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ICT-Assisted Language Learning in Higher Education

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Abstract

Technology has become an integral part of our ever-changing world. Previously students begin to walk what they see and use technology around them. In schools and colleges, they begin using technology to increase their understanding of content standards. Usage of computers, tablets, and the software associated with these devices, become a tool for both teachers and students to increase their mastery of the standards exclusively through one umbrella-term, technology. Language learning is well developed through this methodology. The increase in the availability of technology also demands for its use in classrooms. With significant importance of technology in schools since the early 21st century, it could very well be time to start using technological wavier in education paves a great way for students to learn new contents. Teachers are beginning to utilize technology in their classrooms to benefit student understanding in many of the content areas. The present article focuses on the impact and efficiency of technology- based English language learning and their increase in cognitive levels.

Keywords; Technology, Language learning, Tertiary level leaners, Global citizens.

Introduction

The use of technology has a major impact on students as they transit into global citizens. The need for technology instruction and integration in schools is rapidly increasing. Many reviews demonstrated the significant areas of technology that bring considerable changes in students' achievement and their cognitive development. Students who also have access to computers and technology in their learning possess higher achievement rate and grade point averages than those with limited or no access of technological learning. Instructors must also have a strong understanding of the technology in order to guide their students effectively in its use.

Research Methodology

Many quantitative studies are designed with pre-tests and post-tests to bring effective results. They definitely have positive impact of perception in the teaching and learning processes. English language is an area of content,

presented in many different ways rather teaching. It is a subject gets mixed support which students really enjoy and understand it. Hence their affective domains levels also increases. Much of this can be attributed to the way in which the content is being or taught. As technology continues to enter into classrooms, teachers can begin using technology as another means for instruction, especially in providing training language subjects. There have been many similar studies done in this field. This study explores how computer-based instruction affects student achievement and their attitudes toward instruction. Many questions like, how does computer-based instruction impact the achievement of students in their cognitive levels? and how does the use of computer-based instruction affect student attitudes towards technology and pedagogical purposes? Despite these assumptions, there are many quantitative studies proved positive towards technology based language learning those enhanced the cognitive and affective domains of students at various levels.

A majority of educational institutions followed traditional mode of teaching invariably but a majority of professors of the reputable private educational institution of Technology from which two authors of this paper hail, opted for online teaching using BigBlueButton ,Open Source Web Conferencing for a few courses and Moodle, open -source Learning Platform for every course and the first author of this paper had an experience of teaching employing BigBlueButton a few semesters ago long before the pandemic period.

Online teaching is the need of the hour to avert any spread of infection. This drastic change caught teachers and students unaware. How many of them braced to follow online teaching? Has the stage been set well for online teaching and how many teachers received adequate training? Are they well-equipped to handle online classes?

Does the prior exposure help the private institution to make a smooth transition?

Statement of the problem:

The availability of requisite devices and internet connectivity is the million- dollar question. The main issues users face include internet connectivity, availability of gadgets, concerns of administrators toward these issues and the issues students and teachers have with these online technologies. The categories of these issues are technological, managerial, and pedagogical.

Relational Study reviews:

1. Technological Problems: Internet connectivity encounters a lot of impediments to reach users. Students in the remote area, even within the city during the natural calamities meet challenges in receiving uninterrupted connectivity. The interruptions in connectivity play the spoil sport game especially during the conduct of exam online. This interruption leads to student's and teacher's loss of time in the re-conduct of tests/examinations and thus to frustration later. Muthuprasada's survey research in 2021 on agriculture university graduates with structured & unstructured questionnaires shows students' rating on a 5 point scale after being calculated the percentage and being tried with "a measure of consensus for each statement" ensuring the constraints due to data limit, data speed rated as the major hindrance to online learning.
2. Gadgets are expensive and affordability to devices demands attention on the part of administrators. Not only the lack of stock or/and malfunctioning gadgets but also the lack of technical know how to operate those gadgets either by the teacher or/and the student check them from using for online teaching.
3. Platforms for streaming are umpteen but the need arises for confirming whether it caters to the needs of students from different area of the world and suitable for teachers to handle classes without any intrusion of outsiders. Each has its own advantages and disadvantages but careful attention to ensure whether it allows others to peep in will help teachers to be aware of the presence of strangers on the platform of their choice. At least a few teachers' limited expertise in handling such platforms also poses a problem for online teaching (Noor 2020).
4. Managerial Problems: The concerns of administrators on teaching online receive much attention before simply forcing others to adopt online teaching is a must. The decision to adopt online teaching will perhaps be ineffective and yet no preparedness and proper understanding of its implications deters the successful

