Experiments with Some ICT Tools to Enhance Communication Skill among Undergraduate Students

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Abstract:

Information and (ICTs) which include radio and television, as well as newer digital technologies such as computers and the Internet have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life. Concentrating the usefulness of the ICTs, one such attempt had been made through this research work to evaluate the effectiveness of ICTs for the selected respondents of UG management course who had IT and Communication skills as their core components of the curriculum. The core objective was to check if the samples can use ICTs effectively to enhance their language skills. The offspring of the research clearly divulged that the ICTs have potential to bring remarkable positive change in the language learning class.

Keywords: *Advance, Communication, Education. ICT, Learning, Language skills*

1. Introduction

One of the major goals of education should be the creation of awareness and empowerment so that the rampart exploitation and subordination in society can be encountered. It has been observed by many thinkers that present-day education is an instrument for perpetuating the existing social and power structures. It follows a 'reproductive' model of teaching, and does not do much to foster critical literacy. Critical literacy involves political and cultural awareness, and the ability to see and question the ideological positions, as for example, reflected in the choice of the curricular materials and content. Unfortunately, the learners have been conditioned to see the passing of examinations and scoring high marks as the goals of education. Despite many distinguishing 'academic' achievements made by our educational system such as its spreading of computer literacy, its fight against social literacy has been rather feeble. Treatment of the curricula material should also carry the right messages in consonance with the higher aims of education. Technological literacy, though noticeably prominent, is value neutral and by and large limited to certain sectors of our society.

Even if one does not possess a home computer, the associated technology assists us whenever one makes a telephone call, watches television, uses a bank account or engages in many other everyday activities whereas many changes have been taken place in education over the past few years, the pupils we teach will have little experience of life without computers or computer related technology and will take for granted the new advances in the same way that many of us

find nothing strange in switching on a light or watching the television. From the outset, therefore, it is worth stating that our pupils will probably need no readjustment of attitude when faced with a computer in the classroom and the sense of aware sometimes felt by older people when faced with the new technology will be absent.

The uses to which the computer can be put in the teaching of the language arts revolve around the idea of communication. The use of computer involves communication between the user and the machine, either by reading or by writing, despite the fact that the computer is incapable of independent thought or action and could, therefore, be described as incapable of communication in its own right. There is development work now in progress to produce what is called 'artificial intelligence' – a system which appears capable of emulating human thought process – and no doubt. We shall see the fruition of this work in present teaching learning discipline.

2. Methodology
Samples are selected by random sampling method, so that chance or the operation of probability can be utilized. Students studying in Business Management (UG) and having English as a compulsory subject formed the universe for the research work.

3. Research Procedure
This research study mainly employs the qualitative procedure to evaluate the impact, effectiveness and use of ICT based task to improve four basic language skills Viz. listening, speaking, reading and writing to the students of management. A variety of terms have been used for the various forms of qualitative methods, including: ethnographic, case study, phenomenological constructivist and participant, observational and so on.

3.1 Qualitative Methods consist of three kinds of Data Collection
 1. In-depth, open-ended interviews
 2. Direct observation
 3. Written documents

The study began with needs analysis which was based on the performance of the students in the pre test prepared for them by the researcher. After taking pre test investigator came to know that learners faced more difficulty in basic language skills. They were comfortable with grammar, but they had problems with basic language skills of Listening, Speaking, Reading and Writing.

A sample of 54 students was selected for the tryout of ICT tools that helped the researcher to identify the effectiveness of using ICT tools to improve four basic language skills.

3.2 The Basic Steps of an Experiment
 1. Planning the research, including determining information sources, research subject selection and ethical considerations for the proposed research and method.
 2. Design of experiments, concentrating on the system model and the interaction of independent and dependent variables.
 3. Summarizing a collection of observations to feature their commonality by suppressing details.(Descriptive statistics)
 4. Reaching consensus about what the observations tell about the world being observed.(Statistical inference)
 5. Documenting / presenting the results of the study.

3.2.1 Needs Analysis

The analysis of the needs of the students with reference to different functions of English and basic skill of language was taken up at the commencement of the study. Keeping this in a pre test and a post test were prepared to evaluate the performance of the learners before and after research. The pre test was prepared to measure the level of the students. Through this test the investigator came to know that, students had problem with basic language skills especially reading and speaking.

3.2.2 Tests

Two tests were prepared by the researcher for the study, a pre test and a post test. The pre test was prepared for measuring the level of the students and to identify the problems they had with English. The post test was prepared for measuring the effectiveness and usefulness of ICT to improve basic language skills and different functions and use of English in the class.

