International Journal of Linguistics, Literature and Translation
ISSN: 2617-0299 (Online); ISSN: 2708-0099 (Print)
DOI: 10.32996/ijllt
Journal Homepage: www.al-kindipublisher.com/index.php/ijllt

IJLLT
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

How the Use of ICT Encourages the Student`s Collaborative Learning

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| ABSTRACT
This study aims to investigate the impact of ICT application on student's collaborative learning. The chosen college is Uqlat Al Soqur College of Arts and Sciences, which is a branch of Qassim University. The sample for this study was the students of the third level. (26) students who majored in the English language for the academic year 2015/2016. The most important hypotheses of this study are that the use of ICT results in better language performance and enriches students' vocabulary. Three tools used for data collection were a student 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 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 process the study data. The findings revealed the vital role that ICT play in supporting collaborative learning. Finally, there are some recommendations and suggestions for further research.

| KEYWORDS

ICT, impact, collaborative learning

| ARTICLE INFORMATION

ACCEPTED: 26 January 2023 **PUBLISHED:** 04 February 2023 **DOI:** 10.32996/ijllt.2023.6.2.6

1. Introduction

We are living in a constantly evolving digital world. ICT has an impact on nearly every aspect of our lives - from working to socializing, learning to playing. The digital age has transformed the way young people communicate, network, seek help, access information and learn. We must recognize that young people are now an online population, and access is through a variety of means such as computers, TV and mobile phones.

As technology becomes more and more embedded in our culture, we must provide our learners with relevant and contemporary experiences that allow them to engage successfully with technology and prepare them for life after school.

According to Gwyn et al**.** (2005, p.3), "Students, with computer access through a collaborative-group-issued smart card, are able to integrate direct observation and experience in this unique physical world with resources held electronically in responding to their learning challenge.

Students participating in the excursion program will explore and interrogate targeted databases of learning activities that will support a range of syllabus requirements. In groups, the students will work on a single complex and sustained challenge through related activities in the class, at home and through a critically timed visit to Sydney Olympic Park.

They will engage in work on the web, in class, in the field and in technology pods with an emphasis on student-centered, task driven, collaborative activities that will require them to explore data and information, construct and test hypotheses were appropriate, and present conclusions and solutions in the form of arrange artifacts. The new excursion program has been designed

within a constructivist philosophy, drawing more specifically on situated learning theory and incorporating collaborative learning underpinnings. Technology-supported problem solving embodies many of these elements through an emphasis on solving problems in authentic contexts that enhance the development of higher-order thinking skills; in keeping with this approach, the concept of computer supported collaborative learning (CSCL), drawing specifically on Vygotsky's sociocultural theory of learning can support the design of learner collaborative tasks.

Learner opportunities for clarification of common understandings, shared work activities, and collaboratively developed products/artifacts all scaffold through cognitive support tools (Harper, Hedberg, Corderoy& Wright, 2000) can be effectively implemented through the affordances of web-based environments. Collaboration, and the opportunity to collaboratively construct knowledge, are seen as important elements of a situated learning model. A situated learning environment supports the collaborative construction of knowledge (Brown, Collins &Duguid,1989), but as Hooper (1992) has pointed out, simply placing students in groups will not necessarily result in collaboration. Similarly, group use of computers does not guarantee collaboration. Katz and Lesgold (1993) point out that collaboration is more than cooperation: 'Cooperation ... involves a division of labour in achieving a task.

Collaboration happens synchronously; cooperation is either synchronous or asynchronous' (p. 289). Roschelle and Behrend define collaboration as: 'The mutual engagement of participants in a coordinated effort to solve a problem together' (Roschelle&Behrend, 1993, cited in Katz &Lesgold, 1993, p. 289). Jonassen's (1995) discussion of collaboration also emphasizes learners' socialroles in 'exploiting each other's skills while providing social support and modeling and observing the contributions of each member' (p. 60). Forman and Cazden take this definition even further by suggesting that true collaboration is not simply working together but also 'solving a problem or creating a product which could not have been completed independently' (Forman &Cazden, 1985, cited in Repman, Weller, &Lan, 1993, p. 286). Forman and Cazden have also noted that student discourse in solving collaborative problems has shown that students gain new cognitive strategies through peer collaboration by interpersonal discourse, yet as their understanding of a problem grows, and the initial support, encouragement and guidance of peers offer additional confidence, learners can move to articulate their own argument and resolve conflict. The implications for the design of the learning environment and learner scaffolding will be drawn from these theoretical considerations and research findings to develop cognitive tools.

To support learner collaboration at multiple levels." In an article, Curtis (February 2001. P.26) illustrated that Johnson & Johnson (1996) had listed the following major types of behaviors in collaborative learning situations:

- giving and receiving help and assistance;

-exchanging resources and information;

- explaining elaborating information;

- sharing existing knowledge with others.