implementation and realization of its worth. Essuman(2015) revealed through his study the lack of proper technical support, motivation and understanding about the over workload involved in the process. Hodges(2020) confirmed in his study the need for considering all the possibilities for effective online teaching before transition. Instructional design as well as planning carries much weight as learning is cognitive and social. Since temporary shift compromises on quality, the institution should consider skill training and accessibility, needs and attributes of all the students registered to ensure quality teaching and learning. He highlighted the futility of media comparison study since it fails to emphasis the quality improvement in comparison. The lack of technology management and support systems can be a cause of worry in this rapid transition in a few institutions (Noor 2020).

The ill-timing of Instructional time and space happens as a result of adopting blending method of teaching to suit the needs of students and the course content. The real challenge will be to "develop fluency with teaching and l earning with technology, not just with technology itself" (p.44 as cited in Bair 2011). Setting the parameters clearly should be the main concerns of any institutional management.

5. Above all, conduct of exams as well as evaluation offline is relatively convenient for institution to follow. The option of online teaching questions the reliability of online assessment and evaluation. The reliability carries a lot of weight in the conduct of online tests/exams. Milone(2017) drives home the point the online proctoring service, ProctorU's high technological and additional monetary demand on students is more than benefits from its assurance of integrity. So, the difficulty in preventing students from cheating in exams is inevitable (Kumar 2021) due to such prohibitive cost of proctoring service.

6. Pedagogical Problems: Online teaching has both merits and demerits like face -to -face teaching. Even though no mode of teaching is perfect, yet the assurance of the presence of students the other end creates a lot of issues and even if their presence is for the attendance, their attentiveness is poor in some cases. The real time teaching is possible but sincere learning is a question. The assuaging of students for their cerebral needs is beyond our reach sometime because of their expectations are more and their access to information has immediacy and so, this becomes, sometimes, intimidating to teachers.

Impact on technology and globalization

With the advent of technology and globalization, 21st century has become the era of bilingualism or multilingualism. A survey suggests that from year 2000, English speaking and learning has become a necessity. And in 14 years after 2000 graphs of English speakers and learners is increasing day by day. Recently I got a chance to visit Oxford university for a summer seminar, and was really astonished to know that many countries like ours one facing problems in L2 learning. They have pronunciation problems, grammatical errors and construction problems too. But many countries are using modern gadgets and are technologically advanced. They made a fusion of English teaching with technology and electronic aid. They are progressing and finding good results. There we have been introduced with many devices, apps and soft wares which are really helpful for English teaching. English is spoken as L2 in many countries but use of technical aids has made teaching easier, apt and accessible.

Necessity of ICT in English Teaching • To enhance students' interest in teaching, use of ICT and multimedia is necessary. There are many apps, devices and their use which attracts students to learn. • Traditional teaching always hampers students to interact with each other. As a result they become passive listeners only. They don't understand structure, meaning and comprehension of language, so can't make sentences and speak. Technological introduction give them opportunity to see visual and audio aid and enhance communication skills. • Use of ICT and multimedia enhance students' knowledge and give them some opening in classroom study. • Multimedia enriches teaching content and they are many apps which offer the teacher to interact with students one-to-one at any time even when they are not physically present. • Technology always makes liveliness in teaching. Class become interesting, interactive as ICT offers sound and picture coming together. Students can use these things in the absence of teacher and revise the content for better understanding. • Language Teaching is not a one day process. It's a continuous process and needs special attention and revisions. So, Teachers can give tasks to students and they can see their

contents with the help of devices as per their need. Students can use technology, contact their teachers through Net when not in class and get their expert advice as and when required.