3.3.3 Piloting

After the section of the research problem, the next step for the researcher was to conduct a pilot study which will help learners to acquaint themselves with all the available material and literature in the field. It was also task for the researcher to have contacts and consultation with experts or other surveyors to know the techniques and methods used in previous studies, their findings and difficulties.

In this way to validate the test item prepared, the procedure of piloting was adopted. A number of points were kept in mind while considering the reliability of the test items; some of the points, which were considered, were as follows:

3.3.4 Test Specification

Test specification includes types of items used in a test, level, and number of items and limitation of the time for the test. After observing learner's ability of listening, Speaking,   Reading and Writing, the number of different types of exercises were decided.

3.4.5 Test Length

Test length includes number of items, and time limit given to the learners for the test. So rather than giving learners extra answer sheet, the researcher prepared exercises in which learners had to write answers on the answer sheets attached with question paper. According to the test items span of 60 minutes was provided.

4. Interpretation and Analysis

The data was analyzed on the basis of the scores obtained by the sample group in pre-test and post-test. Several types of statistical parameters were used to verify the validity of the finding of the experiment. They are as below.

- Measure of Standard Deviation-S
- Measure of Mean Score-M
- Measure of Z scores

4.1 Statistics in Linguistic Research

At present statistics is viewed not only as a mere device for collecting Numerical data but as a means of sound technique for their handling and analysis and drawing valid inferences from them. It embraces all sciences. Today it is rather impossible to think of any sphere of human

activity where statistics does not creep in because statistical methods and tools provide quantitative measurements to complex and uncertain social phenomena. The word 'Statistic' has been used to convey different meaning, in plural and singular sense. When word Statistic is used as plural, it means numerical set of data and when used in singular sense, it means the science of statistical methods embodying the theory and techniques used for collecting, analyzing and drawing inferences from numerical data.

Statistics also deal with the variations of variables. The variables to be studied should be homogeneous as whole series is specified in terms of one individual only. Since statistics is a sciences dealing with a set of numerical data, it can be applied to the study of only those phenomena which can be measured quantitatively.

To quote Craxton and Cowden " Without an adequate understanding of the statistical methods , the investigator in the social science may be like the blind man grouping in a dark room for black cat that is not here. The methods of statistics are useful in an over widening range of human activities in any field of thought in which numerical data may be had." Thus the basic knowledge about statistics becomes inevitable for research works for systematic analysis and accurate and precise interpretation of data**.**

4.2 Statistical Analysis of the Data
The average scores made by the students in the Pre Test are 22.5 and Post experimental test 31.38. A significant change in the score of pre test and post test had been observed. The score of pre test i.e. 22.5 had increased and reached 31.8 in the post test that extracts the improvement in the respondents' status of language learning.

4.3 Standard Deviation
The standard deviation is a numerical measure of the average variability of a data set around its means. The standard deviation for a population is denoted by (ơ) (Greek lowercase letter sigma) and standard deviation for a sample denoted by S.

Standard deviation helps in ascertaining the degree of variation or uniformity in two or more data sets. It helps to gauge the representativeness of the mean. If we have two or more comparable distributions with the same mean, then the distributions with the smallest standard deviation has the most representative mean. Here there is a high standard deviation 4.27 in Pre Test score compared with low standard deviation 4.15.

Here Pre and Post indicate the number of the students who performed in Pre and Post tests and after the mean score the difference is of 0.811.

4.4 'Z' - Test
The 'Z' test for one sample uses a formula to the z-score for an individual, and it was used to find significant differences between a samples mean and a population mean. It indicates how likely it is that a sample with a certain mean and standard deviation came from the population being studied, that it had a population mean.

$$Z = \frac{|\,M\,pre - M\,post\,|}{Dm} = \frac{|\,22.5 - 31.38|}{0.811}$$

$$Z = 10.96 \quad \dots(1)$$

The calculated value of Z is 10.961, which was greater than 0.811. It means that the score Z test was higher after the experiment. Test of significance of difference average scores after the used of ICT Materials.

Ho_1 = There is no significant differences between mean scores reflecting components.

H_1 = The mean score reflecting competence of students are higher after using ICT material.

Hence, we reject Ho_1 i.e. Mean score reflecting competence of students after using ICT materials is more than that before it.

After the successfully accomplishing the Pre test and Post test scores of tryout of ICT Materials, the average marks (mean) scored by the students in Pre and Post tests are 22.5 and 31.38 respectively. It shows positive increase. A remarkable growth in the learning was observed by comparing the mean.