- giving and receiving feedback;

- challenging others' contributions (cognitive conflict and controversy leading to negotiation and resolution).

- advocating increased effort and perseverance among peers.

- engaging in small group skills.

- monitoring each other's' efforts and contributions.

Akele (2013, p.102|) reports that**;** *"The use of technology makes English class interactive and collaborative as teachers and learners are given the opportunity to explore ideas and have knotty problems solved. They could relate with the native speakers and authorities in the field. Reddi (n.d) explains that ICT provides uniform quality to the rich and the poor, the urban and the rural and at the same low rate in as much as the content is well produced and is of good quality."*

Nafisat and Abdul Jaleel (2014, p.24) state that: "Spector (2008) advocates how student collaboration is achieved through technology-mediated communication such as e-mail and teleconferencing across space and time in local and wider communities.

Kozma (Kozma, 2003; Kozma& McGhee, 2003) illustrated a student learning approach in which students collaborate with their peers in given projects. He named this approach the Student Collaborative Research Cluster. These classroom practices support the development of skills needed by a society focused on sustained economic development and social transformation: information management skills, communication and collaboration skills, interpersonal and self-directional skills, and the ability to create and innovatively apply new knowledge to solve complex problems. Similarly, King (2005) and Simonson, Smaldino, Albright, and Zvacek (2003) ascertained that ICTs foster collaborative learning.

Considering teachers' professional development cannot be achieved in isolation, Kozma (2003) also exemplified how teachers collaborated with students, colleagues in the school and others outside the school such that ideas on solving classroom problems could be shared and disseminated. Collaboration among lecturers as a benefit of ICT use in teaching is also found in Abolade and Yusuf (2005); they found that ICT allows for networking with other teachers, thus connecting teachers and allowing them to exchange ideas, share resources, and improve teaching practices.

Mohammad Riasati (2012, p.26). States that "Another benefit of technology use is the encouragement of collaboration and communication in learning activities. According to Gillespie (2006), new technology enables students to collect information and interact with resources, such as images and videos. Murphy (2006) states that the Internet can serve not only as a reference source but also as a means of communication. It is argued that technology enables the user to get connected to the world outside of the classroom and hence produce high-quality work, knowing that their work will be viewed by a large audience. In addition, learners can get in touch with their peers from other schools, experts in the field and members of interest groups. Researcher ensures that collaboration is one of the crucial impacts of implementing ICT in the field of education.

2. Statement of the Problem

ICT is essential for students who want to learn English as a second language. Many students are characterized by poor mastery of English. The study investigates the difficulties that face students and the important role of ICT. Many schools are in lack 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 ensure the importance of ICT in developing a sense of participation among students.
2) To certify the efficient role of ICT in the promotion of students' language performance.
3) To indicate the importance of ICT in enriching students' vocabulary.

4. Questions of the Study

The study tries to find answers to these questions:

1) How can ICT encourage students' engagement in collaborative learning?
2) What are the consequences of ICT application on the students' linguistic understanding?
3) Does the use of ICT enrich students' vocabulary?

5. Significance of the Study

First, the study is supposed to add something new to the field of knowledge and then to be of great importance to teachers, students, learners and researchers. Furthermore, the study will discuss how the use of ICT inside classrooms encourages students' engagement in collaborative learning.

6. Methods used in the Study

The methodology that was used in carrying out the study included the description of the subjects (the population and sample), tools of data collection, and the validity and reliability of the study tools.

6.1 The Subjects of the Study

The sample of this study was 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 students was (26). All the students 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 and 5) All were Saudi. See the table and figure below that show the study sample according to number and age.

Age	Number	Percentage
Less than 20 years	3	11.5%
20 – 25 years	23	88.5%
Total	26	100%

