The Impact of Information and Communication Technology on Students’ Learning

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Abstract: This study aims to investigate the impact of ICT (information and communication technology) on the student's learning. The chosen college is Uqait Al Soquor College of Arts and Sciences, which is a branch of Qassim University. The sample for the this study was the students of the third level. (26) students, who majored in English language for the academic year 2015/2016. The most important hypotheses of this study are that, the use of ICT is resulted in better language performance and enriching students’ vocabulary. Three tools used for data collection were a student’s questionnaire, pre and post tests. The pre-test was given to measure the actual level while the post-test was given to check the progress made by the students after they learnt with ICT (projector, smart board and computer) for one academic term. Some of English teachers from different Universities in Saudi Arabia were interviewed. The data was analyzed by using a variety of statistical methods including the statistical package for the social sciences (SPSS) to the process the study data. The findings revealed the influential impact of ICT on the students’ learning. The achievement that students perform when learning with ICT can’t be denied. In addition to that, the use of ICT increases the students’ ability to read and understand. Moreover, ICT usage supports vocabulary enrichment and collaborative learning. Finally, there are some recommendations and suggestions for further researches.

Keywords: ICT application, impact, achievement, linguistic performance

1. Introduction

The basic target of students and learners is to learn English as well as they can. They want to read and write correctly and neatly, but many people want to be able to read and understand English. To meet these needs, more emphasis should be given to information and communication technology (ICT). ICT plays a powerful and significant role in the promotion and the development of language acquisition. This study focuses on the background and the significance of ICT, definition of terms, study questions and the objectives.

ICT as a part of authentic learning encourages students in expressing their own ideas, feelings and experiences. The study investigates the sources of difficulties encountered by students. To solve the problems that students face in learning, more emphasis will be given to ICT. The effect of ICT on the students’ performance and the powerful and significant role that it plays in the promotion of language acquisition is explained. That to say, ICT enriches one’s vocabulary.

Pelgrum and Law (2003) explain that near the end of the 1980s, the term 'computers' was replaced by 'IT' (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information. This was followed by the introduction of the term 'ICT' (information and communication technology) around 1992, when e-mail started to become available to the general public Pelgrum, W.J., Law, N (2003).

According to a United Nations report (1999) ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, another related information and communication activities.

According to UNESCO (2002); information and communication technology (ICT) may be regarded as the combination of ‘Informatics technology’ with other related technology, specifically communication technology. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs,.Etc. has been used in education for different purposes (Sharma, 2003; Sanyal, 2001; Bhattacharya and Sharma, 2007).

Ul-Amin states that “According to Daniels (2002) ICTs have become within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICTs generally refers to ‘computers and computing related activities’. This is fortunately not the case, although computers and their application play a significant role in modern information management, other technologies and/or systems also comprise of the phenomenon that is commonly regarded as ICTs.

ICT has become an integral and accepted part of everyday life for many people. ICT is increasing in importance in people’s lives and it is expected that this trend will continue, to the extent that ICT literacy will become a functional requirement for people’s work, social, and personal lives. ICT includes the range of hardware and software devices and programmes such as personal computers, assistive technology, scanners, digital cameras, multimedia programmes, image editing software, database and spreadsheet programmes. It also includes the communications equipment through which people seek and
access information including the Internet, email and video conferencing. The use of ICT in appropriate contexts in education adds value in teaching and learning, by enhancing the effectiveness of learning, or by adding a dimension to learning that was not previously available. ICT may also be a significant motivational factor in students' learning, and supports students' engagement with collaborative learning.

ICT is an umbrella term, widely used to contain all sort of technologies; computer, software, networking, telecommunications, Internet, programming and information systems technologies.

2. Statement of the Problem

ICT is essential for the students who want to learn English as a second language. Many students are characterized with the poor mastery of English. The study investigates the difficulties that face students and the important role of ICT. Many schools are in lack of internet connection and computers. Many students don’t know how to deal with technical devices. This is a real technical illiteracy that should be eradicated.

3. Objectives of the Study

The main objectives of this study are:
1) To certify the efficient role of ICT in the promotion of student’s language performance.
2) To indicate the importance of ICT in enriching students vocabulary.
3) To ensure the importance of ICT in developing the sense of participation among students.

4. Questions of the Study

The study tries to find answers to these questions:
1) What are the consequences of ICT application on the students’ linguistic understanding?
2) Does the use of ICT enrich student’s vocabulary?
3) How can ICT encourage student’s engagement in collaborative learning?

