People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Kasdi Merbah Ouargla University
Faculty of Letters and Languages
Department of Letters and English Language

Dissertation submitted in partial fulfilment of the requirement for the Master's Degree in the field of English Language and Literature

Major: Linguistics

The Future of E-learning: The Use of Technology in Transforming EFL Students Education in the 21stCentury
The Case of Master Students at Kasdi Merbah University of Ouargla

Presented and publicly defended by

Chaima Fatma Zahra Ghettas
Safa Bennour

Supervised by

Dr. Yousra Seddiki

Jury

Dr. Sabrina Saighi	Kasdi Merbah University-Ouargla	Chairperson
Dr. Yousra Seddiki	Kasdi Merbah University-Ouargla	Supervisor
Dr. Madjid Doufene	Kasdi Merbah University-Ouargla	Examiner

Academic Year: 2023/2024

DEDICATION

To my beloved parents, with all pride and gratitude, I wanted to express my deep thanks and great appreciation to you both.

You have been fundamental pillars in this educational journey of mine.

Your contribution was not only a motivation for my success, but you were also always a source of strength and support.

Thank you for your unlimited love, sacrifice, and constant encouragement.

I would also like to express my gratitude to everyone who stood by me during this journey, from teachers and colleagues to friends and beloved ones.

You were all an integral part of my success and achievement.

You are all a precious treasure in my life, and I will remain indebted to you throughout my life.

Thank you to everyone who shared this experience with me and helped me reach this milestone.

I dedicate this humble work to you.

Thank you…

Acknowledgements

ABSTRACT

In the rapidly evolving landscape of education, the integration of technology had become imperative, especially in the realm of English as a Foreign Language (EFL) instruction. This dissertation explored the use of technology in transforming EFL students' education in the 21st century among master degree students in the English department at University Kasdi Merbah-Ouargla. The aim of this study was to investigate how integrating technology transform education to EFL students and enhance their learning outcomes. This work started by the definitions of E-learning, other terminologies, types, purposes, characteristics, advantages and disadvantages, and the use of technology in educational field. Also, it included the definition of education, historical review, characteristics, importance, the difficulties of using technology in education, the role of integrating technology in education, and the 21st century skills education. For the practical side we used a mixed method approach to achieve the expected results; two questionnaires were delivered to a sample of Forty for (44) students of Master degree, and Ten (10) teachers in the English department at University Kasdi Merbah-Ouargla. We conclude that E-learning had become an important technique in the 21st century education.

Key Words: E-learning, Education, EFL Students, Technology

List of Tables

List of Figures

List of Abbreviations

EFL: English as Foreign Language

NIOS: National Institute of Open Schooling

IGNOU : Indira Gandhi National Open University

Table of Content

General Introduction

Theoretical Part

Chapter one: The Future of E-learning

Chapter Tow: Education in The 21ˢᵗ Century

Practical Part

Chapter Three: The Field Work

General Introduction

Introduction

In the ever-evolving landscape of 21st-century education, the utilization of technology was a transformative force, particularly in the domain of English as a Foreign Language (EFL) instruction. Rapid advancements in technology offer innovative opportunities for educators to engage and empower EFL student. This dissertation aimed to explore the intersection of technology within EFL education, investigating how state-of-the-art tools and methodologies can enhance language acquisition and proficiency. By examining the changing role of technology in this context, the study aimed to uncover potential benefits, challenges, and implications for educators, learners, and the broader educational landscape. Through analysing, this research aimed to provide valuable insights into the effective integration of technology, contributing to optimized EFL learning experiences and preparing students for the linguistic demands of a digitally connected global society. The evolution of E-Learning extensively relied on technology, swiftly reshaping how educational materials aware accessed and utilized. In addition to this, a crucial position in the prospective landscape of education by offering students convenient and flexible entry to educational resources.

1. Statement of The Problem

Nowadays Education was important in our life because it was needed in every field, especially learning English as Foreign Language (EFL) because it became the language of the world and communication. During the Corona pandemic we had faced different difficulties, it affected people's psychological and mental health, they became constantly stressed and anxious. Education had also been affected by the Covid-19 Pandemic. It led to the closure of all schools and universities in the world. The English department at University Kasdi Merbah-Ouargla used different E-learning technique in order to transfer lessons to their EFL students to continue their career and pass to the next year through using technology devices like: Social Media, Progress, Zoom, Google Meet…etc.

2. Research Questions

This study will try to answer the following questions:

1. How can technology transform education in 21st century for EFL students?

2. Were EFL students aware of E-learning definition and its types, characteristics?

3. Were EFL students aware of Education definition and its characteristics, importance?

4.Did EFL students face difficulties while using technology?

3. Key Terms

3. 1. E-learning: A system of learning that used electronic media, typically over the internet. (Oxford, n.d.)

3. 2. Education: Teaching somebody at school or college. (Oxford, 2012)

4. Hypothesis

- It had been hypothesized that the use of technology can easily transform educationin the 21st century to EFL students by using some technique like online platforms and communication tools, although there were some difficulties that students may face.

5. Significance of the Study

This study was important for English as Foreign Language (EFL) learners because they used E-learning in their learning during Covid-19 Pandemic. It enabled them to know how technology transform educational level in 21st century. They can know the advantages and disadvantages of E-learning and education in 21st century, also can learn more how to use technology devices in learning.
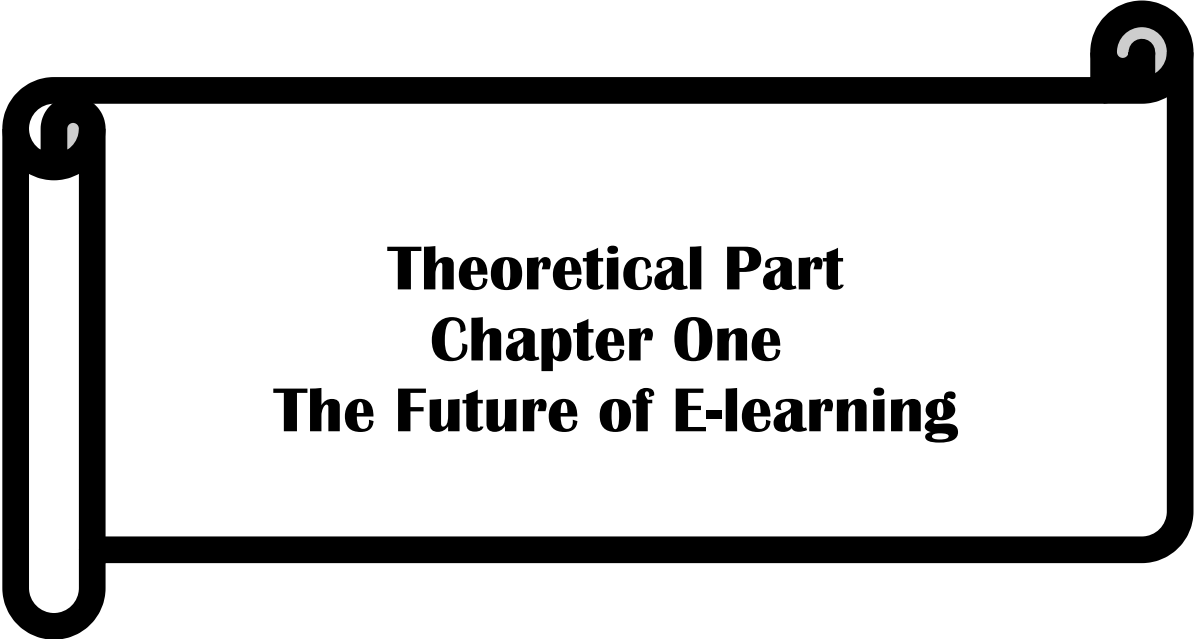
6. Aims of the Study

This research aimed to investigate how integrating advanced technology into the EFL (English as a Foreign Language) curriculum enhances learning outcomes, student engagement, and the overall educational experience in the 21st century. The study focuses on assessing the effectiveness of technological tools, exploring their impact on student motivation and self-directed learning, examining perceptions of educators and students, and identifying challenges and strategies for technology integration in EFL education.

7. Structure of the Study

The research was divided into two parts; The first part was the Theoretical part which consist of two chapters. The first chapter was deals "Future e-learning", and the second chapter was titled "Education in 21st century".

The second part was the Practical part, we had used two questionnaires one to the teachers and learners of University Kasdi Merbah-Ouargla at the English department to collect data.

Theoretical Part
Chapter One
The Future of E-learning

Introduction

E-learning has undergone a significant transformation in the 21stcentury, it provides a flexible and accessible way of learning, allowing for personalized learning experiences and the fostering of a sense of community in the learning process. The future of E-learning is expected to be characterized by a combination of traditional and technology-driven approaches, with a focus on instructional practice and institutional readiness. The COVID-19 pandemic has played an instrumental role in expanding the e-learning base, and higher educational institutions are expected to invest more in E-learning in the future. This chapter focuses on E-learning, its definition, types, purposes, characteristics, advantages, disadvantages, and the use of technology for the educational field.

1. 1. Definition of E-learning

According to Comerchero, M (2006, P.1) E-learning is a method of teaching that combines self-motivation, communication, efficiency, and technology. Because there is little social interaction, pupils must keep themselves engaged. To complete their given activities, students must contact with one another and with the instructor on a regular basis due to the isolation inherent with E-learning. E-learning is effective because it removes distances and subsequent commutes. Distance is reduced since E-learning information is meant to be accessed via suitably equipped computer terminals and other Internet-accessible equipment. E-learning is a broad phrase used to describe a method of teaching using technology.

The term E-learning first appeared in the mid-1990s, coinciding with the growth of the World Wide Web and an interest in asynchronous discussion groups. The purpose of e-learning was to investigate the building of communities of learners who could remain connected regardless of time and location through the use of information and communication technologies (Garrison, 2017).

Clark, R.C&Mayer, R.E define E-learning as instruction delivered via a digital technology with the goal of facilitating learning. E-learning uses a variety of technology, including desktops, laptops, tablets, and smartphones, to support individual or organizational learning objectives (2016).

1. 2. Other Terminologies of E-learning

E-learning is a novel idea that includes terminology such as Computer Conferencing, Telelearning, Web-Based Learning, Online Learning, Virtual Classroom, and Asynchronous Learning. These categories contain subtle distinctions, including Virtual

University, Distance Education, Open Learning, and Distributed Education. Users frequently group additional strategies under broader titles, such as Flexible Learning in Australia. (Mason & Rennie, 2006).

1. 2.1. Computer Conferencing: Computer conferencing, a type of online communication, has evolved dramatically with the introduction of Virtual Learning Environments (VLEs), with a focus on textual interactions and an asynchronous nature. (Mason & Rennie, 2006)

1. 2.2. Telelearning: Tele-learning is a teaching method that combines multimedia features with interactive portions to encourage collaboration between educational institutions and students. (Bomze et al., 2013, P. 421)

1. 2.3. Web-Based Learning: Web-based learning is a digital learning environment that uses the internet to distribute, communicate, analyse, and manage classrooms through computer applications and a graphical user interface. (Jolliffe et al., 2001, P. 4)

1. 2.4. Online Learning: Online learning uses network technologies such as the Internet and corporate networks to offer, facilitate, and assess both official and informal education. (Shank&Sitze, 2004, P. 2)

1. 2.5. Virtual Classroom: Virtual classrooms are a flexible and effective approach to engage students, allowing them to learn from any location, at any time. (Montoute, 2013, P. 7)

1. 2.6. Asynchronous Learning: Asynchronous learning, a self-paced, independent method, can be delivered in various formats like paper-based, internet-based, and E-learning, depending on desired engagement, evaluation, and budget. (Hofmann & Minor, 2009, P. 85-6)

1. 2.7. Virtual University: Higher education institutions use advanced ICT infrastructure to design, develop, and deliver courses online, using the same organizational structure as traditional universities. (Sankey et al., 2023, P. 47)

1. 2.8. Distance Education: According to De V.K. Rao (2007) Distance education can result in depersonalization, strain on lecturers, and ongoing creative writing challenges for students, affecting staff and professors even in on-campus institutions. (P. 1)

1. 2.9. Open Learning: Open learning provides alternative education options for those who are unable to attend traditional school due to time and space constraints. (Seel, 2011)

1. 2.10. Distributed Education: Distributed education, which includes remote education, ICTs, distributed cognition, and human-computer interaction, is a

comprehensive approach to post-compulsory education that improves the learning experience. (Lea& Nicoll, 2005, P. 2)

1. 2.11. Flexible Learning: Flexible learning in university education encourages students to take responsibility for their own learning, emphasizing autonomy and adaptation, and allowing courses to be tailored to individual needs. (Arfield et al., 2013, P. 12)

1. 3. Types of E-learning

According to Matt Comerchero ;E-learning is a flexible term used to describing a means of teaching through technology. The different types of e-learning are basedon :

1. Means of Communication: E-learning can involve entirely online interactions or blended formats that combine online and face-to-face elements, utilizing technologies like two-way video and audio to enhance engagement.

2. Schedule: E-learning can be synchronous, involving real-time interactions such as video conferencing, or asynchronous, utilizing non-real-time methods like emails, blogs, and online forums to allow learners to engage at their own pace.

3. E-Learning Class Structure: The structure of e-learning can vary from self-paced, instructor-led formats to hybrid models combining self-study with expert interaction, offering different modes of instruction administration.

4. Technologies Used: The technology used in e-learning is not limited to web-based tools but can include any media that supports learning, with advancements such as faster internet connections and mobile devices significantly improving the quality and accessibility of E-learning. (E-Learning Concepts and Techniques, 2006).

Globally, there are 10 different types of E-learning that enable individuals learn and get certified even up to university degree without leaving their house or environment as the case may be. The different types of E-learning are listed below: (Tamm, 2021)

1. Computer Managed Learning (CML)
2. Computer Assisted Instruction (CAI)
3. Synchronous Online Learning
4. Asynchronous Online Learning
5. Fixed E-Learning
6. Adaptive E-Learning
7. Linear E-Learning
8. Interactive Online Learning

9. Individual Online Learning

10. Collaborative Online Learning

1. 3.1. Computer Managed Learning (CML): Also known as Computer Managed Instruction (CMI), uses computers to monitor and assess student learning objectives. This instructional method makes use of enormous datasets and ranking characteristics, allowing for more tailored learning. Educational institutions can track progress and control different areas of education by keeping students and computers in continual connection. (Srinivasa et al 2022, P. 286)

1. 3.2. Computer Assisted Instruction (CAI): It, often known as Computer-assisted Learning (CAL), blends traditional teaching methods with computer technology to improve learning outcomes. It blends text, images, sound, and video, allowing students to actively participate in their education. Today's schools provide a wide range of computer-assisted learning packages. (Srinivasa et al 2022, P. 286)

1. 3.3. Synchronous Online Learning: Synchronous online learning involves simultaneous involvement from multiple locations across the world, which is assisted by online chats and videoconferencing. Technology advancements have made it more socially centred, resulting in a popular and fast developing E-learning method. Real-time interaction between students and teachers provides a considerable benefit over traditional distant learning approaches. (Srinivasa et al 2022, P 286)

1. 3.4. Asynchronous Online Learning: Asynchronous online learning is a popular and adaptable approach to online education, offering a variety of forms and encouraging critical thinking. It lessens reliance on memory and notes, decreases shyness, and reduces teacher frustration. Despite potential distractions and delayed feedback, it is necessary to employ strategic techniques to keep pupils engaged, maintain self-discipline, and give socialization opportunities. (Perveen, 2016)

1. 3.5. Fixed E-Learning: Fixed E-learning, a traditional method in which the content remains identical, is unsuitable for E-learning environments since it does not incorporate real-time data from student inputs. Analysing individual student data and making adjustments based on that data can improve learning outcomes for all students, as opposed to fixed e-learning that does not adapt to student preferences. (Pandey et al., n.d, P. 153)

1. 3.6. Adaptive E-Learning: Adaptive E-learning is an innovative method to tailored and student-centred education that takes into account student performance, goals, abilities, and skills. Laboratory-based adaptive instructional strategies can sequence

student data, thereby ushering in a new era of educational science. (Pandey et al., n.d, P. 153)

1. 3.7. Linear E-Learning: Linear E-learning, a sort of human-computer interaction, limits two-way communication between teachers and students, making it less effective in education. Examples include distributing instructional materials via television and radio broadcasts. (Pandey et al., n.d, P. 153)

1. 3.8. Interactive Online Learning: Interactive online learning allows for two-way contact between senders and receivers, allowing teachers and students to adapt their teaching techniques, making it more popular than linear learning. (Pandey et al., n.d, P. 154)

1. 3.9. Individual Online Learning: Individual online learning, a typical classroom approach, prioritizes individual students attaining learning objectives over student-centeredness. This technique is poor for improving communication and cooperation skills since it emphasizes solo study without interaction. This approach needs to be replaced by a more current approach. (Pandey et al., n.d, P. 154)

1. 3.10. Collaborative Online Learning: Collaborative E-learning is a modern approach in which several students work together to achieve common learning goals. It encourages communication, teamwork, and understanding among students, improving their communication skills and fostering knowledge development in a group setting. (Pandey et al., n.d, P. 154)

1. 4. Purposes of E-Learning

The purpose of 'E-learning in the twenty-first century is to give a framework for understanding the use of e-learning in higher education. We define e-learning as learning that occurs on-line via network technology. This does not exclude the use of other technology or methodologies, such as face-to-face educational encounters. However, we shall limit our discussion to learning activities that are undertaken electronically online.

