The Impact of ICT Enabled English Language Teaching on the Engineering Students of Rural and Semi-Urban Areas of South Tamilnadu

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ABSTRACT

The suitability of technological aids plays a pivotal role in the easy and proper understanding of concepts as the present age is of innovation and advancement. A survey has been conducted on random basis with the objectives such as how far the ICT enabled teaching proved worthy to the students with specific reference to improve the basic skills of learning, how the students were aware of the latest technology and recent developments, etc. taking into account the locality of the colleges and students whether rural or semi-urban areas in southern Tamilnadu.120 respondents from ten colleges, both from rural and semi-urban areas, with twelve students each have been taken for analysis. For the purpose of the study, a questionnaire has been used as a tool and was given to the third year students of engineering studies as they have a paper named "Communication Skills''. The hypothesis thus derived is that the ICT enabled teaching enhances the communication skills of the students in the socially backward areas once the educational institutions are equipped with all hi-fi technology relating to teaching and learning.

KEY WORDS: Respondents, Hypothesis, Learner-Centered, Motivation, Clarity, Information and Communication Technology, Virtual Classroom.

1. INTRODUCTION

Technology creates an everlasting visual impact which induces conceptual thinking. It encourages and motivates the students with an enriched environment. The prime factor behind using technology is to cater to the visual and sensory perception of the students. The learner's aptitude, attitude and ability are in the choice of technological tools employed for learning. This research article draws evidences regarding the educational achievements through the ICT enabled teaching. The study not only seeks to measure the impact of the ICT on the performance of students but also tries to establish a link between the use of the ICT and the result oriented exam performance of the students. The findings are derived in such a way that the ICT has positive impact on students' performances in terms of their communication skills. Moreover, A vital development in the area of language teaching design is the Council of Europe's- A Common Frame Work of Reference for Languages: Learning, Teaching Assessment, that aims to provide a common basis for the elaboration of language syllabuses, curriculum. What learners have to learn skills they have to develop so as to be able to act effectively. The students in the institutions with higher level of e-maturity are expected to show a rapid improvement in performances. The basic need is that the colleges and universities ought to have sufficient ICT resources at least sufficient no of computers to achieve better results than those institutions that are not well-equipped as a computer is a tool and medium that facilitates people in learning a language, although the effectiveness of learning depends totally on the users. Hartoyo, (2008), fact an accurate appreciation of language is worth acquiring for several reasons such as

a) Many serious problems in today's world involve a language in an essential way.

b) Insights about a language are of immense intellectual significance with direct and indirect relevance to other disciplines. Philosophers are greatly concerned with the language.

c) Language is relevant to psychology in a number of ways. It provides a significant test for theories of psychological organization.

An introduction about the nature of the language is important to anyone in the practical applications deriving from linguistic research by Ilankumaran, M, 2012.

Hypothesis: Generally, the learners of the English language look forward to second language classrooms with eager eyes and willing ears; unfortunately, the monotony of the long run outdated methods of teaching and learning could not bring in desirable results. The students confront multifarious problems at different quarters especially when it comes to the choice of learning a second language.

The infusion of technology in the process of teaching and learning language of the students of third year engineering course has proved to be fruitful. A fine amalgamation of technology in the otherwise traditional classroom is appreciated and warmly accepted by the present generation learners. "The child's acquisition of his native language is not known to be independent on any special tutoring. Children can be quite inventive in regard to language" Langacker, Ronald W., 2008 this is a change which the learners both young and adult have anticipated for so long. The survey was conducted among the mélange of engineering students both from the rural and urban backup has stressed the need of technological orientation and thereby establishing learners' autonomy. There is more involvement and enthusiasm from the side of the learners who are merely reduced to the level of mute spectators.

Status of the ICT enabled teaching in India – A Review: The 2011 census reveals that 72.2% of the population lives in rural areas that are in about 638,000 villages and the remaining 27.8% lives in more than 5,100 towns and over 380 urban agglomerations. The main aim of this study is to enhance the Scope, Purpose and Methodology adopted for the teaching of English in Rural India. Information and Communication Technology (ICT) is one of the rapidly developing technological fields in the global society particularly in the field of education and its development is tremendous. There is no doubt that the future development is based on the ICTs. However, the benefits of the ICTs have not reached the expected level in the rural areas and semi urban areas as the rural population is still living with minimum level of the ICT facilities especially the poorest of the poor.

