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Effect of ICT on ESL Learners' Writing Proficiency Skills

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Abstract

This study aimed to investigate the Impact of ICT on the Writing Skills of ESL learners at Secondary level. This study was conducted in a Secondary school of Sadiqabad. This study was experimental. Two groups were administrated to conduct this study. Each group contains 25 ESL students at secondary level. One of them is Control group that was taught through traditional method of teaching and other is Experimental group that was treated with ICT integrated Collaborative method of teaching. Before conducting the study, pretest was conducted to find out the present knowledge. After conducting study, posttests were conducted to find out the difference of the scores. Posttest of the Experimental score disclosed that ICT based Collaborative method of teaching is better and significant method of teaching as compared to traditional method of teaching.

Key Words: ICT (Information and Communication Technology), SL ESL learners, Secondary level, Writing Skills

Introduction

The term "Information and Communication Technology," or ICT for short, refers to the widespread use of electronic delivery systems like radios, TVs, and projectors in the modern educational system. ICT also encompasses computers, the Internet, and other electronic delivery systems. According to (Kent & Facer, 2004), school is an essential place where kids participate in various computer activities. On the other hand, the authors noted that the home serves as a supplementary location for regular involvement in a more limited set of computer activities. The use of information and communications technology in teaching, learning, and evaluation is becoming more effective.

A major instrument for educational transformation and reform is information and communication technology (ICT). A lot of earlier studies have shown that the proper use of information and communications technology (ICT) may improve the quality of education and relate it to real-life problems (Ariani, Praghlapati, & Pratama, 2020). According to (Adam, Tatnall, & Technologies, 2017), learning is an activity that occurs continuously throughout a person's life and involves the alteration of the learner's expectations via the pursuit of information, which deviates from more conventional methods. They will need to be prepared for the arrival of new sources of information throughout time and be eager to seek them out. The ability to use various forms of information and communication technology will be an essential need for these students.

The use of ICT has a tendency to increase educational accessibility. With the use of ICT, education may take place whenever and wherever it's needed. The contents for an online course, for instance, may be accessed at any time, day or night, seven days a week. Classrooms that use teleconferencing provide easy and convenient interaction between the

student and the instructor at the same time. Learning and instructing do not need to rely just on printed materials anymore because to advances in ICT. Internet users have access to a plethora of materials, including video clips, audio sounds, graphic presentations, and many more types of media, from which they may gain information. According to recent studies (Sanchez, Alemán, & Education, 2011), the use of ICT in the classroom may help facilitate the shift towards a more learner-centric pedagogical approach. Learners are permitted by their instructors to make judgments, plans, and other academic choices in ICT-based classrooms since they are actively participating in the learning processes (Lu, Hou, Huang, Information, & Technology, 2010). Therefore, thanks to ICT, there are now more educational affordances and opportunities available to both students and teachers. Following is a description of some of the more particular advantages associated with the use of ICT in educational settings.

Theoretical Framework

The theoretical foundation of collaborative learning was initially derived from the constructivist approach and socio-cultural approaches to teaching (Wahbi et al., 2016). This was done in order to account for the unique characteristics of collaborative learning. Collaborative learning and peer correction in the context of the university can significantly influence students to keep up a consistent inspiration and friendliness attitude to their learning; they also help to decrease the dropout rate and support a higher level of academic normalcy (Capobianco, 2017). Collaborative learning requires not only the division of labor within a specific task, which is the foundation of teamwork, but also its joint completion in order for the members of the team to be able to construct meanings together in a cooperative manner and develop their cultural and professional expertise. (Wan et

al., 2000) suggests a teaching that is founded on teaching itself as a pedagogical practice.

When one examines the past of research conducted on the subject of language education, one discovers that the idea of collaborative learning is not a novel one in this particular subfield (Romera-Liebana et al., 2018). There are pedagogical models that have been produced by academics, and they demonstrate that collaborative procedures have been taken into consideration in their creation (Diga, 2017).

When discussing cooperation, it is common practice to focus on recent technological advancements and the expansive opportunities for collaborative learning that such advancements allow. In point of fact, collaborative learning is an essential idea, both in terms of its theoretical underpinnings and its application in the real world (Petersen, Baker, Pather, & Tucker, 2020). In light of these concerns, the current investigation was carried out to investigate the impact that EFL students' participation in online collaboration could have on their growth as writers.