E-learning aims to enhance public access to education, address quality issues, boost revenue, and improve student market share. Understanding strategic goals is crucial for developing systems to monitor progress and develop necessary skills for online contexts, despite often disguised objectives. (Garrison & Anderson, 2003)

According to Kristina Francis, (2018) E-Learning aims to:

1. "Enhance the quality of learning and teaching.
2. Meet the learning style or needs for students.

3. Use E-Learning to improve the efficiency and effectiveness.

4. Improve user-accessibility and time flexibility to engage in the learning process."

1. 5. Characteristics of E-learning

E-learning allows us to provide abstract theory alongside real-life examples, and the user can see the content in the order they desire. (Hills, 2017)

Some E-learning features include interactivity, authenticity, learner control, convenience, ease of use, online support, course security, cost effectiveness, collaborative learning, formal and informal environments, online evaluation, global accessibility. (Khan, 2005)

1. 5.1. Interactivity: Jensen, Neuman &Steuer state that Interactivity is perceived as a media's potential capability to allow the user to affect or modify the content and form of the mediated communication, or as a measure of control over the communication process by both the sender and receiver. (Wang, 2011, P. 2)

1. 5.2. Authenticity: Authentic learning allows students to investigate and develop linked concepts that may be utilized in real-world settings outside of the classroom (Donovan et al. 1999).

1. 5.3. Learner Control: Reeves (1993) defined learner control as the extent to which a person has control over various instructional components within a session or training program. (Martocchio et al., 2012)

1. 5.4. Convenience: The ease given by online education provides students the flexibility to schedule their learning and daily lives with least disruption to one another. (Kyei-Blankson et al., 2024)

1. 5.5. Ease of Use: Ease of use relates to a student's perception that using an e-learning system does not involve a significant amount of work. (Association, 2022)

1. 5.6. Online Support: Online support refers to how an e-learning course can give online instructional and counselling support, as well as general technical troubleshooting services. (Khan, 2005)

1. 5.7. Course Security: Students in online learning require robust security measures to prevent digital archiving and maintain maximum interaction, ensuring the safety of both students and teachers. (Weippl, 2005)

1. 5.8. Cost Effectiveness: Lesh references Moore et al. (1990) study on cost effectiveness, stating that distance learning, especially using interactive electronic

telecommunications, is effective when based on learning achievement, student and teacher attitudes, and cost efficiency. (QUIS team, Hjeltnes& Hansson, 2005, P. 11)

1. 5.9. Collaborative Learning: According to Lally and McConnell from the University of Sheffield, collaborative learning occurs when "course participants work in small learning sets to define a problem.... which is a menable to collaborative group work," (Roberts, 2004, P. 207)

1. 5.10. Formal and Informal Environments: According to Chen and Bryer (2012), learners acquire information through exchanges between partners and classmates, which allow learners to publish questions, content, and assignments to the web. Social ties as manifested on social networks transform our methods of thinking about knowledge, learning, and training in the modern workplace. (Zajda et al., 2023)

1. 5.11. Online Evaluation: As Peter H. Rossi (Chen, 2005) aptly states, "an evaluation should start from clarifying key assumptions underlying the program and understanding the nature of the program, exploring stakeholders' views and evaluation needs, and using these discoveries as a guide for formulating an evaluation design" (Ruhe & Zumbo, 2009, P. 74)

1. 5.12. Global Accessibility: Accessibility refers to the learning environment's ability to adapt to the needs of all learners. Accessibility is determined by the educational environment's flexibility (in terms of presentation, management techniques, access modality, and learner supports), as well as the availability of suitable alternative-but-equivalent content and activities. (Seale, 2013)

2. 6. Advantages and Disadvantages of E-learning

The rapid development of e-learning has both benefits and drawbacks. Advantages include simple access to training content, but businesses are concerned about learner retention and use. Disadvantages include concerns regarding employee access and budget limits. E-learning is the most recent advancement in training delivery, but obstacles include staying current with technology progress and building acceptable e-courses. (IT Consultant Diploma - City of London College of Economics, n.d.)

1. 6.1. Advantages of E-learning are as follows:

1. Conserves Time and Fast Learning: In contrast to traditional education, which defines learning pace through personnel, classrooms, and class time, E-learning allows students to work at their own pace.

2. Cost-Effective: E-learning provides online training tools, games, quizzes, and real-time feedback, making it less expensive than hiring expert trainers and paying for transportation and upkeep.

3. Improved Efficiency and Collaboration: E-learning improves student performance and efficiency by allowing for remote training, encouraging collaboration, and addressing individual strengths, weaknesses, and skill gaps, resulting in enhanced proficiency.

4. Low Price: It is a cost-effective technique. E-learning eliminates the need to pay an instructor, rent a training facility, or purchase new tools or materials.

5. Usability and Practicality: Web-based learning enables firms to efficiently train personnel, manage assignments, and meet deadlines, with benefits for all parties including online communication, chat rooms, discussion forums, video tutorials, and automatic grading.

6. Individual Pace andFlexible: Online learning solutions allow teachers to respond to unique learning styles and curves by providing customisable timetables and complete control over their students' study time.

7. Theory Application: Children, young people, and students are increasingly receiving online news and information via interactive multimedia, video, and chat, which promotes discussion and idea exchange.

8. Anytime Materials and Training Access: E-learning gives students 24/7 access to resources such as photographs, hypotheses, and notes, allowing for continual skill progress through daily practice and technique upgrades.

9. Greener Approach: Traditional teaching techniques rely on paper and pencils, which contribute to pollution through tree cutting and wood use. E-learning, on the other hand, employs digital devices for notes and transit, showcasing a greener methodology while reducing the need for paper and transportation. (Ragaprabha, 2022, P. 70-3)

2. 6.2. Disadvantages of E-learning

E-learning, like any other educational approach, has its disadvantages. Some of these drawbacks include :

1. Internet Connection problems and Interruptions: Over 40% of the population encounters internet access concerns, such as high-speed and data capacity issues, which impact home learning and necessitate focus and planning to deal with noise and distractions.

2. Discipline: E-learning is flexible and convenient, but discipline is required for completion. Traditional learning sessions demand effort and dedication, but e-learning might lead to procrastination.

3. Social Isolation and Skill Deficits: Homework, school attendance, and living at home are all important social activities for children; yet, digital learning can lead to loneliness, depression, and poor social skills in both teachers and students.

4. Lack of Practical Knowledge: Online theoretical information can be unsatisfactory for practical skills such as dance, but experts feel e-learning has room for improvement and that the benefits outweigh the negatives, despite problems in online dance training.

5. Easy to Lose Focus: Online classes can cause focus loss because students may incorrectly believe they are viewing a YouTube video, potentially leading to boredom and deviating off course.

6. Expensive: Online learning is more expensive than traditional instruction, and students must buy their own equipment. Despite the affordability, many parents are forced to sacrifice their life savings in order to provide their children with computers and smartphones.

7. Health Concerns: Parents are concerned about their children's health as a result of excessive computer screen time, vision damage, and potential back problems from incorrect seating positions.

8. Prevention of Cheating is Difficult: Professors face a hurdle when evaluating students during tests because they are not physically there, making it difficult to identify cheating.

9. Limited: Digital learning is not appropriate for many academic subjects, particularly those that require practical, such as engineering, medical science, and STEM fields, where in-person evaluation is required (Ragaprabha, 2022, P. 74-6)

1. 7. Uses of Technology in Educational Field

Definition: D. Unwin (1969) defines educational technology as the application of current skills and techniques to educational and training requirements. This includes facilitating learning by the manipulation of media and methods, as well as controlling the environment insofar as it affects learning (Mangal, 2009, P. 3).

According to Januszewski & Molenda (2013) "Educational Technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources". (P. 1).

7. 1. Facilitating learning: Facilitating learning involves organizing processes and resources, emphasizing learners' interests and abilities, rather than external entities defining problems. This approach empowers learners to define learning problems and control their mental processes. (Januszewski&Molenda, 2013, P. 17)

7. 2. Improving Performance: Improving performance is a primary goal of educational technology, intending to significantly improve the performance of individuals, instructors, designers, and organizations. (Januszewski&Molenda, 2013, P. 49)
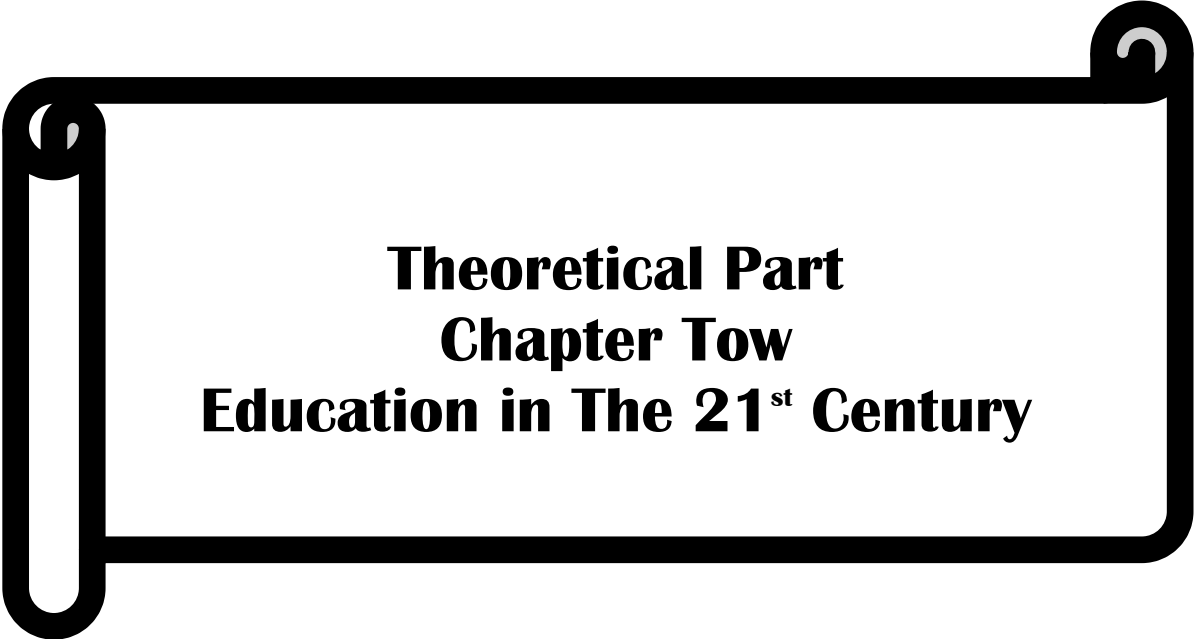
7. 3. Creating Resources: Creation refers to the study, theory, and practice involved in developing instructional materials, learning environments, and big teaching systems in a variety of situations, using a variety of media and theoretical foundations. (Januszewski&Molenda, 2013, P. 7-8)

7. 4. Using Resources: Using entails selecting appropriate techniques and resources, whether done by the student or an instructor, to put learners into contact with learning circumstances and materials. (Januszewski&Molenda, 2013, P. 8)

7. 5. Managing Processes and Resources: Managing audiovisual centres involves directing operations and using specialized processes to design, create, and produce learning resources like images, films, audiocassettes, computer programs, DVDs, and other public-facing features of educational technology. (Januszewski&Molenda, 2013, P. 9-11).

Conclusion

In the 21st century, E-learning has become an indispensable part of education, offering flexible, personalized, and technology-driven learning experiences. Its impact spans across diverse terminologies, types, purposes, and characteristics, highlighting its advantages like cost-effectiveness, global accessibility, and enhanced collaboration. Despite challenges such as internet connectivity issues and social isolation, E-learning remains a transformative force shaping the future of education and empowering learners globally.

Theoretical Part
Chapter Tow
Education in The 21st Century

Introduction:

Education was the key to success, opportunities and social advancements. It was also the engine room and strength of nation. The term Education had been interpreted by different people in different ways. Some people refer to it as formal schooling or to lifelong learning. Some others refer to it as acquisition of knowledge, skills, attitudes. In the 21st century, knowledge and skills have become essential for success in daily and professional life. In this chapter we will discuss 21st century education and their importance in the era of development, in addition to its main   characteristics.

2. 1. Education Definition

The word Education was derived from the Latin word 'educare' meaning 'to raise' and 'to bring up'. According to few others, the word 'Education' had originated from another Latin term 'Educere' which means 'to lead forth' or 'to come out'. These meanings indicate that Education sought to develop the innate or the inner potentialities of humans. Some other educationists believe that the word 'Education' had been derived from the Latin term 'Educatum', which means the act of teaching or training. The meanings of these root words lead us to believe that education aims to provide a nourishing environment that would facilitate or bring out and develop the potentialities in an individual. (Jyaishtha, 2014)

For the aim to find a clear definition of the term education, it is necessary to mention the following claims stated by Sayah L (2017).

Good (1973) education was viewed as the constellation of processes which enable persons to develop abilities, attitude, behaviours and social value.

Good (1973) The social process which refers to the acquired social competences and individual development from the environment to which an individual belongs.

Another definition of Dewey (1916) by which education was viewed as the process of the reconstruction of experience …and increases ability to direct the course of subsequent experience, giving it a more socialized value through the medium of increased individual efficiency. (p. 89-90)

And peters (1956) who considered education as the process that allows the learner to acquire specific qualities and habits in an intelligent way that help in increasing the desire to learn.

Education was the process of facilitating learning, or the acquisition of knowledge, skills, value, morals, beliefs, habits, and personal development. Education methods include teaching, training, storytelling, discussion, and direct research. Education frequently takes place under the guidance of educators also known as teachers; however, learners can also educate themselves (Onebunne, 2022)

According Jyaaishtha (2014), Mahatma Gandhi defined education as an all-round development drawing out of the best in child's body, mind and spirit. In addition to Swami Vivekananda education was the manifestation of the divine perfection, already existing in man. Education means the process by which character was formed, strength of mind was increased, and intellect is sharpened, as a result of which one can stand on one's own feet.

2.2. Education historical Review

Education started in prehistoric times, when adults taught children the skills and knowledge, they thought were important for their community. Orally and by imitation, this was accomplished in preliterate communities. Knowledge, morals, and talents were transmitted from one generation to the next through storytelling. Formal Education emerged as societies started to acquire information beyond what could be easily taught by imitation. In Egypt during the first university in Europe, the Academy, was founded by Plato in Athens (Hannam, Janes2011). After Athens, Alexandria, an Egyptian city founded in 330 BCE, emerged as the intellectual centre of ancient Greece. In the third century BCE, the magnificent Alexandria Library was constructed there. After Rome fell in 476 CE, European civilization saw a drop in literacy and order (Robinson,2006). The most famous ancient philosopher in China was Confucius (551-479 BCE), a native of the state of Lu. His educational philosophy still has an impact on Chinese society as well as those of its neighbours, including Korea, Japan, and Vietnam. Confucius amassed a following and made fruitless attempts to find a ruler who embrace his principles of good governance, but his Analects were preserved by adherents and have remained influential in East Asian Education to this day (ISCED,2011). (Onebunne,2022, p. 25).

Calmecac schools provided rigorous religious and military training to Aztec noble boys. The Aztecs had a comprehensive education theory, known as **tlacahuapahualiztli** in Nahuatl. ISCED (2011) defines it as the art of raising or educating a person or the art of strengthening or bringing up men. This broad definition of education emphasizes home-based learning, formal schooling, and community life. According to historians, formal education was essential for all individuals, regardless of socioeconomic class or gender (Thiem & Erwin, 1969). The term **neixtlamachiliztli** refers to imparting wisdom to one's face. According to Hannam and Janes (2011), educational practices aim to pass down knowledge and experience to future generations, promoting personal growth and communal integration (Onebunne,2022, p. 25).

After the fall of Rome, the Catholic Church became the sole preserver of literate scholarship in Western Europe. Cathedral schools were established in the Early Middle Ages as advanced education centres, which later evolved into medieval universities and precursors to modern European universities (Thiem, Erwin,1969). Chartres Cathedral School was influential during the High Middle Ages. Medieval universities in Western Christendom encouraged freedom of inquiry and produced scholars like Thomas Aquinas, Robert Grosseteste, and Saint Albert the Great. The University of Bologne, founded in 1088, is considered the first and oldest continuously operating university (ISCED,2011). Islamic science and mathematics flourished under the Islamic empire, extending from the Iberian Peninsula to the Indus and the Almoravid Dynasty and Mali Empire (Onebunne,2022, p. 25).

