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A Comparative Study on the use of ICT on Male and Female Students' Learning at Elementary Schools level

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Abstract

Learning for education requires acquiring many sorts of information and either modifying or gaining new knowledge, behaviors, skills, abilities, and preferences. The study looks into elementary school students' using ICT in their learning because technology is being used in every part of life, including education, and its usage is becoming more widespread and crucial for students. The aim of this study was the use of ICT on male and female students learning at elementary school levels. The study was descriptive, and the data was gathered using a quantitative method. The population was made up of students from Islamabad's public elementary schools male and female students of 7th and 8th grades. The findings also show that male students utilize ICT with confidence and are familiar with the tools. Male students frequently utilize the internet for both personal and academic purposes. In elementary school, male students utilize ICT to expand their knowledge and improve their digital skills. As a result, the majority of male students choose careers in software engineering and computer sciences. Female students are also less interested in using ICT than male students. The purpose of the study is comparison between of male and female students learning through ICT.

Keywords: Learning, Technology, Usage and Gender Differences.

Introduction

Information and communication technology" is what ICT stands for. It describes technological advancements that facilitate communication-based information access. The internet, wireless networks, mobile devices, and other communication tools fall under this category. It indicates that there are more options now than ever before to employ ICT in teacher training programs and raise teacher quality for more effective instruction. ICT performs a crucial role in the electronic storage, recovery, manipulation, and transfer of information that is digital. Formally speaking, they are known as personal computers, digital televisions, emails, and Android systems (Scholten, Velde, & Manen, 2009).

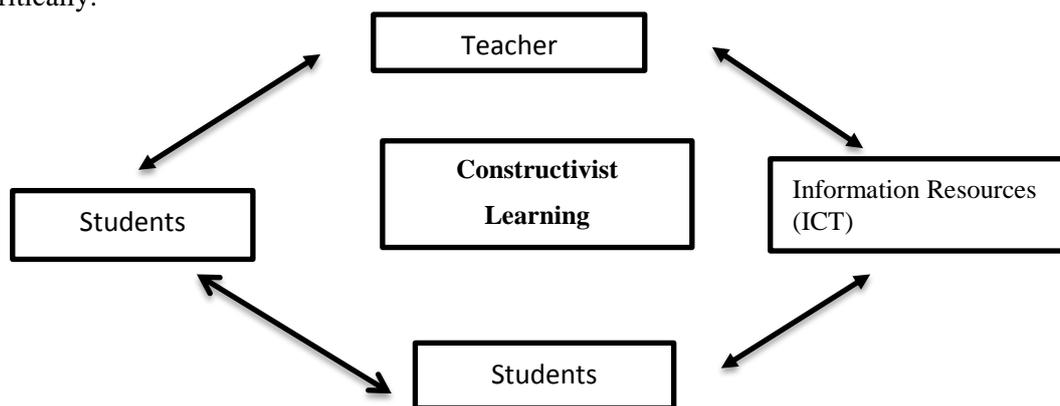
The modern world is built on information and communication technology (ICT), hence appreciating this medium and its basic ideas is regarded as a crucial component to a quality education (UNESCO, 2002). This article examines the use of ICT on male and female students learning at elementary school levels. In just a few years, communication technology has become fundamental to the development of modern society. The majority of nations on Earth now understand the value of communication technology in education.

According to Bourne (2017), Technology is becoming a more vital component of every student's learning kit as a result of its constant evolution and growing influence on societies around the world. Therefore, educational institutions must adopt information-and technology-based learning schemes in education (Ullah et al., 2019). To make sure that educational institutions receive the critical knowledge required for globalization, nations everywhere are working to provide their teachers with hands-on ICT training. ICT is revolutionizing how educational processes are carried out by adding valuable elements to virtual learning environments. The phrase "information communication technology" is often used to describe the technologies that are used to gather, store, edit, and transmit information in different forms. Effective integration of ICTs in education requires a complex system

that addresses various aspects such as curriculum development, effective pedagogy, institutional preparation, teacher competency, technology, and long-term funding.

