and therefore proper awareness about

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the availability of CALL applications may encourage more and more teachers to use them in their classroom teaching of ESL as well as academic vocabulary.

Recommendations

The following recommendations may be made for the enhancement of the classroom teaching of academic vocabulary using web-based applications.

a) The teachers should identify the target academic words to be taught and prepare a wordlist for teaching a group of target learners. Many academic wordlists are readily available which may also be used by the teachers.

b) Teachers should classify the learners according to their learning levels.

c) The teachers should have knowledge about the availability of the authentic web-based applications for teaching academic vocabulary.

d) The web-based applications should be used as tools and be used with the conventional methods such as the context-based and the direct methods.

e) The teachers should have adequate knowledge of using the computer and browsing through the internet.

f) Many web-based applications provide context-based exercises on academic vocabulary which may be used in the classroom.

g) Teachers should conduct the sessions preferably either in the computer laboratory or language laboratory. There should be a batch of 20 students formed for each session.

h) In case of unavailability of the Computer or language laboratory, the teacher may conduct the sessions in a classroom using a laptop & an LCD projector. In such a case the teacher can teach a certain number of words in each session by making students respond to it one by one.

i) The teachers should conduct formative and summative tests using the web-based applications to monitor the students' progress.

j) The teacher should also give remedial exercises through the web-based applications.

k) The teacher should also encourage the students to use the taught words in meaningful contexts and in their day to day communication.

Web-basedapplication for teaching/learning academic vocabulary

Hiray&Maf (2012) have recommended the most authentic web-based applications for teaching & leg academic vocabulary from the Academic Word List (AWL) prepared by AverilCoxhead (2000).These applications given below, offer exercises on the 570 word families identified by Coxhead as the essential academic vocabulary for the tertiary level learners.

1 http//wordnet.princeton .edu

2 http://www.webcorp.org .uk/

3 http//www..uefap.corn/vocab.htm

4 http://esl.fis.edu/vocab/index-a.htm

5 http://www.vocabulary.com/

6 www.englishvocabularyexercises.com

7 http://www.Lextutor.ca/

http:/www.notingham.ac.uk/%7Ealzsh3/acvocab/awlhighlighter.htm

List-based applications for teaching/learning academic vocabulary

The web-based applications listed above have been studied against multiple criteria such as Non-commerciality, adequacy, authenticity, recommendations received by experts, authority, simplicity and currency. All these applications fulfilled the criteria satisfactorily and therefore have been recommended for teaching/learning academic vocabulary. These applications may be used by the teachers for their classroom teaching of academic vocabulary.

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