Development of technology in a new world

"Education technology improves students' attitudes towards technology and learning, because it can customize the learning experience to the student and it makes learning more enjoyable, and interactive (Valdez and Hutchinson 34). The quantitative method will provide data relating to student tests scores based on their pre- and post-assessments. This kind of study uses a quantitative research approach. By using a quantitative method research approach, it provides more concise data that directly shows the correlation between student achievements for both focus groups, as well as how their attitudes have changed throughout the process.

Many studies witness that technology has a positive impact on student perception. The studies suggest there are many factors that play a role in how technology impacts student achievement. For one, the technology must be used in a way that assists a teacher with the content already being taught. Meaning it is used as a secondary source for instruction as opposed to being the only form of instruction. Secondly, the technology must be readily available for students to use and must be used consistently. Lastly, the teacher must have complete knowledge and training using the technology in order for it to be used successfully. These are all common themes discussed in the many studies done on computer-based instruction and the impact technology plays on student achievement.

Another study found that "students who use technology were (a) spending more time involved in collaborative work, (b) participating in more project-based instruction, (c) producing writing of higher quality and greater length, (d) gaining increased access to information, (e) improving research analysis skills, and (f) spending more time doing homework digitally. Studies have also determined that using technology at the beginning of class sessions helped students stay on task and concentrate." (Devlin 2013).

Methods and Design

Studies with quantitative research methods opine, "Quantitative research generally reduces measurement to numbers. In survey research, for example, attitudes are usually measured by using rating scales." (Johnson & Christensen 37). By using a quantitative method research approach it provided a dimension that offered to show if there is a correlation between both focus groups, while also understanding what is occurring from the participants' point of view. The quantitative method provides specific data relating to student tests scores based on pre- and post-assessments. The quantitative method also uses surveys provided to all participants to show changes in attitudes towards the use of technology throughout the study.

The goal of the study was to determine if student achievement and attitudes are impacted when students are only using computer-based instruction for language learning and the development of cognitive part. The participants of such studies are the students who will be divided into two groups randomly namely controlled group and experimental group. Each group being taught the same content but through two separate methods of instruction. The data collected from pre-tests and post-tests will be used to determine the increase in understanding by students in both instructional groups. The data will be gathered to determine how much growth has made for all students as a whole. Then data will be analyzed to determine which instructional group, teacher-led or computer-based, achieved a greater increase in achievement on the post-test.

Through data collection and analysis, it will be comprehended that students taught through teacher-led instruction had an overall higher average passing score than students receiving only computer-based instruction. Student attitudes towards technology will also an important factor when deciding how impactful technology implementation is to academic achievement. These findings provide educators with enough data to determine that computer-based instruction can be used for academic growth in students; however it is not as convincing as teacher-led instruction.

Hence such kind of studies explores how computer-based instruction affects student achievement and their attitudes toward instruction. These researches provide valuable insights into the importance of technology use in the classroom. As society continues to use technology on a daily basis, students need to have more opportunities to learn through technology in the classroom. This however, does not mean students should be using computers as the only means of instruction in the classroom.

The use of computers and technology for primary instruction did improve student attitudes towards learning and many students feel the learning was much more enjoyable when using computers than learning from the teacher. Hence it is worth-proving to believe that all computer-based instruction programs are beneficial, but that using technology and computer-based instruction as a secondary source of instruction can be beneficial for students' overall academic achievement, improve the level of cognitive domain and improve student attitudes towards technology and learning as well.

Conclusion

With the many advantages to technology integration and computer-based instruction, there are also some disadvantages. The cost of technology is something that should not be overlooked. With such little funding in education today, the cost of technology can cause many institutions to think twice about making purchases. An article when discussing the differences between computers and textbooks in schools stated the additional costs for technology integration that many overlook. "On top of the initial costs to each school system, the additional costs of servicing the computers, protecting the equipment from theft, and providing staff development for teachers must not be overlooked." (Wishengrad,R 4). Additionally, technology can also cause students to lose out on important face-to-face interactions that are necessary for human growth. Even though there are disadvantages in technical learning, the current world based on technology forwards the student community into the universe of development. Ultimately this development pitches a higher grade of success amid the pedagogy of English language learning also.

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