Theoretical framework

Constructivism is a child-centered approach to learning that depends on the idea that knowledge is created by learners in their minds." Stated in various ways, students create new knowledge by integrating existing knowledge with newly acquired knowledge. Constructivist education holds that a student's beliefs, experiences, and attitudes influence their learning as much as the context in which a concept is taught. Constructivism holds that the process of creating new knowledge is what constitutes learning. Through constructivist learning, students are constantly active contributors to the construction of meaning and knowledge rather than passive recipients of it. Thus, the goal of teaching and learning should always be to create an atmosphere where students can create new information rather than having their knowledge modified. ICT is a helpful tool that can support constructivist innovations in the teaching-learning process because of the high demand for education in our culture. The finest visual aid for constructivist learning theory is information and communication technology. Constructivist learning is the foundation of ICT-based learning activities and programs. Assisting students in adjusting to new circumstances, exploring new material, gaining new knowledge, and practicing new experiences, enables students to actively participate in the learning process. Students who study computer programming develop their ability to think critically and generate their knowledge. Constructivist learning requires less teaching and learning that is exam-focused and more possibilities for student participation in the learning process, teamwork, self-study, peer review, and evaluation. Through encouraging small group activities, ICT fosters student connection and collaboration. ICTs are thought to be able to support constructivist education. It also helps students think more critically.



It is now evident that ICT is a superior instrument for supporting constructivist learning. Teachers and students can build knowledge by using various information resources that ICT offers. ICT is used in constructivist teaching and learning to facilitate learning rather than just provide information. Additionally, it helps pupils form the habit of self-study, which is crucial to the process of creating knowledge.

Problem Statement

An era where technology is always at their fingertips is being experienced by today's youth. Children's interest is sparked by a growing number of social media apps and websites. Today's culture is obsessed with video games, computers, tablets, gaming phones, free Wi-Fi, and electronic devices. Enhancing participants' learning through development requires an internet-based learning network. In advanced nations, the use of the internet to enhance learning is very high; in developing countries, however, there is a lack of use and a need to encourage the use of the internet for learning-focused purposes. The purpose of this study is to look into how students in elementary schools use ICT to learn.

Objective of the Study

The objective of this study is

1. To identify the use of ICT (internet, Microsoft Office, and computer) on the students' learning at the elementary level.

Significant of the Study

Information and communication technology (ICT) has the potential to completely transform education, which makes it important to research how it is used by elementary school pupils. This study is significant and useful for legislators, instructors, professors, scholars, pupils, and paternities who are involved in encouraging the use of ICT at the elementary level. Students are encouraged to solve problems, think critically, and acquire the digital literacy skills necessary for success in the workforce of the twenty-first century through the use of ICT. Students who interact with technology-rich learning environments gain the ability to assess sources and apply their knowledge in practical settings.

Research Question

1. What range ensures the use of the internet, MS Office, and computers on the student's learning at the elementary level?

Literature Review

Learning and education are no longer just reliant on printed materials because of ICT. There is a plethora of tools available on the Internet that allow one to learn through audio-visual presentations, video clips, and more. According to recent studies, ICT helps to change a classroom into learner-centered indicating that ICT assists in transforming a teaching environment into a learner-centered one (Castro Sánchez & Alemán, 2011). By giving male and female students access to a greater range of materials and opportunities for collaboration and communication, the use of technology, such as ICT, can increase the efficacy of these teaching strategies (National Centre for Education Statistics, 2020).

ICT is thought to be a priceless source of advancements and modifications in the educational system. Several previous studies have shown that appropriate technology use can improve the standard and connect education to real-world situations (Lowther et al. 2008; Weert & Tatnall, 2005). Internet supports teachers in preparing students for the real world and emphasizes that, as our nations grow more and more reliant on technology, students must learn how to be knowledgeable about ICT to be productive citizens (Ashley, 2016). Schools should create a well-thought-out technology plan to determine how the investments in ICTs affect the scholars. Primary school computer rooms were typical of larger educational institutions overall. Conversely, there was a higher prevalence of computers in specialist rooms rather than post-primary classes, even though pupils had more access to computers in classroom settings.