The Renaissance in Europe marked a new era of scientific and intellectual inquiry, influenced by the development of the printing press by Johannes Gutenberg around 1450. This period saw the spread of European ideas in philosophy, religion, arts, and sciences globally. Missionaries and scholars, such as the Jesuit China missions, brought new ideas from other civilizations, such as Euclid's Elements and Confucius' thoughts. The Enlightenment led to a more secular educational outlook in Europe, with much of modern Western and Eastern education based on the Prussian system (Robinson,2006). Today, full-time education is compulsory for all children up to a certain age, driven by population growth and the proliferation of compulsory education (Onebunne,2022, p. 25).

2. 3. Characteristics of Education

According to Ministry of research, Technology and Higher Education of Indonesia, the characteristics of 21st-century learning include integrative, holistic, scientific, contextual, thematic, effective, collaborative, and student-centred (Wulandari, 2021)

2. 3.1. Integrative: Integrative learning was defined as a process of learning that connects classroom activities to real-world experiences and surroundings.

2. 3.2. Holistic: The goal of holistic learning was to comprehend ideas and expand knowledge fully, not simply in bits and pieces.

2. 3.3. Scientific: Was a learning activity that involves information gathering through exploration activities.

2. 3.4. Contextual: Contextual learning was the process of relating academic ideas to real world situations.

2. 3.5. Thematic: Learning that linked ideas to produce deeper understanding and significant new experiences was called thematic learning.

2. 3.6. Effective: An effective learning process was one that was precise and efficient in order to accomplish the intended objectives.

2. 3.7. Collaborative: Collaborative learning activities were those that place a strong emphasis on working together to accomplish goals, as well as encouraging active engagement and the capacity for discussion and communication.

2. 3.8. Student-centred: Student-centred learning activities were those in which the instructor acts as a facilitator while the students direct the learning process.

2. 4. The Importance of Education in 21st century

One of the most vital things we need in life was Education. Without it, man was incomplete. Critical thinking was developed through Education. This was essential for educating someone how to make decisions and communicate with others logically (e.g., increasing activity, improving time management). Education increased an individual's likelihood of obtaining better jobs by helping them achieve fundamental work standards. Here where some reasons why Education was important according to Onebunne (2022, p. 28-29)

2. 4.1. Creating More Employment Opportunities: Finding a job was difficult, particularly during turmoil economic times. Hundreds of applicants were frequently required to compete for a single employment. Learn, educate yourself, get a degree, and acquire as many credentials, abilities, know-how, and life experiences as You can. Your Education gives You an advantage over rival application.

2. 4.2. Developing Problem-solving Skills: One advantage of Education in the 21st century was that it teaches us how to acquire and develop the skills necessary for independent decision-making, critical and logical thinking. People were not only capable of forming their own beliefs, but they were also skilled at locating credible and convincing justifications and supporting data for their positions.

2. 4.3. Improving the Economy: Individuals with strong educational and scholarly credentials typically find well-paying employment. Their career prospects were better the more educated and accomplished they were. Individuals who experienced poverty as children but pursued education are more likely to change their life circumstances and help lower the percentage of poverty in society. Since Education was about gaining knowledge and being able to apply it sensibly to our lives while also improving the lives of others, it helped countries prosper economically.

2. 4.4. Giving Back to the community: People with Education recognize the value of residing in a safe and secure neighbourhood. They were more likely to get involved in initiatives that advance society as a whole as well as their area.

2. 4.5. Creating Modern Society: People with Education were better able to distinguish between good and wrong, which lowers the crime rate. Lombardi (2017) asserted that Education was a vital component of contemporary society. To be able to contribute to modern society, one must educate themselves on culture, history, and other pertinent topics. Education shaped individuals into leaders by teaching them how to lead with their emotions and authentic ideals in addition to imparting knowledge about (college)courses. Bad things were happening all around the world, and the only people who can assist steer us in the right direction were capable leaders.

2. 4.6. Bridging the Borders: Having access to digital Education facilitated global communication with people and organizations. There were no longer borders. Communicating and exchanging ideas with individuals from many nations and customs broadens perspectives and fosters mutual understanding and appreciation.

2. 4.7. Creating equal opportunities: Education had always been very important in society because it was not affected by caste, race, gender, or religion. Those with Education were regarded equally based on their knowledge and skills. Additionally, educated people have an open mind and the capacity to listen to and accept the opinions of others, no matter how dissimilar they may be. Education provided the opportunity to live freely and independently. It served as a safe haven from bad financial decisions and storms.

2. 4.8. Introducing Empowerment: The secret to transforming weakness into strength was Education. It provided many resources and methods for comprehending and resolving the issues that lie ahead of us. More significantly, Education gave us the mental flexibility to choose wisely and move quickly when necessary. Numerous studies demonstrated that educated women had better decision-making skills and were therefore better able to speak out against gender bias and domestic abuse.

2.5. Difficulties of Technology use in Education

2. 5.1. Major Means Replaced by the Assisting One: Technology was often used as an aid to achieve teaching effects, but many teachers lack proficiency in using it confidently. Students often focus on screens, leading to no eye contact between teachers and students. Modern information and technology teaching was extreme, disregarding traditional teaching methods. Creative Education emphasized that modern educational techniques serve as an assisting instrument rather than a target, and should not dominate the class. They should be substitutes for effective teaching and learning (Dorathy & Dr.S.N.Mahalakshmi, 2014)

2. 5.2. Loss of Speaking Communication: English language analysis by teachers effectively conveys knowledge to students, improving pronunciation, comprehension, thought patterns, and oral expression. However, the introduction of multimedia technology, including audio, visual, and textual effects, can lead to a lack of communication between teachers and students. Teachers' voice was replaced by computer sound, and their analysis was based on visual images, limiting students' opportunities for speaking. This results in a classroom environment that becomes more like a courseware show, with students becoming viewers rather than active participants in class activities (Dorathy & Dr.S.N.Mahalakshmi, 2014)

2. 5.3. The Restriction of Students' Thinking Potential: Language teaching required a tense atmosphere, but over-demonstrations can hinder real-time feedback. The main goal should be to develop students' thinking capacity using multimedia technology. However, lack of professional development and limited access to technology hinder its integration into the curriculum (Dorathy & Dr.S.N.Mahalakshmi, 2014)

3. 5.4. Integrating Technology in Teacher Development: Teachers must integrate technology into their curriculum, providing students with rich experiences and supporting those lacking confidence. They should be gatekeepers for students' access to technology opportunities, using ICTs for professional development and enabling anytime, anywhere learning through e-learning, which may include mobile devices (Dorathy & Dr.S.N.Mahalakshmi, 2014)

2.6. The Role of Integrating Technology in Education

2. 6.1. Wider Participation: Technology had enabled Education to reach a wider audience, particularly in India, where geographical, economic, physical, and social limitations exist. The expansion of distance education at school and higher education levels had improved the country's educational status. Educational technology had also expanded open education services through institutes like the National Institute of Open Schooling (NIOS) and Indira Gandhi National Open University (IGNOU). (Jathol & chabra, 2015)

2.6.2. Empowerment of Learners: Traditional classroom learning involves fixed schedules, with the teacher deciding class speed and frequency. However, different learners had different learning capacities. Technology can be used to adapt learning methods, allowing learners to access course material through various media, ensuring a unique learning experience for each individual (Jathol & chabra, 2015)

2. 6.3. Facilitate application of senses, memory and cognition: Learning should be viewed as a technique to display skill. This aligns with Bloom's Taxonomy, which suggested that learning outcomes involve both the mind and the body. Modern teaching and learning circumstances do not fully meet human abilities. Technology, such as video and the internet, can help learners grasp the universe and learn about topics outside their physical reach (Jathol & chabra, 2015)

2. 6.4. Differentiated instruction: Educational technology encouraged students to actively participate and question using various methods. Individual instructions become

more generic, promoting the development of individualized learning processes. Learners were motivated to explore multimedia and apply their knowledge creatively (Jathol & chabra, 2015)

2. 6.5. Continuing Education (lifelong Education): With the rapid growth of knowledge, individuals must continue to learn throughout their lives. Continuous Education was crucial for enhancing one's quality of life. This was only achievable with educational technology(Jathol & chabra, 2015)

2. 6.6. Multiple learning resources: The technological revolution had enabled learners to easily access a wide range of learning resources, unlike traditional teaching methods that had limited resources. Computers can not only display graphics but also communicate with learners. We saw various improvements in telecommunications (Jathol & chabra, 2015)

2. 7. Educational skills during 21st century

To promote and support the incorporation of 21st century skills, it was vital to establish their definition and relevance to the learners. The following sections provided an overview of each ability and explore its relevance.

2. 7.1. Critical thinking: According to (Collins & O'Brien, 2011) critical thinking was using higher-level thinking to found significance in actions or events. Critical thinking involved questioning, doubting, comparing and making judgments (Idrizi, 2023)

In more EFL context, critical thinking Richards and Schmidt (2010) defined critical thinking as a level of reading comprehension or discussion abilities in which the student can question and assess what had been read or heard. In language instruction, this approach promoted active engagement with target language content, deeper processing, and respect for students' autonomous thinking (Idrizi, 2023)

Critical thinking was crucial in foreign language learning due to the cognitive effort required for comprehension, analysis, and evaluation of inputs like reading and listening, as well as the processing and evaluation of outputs like speaking and writing. Scholars and research emphasized the importance of incorporating critical thinking skills in education, particularly language teaching, as it positively impacts students' learning and enthusiasm. Critical thinking positively impacted language learners, improving their success and enriching their learning. It fostered learner autonomy, promoted adaptive

learning beyond the classroom, make students more active, potentially leading to lifelong learning, and encouraged participation in solving social issues (Idrizi, 2023)

2. 7.2. Collaboration: Collaboration in language education referred to the skill of working together with peers to achieve learning goals, requiring the learner to contribute, accept responsibility, and value others. Collaboration was a crucial aspect of education, with many instructional methods and materials incorporating cooperative learning. Language teaching methods like Task-based Teaching, Communicative Language Teaching, and Project-based Learning emphasized student-student collaboration in lesson planning. Learning theories like Vygotsky's Sociocultural Theory support this, stating that learning occurs best in social interaction contexts (Idrizi, 2023)

Collaborative skills and learning in language education were crucial, as highlighted by socio-cultural theory and Social Interdependence Theory. These theories emphasized the importance of social interaction and cooperative learning, where each student's outcome was influenced by others in a group, leading to higher and better learning outcomes than individual work. Collaborative learning not only enhanced learning outcomes but also fostered social skills and teamwork awareness, preparing students for workplaces requiring teamwork. Studies show that collaborative learning increases tolerated towards diverse learners, fostered caring for others, and improved conflict resolution abilities (Idrizi, 2023)

2. 7.3. Communication: Effective communication was crucial for language acquisition success. The ultimate purpose of language education was for learners to communicate effectively.

Effective communication in EFL enabled learners to achieve fluency in all abilities, including listening, reading, writing, and speaking. Effective communication was crucial for academic success, lifelong learning, and job advancement. Communication was viewed as a critical skill in one's employment in the twenty-first century; for example, communication may assist an individual in a job interview or help one be productive and wealthy in their field. As McIntosh et al. (2008) rightly stated Communication skills can not only help you get the job you want, they can help you be more successful in the job you have. Furthermore, communication was generally linked to collaboration, with the understanding that excellent communication leads to good collaboration, and vice versa; successful cooperation implies that successful communication had occurred (Idrizi, 2023)

2. 7.4. Creativity: According to Collins & O'Brien (2011) Creativity referred to the ability or power to create with originality, innovation, self-expression, and imagination(Idrizi, 2023)

Hadfield and Hadfield (2015) discuss the benefits of using creativity with language learners. The first was that learners engaging in creative activities and tasks are more motivated and this, in turn, results in more positive outcomes. Creativity and creative tasks helped learners become more risk-takers, and this make them did more than what their real linguistic abilities were. In addition, the more cognitive effort and the deeper the language was processed during creative activities, the more language becomes stored and memorable for the learner. Creative thinking can also result in significant and far-reaching changes in learners, it can significantly improve learners' decision-making abilities, self-confidence, and communication autonomy. These can improve pupils' short-term learning achievement and long-term productivity as individuals or employees (Idrizi, 2023)

Conclusion

In the 21ˢᵗ century, Education was one of the most important necessities of our life. With rapid technological advancements and globalization, education was the key to equipping individuals with skills and knowledge needed to thrive in a rapidly changing world. It was not just about acquiring information, but also about developing critical thinking, creativity, communication and collaboration skills. Education empowered individuals, fostered innovation, derived economic growth, and promoted social mobility, making it indispensable in today's society.

Practical Part
Chapter Three: The Field Work

Introduction

The present chapter analyses and discusses the data acquire in the research we conduct to investigate the use of technology in transforming EFL students' education in the 21st century.

This chapter demonstrate the field work; it contains an introduction of the study methodology, a description of the participants, a description of the research instruments used (questionnaires), discussion of the findings. The questionnaires investigate students and teachers' impression of utilizing technology in transforming EFL students' education in the 21st century.

3. 1. Methodology

In this study we choose a mixed method approach to fulfil our research. The aim is to investigate the topic under study in a clear and comprehensive manner. Two questionnaires are submitted, for both students and teachers of KasdiMerbah University – Ouargla. The participants include 42 students who use technology to continue their education during Covid-19 pandemic, and 10 teachers who use technology during the same period.

3. 2. Participants

This study's participants are Master students aged between 20 – 34 years old, both male and female, and teachers from English department at University of KasdiMerbah – Ouargla in the academic year 2023/2024. The study intends to analyse the use of technology in transforming EFL students' education in the 21st century during Covid-19 pandemic where the students continuing their studies online.

3. 3. Research Instruments

For data collection in this study we use two questionnaires, one for the students and another for teachers. The purpose of the questionnaires is to collect students' and teachers' thoughts and attitudes about the use of technology in transforming EFL students' education in the 21st century. It contains both open-ended and closed-ended questions about students and teachers view and experiences in utilizing online learning in education, advantages and disadvantages of e-learning, the importance of education and the difficulties they faced while using technology.

The alignment of this instrument with the research aim and the nature of the investigation support our selection. The questionnaires give insights into students' and teachers' experiences and views, allowing for more in-depth knowledge of their attitudes toward the intervention.

3. 4. Students' Questionnaire

3. 4.1. Description of the Questionnaire

The first questionnaire, submit to 44 students, is made of 16 questions. Its main purpose is to gather some background information about the participants. It seeks to examine the students about the use of technology in transforming education. It includes both closed-ended and open-ended questions. The questionnaire is divided into two sections. The first section (2questions) seeks to have some personal information about the students such as their age, gender. The second section (14 questions) describe students' attitudes towards the use of technology in transforming education, their opinion about the characteristics of E-learning, its types, advantages, disadvantages, purposes. And their opinion about Education and its characteristics, importance, difficulties of using technology in education and the role of integrating technology in education.

3. 4.2. Analyses of the Results

The first section : Personal information

Q1. Students' Gender

Table 3.1; Figure 3.1

Students' Gender

Options	Male	Female	Total
Number	6	37	43
Percentage	14%	86%	100%
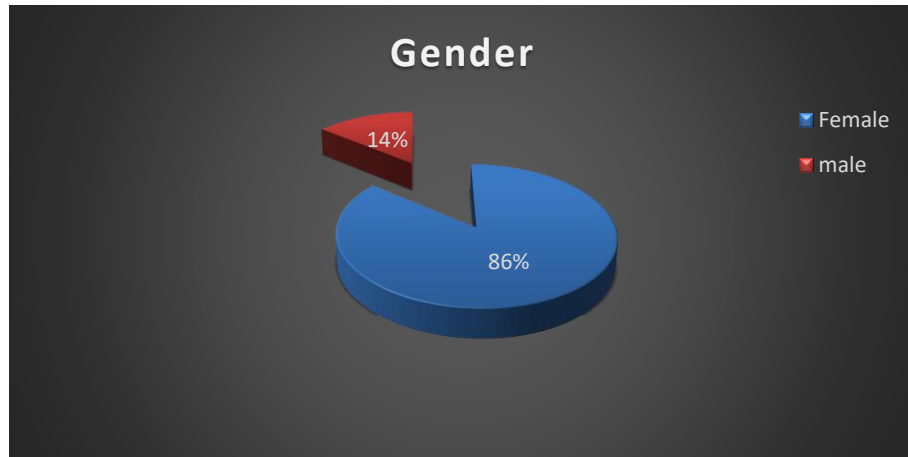
Table 3.1 and Figure 3.1 show that females are more dominant than males in this study. Out of forty-four (100%) students, only 6 students represent males, while 37 students are females.