Despite many schemes and huge funds by Central and State Governments, the NGOs are allocating huge amount for the development of the ICTs and rural education and the level of improvement in accessibility of the ICTs in the educational institutions in rural and semi urban areas did not reach the expected level.

The Contemporary condition: The present scenario of the ICT enabled teaching in rural and semi urban areas is still poor. In some villages, though the students study in the engineering colleges, they have their own difficulties in accessing the net based education. In some colleges, the computers are not installed in systematic order and basic software is not installed into them. The quality of the ICT based education facility is very poor as they are not given proper training and practice. The teachers do not teach properly. The initiatives, though taken by the government, are not implemented in the educational institutions and so the present scenario remains rather bleak than bright.

Technological aids in the Educational Institutions of Rural and Urban areas: In general, many of the management run their educational institutions as a major source to mint money and to gain mammoth profit. Lack of sufficient funds to support proper teaching and learning fail to promote real interest in the minds of the teacher and the taught. Owing to these practical intricacies, quality education could not be implemented upto the level of satisfaction. The present generation, which is madly after novelty and modernism, could not be easily satiated with the traditional tools of texts, black boards and chalks.

Higher educational institutions, especially professional colleges in the urban areas and semi-urban areas are furnished with the modern teaching aids. These colleges are allotted with sufficient investment to provide current teaching aids to offer contemporary features of education to enhance the process of teaching–learning. These colleges make use of aids such as Power Point Presentation, LCD Projectors, Over Head Projectors, Laptops, Smart Boards, digital data, etc. "Digital data involves a variety of signal types, like text, audio, and video, are now handled within the same application. The merging of mass-media communication technologies [radio and television] with telephone technologies and data network technologies [radio and television] are under way. Such convergence of technologies means that the ICT will be increasingly ubiquitous in society, and easier to access and use. It will therefore become more of a complementary and core technology in teacher training by Amrita Maheshwari (2010).

There are three reasons behind utilizing teaching aids

Clarity: While learning a lesson, there comes an intricate stage, when some points are not clear. Teaching tools presents a vivid and clear idea to the pupils.

Motivation: These aids motivate learning activity and lead to Self - Directed Learning.

Fixation: With the help of the aids, knowledge is fixed firmly in the minds of pupils. Teaching aids are classified as follows: a) Visual-Aids, b) Auditory-Aids, c) Audio-Visual Aids, d) Activity Aids

Further classification of these aids is

Graphic aids: Photographs and Pictures, Flash cards and Strips, Posters, Charts, Graphs, Maps, Cartoons and Comics.

Display Boards: Black-board, Flannel-board, Bulletin-Board, Peg-board.

Three dimensional Aids: Models, Objects, Specimens, Mock-up, Dioramas, Puppets and Mobiles.

Projected Aids: Films, Filmstrips and Slides.

**Audio Aids:** Radios, Televisions, Videos, Recordings.

The Present Study: A Survey of College Students on the basis of Rural and Semi-urban Areas. A survey of college students, belonging to rural and semi-urban areas, was conducted to find out the ways how the ICT enabled teaching is working out among the students on the basis of the three criteria viz. first generation learners, medium of instruction and technology based learning. The survey was conducted with the hypothesis that the students of urban and rural areas learn English for communication purpose in more or less the same ways and experience. A total of 120 students from ten colleges-five from rural and five from semi-urban areas were surveyed with a structured questionnaire consisting of twenty four questions was administered to them.
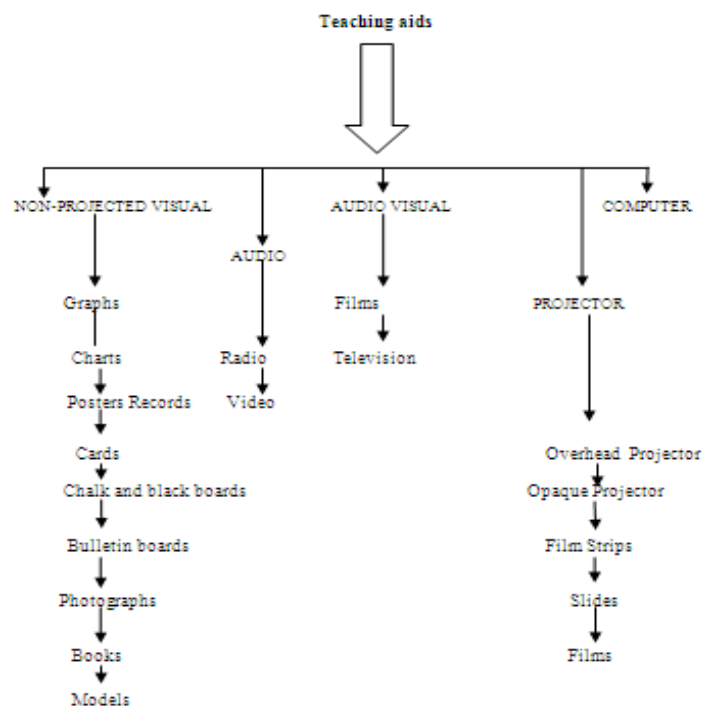
A simple and straight forward numerical analysis of the data collected revealed interesting and surprising results which are informative and suggestive of the attitudinal aspects of the students in learning the language. Enough care and caution were taken regarding the locality of the college and the students. The tools were developed to find out the validity and reliability of the data collected.