For the implementation of ICT in education, consistent energy supplies are necessary for most ICT resources, such as computers and the Internet. And finally, part of the necessary infrastructure is telecommunications facilities. An example of a communication technology might be a cable connecting a terminal device to a phone or other telecommunication network, or a fixed broadband or narrowband telephone line (UNESCO, 2014).

A computer can provide more individualized activities, teamwork, autonomous research, and learner-centered instruction. Students can receive tailored instruction from it since it provides a range of materials and symbolic modes and functions as a partner and tutor in interactions with the learner. In schools today, PowerPoint and other visual aids are commonplace. Although comprehensive research on the use of these technologies is still relatively new, adoption of them is seen as required, or at the very least, educationally appropriate (Reedy, 2008).

Teachers and students can benefit from the renewal that comes with the inclusion of ICTs. In challenging subject areas, this can support curricula and aid in increasing the quality of instruction. Teachers must work together on projects and establish intervention change techniques to accomplish these goals. One such strategy is to use ICT to facilitate teaching partnerships. Computers and the Internet are often heralded as powerful tools for empowering users to bring about positive educational changes and enhancements. They achieve this by leveraging diverse information and resources, encouraging the examination of content from various perspectives. This, in turn, fosters the authenticity and relevance of learning situations (Tinio, 2003). ICT facilitates understanding of complex concepts by simulating them, which further enhances authentic learning environments. Therefore, ICT could support higher-order thinking and dynamic learning. It is necessary to move from traditional to new teaching approaches to improve pupils' academic achievement.

Computer Assisted Instruction (CAI) does not rely on time or space, students can complete the program at home. Computer-assisted instruction (CAI) accelerates the learning rate, enabling

learners to cover a greater amount of material within a given timeframe compared to those taught through conventional methods. Furthermore, students who receive instructions via ICT demonstrate improved retention of learning (Cotton, 2001).

The use of ICT is commonly used in both male and female students learning at elementary school. When it comes to using technology for studying, male students are more confident than female ones. The use of technology for education is generally seen more favorably by men than by women. Studies conducted globally indicate that boys are more likely than girls to have used ICT outside of the classroom, to do so with greater freedom, and to believe they are more adept at more complex ICT tasks like downloading and programming. Both boys' and girls' motivation and academic achievement rise when ICT is used in the classroom, yet the gains are more pronounced for boys than for girls.

Pelgrum, and Law (2003) have explained the following potential characteristics of ICT in teaching and learning process as compared to the traditional paradigm:

1. The importance of information, inquiry, communication, social, and metacognitive skills will increase.
2. The integration of school subjects and their component elements will result in the dissolution of their respective borders.
3. Students' performance will be evaluated using a wider range of techniques (open-ended questions, portfolios, diagnostic and summative exams).
4. The course material will be modified to make it more applicable to real-world situations.

As information and communication technology advances, digital literacy is becoming a necessary component of contemporary schooling. The only way teacher educators may improve their students' learning abilities is if they use ICT effectively (Owen, 2004). The incorporation of ICT into instructional techniques accounts for the importance of ICT in the learning process. ICT has given student learners the impression that it expands their knowledge, uncovers reality, offers opportunities for active learning, boosts their motivation, improves output, allows for critical thinking, and strengthens coordinated efforts to meet educational goals (Newhouse, 2002). Teachers must recognize the need for ICT tools to be an integral part of their pedagogy and set up their classrooms accordingly (Kalogiannakis, 2010). The usage of ICT in education is growing daily, and because of its importance in the teaching and learning process, teacher educators are encouraged to incorporate technology into their training programs. Wang (2008) pointed out that, three essential elements make up a technologically enhanced learning environment: technology, pedagogy, and social interaction.

Chandra (2004), summarized that the use of ICTs in the classroom has a lot of beneficial effects on students and the educational process. He noted the following effects of integrating ICT in the classroom.