Q2. Students' Age

Table 3.2; Figure 3.2

Students' Age

Age	20	21	22	23	24	25	26	27	29	31	33	34	Total
Number	4	6	12	9	3	1	2	2	2	1	1	1	44
Percentage	9%	14%	27%	21%	7%	2%	5%	5%	5%	2%	2%	2%	100%
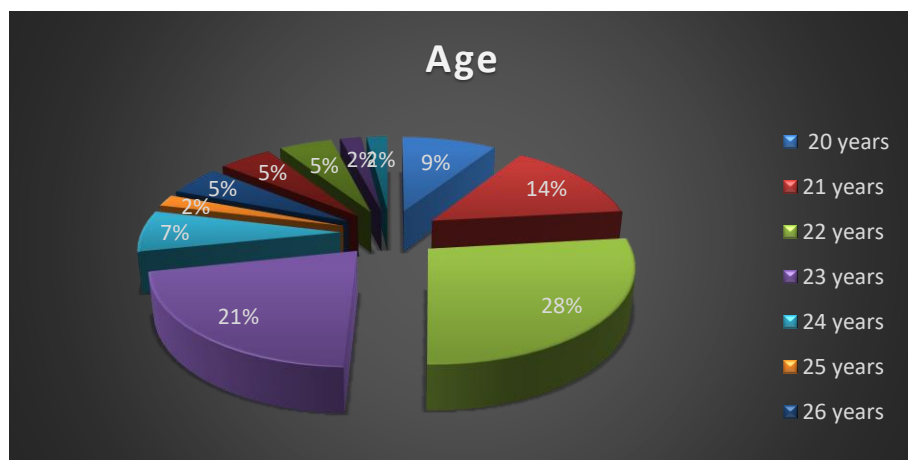
Table 3.2; Figure 3.2 display the age distribution of our sample. The participants aged 22 years old constituted the highest percentage (28%), while the lowest percentage is among students aged 25 to 34 years old.

The second section

Q3. Do you know what is E-learning?

Table 3.3; Figure3.3

Students attitude towards E-learning definition

Options	Yes	No	Total
Numbers	36	8	44
Percentage	82%	18%	100%
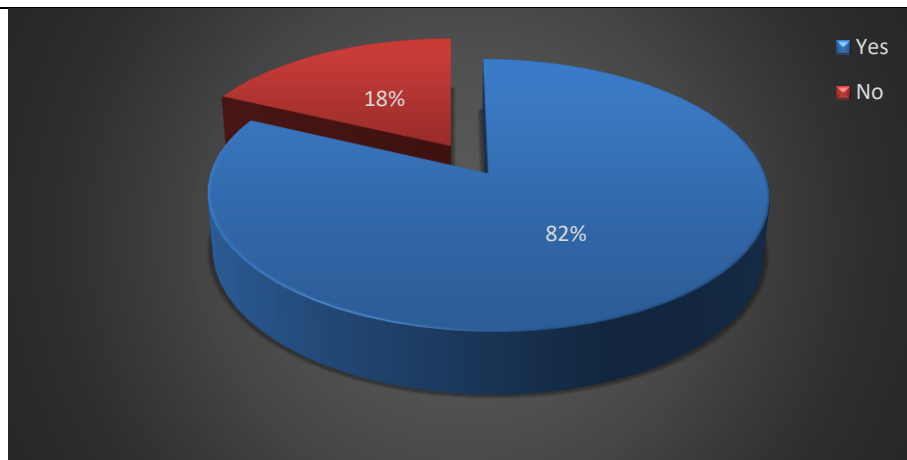
Table 3.3; Figure 3.3 show that 36 participants (82%) say yes, indicating that they know the definition of E-learning, while 8 participants (18%) say no

Q3.1. If yes, would you define it briefly?

According to Table 3.3; Figure3.3 the students know the definition of E-learning, and the majority define it as the learning process through digital resources.

Q4. Do you know other E-learning terminologies?

Table3.4; Figure3.4

Students' attitude towards knowing other E-learning terminologies

Options	Yes	No	Total
Numbers	38	5	42
Percentage	88%	12%	100%
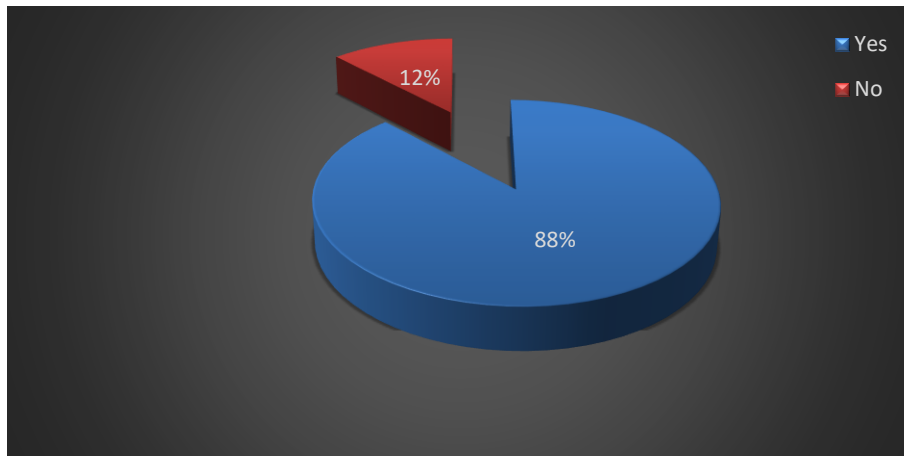
According to Table 3.4; Figure 3.4, the majority of students, 38 (88%), know other terminologies of E-learning, while 5 (12%) declare that they are not aware of any other E-learning terminology.

Q4.1. if yes, which one among these E-learning terminologies are aware with?

a) Computer conferencing/**b)** Telelearning/ **c)** Blended learning/**d)** Web-Based learning/ **e)** Online learning/**f)** Virtual classroom/ **g)** Distance education/**h)** Open learning/ **i)** All of them/**j)** None of them.

Table 3.5; Figure3.5

Students attitude towards other E-learning terminologies

Options	a	b	c	d	e	f	g	h	i	j	Total
Numbers	2	0	2	0	19	0	4	0	14	2	43
Percentage	5%	0%	5%	0%	43%	0%	9%	0%	33%	5%	100%
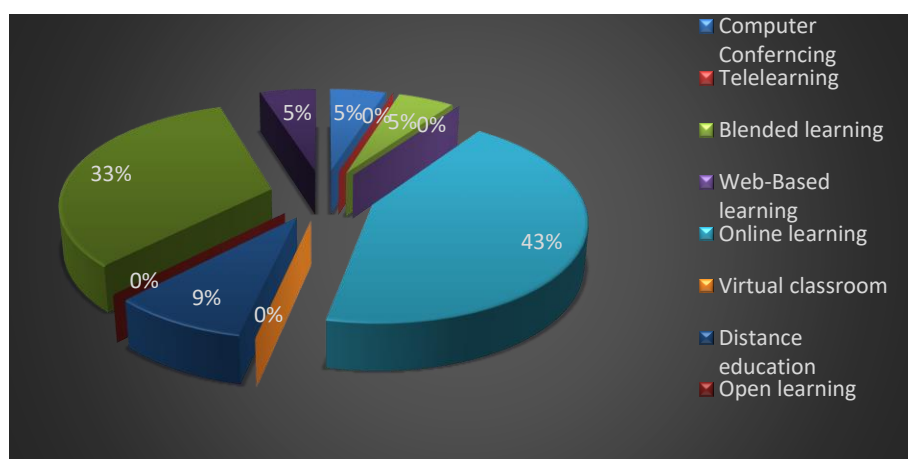
The results obtain from Table 3.5; Figure 3.5 indicate that the majority of students know the term 'Online learning,' which is chosen by 18 students (43%). Following this, 14 students (33%) are familiar with all of the terms. However, only 4 students (19%) pick the term 'Distance education,' while 'Blended learning' and 'Computer conferencing' are selected by 2 students each (5%).

Q5. Do you know E-learning types?

Table 3.6; Figure3.5

Students attitude towards knowing E-learning types

Options	Yes	No	Total
Numbers	16	28	44
Percentage	36%	64%	100%
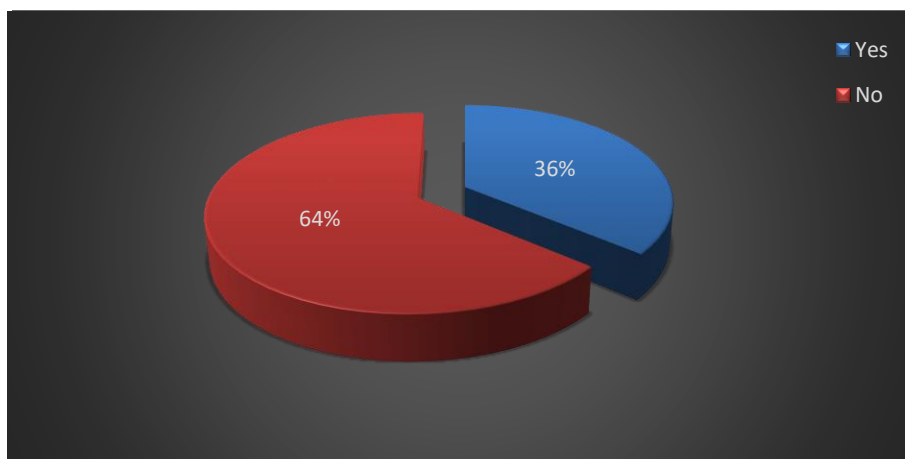
Table 3.6; Figure3.6 demonstrate that most of students (64%) do not know about E-learning types. While only (36%) know about the types of E-learning.

Q5.1. If yes, which one among the following types are you aware with?

a)Computer Managed Learning (CML)/**b**)Computer Assisted Instruction (CAI)/ **c**)Synchronous Online Learning/**d**)Asynchronous Online Learning/ **e**) Fixed E-Learning/ **f**)Adaptive E-Learning/ **g**)Linear E-Learning/ **h**)Interactive Online Learning/ **i**)Individual Online Learning/ **j**)Collaborative Online Learning/ **k**)All of them/ **l**)None of them.

Table 3.7; Figure 3.7

Students attitude toward E-learning types

Options	a	b	c	d	e	f	g	h	i	J	k	l	Total
Numbers	4	3	4	3	2	2	2	3	8	5	5	3	44
Percentage	9%	7%	9%	7%	5%	5%	5%	7%	18%	11%	11%	7%	100%
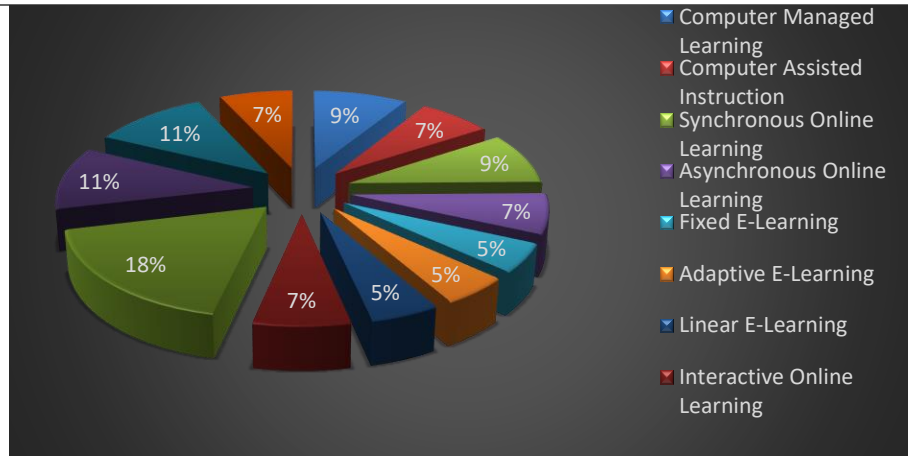
The data from Table 3.7; Figure 3.7, indicate that students are asked to indicate their awareness of various E-learning types. Among the options provided, Individual Online Learning had the highest awareness, with 18% of students recognizing it. Collaborative Online Learning and All of them are also familiar to 11% of students each. Additionally, 7% of students are aware of Computer Managed Learning (CML), Computer Assisted Instruction (CAI), Synchronous Online Learning, Asynchronous Online Learning, and Interactive Online Learning. However, a notable portion of students (7%) indicate that they are not aware of any of the listed E-learning types.

Q6. Do you know E-learning purposes?

Table 3.8; Figure 3.8

Students attitude towards knowing E-learning purposes

Options	Yes	No	Total
Numbers	40	4	44
Percentage	91%	9%	100%
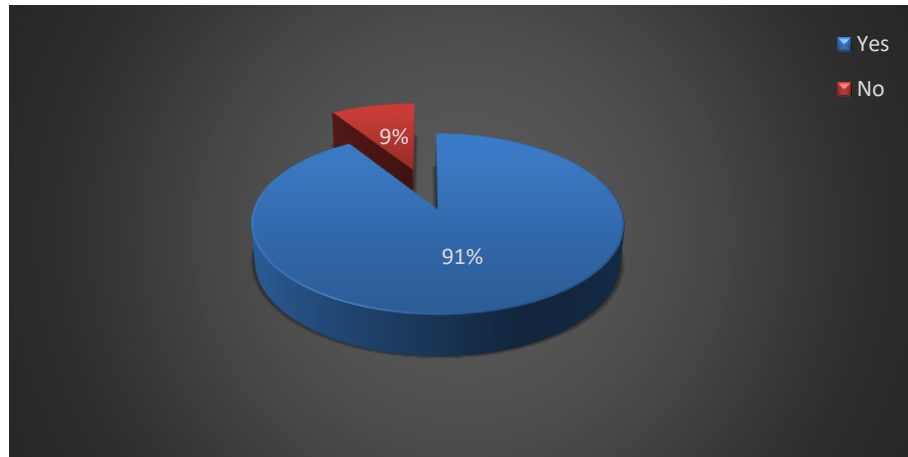
Based on the responses illustrate in the Figure above and in Table 3.8, we could see that the majority of the students (19%) are aware of E-learning purposes, while only (9%) are not familiar with the purposes.

Q6.1. If yes, which one among the following purposes do you consider the most important one?

a) Improve learning quality/ **b**) Meet student needs/styles**/c**) Enhance education efficiency/ **d**) Enhance accessibility and flexibility/ **e**) All of them/ **f**) None of them

Table 3.9; Figure3.9

Students' attitude towards the most important E-learning purposes

Options	A	b	c	d	e	F	Total
Numbers	7	1	4	11	19	0	42
Percentage	17%	2%	10%	26%	45%	0%	100%
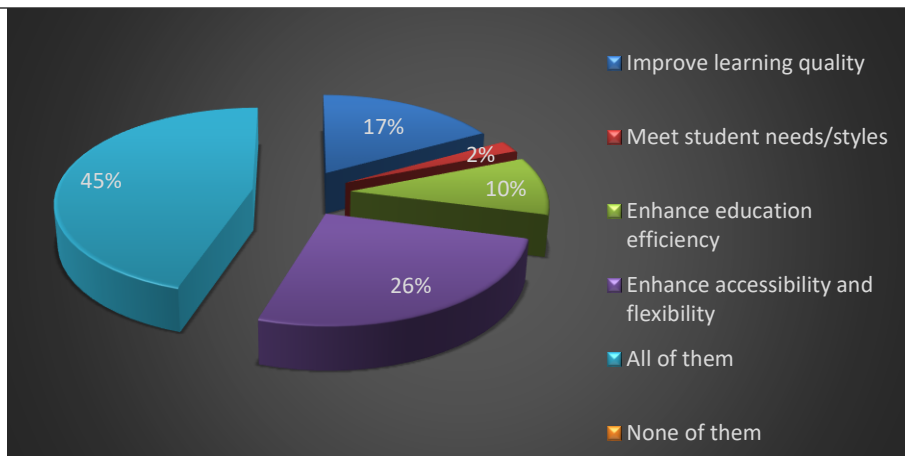
According to Table3.9; Figure3.9 majority of respondents (45%) consider all listed purposes equally important. "Enhanced accessibility and flexibility" are the next most

selected purpose, chosen by 26% of respondents. "Improved learning quality" receive 17% of the responses, while "Enhanced education efficiency" receive10%. Only a small percentage of respondents (2%) chose "Meet student needs/styles" as the most important purpose

Q7. Do you know E-learning characteristics?

Table 3.10; Figure3.10

Students attitude towards knowing E-learning characteristics

Options	Yes	No	Total
Numbers	37	7	44
Percentages	84%	16%	100%
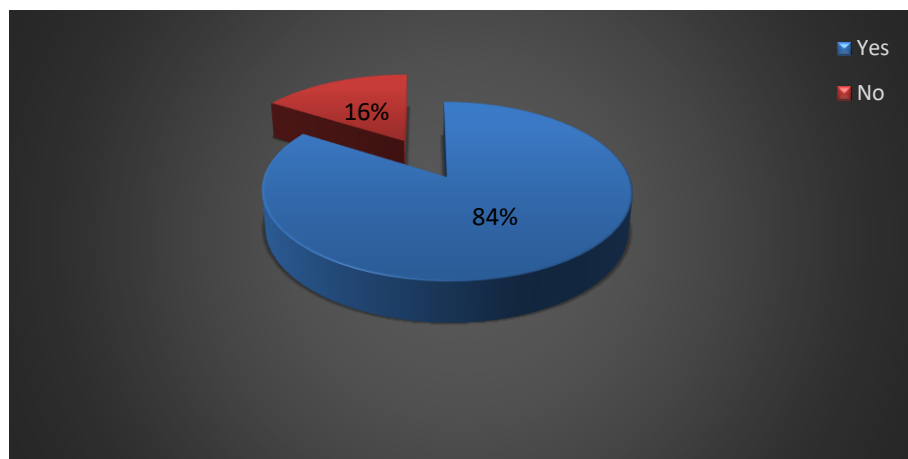
Table 3.10; Figure 3.10 illustrate that 84% of students are familiar with the characteristics of E-learning, while 16% are not.