Table.1.Students of Rural Areas

Criteria	Excellent	Very Good	Good	Average	Poor
First Generation Learners	14%	21%	23%	26%	16%
Medium of Instruction	19%	31%	26%	15%	9%
Technology Based Learning	13%	27%	24%	22%	14%
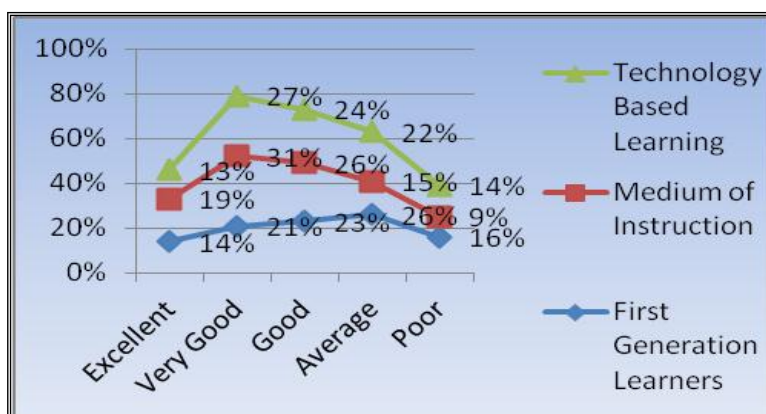
Fig.1.Showing the communication skills of Students from Rural Area

Data analysis: Table I indicates that the students of rural areas in general are not so good in communication skills though they thrive hard to achieve excellence. Among the first generation graduates, only less number of fourteen percentage students fall under the excellent category followed by very good students of twenty one and good of twenty three percentages. Twenty six percentages of students are average and sixteen percent are poor. When it comes to the medium of instruction, even though the students had their education through English, nineteen students excel in English communication whereas thirty one percent of students are very good. Twenty six percentage of students fall under the category of good and fifteen percentages and nine percent each under average and poor category respectively. As for as technology based learning is concerned, thirteen percentage are excellent in their execution of action using technical aid for the purpose of learning which is followed by twenty seven, twenty four, twenty two and fourteen percentages for very good, good, average and poor categories respectively.

Table.2.Students of Semi-Urban Areas

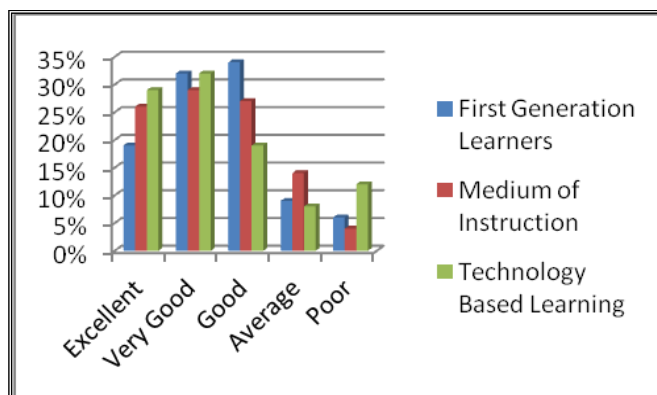| Criteria	Excellent	Very Good	Good	Average	Poor
First Generation Learners	19%	32%	34%	9%	6%
Medium of Instruction	26%	29%	27%	14%	4%
Technology Based Learning	29%	32%	19%	8%	12%