5. Significance of the Study

First, the study is supposed to add something new to the field of knowledge and then to be of a great importance to teachers, students, learners and researchers. Furthermore, the study will discuss how the use of ICT inside classrooms promotes language acquisition. That is to say, the student’s vocabulary and fluency are developed to a large extent.

6. Methods used in the Study

The methodology that followed to carry out the study; the description of the subjects (the population and sample), tools of data collection, the validity and reliability of the study tools.

Population of the Study
104 female English students in Qassim University.

The Subjects of the Study

The sample of this study is female students who study English at Uqlat Al Soqour Faculty of Arts and Sciences, (3rd) level for the academic year 2015-2016. The total number of the students was (26). The sample studied English as a second language and they all shared the following characteristics:
1) All had the same educational background.
2) All were female.
3) All were of the same age and in the same level (3rd level).
4) All were EFL Learners.
5) All were Saudi.

The Tests

Two English reading comprehension tests were designed and divided into pre-test and post-test. They were designed to suit the intended students. The pre-test was given to measure the actual level while the post-test was given to check the progress made by the students after they have been learnt with ICT for one academic term.

After receiving permission from the dean of the college, the researchers started their work. The group of the students who participated in this study was informed about the pre-test. They were also told that their scores would be confidential and would be used only for the purpose of the study.

The pre-test took place on March 2016 and it was given only one and half an hour of time in a comfortable, calm lecture room and the students attended and performed the test in a very suitable place and time. After the students finished, the papers were collected and marked and then the scores were fairly listed.

Three months elapsed during which the students attended organized lectures for three hours per a week in the presence of different types ICT, and at the end of the academic term, the participants were given the post-test accompanied by the same procedures used in the pre-test. The post and the pre-test were intended to measure whether there was a progress or not in the students’ performance due to the application of ICT.

Teacher's interview

In his thesis Salih (2014) pointed out to the interview as explained by " (Mostel and Kalton, 1971; quoted in Bell 1993:91; Cited in Al-Samawi 2000), Tanveer (2007) states that:

"The rationale behind the use of interview as a data collection tool was that it can provide access to things that cannot be directly observed, such as feelings, thoughts, intentions, or beliefs. (Merriam, 1998: cited in Oghta, 2005)".

An interview was another tool for data collection. It was designed to collect Data from college teachers. The items of the interview concentrated on the effects of using ICT on students’ achievement, the students’ attitudes towards the use of ICT and its vital role that plays in teaching and learning.
A written interview of (5) questions was used as an additional tool for data collection. It was design for (10) college teachers, who used to have a long experience in teaching English at universities; their experiences range between 10-20 years. The participants were (5) males and (5) females. The questions focused on the effect of ICT on the students’ learning. Also, it concentrated on how the use of ICT in class motivated students for language learning, and encouraged collaborative learning. In addition to that, ICT was proved to enrich students’ vocabulary and enhance teaching and learning process. The participants in the interview were told about the aims and objectives of it. They were also informed that their participation would be confidential. Their participation was used for the purposes of the study. The experience of the participants was put into consideration.

Two of the interviewees explained that, ICT plays an important role in supporting students’ engagement in collaborative learning. Another two interviewees confirmed the role of ICT in enriching and deepening skills. One of the interviewed teachers illustrated how the ICT can develop some reading skills: spelling, grammar, punctuation, editing and re-drafting. Most of interviewees agreed with the researcher that learning with ICT motivates the students to learn language more than the usage of the traditional ways. The interviewed teachers answered clearly most of the questions in the study and they were provided chances to talk about their opinions and attitudes towards the use of ICT in the field of education.

7. Findings of the Study

The findings of the study can be summed up in the following points:

1) The use of ICT will increase language fluency and vocabulary building.
2) ICT helps in the adaptation of the students with teaching materials.
3) The using of authentic materials engorges teamwork and motivation among students.
4) Students and teachers must have a previous background about ICT.

8. Recommendations

According to the findings of the study, some recommendations are offered:

1) Teachers of English language are recommended to expand the use of ICT in classes for better linguistic performance and for excellent achievement.
2) Teachers of English language should consider the important role that ICT plays in promoting vocabulary and fluency.
3) Students are encouraged to know how to use and benefit from technology in learning English.
4) Ministries of education are expected to train and equip teachers with ICT requirements.
5) Teachers of English language are recommended to persuade their students to lean for fun by using ICT.

9. Suggestions for Further Studies

Of course, lots of researchers missed some points that related to the role of ICT on language learning. So, further studies are expected to:

1) Complete the ICT missing areas related to the impacts of ICT on students.
2) Do extra research on the importance of ICT in promoting students’ standard in terms of performance, vocabulary enrichment, motivation and collaborative learning.

References