Q7.1. If yes, which one among the following characteristics are you aware with?

a) Interactivity/**b)** Authenticity/**c)** Learner Control/**d)** Convenience/**e)** Ease of Use/**f)** Online Support/**g)** Course Security/**h)** Cost Effectiveness/ **i)** Collaborative Learning/**j)** Formal and Informal Environments/ **k)** Online Evaluation/ **l)** Global Accessibility/ **m)** All of them/ **n)** None of them

Table 3.11; Figure 3.11

Students attitude towards E-learning characteristics

Options	a	b	c	d	e	f	g	h	i	j	k	l	m	n	Total
Numbers	5	4	1	1	6	2	1	0	0	0	4	2	12	1	39
Percentage	13%	10%	3%	3%	15%	5%	3%	0%	0%	0%	10%	5%	31%	3%	100%
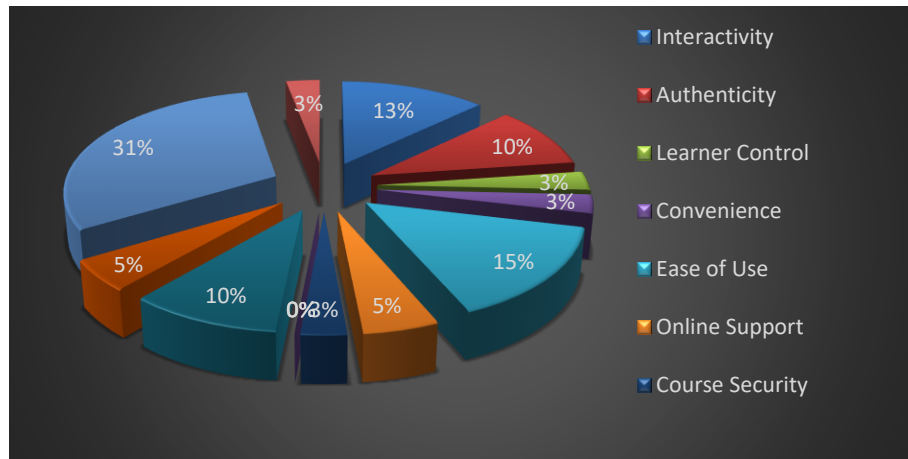
The data collect from Table 3.11; Figure 3.11 show that the majority of students (31%) are aware of all the characteristics listed. Ease of Use was also well-recognize at 15%. However, characteristics such as Cost Effectiveness, Formal and Informal Environments, and Online Evaluation had lower awareness levels, with only a few students indicating awareness.

Q8. Do you know E-learning advantages?

Table 3.12; Figure 3.12

 Students attitude towards knowing E-learning advantages

Options	Yes	No	Total
Numbers	41	2	43
Percentage	95%	5%	100%
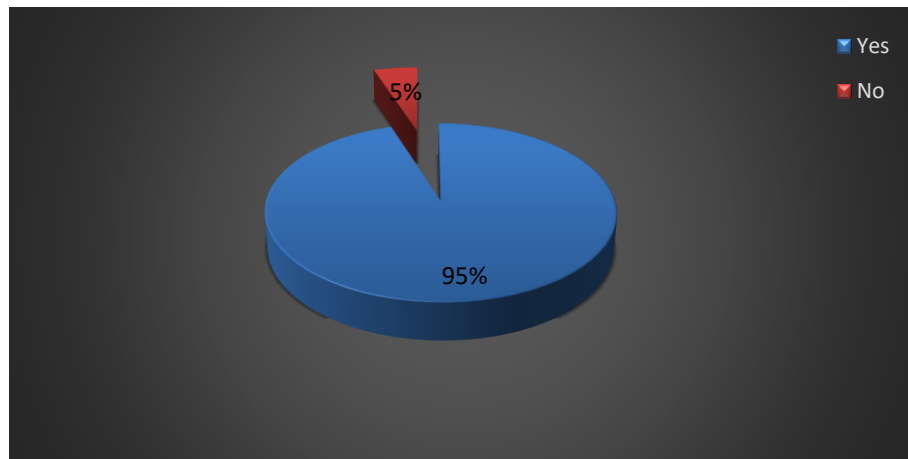
Based on the responses depict in Table 3.12 and Figure 3.12 above, it can be deduce that the majority of participants, 95% of them, are aware of the advantages of E-learning. Only 5% of participants answer "No" to this question, indicating that they are not familiar with the advantages of E-learning.

Q8.1. If yes, which one of these advantages do you know?

a) Conserves Time and Fast learning/ **b)** Cost-Effective/ **c)** Improved Efficiency and Collaboration/ **d)** Low Price/ **e)** Usability and Practicality/ **f)** Individual Pace and Flexible/ **g)** Theory Application/ **h)** Anytime Materials and Training Access/ **i)** Greener Approach/ **j)** All of them/ **k)** None of them.

Table 3.13; Figure 3.13

Students attitude towards E-learning advantages

Options	a	b	c	d	e	f	g	h	i	j	k	Total
Numbers	15	3	4	3	4	3	0	0	0	11	0	43
Percentage	35%	7%	9%	7%	9%	7%	0%	0%	0%	26%	0%	100%
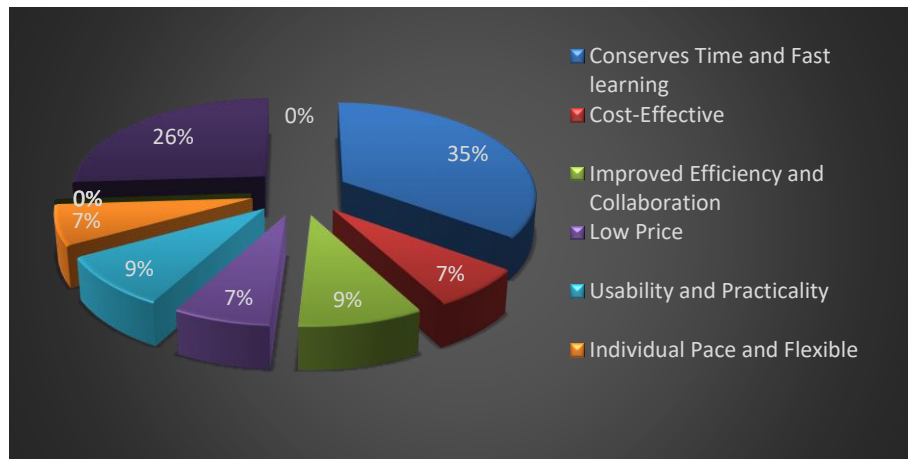
Table 3.13 and Figure 3.13 illustrate that respondents are asked about their awareness of the advantages of E-learning. The data reveal that several advantages are recognized by the respondents. The most widely recognized advantages are Conserves Time and Fast learning, with 35% of respondents acknowledging it. Additionally, 26% of respondents select 'All of them' as a choice, indicating a general acknowledgment of multiple benefits without specifying individual advantages. Other advantages such as Cost-Effective (7%), Improved Efficiency and Collaboration (9%), Low Price (7%), Usability and Practicality (9%), and Individual Pace and Flexible (7%) are also acknowledged, albeit to a lesser extent. However, based on the data provided, no respondents indicate recognition of Theory Application, Anytime Materials and Training Access, or Greener Approach.

Q9. Do you know E-learning disadvantages?

Table 3.14; Figure 3.14

Students attitude towards knowing E-learning disadvantages

Options	Yes	No	Total
Numbers	35	9	44
Percentages	80%	20%	100%
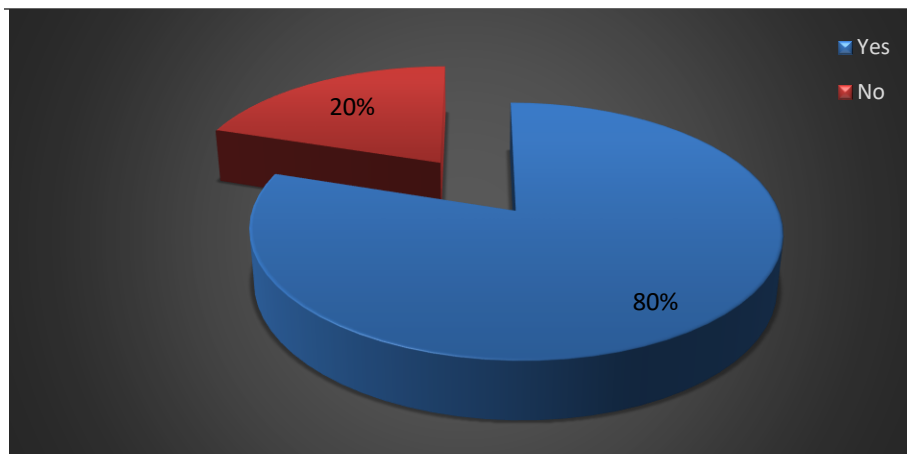
From Table 3.14; Figure 3.14, it seems that 80% of the respondents are aware of the disadvantages of E-learning, while the remaining 20% do not have knowledge of these drawbacks.

Q9.1. If yes, which one of these disadvantages do you know?

a) Internet Connection and Interruption/**b)** Discipline/**c)** Social Isolation and Skill Deficits/**d)** Lack of Practical Knowledge/**e)** Easy to Lose Focus/**f)** Expensive/**g)** Health Concerns/**h)** Prevention of Cheating is Difficult/ **i)** Limited/ **j)** All of them/ **k)** None of them.

Table 3.15; Figure 3.15

Students attitude towards E-learning disadvantages

Options	a	b	c	d	e	f	g	h	i	j	k	Total
Numbers	10	3	3	4	1	2	1	2	3	10	0	39
Percentages	26%	8%	8%	10%	3%	5%	3%	5%	8%	26%	0%	100%
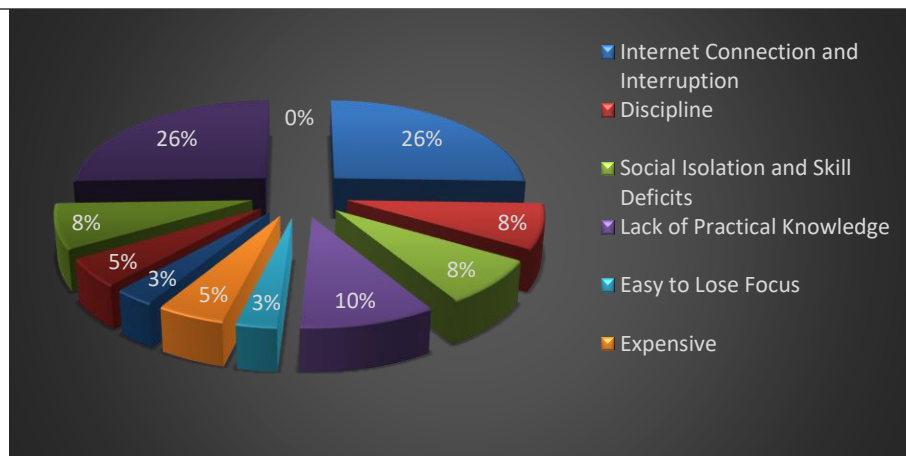
Table 3.15 and Figure 3.15 demonstrate that most of the students are aware of various disadvantages associated with E-learning. Specifically, 26% of students are familiar with Internet connection and interruption issues, as well as all the listed disadvantages. Additionally, 10% of students know about social isolation and skill deficits, while 8% are aware of discipline challenges and limited practical knowledge. A smaller proportion of students, constituting 5%, are aware of the challenges related to focus loss, prevention of cheating, and health concerns. Interestingly, none of the survey students indicate they are unaware of any of the liste disadvantages.

Q10. Do you know the uses of technology in educational field?

Table 3.16; Figure 3.16

Students attitude towards knowing the uses of technology in educational field

Options	Yes	No	Total
Numbers	41	3	44
Percentage	93%	7%	100%
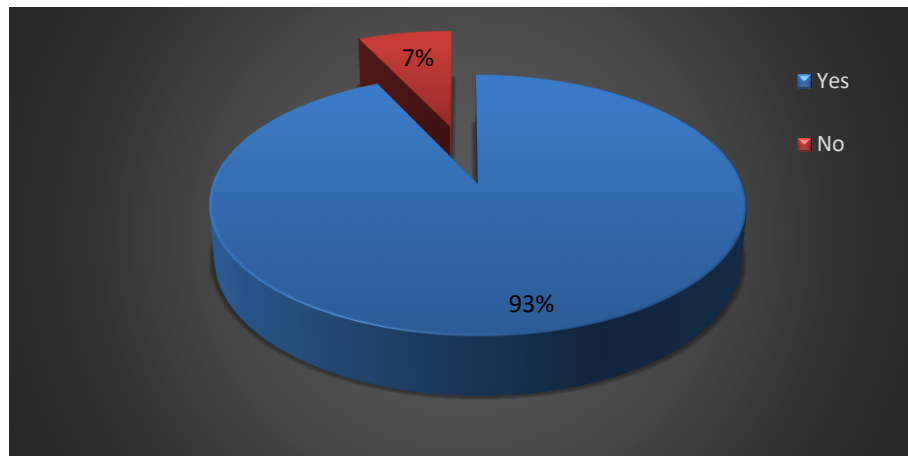
Table 3.17 and Figure 3.17 demonstrate that most of the students are aware of the uses of technology in the educational field. Specifically, 93% of the students indicate that they know about the uses of technology, while only 7% state that they do not.

Q10.1. If yes which one among the following uses have you used before?

a) Facilitating learning/ **b)** Improving Performance/ **c)** Creating Resources/ **d)** Using Resources/ **e)** Managing Processes and Resources/ **f)** All of them/ **g)** None of them.

Table 3.18; Figure 3.18

Students attitude towards the uses of technology in educational field

Options	a	b	c	d	e	f	g	Total
Numbers	11	5	2	8	1	13	2	42
Percentage	26%	12%	5%	19%	3%	31%	5%	100%
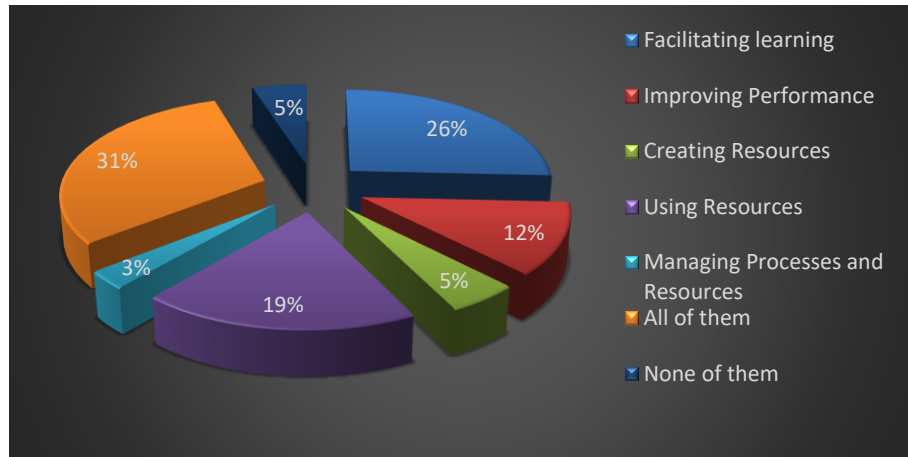
Going off the answers that are represent in Table 3.18 and Figure 3.18, we can say that the majority of participants (31%) have use all of the following uses previously. This is followed by facilitating learning (26%), managing processes and resources (19%), improving performance (12%), and creating resources (5%). Additionally, a small percentage of participants (3%) indicate they have not use any of these uses before.

Q11.Do you know what is Education?

Table 3.19; Figure3.19

Students' attitude towards knowing Education definition

Options	Yes	No	Total
Number	34	10	44
Percentage	77%	23%	100%
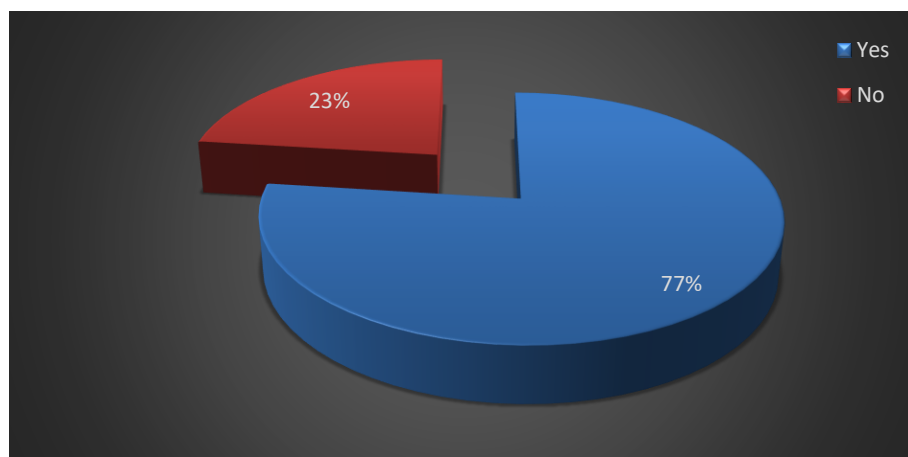
Table 3.19; Figure3.19: Students' attitude towards knowing Education definition

The results from Table 3.19; Figure 3.19 indicate that (77%) of students know the definition of Education. The rest (23%) do not know.