Fig.2.Showing the Communication Skills of students from Semi-Urban Areas

Table 2 shows the details about the students of semi-urban areas, among the first generation learners, nineteen percentages of students are excellent while interacting in English. About thirty two percentages of students are very good while thirty four are good. Only nine percentages are average and six are under poor category. Regarding the medium of instruction, twenty six students are excellent and twenty nine are very good. About twenty seven percentages are good, fourteen are average and four are categorized under poor category. Underhill, Andrian. A. 2007 lists out the following as the recent trends which are very much prevalent in English language teaching. They are

a) Networking, interest and support groups.
b) Learner centeredness and learners needs.
c) Reflective practice and teacher learning.
d) Portfolio development for teachers.
e) Syllabus design / materials development.
f) Criticism of published materials.
g) English as an International language.
h) Corpora.

As for as technology based learning is concerned, twenty nine percent are excellent and thirty two are very good. About nineteen percentages are good, eight percentages are average and twelve percentage are poor.

2. FINDINGS OF THE STUDY

The analysis and interpretation of the data have revealed the following significant findings of the study. More number of parents in the semi-urban areas go to work as compared to that of the rural areas. The first generation learners who opted for engineering studies had their school education in English medium are more in semi-urban areas where they are slightly lesser in rural back up. Though most of the government educational institutions provide in service program on the ICT for teachers and in turn to students as well, the expected outcome is not so desirable. The general awareness on the ICT is more in semi-urban based engineering colleges.

A significant development is possible on learners' performances. The teachers also become convinced that the educational achievements of students are due to proper use of the ICT. The remarkable fact the researcher has come across is that the ICT enabled teaching also helps to reduce the social disparities among students so that they could achieve their common goal of attaining the skills.

The study has also revealed how the ICT has significant impact on teachers and teaching processes enabling them to plan their lessons and classroom activities effectively and efficiently. They can work in teams and share ideas about the prescribed syllabus and curriculum. Many teachers use the ICT to enrich and enhance the traditional teaching learning methods where the students become active speakers rather than being passive listeners.

The other general observations based on the survey conducted are:

• The colleges in rural areas have no sufficient ICT facilities than those in semi urban areas.

• More number of teachers working in semi urban areas is getting training for using the ICT than those in rural areas.

• Teachers have no potential to prepare their own materials pertaining to the enrichment of the ICT in language classrooms.

- Managements of colleges in semi urban and rural areas are put under pressure regarding the requirement of internet facilities irrespective of the location.
- Teachers need to get administrative support for using the ICT resources.
- Teachers of the colleges located in rural area feel the restrictions in using the ICT materials.
- There is always a need to strengthen the computer facilities in all the colleges.
- Teachers need to know the use of the ICT materials.
- There is a need to make all the students participate in the ICT enabled teaching,
- Students expect that the teachers should be masters in using the smart classrooms.
- The management should always consider the installation of the ICT an investment and not expense.
- Internet connectivity becomes a problem to the students of semi urban and rural areas.
- There is no proper up gradation of technology in the colleges and the training given to the teachers.

3. SUGGESTIONS

The students prefer flexibility in terms of time, space, place, content selection and delivery of instructions. In the past, it was quite impossible to satisfy such requirements due to the non-availability of proper tools. Now, it has become feasible and possible to implement open and flexible learning strategies using the ICT as a tool. It is, with the availability of web tools, now possible to create content websites, online education to support and assist face to face instruction in an innovative way. Searching, locating and categorizing knowledge and information via internet have opened new vistas in the implement of flexible learning strategies. There are various applications of the ICT tools in the teaching and learning system starting from the productivity software to specialized educational software. Hence, preparation and motivation of teachers to face the challenges of the ICT enriched teaching is the need of the hour. "E-learning includes learning at all levels, formal and informal, which uses a computer network for the delivery of teaching materials, interaction, and / or facilitation. They need to be equipped with the fundamentals of the ICT tools and sufficient understanding on the integration and use of the tools in teaching. Efforts have to be oriented towards developing positive attitudes regarding the ICT enabled teaching.