Significance of the Study

Students are encouraged and given the opportunity to work together and learn from one another in the context of collaborative learning in order to study and investigate a topic, find a solution to a problem, finish a task or an assignment, or develop a project. Using information and communication technology (ICT) to assist collaborative work like this provides a variety of benefits. Not only may it make some collaborative tasks easier to carry out, but it can also make it possible for students to work together on projects despite the fact that they are situated in various areas and are working at different times. In addition, they are able to practice critical skills for the 21st century, such as working together, communicating effectively, and creating new knowledge with the help of ICT-based collaborative work. In this respect,

ICT-supported collaborative learning has a lot to contribute.

The purpose of this study is to evaluate whether or not collaborative learning is beneficial in assisting ESL students in developing their writing abilities in English. The significance of the research lies in the fact that it intends to investigate, in great detail, the question of whether or not students create superior writing while working in small groups as opposed to when working singly. It is necessary to provide an explanation of the function that the internet serves in our everyday lives. At this point in time, computer technology is prevalent in every sphere of life; yet, there are certain concerns associated to various advances in this technology. Before the invention of computers, it was impossible for a single person to store thousands of papers in a manner that would guarantee that no one would ever be able to read those papers. Today, however, you may protect your documents on computers. The computer has made almost every task simpler and more efficient in recent years. Additionally, we can get the necessary material by using the internet. The technology that underpins the Internet makes our lives simpler by allowing us to get anything, including any information, at any time and in any location with only the press of a button. Because of this, it is imperative to investigate the function that the internet plays in the acquisition of a second language in this day and age when it plays such an important part in every aspect of modern life. Collaborative through ICT means the development of general knowledge and the ability to apply that general information to the solution of issues via the internet are two goals of learning a second language. Teachers that want their pupils to expand their knowledge via the usage of the internet and share it with the other students might benefit from using collaborative learning in their classrooms. Learning via collaboration has several advantages, particularly for

individuals who have not been successful in their previous academic endeavors as evidenced in regular classrooms. This study is being conducted to investigate the function that the internet plays in the process of collaboratively learning a second language.

Research Questions

1. What is the effect of the use ICT tools and Collaborative Learning Method in enhancing Second language proficiency as far as writing skills are concerned?
2. What is the attitude of the ESL learners towards use of ICT and collaborative method of teaching?

Objectives

1. To explore the effect of use ICT tools and Collaborative Learning Method in enhancing Second language proficiency as far as writing skills are concerned?
2. To investigate the attitude of the ESL learners towards use of ICT and collaborative method of teaching?

Literature Review

The most important aspect of effective communication is having strong writing abilities (Nee, Yunus, & Suliman, 2019). Writing is something that's always been a part of our lives. This is seen when we write in order to share our ideas and to make others comprehend what is going on in our heads on a daily basis. Therefore, having exceptional writing abilities enables an author to present his or her message in a way that is understandable and requires the reader to spend less time doing so in order to grasp what the author has written.

It has also been suggested by (Ariantini et al., 2021) that students do not necessarily need to be able to write in order to be effective in writing. Despite of this, children must be able to comprehend some things both before and after they write. The setting of this study is not primarily focused on writing abilities; rather, the purpose of this research is to investigate the connection between the usage of social media and the

influence it has on the promotion of writing skills.

Writing abilities include things like correct punctuation, spelling, syntax, sentence building, and vocabulary, to mention just a few of the components. The students will be able to arrange their prior knowledge and beliefs into reasoning that is compelling, and they will be able to communicate their ideas via prose that is well formed and free of errors if they have these abilities.

When the students are provided with these abilities, it is much simpler for the audience to comprehend the material being presented. However, the vast majority of us are not aware that students are writing by inputting their thoughts on various social media platforms on a daily basis.