Q11.1. If yes, would you define it briefly?

According to the Table3.19; Figure3.19 the students know the definition of Education, and the majority define it as the process of learning and acquiring knowledge and skills in formal institutions.

Q12. Do you know the characteristics of Education?

Table 3.20; Figure3.20

Students' attitude towards the awareness of the educational characteristics

Options	Yes	No	Total
Number	33	11	44
Percentage	75%	25%	100%
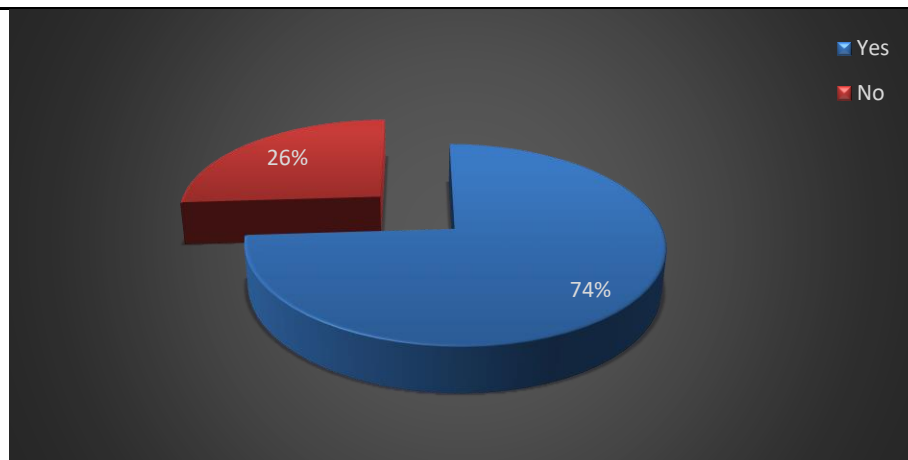
Table 3.20 and Figure 3.20 clarify that the majority of the students (75%) know the characteristics of education. While (25%) from the participants say No.

Q12.1. If yes, which one among the following educational characteristics do you know?

A. Integrative; B. Holistic; C. Scientific; D. Contextual; E. Thematic; F. Effective; G. Collaborative; H. Student-centred; I. All of them; J. None of them

Table3.21; Figure3.21

Students' knowledge about the educational characteristics

Options	A	B	C	D	E	F	G	H	I	J	Total
Numbers	4	0	10	3	2	6	3	3	12	1	44
Percentage	9%	0%	23%	7%	5%	14%	7%	7%	27%	2%	100%
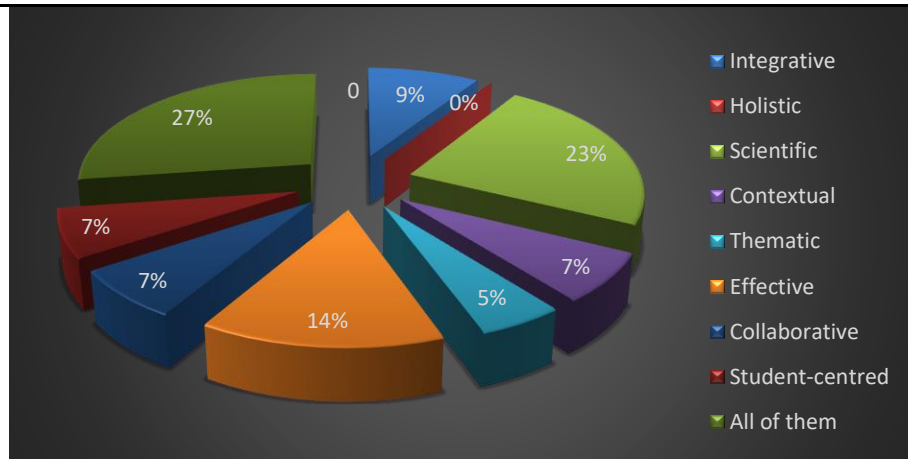
According to Table 3.21; Figure3.21, (27%) of the students say that they are aware of all the characteristics of Education, (23%) say scientific, and (5%) from the participants indicate that they are conscious with effective. (7%) respond that they are aware with collaborative and (7%) with student-centred. (9%) declare that they are familiar with integrative, (5%) with effective. However, no one of them are aware with holistic.

Q13.Are you aware of the importance of Education?

Table 3.22; Figure 3.22

Students' awareness about the importance of education

Options	Yes	No	Total
Numbers	42	2	44
Percentage	95%	5%	100%
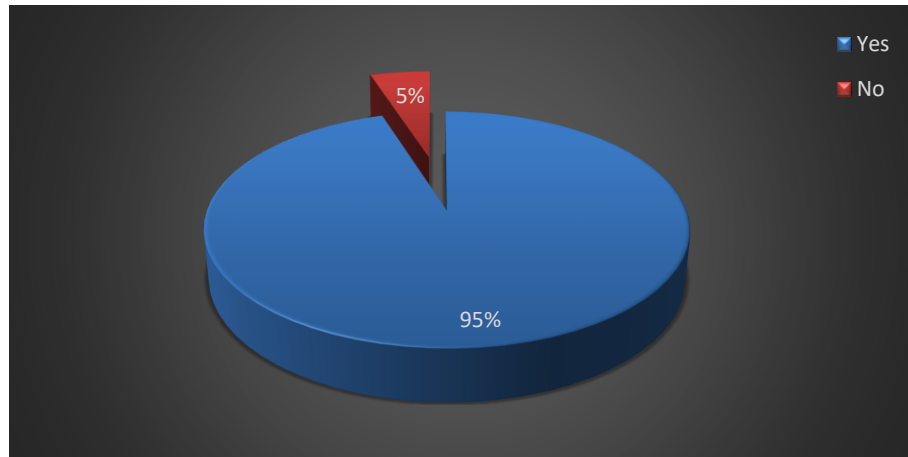
Table3.22; Figure3.22 demonstrate that (95%) from the students are aware with the importance of education, while (5%) who declare that they are not know any importance.

Q13.1. If yes, which ones among the following importance are you aware with?

a) Creating more employment opportunities/**b)** Developing problem-solving skills/**c)** Improving the economy/**d)** Giving back to the community/**e)** Creating modern society/**f)** Bridging the borders/**g)** Creating equal opportunities/**h)** Introducing empowerment/**i)** All of them/**j)** None of them

Table 3.23; Figure3.23

Students' awareness about the importance of education

Options	a	b	c	d	e	f	g	h	i	j	Total
Numbers	2	5	3	0	5	1	2	0	24	0	42
Percentage	5%	12%	7%	0%	12%	2%	5%	0%	57%	0%	100%
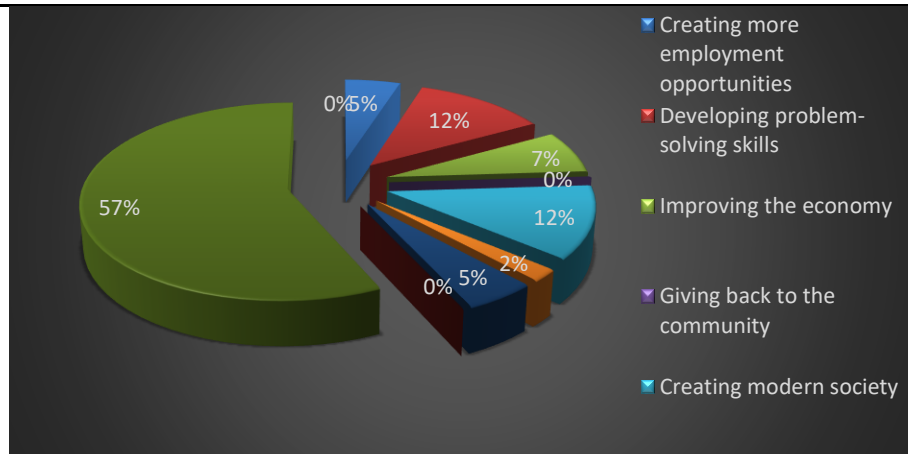
Table3.23; Figure3.23 show that (57%) of the participants declare that they are aware of all the importance mention before, (12%) say developing problem-solving skills and (12%) mention that they are familiar with creating modern society. (7%) they are aware with improving the economy, (5%) clarify that they are conscious with crating more employment opportunities and (5%) say creating equal opportunities. (2%) mention bridging the borders.

Q14.Do you know the difficulties of using technology in education?

Table 3.24; Figure3.24

Students' knowledge about the difficulties of using technology in education

Options	Yes	No	Total
Numbers	34	9	43
Percentage	79%	21%	100%
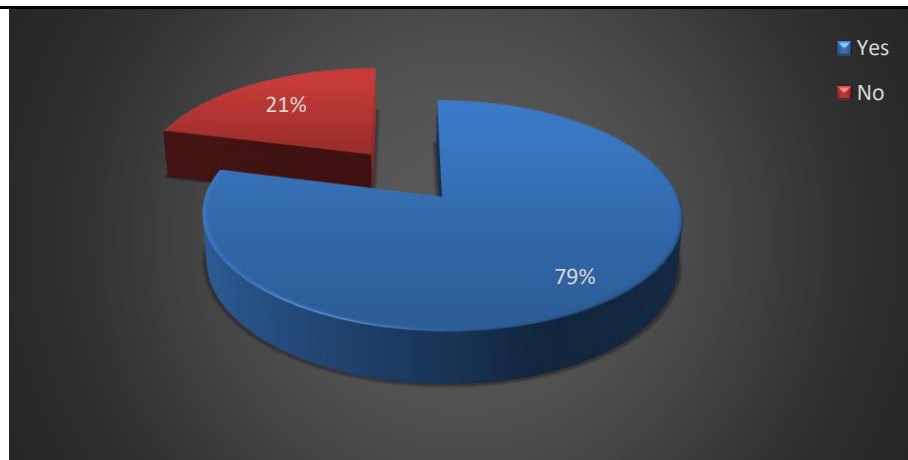
From Table 3.24; Figure3.24 the majority of the students (79%) say that they know the difficulties of using technology in education. Whereas (21%) from the participants say no.

Q14.1. If yes, which difficulty among the following list you have faced?

a) Major means replaced by the assisting one/**b)** Loss of speaking communication/**c)** The restriction of students' thinking potential/**d)** Integrating technology in teachers development/**e)** All of them/**f)** None of them

Table3.25; Figure3.25

Students attitude towards the difficulties have faced before

Options	a	b	c	d	e	f	Total
Numbers	3	10	6	7	10	2	38
Percentage	8%	26%	16%	18%	26%	5%	100%
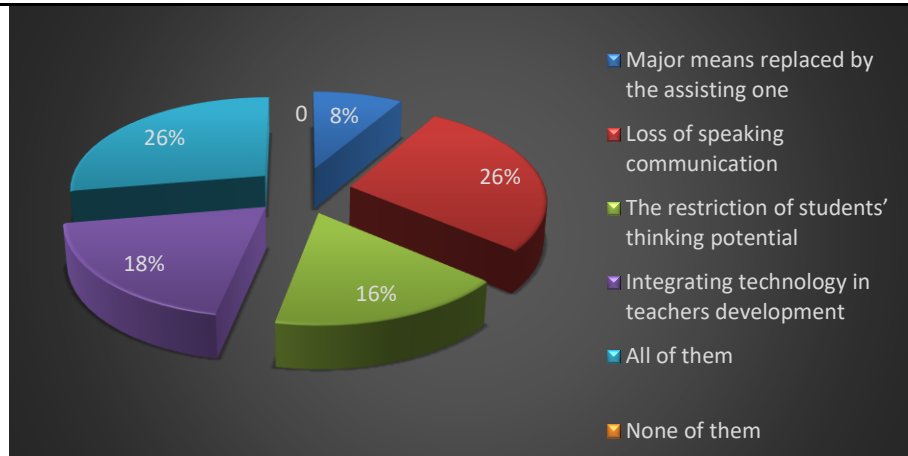
According to Table3.25; Figure3.25, (26%) from the students say that they face all the difficulties mention before, and (26%) declare that they face loss of speaking communication. (18%) clarify that they face integrating technology in teacher development, (16%) mention the restriction of students' thinking potential, and (8%) say major means replaced by the assisting one. However (5%) mention that they do not face any difficulty.

Q15.Are you aware of the role of integrating technology in education?

Table3.26; Figure3.26

Students' awareness of the role of integrating technology in education

Options	Yes	No	Total
Numbers	27	17	44
Percentage	61%	39%	100%
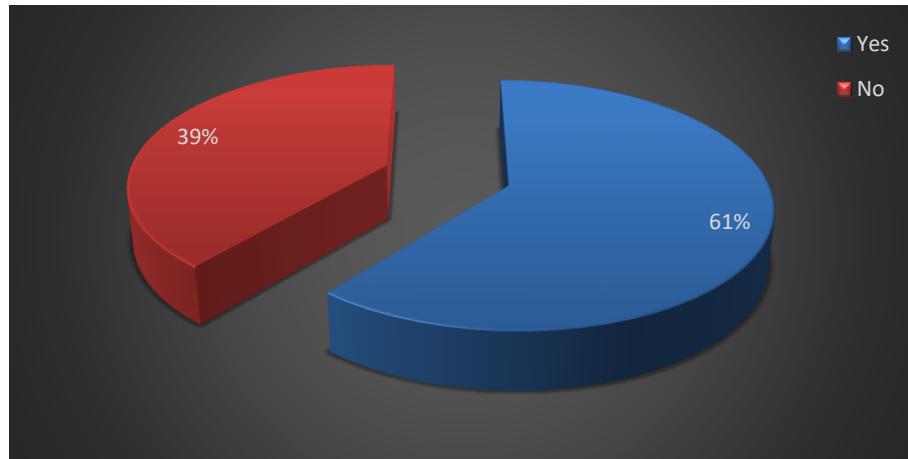
Table3.26; Figure3.26 show that (61%) from the participants they are aware of the role of integrating technology in education, whereas (39%) declare that they are not aware of any of the roles.

Q15.1. If yes, which one of the following roles are you aware with?

a) wider participation/**b)** Empowerment of learners/**c)** Facilitate application of senses, memory and cognition/**d)** Differentiated instruction/**e)** Continuing education/**f)** Multiple learning resources/**g)** All of them/**h)** None of them

Table 3.27; Figure3.27

Students' awareness of the roles of using technology in education

Options	a	b	c	d	e	f	g	h	Total
Numbers	2	1	3	2	2	7	14	3	34
Percentage	6%	3%	9%	6%	6%	21%	41%	9%	100%
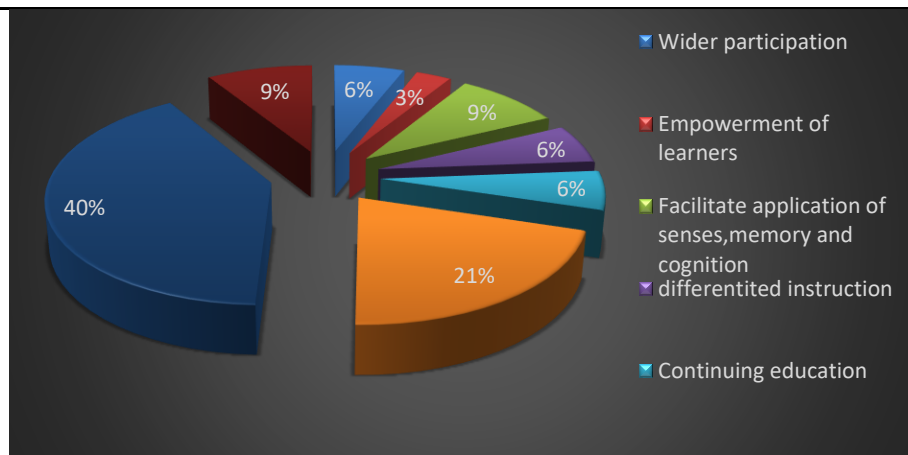
From Table3.27; Figure3.27, (40%) of the students say that they are aware with all of the roles mention before, (21%) clarify that they are familiar with multiple learning recourses. (9%) respond by facilitate application of senses, memory and cognition, (9%) say that they are not aware of any of the roles. (6%) reply by continuing education, (6%) by differentiated instruction and (6%) by wider participation. (3%) say that they are aware with empowerment of learners.

Q16.Do you know the 21ˢᵗ century skills education?