Table (3.1) Distribution of age among Experimental group

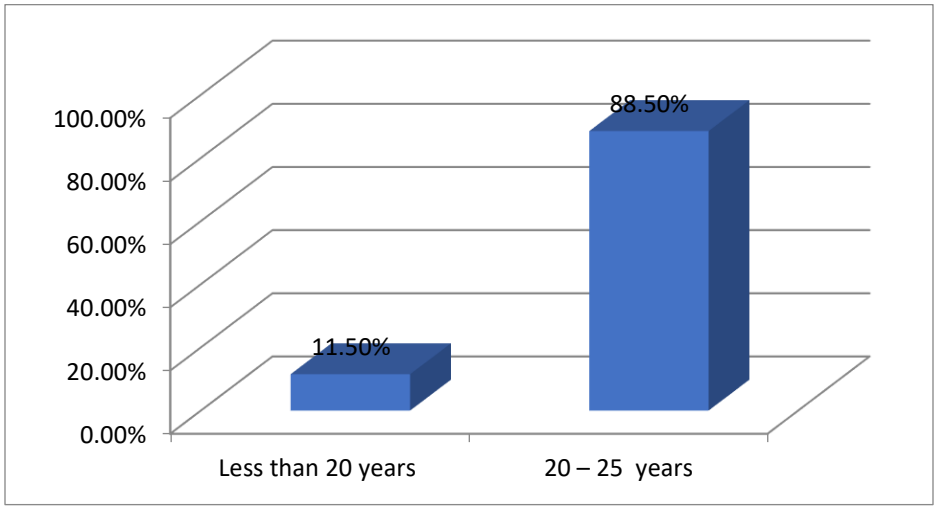

Fig (3.1) Distribution of age among Experimental group

6.2 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 had 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 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 a 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 week in the presence of different types of 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 progress or not in the students' performance due to the application of ICT.

6.3 Teacher's interview

In his study, Salih (2014) pointed out the interview as explained by " (Moster 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 Ohata, 2005)". An interview was another tool for data collection. It was designed to collect Data from college teachers. The items interview concentrated on the effects of using ICT on students' achievement, the students' attitudes towards the use of ICT and its vital role that it plays in collaborative learning.

A written interview of (5) questions was used as an additional tool for data collection. It was designed 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 the 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 ICT could develop some reading skills: spelling, grammar, punctuation, editing and re-drafting. Most of the interviewees agreed with the researcher that learning with ICT motivates the students to learn the language more than the usage of 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.

6.4 Questionnaire Results

A questionnaire was distributed to twenty-six students, the experimental group, only to investigate the vital role that ICT plays in college students 'collaborative learning by choosing items related to the five hypotheses of the study. The response options in the questionnaire are (strongly agree, agree, undecided, disagree and strongly disagree).

Q2. In collaborative learning, I can work more actively.

Item	Frequency	Percentage %
Strongly agree	20	76.9
Agree	6	23.1
Total	26	100

Table (4.3): In collaborative learning, I can work more actively

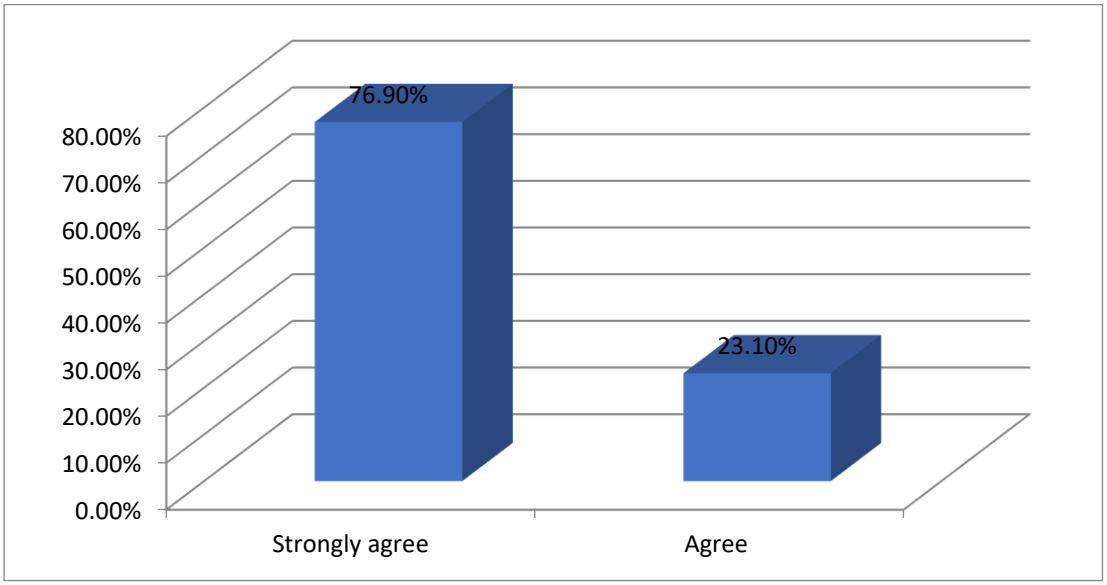

Figure (4.3): In collaborative learning, I can work more actively

The above table & Fig (4.2) show that (20) of the students (76.9 %) strongly agreed with item (2) ;(In collaborative learning, I can work more actively), while 6 students (23.1%) responded 'agree'.

Q3. New opinions and ideas were discussed when learning within groups.