ICT and Its Impact on Education

The fast development of a wide variety of consumer electronics products has resulted in an increase in the prevalence of ICT applications in everyday life. ICTs are extensively utilized in many parts of life, including leisure, business, and academics, and today's children and teens are growing up with computers and mobile devices entrenched in their everyday lives, as stated by (Revilla Muñoz, Alpiste Penalba, Fernandez Sanchez, Santos, & Technology, 2017). There is no question that using social media and surfing the Internet has become part of the daily routine of students in today's society, particularly those in elementary school. The use of information and communication technology (ICT) is described in greater detail by (Chin Nee, Md Yunus, & Suliman, 2020), as a means by which instructors are enabled to encourage student-centered learning by fostering in their students a feeling of belonging in society. As a result of this, the role of the teacher is critically important in the incorporation of social media into the educational process, particularly in fostering and encouraging a

Love of writing among today's students. One way to encourage people to write and give them practice is to give them writing assignments that they can complete on social media platforms. This is in line with the eighth shift in the National Education Blueprint, which is to Leverage Information and Communication Technology (ICT) to scale up quality learning throughout Malaysia. ICT has a tremendous capacity to hasten the acquisition of information and the development of thinking skills over a wider scope. The potential has, however, not even come close to being realized (Gunawan, 2017).

Research Methodology

The aim of this study was to evaluate the effect that the use of information and communication technology has on the writing abilities of secondary school students learning English as a second language. This study falls under the category of experimental research. The process of carrying out this study consisted of two stages. In the first part of this study, an instructional activity was carried out to examine the impact of the ICT method of instruction. In order to do this, two separate groups were established. To clarify, this would be the Control Group and the Experimental Group.

Research Design

To conduct the study two groups were administered one of them is named as Control group and second was named as Experimental group. Control group was taught through traditional method and Experimental group was treated through ICT integrated Collaborative learning method of teaching. For this purpose, a public sector Govt. Girls Secondary School old Sadiqabad.

Population

Area of study for this research was district Rahim Yar Khan. The population of the study was female students of urban public secondary schools of Rahim yar Khan. Population was comprised of students from

and their average age was 14 to 16 years. Selection of girls would be made randomly.

The population of the study was male students of urban public secondary schools of Rahim yar Khan. Population was comprised of students from and their average age was 14 to 16 years. Selection of boys would be made randomly.

(Annexure A)

Sampling

Girls' public secondary schools from tehsil Sadiqabad of Rahim Yar Khan was taken as sample for this research.

(Annexure B)

Sample Size

Sample size for this study was one female public secondary school from Sadiqabad city. 50 students were selected randomly. 25 students were selected for experimental group and 25 students were placed in control group. Before conducting study while selecting ESL learners it was made sure by the researcher that they were all of equal caliber. Their caliber and mental level were assessed by middle standard examination result card conducted by Punjab Examination Commission.

25 ESL students were also included in this study to observe their opinion regarding the method applied in this study. They were given a questionnaire to know their opinion about use and effectiveness of ICT assisted Collaborative learning based teaching method in ESL classroom.

Research Procedure

In this research Controlled group was taught by traditional method through books and black/white board and experimental group was taught by available ICT i.e. CPU, LCD, Microphone, Speakers, Headphones, internet, SNSs etc. Pre- test had helped to check present knowledge and Posttest had helped to make difference of both teaching methods for both different groups. Duration of study was consisted of 6 weeks for both groups.

Validity of Instruments

Validity is the extent to which the instruments used during the study measure the issue they are intended to measure (Parvaresh & Amin, 2005). Under the auspices of the kind supervisor the validity of the instruments was ensured. After devising the questionnaires, the questionnaires were pre-tested to ensure the validity of the questions. So that the ambiguity of the questionnaire can be removed and they can be simplified for creating better understanding among primary teachers.

Reliability of Questionnaire and Test

Reliability is the extent to which the measuring instruments would produce consistent scores when the same groups of individuals are rapidly measured under the same conditions (Oben, 2021). For test reliability, the researcher has used Test-Retest method. A measure of reliability known as test-retest reliability is achieved by subjecting the same set of persons to the same test repeatedly over the course of some amount of time. The reliability of the test may then be determined by correlating the results from Times 1 and 2, which measures how well it holds up over time. By using this method, correlation was calculated as 0.81 that shows good reliability of the test.

Delimitations of the Study

This study was carried out in one Public School of Sadiqabad city, where ICT resources like computer laboratory and internet sources would be available.

Writing skills are vast to teach so Teaching would be focused on essay writing, story writing and letter writing.