The followings are the suggestions to overcome the problems in the findings

a) The teachers must be trained to have the knowledge and skills to use the new digital tools and resources to help all students achieve high communicative skills.

b) The funding for new ICT resources should be increased and properly used in order to provide adequate ICT equipment and resources.

c) The use of technology and on-line learning need to be an emerging area of education.

d) Technology based plans for implementing the ICTs in engineering colleges should be prepared and implemented.

e) Professional development to incorporate the ICTs into teaching and learning is an existing process and should not be thought of as one to be avoided.

f) Specific units in study and personnel to teach them should be allocated along with the ICT tools and materials for the ICT-enabled teaching.

g) The teachers as facilitators have to integrate the ICTs in their courses.

h) The teachers must be adequately equipped with more didactic competencies so as to assume their new role as experts in the learning process so that they can use the ICTs as presentation tools such as overhead and LCD projectors, television, electronic whiteboards where students simultaneously view the same resources on computer screens in the classroom.

i) The teachers should act as role models for prospective learners by using the ICTs in their courses.

j) In-service and pre-service training in the ICTs for teachers should be improved in both quantity and quality

k) The teachers need to be supported in meeting the challenge of effectively integrating the ICT in their classroom practices.

l) All the classrooms should have at least one computer and a computer-projector system with Internet access and every engineering college should have at least one laboratory available for students to ensure the diffusion and effective use of technology.

m) Computer, satellite communication, internet and various Electronic Media need to be made the real models for teaching and learning.

n) The teachers should be motivated and given incentives to make them participate actively in the ICT enabled activities.

o) The teachers should nurture innovative practice as it is the way to enhance the quality education yielding communication skills.

p) The ICT-related courses for prospective teachers should be offered and every ICT-related course should be based on practice-oriented as for as language is concerned.

q) The course content should be redesigned time to time to acquire more benefit from the ICTs and it should be supported by a course delivery and utility system.

r) High quality, meaningful, and culturally responsive digital content which is well-designed programme for imparting new knowledge and skills of teaching must be available for teachers.

s) Teachers should be sufficiently educated by providing in-service training opportunities conducted by qualified personnel.

t) The curriculum content of the ICT enabled teaching should be the world-class and globalized maximizing relevance and exposure in different development areas.

4. CONCLUSION

The researcher has come out with, of many, two major facts: first, the pace of learning the communication skills can be changed using the ICT as the students in modern days feel to develop sufficient potentials to enable them to use the advantages and opportunities that the ICT offer and second, the technological tools enhance the quality of teaching in colleges and universities so that the students can achieve their target of competence in English. It has further been proved in the study that the collaboration and cooperation between the teacher and the students are found worthy in planning and executing the teaching methods. The analytical skills are acquired by the students as a new phenomenon. The ICT enabled teaching encourages the students to be independent in active learning and make them motivated to learn the qualities such as self-confidence. The changing role of teachers from instructors to facilitators needs to be understood first. The classroom has to be converted into a learner-centered interaction room where the pedagogy-technology integration has to be successfully implemented along with pedagogical principles. The ICT tools alone do not make good pedagogy. The learning environment is the first and foremost one to be designed using the ICT tools coupled with the pedagogical principles. Teachers need to learn continuously throughout their live about the new ways of using technology for the development of their students as well as the latest systems of education.

REFERENCES

Hartoyo, Individual Differences in Computer-Assisted Language Learning, Semaran: PelitaInsani Semarang, 2008.

Ilankumaran M, Communication Skills in English through Developmental Speaking, Contemporary Discourse Peer-Reviewed, III (II), 2012.

Langacker, Ronald W, Languages and its Structures 2nd Ed., New York, Harcourt Brace, 2008.

Maheshwari, Amritha, Teacher Education via Open Distance Learning: A Democratic Alternative, University News, 48 (22), 2010, 1-5.

Nagaraj, English Language Teaching-Approaches, Methods, Techniques II edition New Deihi: Orient Blackswan Private Limited, 2008.

Under Hill, Andrian, A Trends in English Language Teaching today, MED Magazine, 2007.

Victoria L. Tinio, Modification Teaching through ICT, The American Journal, 12, 1999, 56-63.