- Permit the presentation of content through various mediums for multichannel learning.
- Encourage and involve students in the educational process.
- Introduce an abstract idea of life.
- Strengthen higher-order thinking processes and other critical thinking abilities.
- Give pupils the chance to practice foundational skills at their speed and on their schedule.
- Give students the freedom to gather and use knowledge, work through issues, create new ones, and explain the world in which they live. They should also have access to global information resources.
- Bring the outside world into the classroom by using the most economical method possible.

Why Provide educators and learners with a platform that allows them to collaborate with colleagues across distances, share work, conduct research, and operate as if there were no geographical restrictions?

ICT integration and introduction into the classroom is one of the pillars of the global education reform movements. To successfully integrate ICT into the classroom, a thorough preparation strategy is needed. The proper use of technology in the classroom creates an excellent learning environment that maximizes learning outcomes. The use of ICT and related resources in classroom instruction enhances students' knowledge and comprehension of current events.

When ICT is used effectively in the educational process, it develops lifelong learning and cognitive skills at the higher education level, which is vital for career success (Boakye & Banini, 2008). A new idea of lifelong learning has evolved and replaced the old one as a result of the use of

technology in education and training. Bryderup, Larson, and Quisgaar (2009) pointed out that, "Activities within the lifelong learning paradigm appear to be utilizing ICT among students, suggesting that ICT may have a positive relationship with the development of a lifelong learning paradigm." (p.375).

UNESCO (2007), the importance of integrating ICT into teaching methods is acknowledged in the pocket handbook for ICT-enabled learning, which states:

A new learning framework that has the potential to rule education in the twenty-first century can be implemented using the amazing medium of the internet and web technology. It is understood that in-person interactions are valuable. Rather than framing these pedagogical and technological advancements as either/or choices, educators and administrators should embrace the enormous possibility that comes with the new learning model that ICTs make available (p.1).

By using constructivism's learning theory, teacher educators can employ communication and information technology as tools rather than as a means of achieving learning objectives within a traditional teaching technique (Teo et al., 2008). Creative learning is made possible by ICT-supported education, and learning is made possible by innovative teaching strategies.

Teaching Strategies to Engage Students Using Technology

Technology greatly assists in learning, as seen by how much kids enjoy using technology in their lessons (Gupta & Gupta, 2016).

Students' attention is readily captured by clear graphics, videos, and instantaneous information. Your lessons will be more engaging if you use a variety of multimedia resources. Students take advantage of unique resources, and the diversity of these materials keeps them interested and involved in the classroom all through the learning process. By stimulating several senses simultaneously, multimedia allows educators to reach a wide range of learners and capture their attention for extended periods. Enabling students to produce and employ various forms of multimedia fosters a more cooperative learning environment, facilitates communication, and enables them to put their newly acquired knowledge into practice, all of which contribute to improving the quality of education in general.

Any individual uses and likes social media, including children and teachers. It is therefore quite beneficial to use social media for educational objectives. Pupils adore interacting with others, working together, discussing, and exchanging concepts. Social media makes it easy for several crucial components of education, such as collaboration and engagement, to occur. Not only is it widely utilized, but it also makes it possible for you to maintain organization and facilitates the assignment of tasks, assignments, and other assignments relating to the class. In addition, is it widely utilized, but it also makes it possible for you to maintain organization and facilitates the assignment of tasks, assignments, and other assignments relating to the class. When discussing how to keep parents informed about their children's academic progress and other school-related events, social media is also crucial. Globally, educators and the general public enjoy a variety of platforms such as Facebook and Twitter.

Modify things up and include some interaction. In the twenty-first century, information can be found through a variety of media in addition to books, including podcasts, videos, open educational resources (OERs), blogs, and other online publications. Children take pleasure in discovering new things and expanding their horizons. Students find it refreshing and enjoyable to use a variety of resources. It even attends to the various learning requirements of the pupils, since one resource might not be suitable for every one of them.

Possibly this is the area where tech integration shines the most. The nicest thing is what the students learn when they play games. There's no denying the fact that children adore games, and these educational games help them learn valuable things while having a great time. Students are more inclined to continue studying outside of the classroom if they set challenges for one another and when they do so on a mobile device. Further, gamification may be applied anywhere and at any complexity level as an educational framework. It can be used in conjunction with other complementary frameworks, directly to the contents, or even to the instructional framework (Gupta & Gupta, 2016).