Use of ICT in Writing

Wordle

Wordle is a game that allows you to generate "word clouds" from text that you give using the text you input. The clouds highlight the words that are used more often in the original text by bringing them to the forefront. You have a variety of typefaces,

layouts, and color schemes to choose from when customizing your clouds. Wordle gives you complete creative control over the pictures it generates for you, so you may use them anyway you like. You have the option of printing them off or saving them to your computer desktop to use anyway you see fit. These word clouds are helpful for summarizing huge papers, and they also assist teachers in guiding pupils towards more creative forms of writing. Because it is a web-based service, your browser must have Java Script installed in order to use it. Because mobile phone browsers do not support it, it is not possible to generate a word cloud on a mobile phone. It is necessary to utilize a laptop or desktop computer in order to generate the word cloud; however, after that, learning activities may be carried out on any of the other devices that are present in the classroom.

Online evaluation by the student, the instructor, and peers using a rubric

In a conventional school setting, the instructor is the only evaluator of students' work. Not only is s/he the sole person who can give judgment on the performance, but s/he also has the most randomized evaluation method of everyone. The majority of the time, the instructor does not provide an acceptable and consistent rubric to evaluate students' writing activity. If such a rubric is established, it must be made accessible to students, and students must take an active part in both the evaluation of their peers and their own work. When a teacher considers incorporating ICT or Web 2.0 resources, he or she should plan ahead to include an internet-based online rubric that may be used for evaluation by the instructor, peers, and the student themselves. There are two straightforward tools available for this purpose, namely: 1) Use Google Form to create an online rubric. 2) If necessary, use Flubaroo to generate an auto grading and determine which responses are correct and which are incorrect. In general, there are not

going to be any correct or incorrect responses in the rubric that will be used to evaluate the writing exercises. The inclusion of Flubaroo in the evaluation rubric is only required if the test in question is of the comprehension kind.

The grading system has to ensure that the language used in all of these different tasks is unrehearsed and flows naturally. Due to the fact that technology is intended to foster unstructured and informal ways of learning, the language that is produced may be fairly easy going and natural, as well as full of mistakes, typos, and spelling problems. In each of these writing actions, there need to be room for and permission to make use of comparable language. Here is an example of an online scoring rubric that may be used to evaluate different types of writing assignments.

(Annexure C)

Table 3 shows the results of an independent t-test of the pre-test control and experimental groups. The total number of participants in this table was 25 for each group. The control group's mean pre-test value was 24.53, while the experimental group's was 19. The standard deviations are 1.48 and 1.9, respectively. The number 58 is equal to the value of d . Through the assumptions of t-test the pre control and pre experimental groups t-value is 10.51 and effect size is 0.67 that is larger than 0.05. ICT's effectiveness in boosting learners' English writing skill

(Annexure D)

Table 4 shows the results of an independent t-test of the post-test control and experimental groups. The total number of participants in this table was 25 for each group. The control group's mean pre-test value was 24.53, while the experimental group's was 46.86. The standard deviations are 1.47 and 2.75, respectively. The number 58 is equal to the value of d . Through the assumptions of t-test the pre control and pre experimental groups' value is -39.163 and effect size is 0.047 that is less than 0.05. Hence it is proved that Use of

ICT proved significant in improving ESL learners' writing skills.

Discussion and Conclusion

The findings of this research project have shown to us that the impacts of Facebook on the students' anxiety about writing manifest as a combination of positive and negative reactions. In spite of this, the multiple benefits and characteristics that make it easier for Facebook to host an active learning environment such as online collaborative writing unquestionably outweigh its drawbacks, as was shown in this research.

The data obtained through the students' writing performances on the pre and post tests were analyzed, and the results showed that the students' writing performances improved in both the control group and the experimental group. However, after comparing the differences in the post-test results, it was discovered that blogging collaborative writing was more effective than class writing instruction. According to (Jones, 2003), language instructors feel that pupils get an advantage from the additional writing that is required in online discussion forums and utilize it to communicate effectively in real-world settings.

The experimental group's writing ability improved as a result of the collaborative blogging activity, and the activity had a favorable impact on both the composition and the subject matter of the students' writing.