Table3.28; Figure3.28

Students attitude towards the 21ˢᵗ century skills education

Options	Yes	No	Total
Numbers	32	11	43
Percentage	74%	26%	100%
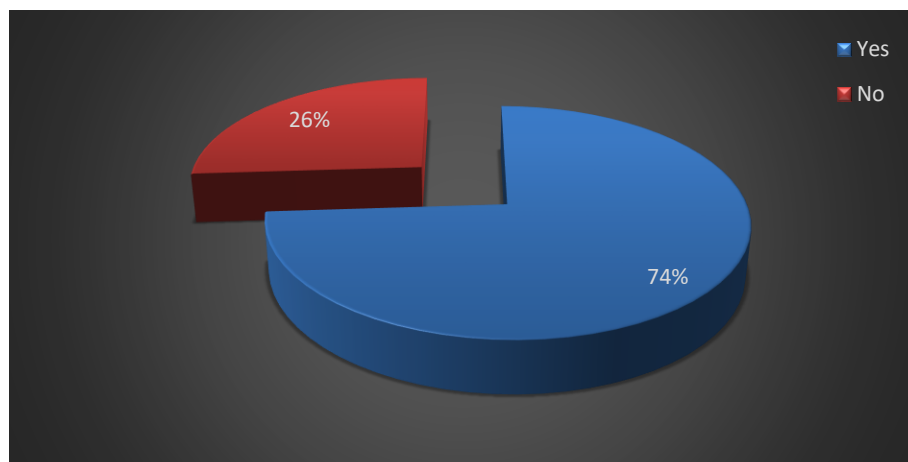
From the Table 3.28; Figure3.28 the majority of the participants (74%) say that they know the 21ˢᵗ century skills education, while just (26%) who do not know.

Q16.1. If yes, which one among the following skills have you studied before?

a) Critical thinking/**b)** Collaboration/**c)** Communication/**d)** Creativity/**e)** All of them/**f)** None of them

Table3.29; Figure3.29

Students attitude towards 21ˢᵗ century skills education has studied before

Options	A	b	c	d	e	f	Total
Numbers	11	1	4	2	16	2	36
Percentage	31%	3%	11%	6%	43%	6%	100%
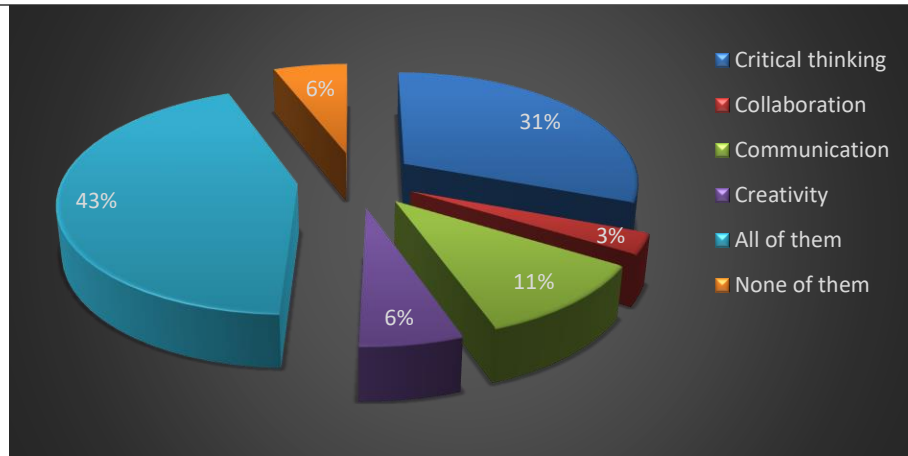
According to Table3.29; Figure3.29, (43%) respond that they study all of the skills mention before, (31%) say that they study critical thinking and (11%) study communication. (6%) answer by creativity and (6%) say that they dnot study any skill before. (3%) clarify that they study collaboration.

3. 5. Teachers' Questionnaire

3. 5.1. Description of the Questionnaire

The teachers' questionnaire, administer to a total of 10 educators, consist of 16 questions. Its primary purpose is to gather essential background information about the participants. The questionnaire seeks to examine teachers' perspectives on the use of technology in transforming education. It includes a mix of closed-ended and open-ended questions. The questionnaire is divided into two sections. The first section (2 questions) aims to gather introductory information about the teachers' teaching experience and grade level. The second section (14 questions) explores teachers' attitudes towards the use of technology in transforming education, their opinions about the characteristics, types, advantages, and disadvantages of E-learning, as well as their views on the purposes, importance, difficulties, and the role of integrating technology in education

3. 5.2. Analyses of Results

The first section: Introductory Information

Q1. Years of teaching experiences?

a) 1 - 5 years/ **b)** 5 - 10 years/ **c)** 10 - 15 years/ **d)** More than 15 years

Table3.30; Figure3.30

Years of teaching experiences

Options	A	B	c	d	Total
Numbers	5	3	0	2	10
Percentages	50%	30%	0%	20%	100%
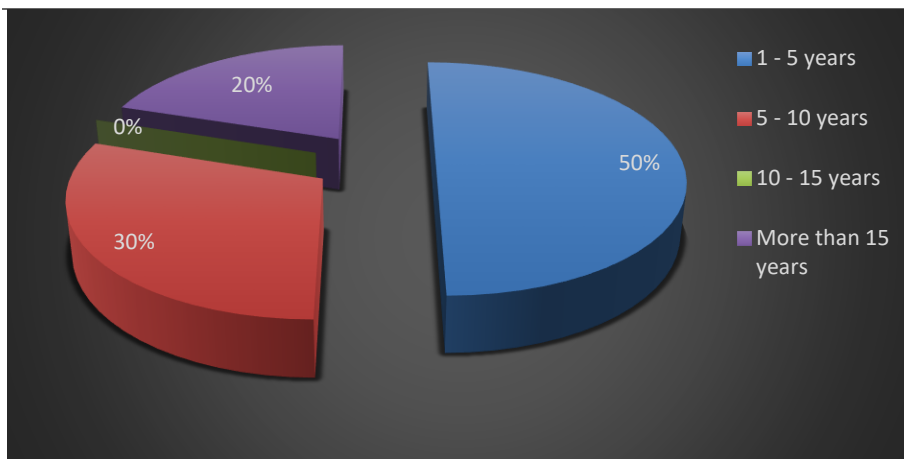
According to Table 3.30 and Figure 3.30, 50% of the teacher's survey have 1 to 5 years of teaching experience, while 30% have 5 to 10 years of experience. No teachers survey have 10 to 15 years of experience, and 20% have more than 15 years of experience.

Q2. What is your degree?

a) Professor/ **b)** MCA/ **c)** MCB/ **d)** Assistant teacher A/ **e)** Assistant teacher B/ **f)** Other

Table 3.31; Figure 3.31

Teachers' educationaldegree

Options	A	b	c	d	e	f	Total
Numbers	1	2	4	2	0	1	10
Percentage	10%	20%	40%	20%	0%	10%	100%
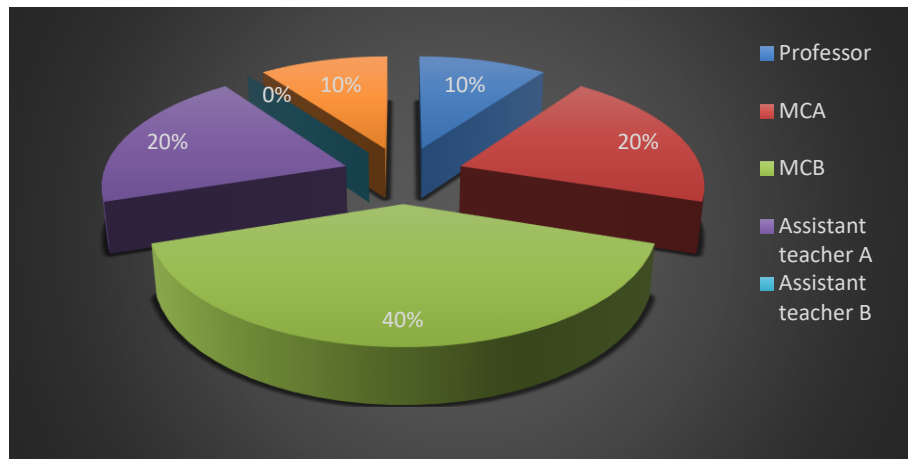
According to Table 3.31 and Figure 3.31, the majority of teachers are holders of the MCB degree, accounting for 40% of the total respondents. Following MCB, both MCA and Assistant teacher A degrees are held by 20% of the respondents each. Professors and individuals with other degrees each comprised 10% of the total respondents. It is noteworthy that no respondents held the Assistant teacher B degree.

The second section

Q3. What is E-learning? (briefly)

Among the teachers' responses, E-learning is described as learning online, either autonomously or with guidance through educational platforms or online courses. It is seen as a medium for engaging learners in online training courses using different types of technologies. Additionally, it is defined as a type of learning based on media, computers, and virtual intelligence, facilitated through electronic resources accessible via computers or digital devices.

Q4. Do you know other E-learning terminologies?

Table3.32; Figure3.32

Teachers' attitude towards knowing other E-learning terminologies

Options	Yes	No	Total
Numbers	10	0	10
Percentage	100%	0%	100%
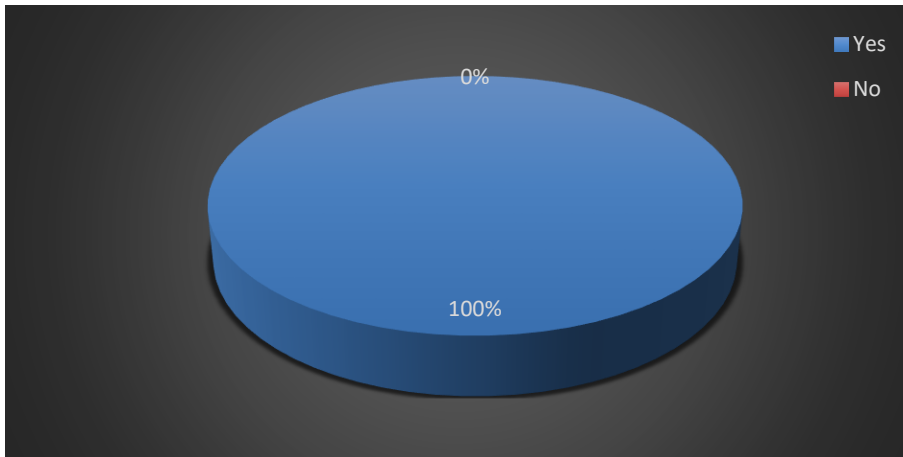
According to Table 3.32; Figure 3.32, all teachers know other E-learning terminologies

Q4.1. If yes, which one do you know?

a) Computer Conferencing/ **b)** Telelearning/ **c)** Blended Learning/ **d)** Web-Based Learning/ **e)** Online Learning/ **f)** Virtual Classroom/ **g)** Distance Education/ **h)** Open Learning/ **i)** All of them/ **j)** None of them.

Table 3.33; Figure 3.33

Teachers' attitude towards other E-learning terminologies

Options	a	b	c	d	e	f	G	h	i	J	Total
Numbers	2	1	3	1	5	2	3	1	3	0	21
Percentage	10%	5%	14%	5%	24%	10%	14%	5%	14%	0%	100%
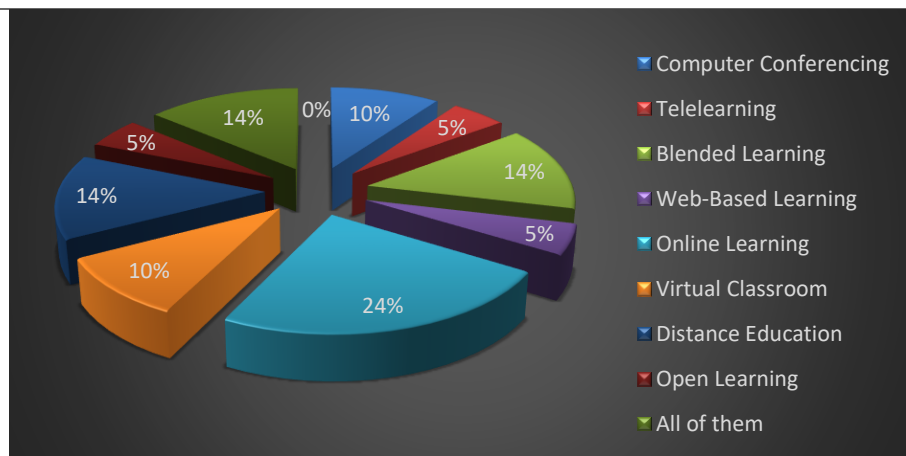
From Table 3.33; Figure 3.33, it appears that a total of 21 responses are recorded. Among them, Online Learning had the highest number of responses with 5 (24%). Following that, Blended Learning and Distance Education are each mention 3 (14%) times. Computer Conferencing and Virtual Classroom are both recognized 2(10%) times

each. Open Learning, Telelearning, and Web-Based Learning are each mentioned once (5%). Notably, out of the 21 responses, 3 (10%) indicate awareness of all the mentioned E-learning terminologies.

Q5. Do you know E-learning types?

Table 3.34; Figure3.34

Teachers' attitude towards knowing E-learning types

Options	Yes	No	Total
Numbers	9	1	10
Percentage	90%	10%	100%
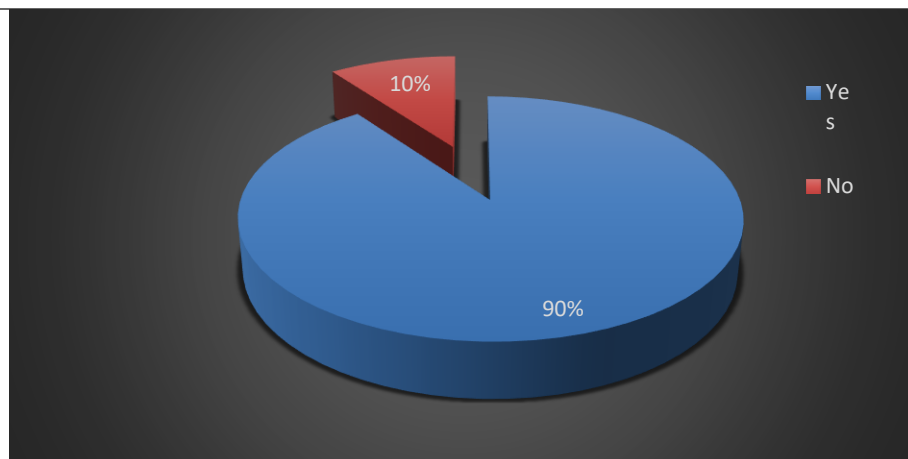
Based on the data from Table 3.34 and Figure 3.34, it seems that the majority of teachers know about E-learning types. Out of a total of 10 respondents, 9 answer 'Yes', representing 90% of the responses, while only 1 respondent answer 'No', accounting for 10% of the responses.

Q5.1. If yes, which one among the following types you did within EFL classes?

a) Computer Managed Learning (CML)/ **b)** Computer Assisted Instruction (CAI)/ **c)** Synchronous Online Learning/ **d)** Asynchronous Online Learning/ **e)** Fixed E-Learning/ **f)** Adaptive E-Learning/ **g)** Linear E-Learning/ **h)** Interactive Online Learning/ **i)** Individual Online Learning/ **j)** Collaborative Online Learning/ **k)** All of them/ **l)** None of them.

Table 3.35; Figure 3.35

Teachers attitude towards E-learning types

Options	a	b	C	d	e	f	g	H	i	j	k	L	Total
Numbers	1	0	7	4	2	1	0	3	4	6	0	0	28
Percentage	4%	0%	25%	14%	7%	4%	0%	11%	14%	21%	0%	0%	100%
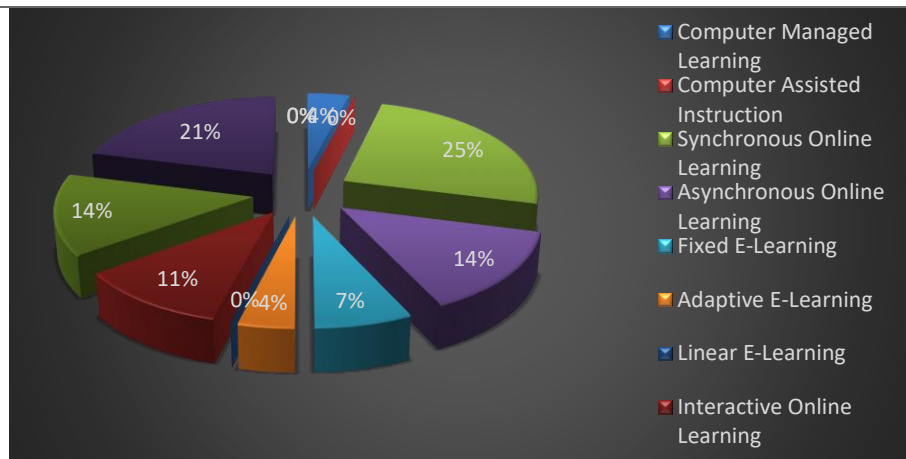
The data from Table 3.35 and Figure 3.35 indicate that among the surveyed teachers, 25% implement Synchronous Online Learning, 21% utilize Collaborative Online Learning, 14% incorporate Asynchronous Online Learning and Individual Online Learning each, 11% employ Interactive Online Learning, 7% each use Fixed E-Learning and Computer Managed Learning (CML), and 4% each integrate Adaptive E-Learning and Computer Assisted Instruction (CAI). While, none of the survey teachers report using Linear E-Learning.

Q6. Do you know E-learning purposes within educational field?