The standard deviation of Pre test and Post test are 4.2770 and 4.1501 which again clearly witnessed the growth in the language acquisition among the samples.

The tabulated value of 'Z' of significance is 10.961. Since the calculated value of 'Z' is much greater than the tabulated value it is highly significant. Hence the data are inconsistent with the null hypothesis which is rejected because the mean score of Post test reflecting the improvement in performance of learners after using ICT Material is more than that before using it.

The score of Pre test was 1215 and the score of Post test was 1695. The difference between both the tests was 480 which indicate better improvement in Post test. Mean of Pre test and Post test of the group is 22.5 and 31.38. The difference between the mean of Pre test and Post test of the group 8.88 which is noteworthy. Hence, the outcome of the experiment obtained through data analysis shows the positive impact of the ICT Material tried out on the sample group. Statistical decisions are based upon probability estimate, sampling error, variance, the null hypothesis, levels of significance, and one tailed test and two tailed test have been explained and illustrated. It must be remembered, however that the statistical presentation helps the consumer of research to understand research works better. Statistical process a servant of logic, has value only if it verifies, clarifies and measures relationships that have been established by clear, logical analysis. Statistic is a means never an end of research. The statistical analysis of this chapter has helped the investigator to graphically represent findings and validate it.

5. Conclusion
Bob Collins, a corporate manager, puts it in this way:
The most critical skill required in today's business world is the ability to communicate, both oral and writing. Effective communication has a direct impact on one's potential within an organization.

In the last decade, changing conceptions of learning and rapid technological advances have been accompanied by changes in language teaching and learning. Language classrooms are increasingly turning into blended learning environments that focus on active learning. It is commonly known that active learning advances the learning process and thus raises the quality of the language learning experience. Blended language learning uses multiple teaching and guiding methods by combining face-to-face sessions with online activities and utilizing a mix of

technology-based materials. The growing use of ICT in blended language learning environments has changed the face of language teaching and learning in a beneficial way and will continue to do so along with future technological innovations. The main benefits of ICT to language learning are presented below by drawing on the perspectives of Jonassen et al. (1999) who define technology-enhanced meaningful learning as active, authentic and cooperative.
Following inferences were made on the basis of the research work:

First and foremost, ICT and the Internet in particular-provides language learners with the opportunity to use the language that they are learning in meaningful ways in authentic contexts. The Internet provides an easy and fast access to the use of current and authentic materials in the language being studied, which is motivating for the language learner. Such authentic materials include, for instance, online newspapers, webcasts, podcasts, newsroom video clips or even video sharing websites such as, say, YouTube. Where language teachers earlier searched and carried authentic materials like maps and train timetables to a classroom, they can now ask learners to access such information online, thus helping them learn with current and real-time materials.

Another motivating language learning opportunity using ICT is provided by chat rooms and virtual environments such as Second Life where the language learner can practice not only the written use of the language, but also practice speaking and pronunciation, without the fear of making mistakes.

A second important benefit derived from the use of ICT in a language classroom is based on the opportunities it affords for cooperation and collaboration with one's peers. Language teachers all over the world are introducing myriads of ICT-enhanced language learning projects, including simulations, between their students and groups in other countries, thus widening the language learning perspective into that of learning about the cultural context of the language being used. Previously, students or classes would write letters or later even e-mails to each other. Today, using ICT they can 'skype' or chat online, where they can not only write to each other in real-time, but also see each other and speak to each other online. Students are thus able to write, read, speak, listen, and react to a conversation using ICT as part of the language learning process. They are motivated to communicate and collaborate with peers to produce common products, for instance, wikis. These beneficial ICT-enhanced language learning activities call for the teacher to organize and monitor them, although in a blended language learning class the overall role of the teacher has changed from the traditional authoritative role to that of a facilitator.

A third major benefit of the use of ICT in blended language learning classrooms is the opportunity that ICT-based tools give to language teachers so that they can tutor their learners more effectively. With the help of ICT-based tools and the constantly growing number of available educational resources language teachers are able to give individual and personalized guidance to the learners. The use of several media–audio, video, authentic contexts and real-world experiences help language learners with different learning styles to assimilate the content according to their needs. In a blended learning environment that uses ICT tools, it is easier for the language teacher/tutor to use different approaches with students and accommodate different learning styles and the different needs of fast, slow, or handicapped language learners. Institutions in all educational sectors have a very important role in supporting their language teaching staff and their language learners in the meaningful use of ICT in language teaching and learning.

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