Reliability and validity

Cronbach's alpha coefficient was computed to assess the questionnaire's reliability; the result was a value of $\alpha = 0.726$. This suggests that the questionnaire items are assessing an ideal concept

consistently and show a strong degree of internal consistency. Three experts in the fields of higher education and instructional technology evaluated the validity of the questionnaire. To guarantee the questionnaire's authenticity, these specialists offered recommendations and authorized modifications.

Methodology

The design of this study was descriptive (quantitative method) was adopted to achieve the objectives. The population of this study was elementary schools and a total population of 130 public schools. The sample of this study was male and female students of classes 7th and 8th. The sample of the research was chosen through the random sampling techniques. The researcher created the questionnaire by herself. There are four main categories for the usage of ICT (internet, Microsoft Office, computer) in the closed-ended questionnaire. The research sample comprised 100 students, with 10 students from each institution. The data will be analyzed through SPSS version 21 is used. Data was interpreted in tabular form using SPSS.

Results and discussion

The study collected responses from a questionnaire directed to male and female students in public schools. The researcher distributed questionnaires to 100 students to assess the influence of gender on their use of ICT.

Table 1

Use of ICT (computer, internet, and internet)							
Statements	Gender	Strongly agree	Agree	Sometime	Strongly disagree	Disagree	Mean
I often use Social Media (Facebook, Instagram, Pinterest, WhatsApp)	Male	100%					1.0
	Female		60%		10%	30%	3.1
I frequently watch YouTube channels.	Male	90%	10%				1.1
	Female	10%	40%	40%		10%	2.6
I send emails quite often	Male			80%	20%		3.4
	Female			10%	40%	50	4.4
I frequently play online educational games.	Male	10%	30%	20%	10%	30%	3.2
	Female	10%		40%	30%	20%	3.5
I often use Google to search	Male	70%	20%	10%			1.4
	Female	60%	30%			10%	1.6
I use MS Word for assignments	Male	60%	10%	20%		10%	1.9
	Female	20%	30%	20%	20%	10%	2.7
I often use PowerPoint for presentations.	Male	30%	20%	20%	20%	10%	2.6
	Female	20%		40%	30%	10%	3.1
I easily connect my computer or laptop to Bluetooth and Wi-Fi.	Male	80%		10%	10%		1.5
	Female	50%	20%	20%		10%	2.0
I can easily Empty the recycle bin.	Male	90%		10%			1.2
	Female	40%	20%		10%	30%	2.7
I am aware of creating a new folder.	Male	90%		10%			1.2
	Female	40%	30%	10%	10%	10%	2.2
I am aware of adjusting the volume on the computer	Male	90%	10%				1.1
	Female	60%		20%	10%	10%	2.1
I often Play videos on a computer or laptop.	Male	80%		10%		10%	1.6
	Female	50%	10%		10%	30%	2.6

Table 1 shows that the male students much use of ICT (internet, computer & MS Office) than the female students. Male students are well aware of the use of ICT like creating new folders and computer commands and female students only focus their study

Table no 2

Use of ICT in learning

Academic Task							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
The computer helps me to do homework	Male	100%					1.1
	Female	20%	20%	30%	30%		2.7

Use of the internet improves my grade	Male	70%	20%	10%			1.4
	Female	30%	10%	10%	40%		2.9
I use the internet for school-related assignments	Male	60%		20%	10%	10%	3.9
	Female	30%	20%	40%	10%		2.3
I attempt online quizzes for my learning	Male	40%	20%	30%		10%	2.2
	Female	10%	30%	30%	10%	20%	3.0

This table shows that's students' learning through using f ICT. In this table, male students actively use the Internet for their school work and attempt online quizzes, and also male students think that the Internet improves their grades but on the other hand female students do not use the Internet actively they do their work themselves.