The language and writing tools that were made available to the students who participated in the experiment might be one reason for why blogging seems to be successful in improving students' writing abilities. The writing examples and activities that were related to the topic were restricted for the control group since they had just a limited amount of exposure to the language. In other words, pupils were provided with fewer tasks on the various forms and patterns of paragraph writing.

The experimental group was given the opportunity to have more exposure to language and writing input as well as resources. They discovered the possibility to practice considerably more instances of sentence structures and paragraph writing than the group that served as the control. They have access to a wide variety of interactive activities and the ability to pick and select depending on their particular requirements. As a consequence of this, there seemed to be a considerable difference between the experimental group and the control group in the post-test results. This was due to the fact that the experimental group had more opportunities to get the essential materials.

The beneficial impact that blogging had on the writing of students was observable in their written work in the form of increased sentence length, enhanced sentence structure, and increased creative writing. Additionally, the learners' interest in writing was raised as a result of utilizing blogs as a forum for their writing. This study lends credence to the hypothesis that blogging increases learner engagement, which in turn motivates students to read and write for the purpose of communicating. This finding is in line with findings from other studies (Zhang, 2009) in which students of English as a foreign language expressed optimism over the usage of weblogs to improve their writing abilities.

According to the results of this research, the writing performance of students with lower levels of education significantly improved when compared to students with higher levels of education. This is consistent with a study that was carried out by (Yunus, Tuan, & Salehi, 2013), in which he found that blogging helps low proficiency level students to produce constructive writing. This was further supported by (Amir, Ismail, & Hussin, 2011), who carried out a study on a group of students who were taking general English proficiency course. (Amir et al., 2011) also

found that blogging helps low proficiency level students to produce constructive writing. Their results demonstrated that blogs lowered the obstacles associated with writing, and students reported feeling more confidence in their ability to write when they were aware that other members of the community could read their work and provide criticism on blogs. Students had the ability to study the language alone and track their progress while doing so, which provided them with a venue for self-improvement and allowed them to track their development independently.

Because the findings demonstrated both positive and negative feedbacks, this was in line with many researchers on writing apprehension and web 2.0 (Chokwe, 2013) who had seen affirmative effects on the students' writing apprehension after the use of web 2.0 tools. These researchers had seen positive effects on the students' writing apprehension.

Even more so, it was parallel with the findings of (Mohd Nawi, Ramamurthy, Shafien, Omar, & Nik Azim, 2021), who discovered negative outcomes on her respondents' apprehension assessment but saw favorable changes on the stress and product apprehension level following the online writing intervention.

Facebook could be integrated into the English language classroom with some modifications and adaptations of tasks and activities, particularly those concerning ESL writing activities, due to the promising effects that have been cited in a number of recent studies (Ananthan & Said, 2019).

Blogs, which may be used both as learning and teaching tool online, can be seen of as a facilitator for the writing that learners engage in. Students get more confidence in their ability to voice their opinions as a result of the newly created opportunities for peer interaction that come in the form of blogging. Blogging is beneficial in the classroom

because it allows teachers to provide students writing assignments that are formed via the use of an interactive process, which in turn motivates students to develop their writing abilities. Blogging also provides an innovative learning environment that enables students the opportunity to actively participate in the learning community. This opportunity is provided via the medium of blogging. Students have the opportunity to practice a variety of language skills in an authentic learning setting, which may help them overcome obstacles to writing.

In addition, due to the recent revisions made to the national assessment policy, it is believed that this online writing platform is an appropriate and cost-effective medium for the current English language classroom teaching. This is because the national assessment policy has been updated to include a more comprehensive assessment package.

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(Annexure A)

City Name	Boys Schools	Girls' Schools	Total Schools
Rahimyar Khan	11	9	20
Sadiqabad	8	7	15
Khanpur	8	7	15
Liaquatpur	8	7	15

(Annexure B)

Students	Female
Control Group	25
Experimental Group	25
Total	50

(Annexure C)

Test	N	M	SD	D	t	Effect size
Pre.CG	25	24.53	1.48	24	10.51	0.67
Pre.EG	25	19	1.9			

(Annexure D)

Test	N	M	SD	D	T	Effect size
Post.CG	25	24.53	1.47	24	-39.163	0.047
Post.EG	25	46.86	2.75			