Item	Frequency	Percentage %
Strongly agree	11	42.3%
Agree	15	57.7
Total	26	100

Table (4.4): New opinions and ideas were discussed when learning within groups

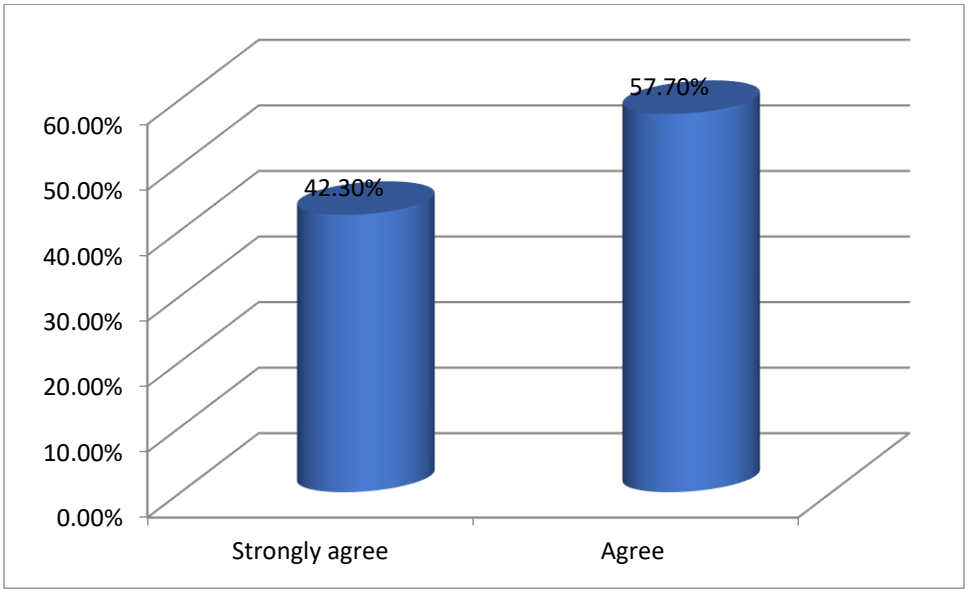

Figure (4.4): New opinions and ideas were discussed when learning within groups

According to table and figure (4.3), 11 of the 26 students (42.3%) responded 'strongly agree' to item (3); (new opinions and ideas were discussed when learning within groups), While 15 students (57.7%) answered 'agree.'

Q5. Group discussion is enjoyable.

Item	Frequency	Percentage %
Strongly agree	18	69.2
Agree	8	30.8
Total	26	100

Table (4.6): Group discussion is enjoyable.

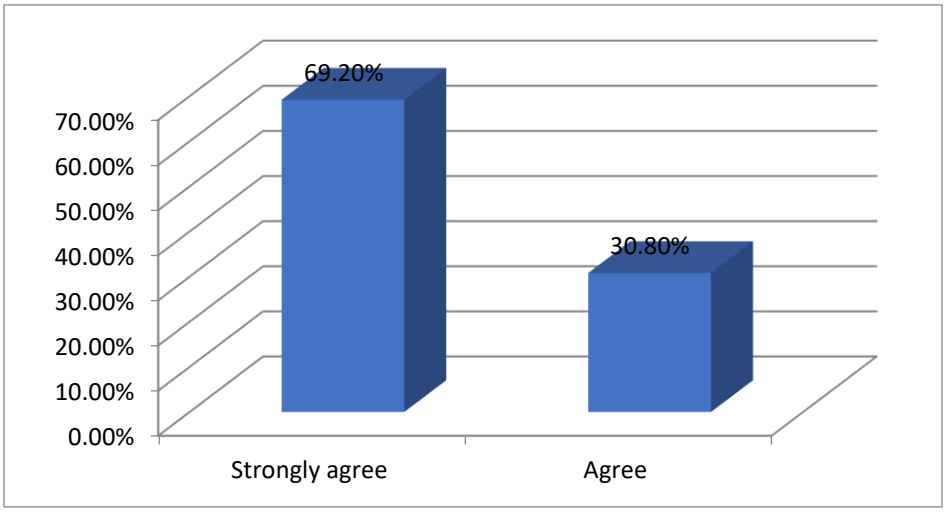

Figure (4.5): Group discussion is enjoyable.

According to table &Fig (4.5), the percentage of students who strongly agree with item (5) **(**Group discussion is enjoyable) are 18 students out of 26 (69.2 %), and the rest 8 students (30.8%) responded 'agree'.

7. Findings of the Study

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

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

8. Recommendations

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

1) Teachers of the English language are recommended to expand the use of ICT in classes for better engagement in collaborative learning and for excellent achievement.
2) Teachers of the 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 the English language are recommended to persuade their students to learn for fun by using ICT.

9. Suggestions for Further Studies

Of course, lots of researchers missed some points related to the role of ICT in 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' standards in terms of performance, vocabulary enrichment, motivation and collaborative learning.

Funding: This research received no external funding.
Conflicts of Interest: The authors declare no conflict of interest.
Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

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