Table no 3

New information about the study							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
I search stories online for reading	Male	80%		20%			1.4
	Female	20%	30%	40%		10%	2.5
I use social media websites for communication (Facebook, Instagram & Email) or academic learning.	Male	80%		20%			1.4
	Female	30%	10%	20%	10%	30%	3.0
Internet helps me in approaching various websites of great knowledge	Male	90%	10%				1.1
	Female	50%	30%	10%		10%	1.9
The use of the internet helps me to find relevant knowledge	Male	80%	10%	10%			2.5
	Female	20%	70%	10%			2.0

This table indicates new information about studies through the Internet. the male students also use the free internet in their learning and they use communication websites like Facebook and Instagram in their learning. the male students find new knowledge however, the female students do not use the internet actively they use the internet sometimes.

Table no 4

Active learning							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
Students learn better from computer	Male	90%				10%	1.3
	Female	70%	20%	10%			1.4
The use of ICT increases student's confidence to participate actively in class	Male	80%				10%	1.7
	Female	50%	30%	20%			1.7
I think students learn more effectively with the use of ICT	Male	80%	20%				1.2
	Female	70%	20%	10%			1.4
The use of ICT encourages students to communicate with others	Male	70%	20%	10%			1.4
	Female	50%	30%	20%			1.8
The use of ICT has enhanced student's performance	Male	60%	10%	10%		20%	2.1
	Female	50%	40%	10%			1.6
The Internet is an effective tool for attracting students	Male	70%	10%	10%	10%		1.6
	Female	70%	20%	10%			1.4
The use of ICT improves your ability to perform any academic task	Male	70%		10%	10%	10%	1.9
	Female	40%	30%	10%	20%		2.1

This table indicates that active learning through using ICT in learning. the male and female students have the same opinion, both students agree agreed students learn better from computers, and

both students actively participate in using the internet and they both agree ICT enhances students' performance.

Table no 5

Knowledge of application							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
I know about MS Office (word & PPT)	Male	40%	30%		10%	20%	2.4
	Female	40%	20%	20%	20%		2.2
I use MS Office tools like (word& PPT) for my schoolwork	Male	50%	30%			20%	2.1
	Female	30%	30%	10%	10%	20%	2.6
I easily do font, and size on word	Male	50%	30%	10%	10%		1.9
	Female	70%	20%			10%	1.6
I can easily insert, delete, or undo paragraphs in ppt	Male	90%	10%				1.1
	Female	50%	10%	10%	10%	20%	2.4
I change the background on the slides	Male	100%					1.0
	Female	20%	20%	30%	10%	20%	2.9
I can easily select the whole text (word, PPT)	Male	60%		10%	10%	20%	2.3
	Female	50%	20%	30%			1.8

This table shows that knowledge about the application (MS Office) in learning. The male students know about Word and PPT and also male students do font size, delete, or insert in Word or PPT however the female students have little knowledge about Word and PPT.

Table no 6

Digital literacy skills							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
I can import images & pictures to my document	Male	90%		10%			1.2
	Female	70%	20%		10%		1.7
I can create and rename file & folder	Male	100%					1.0
	Female	60%	20%	10%	10%		1.7
I can locate files & folders on the computer	Male	80%	10%			10%	1.5
	Female	80%	10%		10%		1.4
I know computer and their basic function	Male	70%	20%			10%	1.6
	Female	50%	40%			10%	1.8

This table shows that both genders male and female students' same level of digital literacy skills Both genders are created and renamed folders. male or female students import images of their documents and also know their computer and basic functions.

Table no 7

Self-learning							
Statements	Gender	Strongly Agree	Agree	Sometime	Strongly Disagree	Disagree	Mean
I use the internet for my personal use	Male	90%	10%				1.1
	Female	40%	10%	30%	10%	10%	2.4
I enjoy using a computer to watch videos	Male	70%	10%	10%		10%	1.7
	Female	40%	30%	20%	10%		2.0
I play spelling games to improve my learning	Male	80%				20	1.8
	Female	10%	40%	10%	10%	30	3.1
I use the internet for online educational game	Male	80%	10%			10	1.4
	Female	20%	20%	30%	20%	10	2.8

This table shows that self-learning through using ICT. The male students use the internet for their personal use and play online games to improve their learning and on the other hand, the female students are less interested in using the internet and playing educational games.

Discussion

The study was conducted in 2017 "The Use of ICT by High School Students and the Impact on Academic Performance" by María del Rocío Carranza Alcántar, Claudia Islas Torres, Juan Francisco Caldera Montes, Alma Azucena Jiménez Padilla & Daisy Alcaraz Bran. The study aims to define the availability of ICT to students and to assess if the use of these resources is related to academic achievement or school adjustment. A survey of 988 high school students was conducted as part of the study's quantitative methodological approach. According to the descriptive data, the number of people who have access to the Internet at home was correlated with the number of hours a day they spend on social media or the Internet. The study was showing a negative correlation between spending many hours a day on social media or the internet and academic achievement. This recommends that increased usage of technology may have an impact on students' academic performance. This study is about comparative study on the use of ICT on male and female students' learning at the elementary level. The study composed of 7th and 8th class grade students from public schools in Islamabad, discovered that male students actively use the internet, computer, and MS Office. Male students are well aware of how to use the Internet in their study, they do their school work with the help of the Internet, and male students know about MS Office. They also know how to select the paragraphs in Word and PPT, on the other hand, female students use ICT but 50% of females use the internet in their school work. Male students are well aware of computers and their basic functions, male students are easily to connect their laptops to Bluetooth and Wi-Fi in the other hand both genders are agreeing the use of ICT increase students' confidence to participate in the classroom.

Conclusion

Based on the results, a conclusion was made male students freely use the internet and computers/laptops. It is concluded that the use of ICT on students learning. In conclusion, a comparative analysis of how male and female elementary school children utilize ICT to learn has shed important light on how technology integration affects learning outcomes unique to each gender. Male students confidently use ICT and they know about the technology. ICT resources are crucial to students' learning. The female students only see these ICT tools but on the other hand, female students are aware of the technology but do not use the internet in their studies. The male students actively use the internet in their studies but also use it in their personal. To promote inclusive classroom environments, ensure fair access to technology resources, and address potential biases or prejudices connected to gender and technology, teachers are essential.

The findings indicate that male students strongly use ICT (internet, computer/laptop & MS Office) not only in their studies but also in their active learning. The findings indicate that female students are less use the internet in their daily lives and not in their studies. At one point both genders agree that ICT enhances student learning and self-confidence. The study goal is ICT is enhance students' learning not only in their academics but also in their daily routines. Digital literacy is necessary for ICT use. In light of the finding that these abilities are essential in today's technologically advanced society, any conclusion should emphasize how important it is to guarantee that male and female students have equal opportunities to acquire them.

The use of ICT can positively impact both male and female students by providing access to a vast array of educational resources. ICT can increase learning motivation and engagement, which will help students of both genders. The use of ICT at elementary-level male students are using these tools to increase their knowledge and they develop digital skills in the future most male students choose a career in software engineering and computer sciences not only female students are also interested in using ICT but male students. The goal of this study ICT is to enhance student learning, in their personal use and active use in work. Educators can contribute to teaching students digital literacy skills, including how to evaluate online information, use digital resources responsibly, and practice good digital citizenship. Encourage a growth mindset among students regarding the use of technology. In the end, schools may contribute to more equitable and successful educational experiences by better supporting the different learning needs and interests of all students by addressing gender-specific issues and establishing inclusive ICT environments.

Recommendation

The present research provides the following insights and recommendations for further investigation:

- Recognize that learning styles can differ between male and female students. Offer a range of ICT resources and exercises to suit various learning styles, including kinaesthetic, aural, and visual.
- It further focuses on Utilizing a variety of assessment strategies, including online assessments, to gauge students' understanding of both content and technology skills.
- The study employed structured questionnaires. Additional methods and a qualitative approach need to be applied to strengthen the results' validity.
- Male and female students should be encouraged to collaborate on ICT projects as part of collaborative learning activities. This breaks down barriers related to gender and encourages teamwork and cooperation.
- Teach the basics of internet research to elementary school pupils. Teach them how to assess online sources, utilize search engines, and pull pertinent data from digital networks.

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