Table 3.36; Figure 3.36

Teachers' attitude towards knowing E-learning purposes

Options	Yes	No	Total
Numbers	10	0	10
Percentage	100%	0%	100%
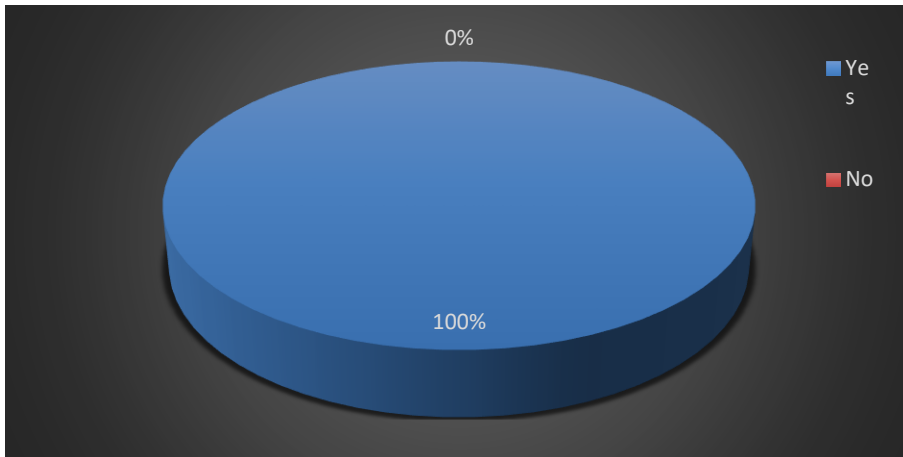
According to the data from Table 3.36; Figure 3.36, all of teachers are know the purposes of E-learning within educational field.

Q6.1. If yes, which one among the following purposes do you think is the most important for your EFL students?

a) Improve learning quality/ **b)** Meet student needs/styles**/c)** Enhance education efficiency/ **d)** Enhance accessibility and flexibility/ **e)** All of them/ **f)** None of them.

Table3.37; Figure3.37

Teachers' attitude towards the most important E-learning purpose

Options	a	b	c	D	e	f	Total
Numbers	0	2	1	2	5	0	10
Percentage	0%	20%	10%	20%	50%	0%	100%
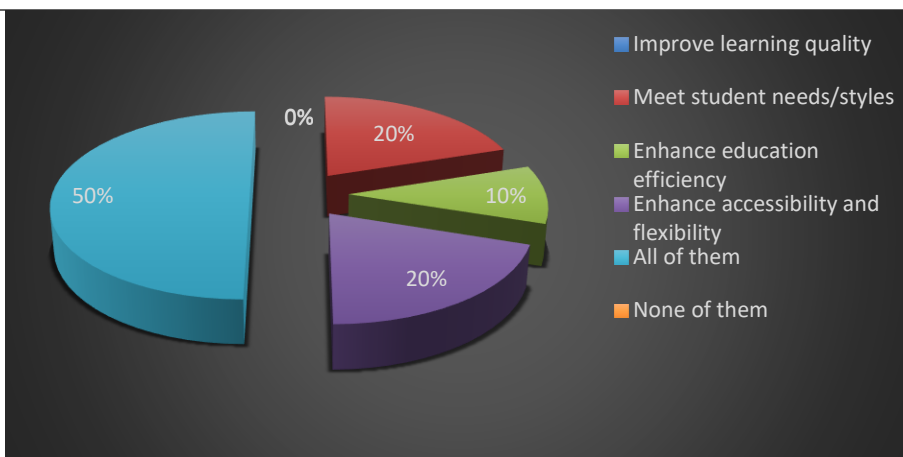
According Table 3.37, Figure 3.37. Seems that that the majority of teachers (50%) consider all of the mention purposes to be equally important for their EFL students, particularly focusing on enhancing accessibility and flexibility.

Q7. Do You know E-learning characteristics?

Table 3.38; Figure 3.38

Teachers attitude towards knowing E-learning characteristics

Options	Yes	No	Total
Numbers	9	0	9
Percentage	100%	0%	100%
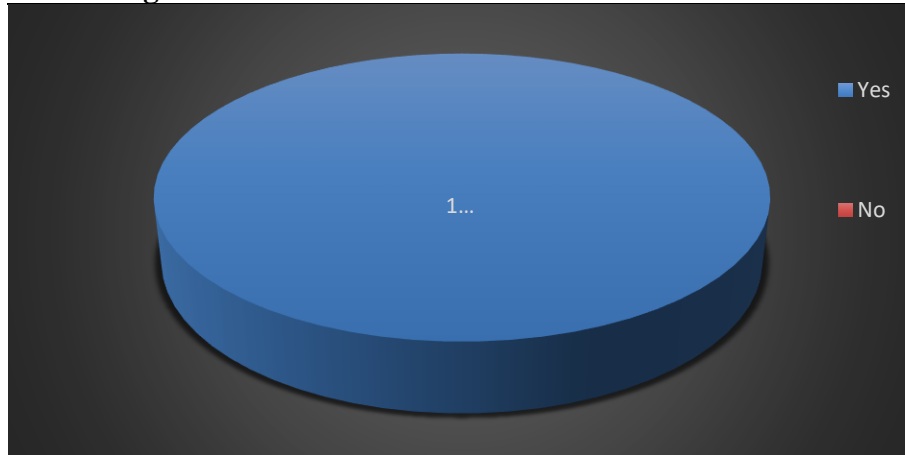
Table 3.38; Figure3.38, show that all of teachers (100%) are known E-learning characteristics.

Q7.1. If yes, which one among the following characteristics have been presented to your EFL students?

a) Interactivity/**b)** Authenticity/**c)** Learner Control/**d)** Convenience/**e)** Ease of Use/**f)** Online Support/**g)** Course Security/**h)** Cost Effectiveness/ **i)** Collaborative Learning/**j)** Formal and Informal Environments/ **k)** Online Evaluation/ **l)** Global Accessibility/ **m)** All of them/ **n)** None of them.

Table 3.39; Figure 3.39

Teachers' attitude towards E-learning characteristics

Options	a	B	c	D	e	f	g	h	I	j	k	l	m	n	Total
Numbers	2	1	1	2	2	5	2	1	4	0	2	2	0	0	24
Percentages	8%	4%	4%	8%	8%	21%	8%	4%	17%	0%	8%	8%	0%	0%	100%
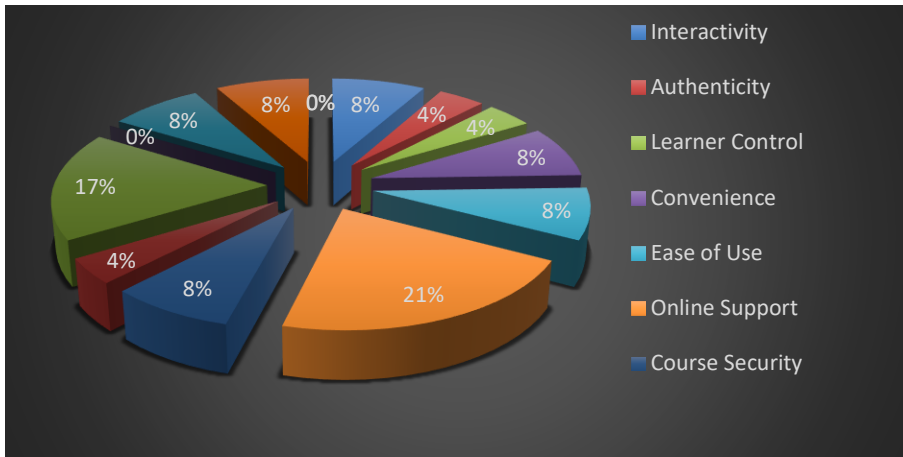
According to Table 3.39 and Figure 3.39, teachers highlight various E-learning characteristics to their EFL students. The majority of teachers, constituting 21%, emphasize the importance of Online Support, underscoring its role in facilitating effective learning experiences. Collaborative Learning is also significant, with 17% of teachers stressing its value in promoting interactive and cooperative learning environments. Additionally, characteristics such as Interactivity, Convenience, Ease of Use, Course Security, Cost Effectiveness, Online Evaluation, and Global Accessibility are presented by teachers, each accounting for percentages ranging from 4% to 8%.

Q8. Do you know advantages and disadvantages of E-learning?

Table 3.40; Figure 3.40

Teachers' attitude towards knowing E-learning advantages and disadvantages

Options	Yes	No	Total
Numbers	10	0	10
Percentages	100%	0%	100%
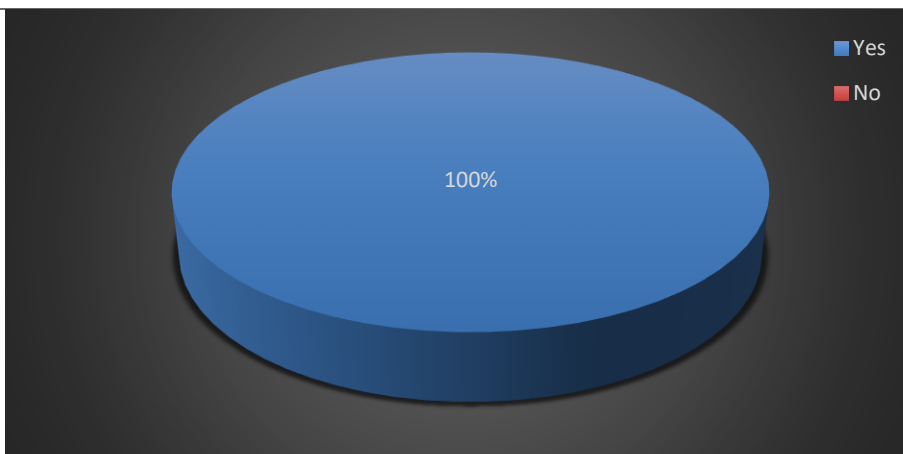
Based on Table 3.40 and Figure 3.40, it appears that teachers are surveyed regarding their familiarity with the advantages and disadvantages of E-learning. The responses from the 10 teachers indicate that all of them (100%) are knowledgeable about the advantages and disadvantages of E-learning.

Q8.1. If yes, would you state some advantages and disadvantages of E-learning within the educational field?

According to Table 3.40 and Figure 3.40, teachers are aware of E-learning advantages and disadvantages, and they state that the disadvantages included technical difficulties such as internet connection speed and bad connections. Additionally, they note that E-learning requires self-discipline, a certain level of knowledge and ability, and may result in less interaction with the teacher. On the other hand, teachers mention several advantages, including motivation, convenience, self-reliance, collaboration, time-saving benefits, and the ability to access information at any time and pace. However, they also acknowledge that online learning may lead to a lack of motivation, reduce physical interaction with teachers or colleagues, and limitations in evaluation and feedback processes due to the absence of face-to-face communication.

Q9. Which one among the following uses do you consider the most important use of technology in the educational field?

a) Facilitating learning/ **b)** Improving Performance/ **c)** Creating Resources/ **d)** Using Resources/ **e)** Managing Processes and Resources/ **f)** All of them/ **g)** None of them.

Table 3.41; Figure 3.41

Teachers' attitude towards the most important use of technology in the educational field

Options	a	b	c	d	e	F	g	Total
Numbers	3	1	0	1	1	4	0	10
Percentage	30%	10%	0%	10%	10%	40%	0%	100%
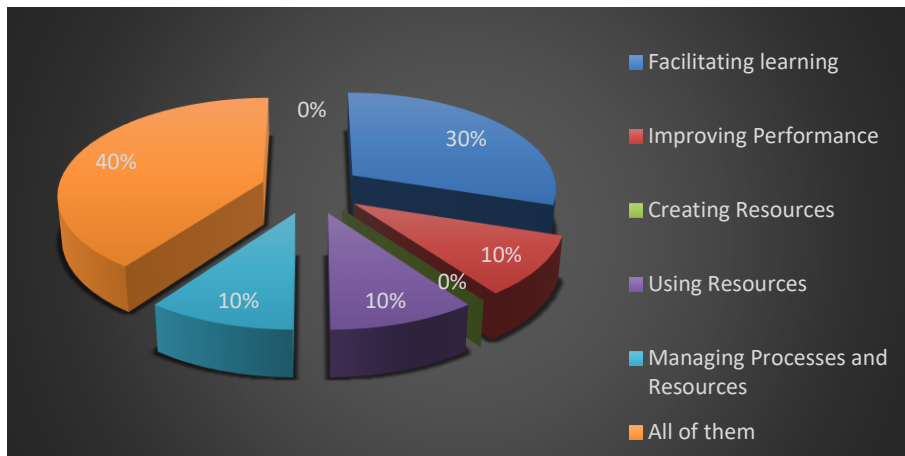
According to Table 3.41 and Figure 3.41, Among the teachers survey , 40% regard facilitating learning and all potential uses equally as paramount, while 10% emphasize using resources and managing processes and resources. Improving performance also garner 10% of the responses. Interestingly, none of the teachers consider creating resources as the primary use of technology in education.

Q10.What is Education? (briefly)

According to the teachers' responses, Education the process of transmission of knowledge and skills to others (learners or students).

Q11. Do you know the main characteristics of education?

Table3.42; Figure3.42

Teacher's awareness of the educational characteristics

Options	Yes	No	Total
Numbers	10	0	10
Percentage	100%	0%	100%
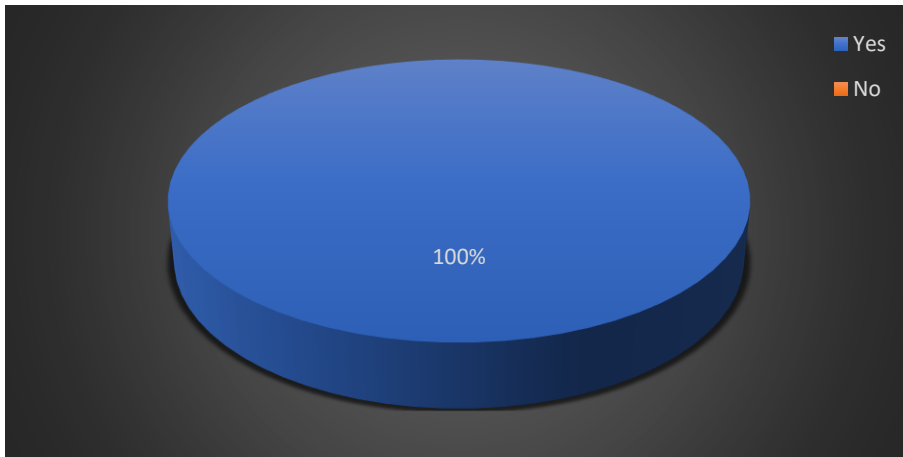
From Table3.42; Figure3.42. It seemsthat all the teachers (100%) know the characteristics of education.

Q11.1. If yes, which ones of the following educational characteristics have been presented to your students?

a) Integrative/**b)** Holistic/**c)** Scientific/**d)** Contextual/**e)** Thematic/**f)** Effective/**g)** Collaborative/**h)** Student-centred/**i)** All of them/**j)** None of them

Table3.43; Figure3.43

Teachers attitude towards the educational characteristics have been presented to their students

Options	A	b	c	d	e	f	g	h	I	j	Total
Numbers	0	0	2	1	0	0	1	0	6	0	10
Percentage	0%	0%	20%	10%	0%	0%	10%	0%	60%	0%	100%
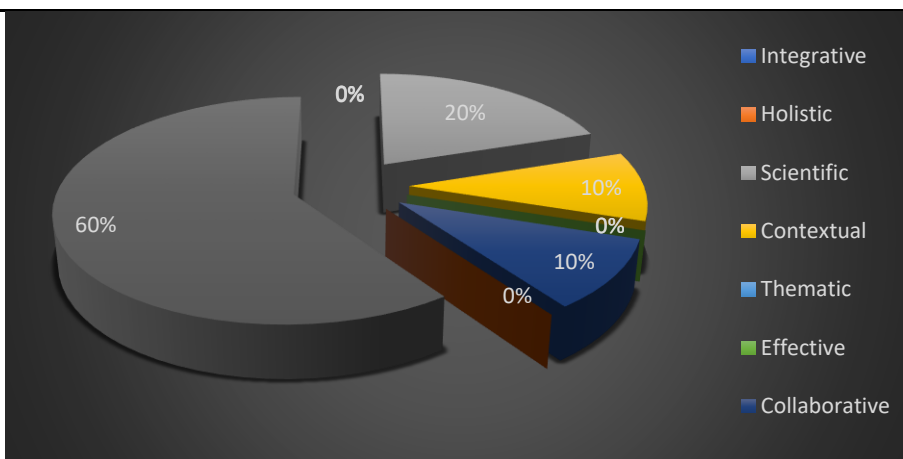
According to Table3.43; Figure3.43. The majority of the teachers (60%) indicate that they present all of the characteristics, (20%) declare that they present scientific. (10%) saycontextual, and (10%) mention collaborative.

Q12.Do you know the importance of education?

Table3.44; Figure3.44

Teacher's awareness of the importance of education

Options	Yes	No	Total
Numbers	10	0	10
Percentage	100%	0%	100%
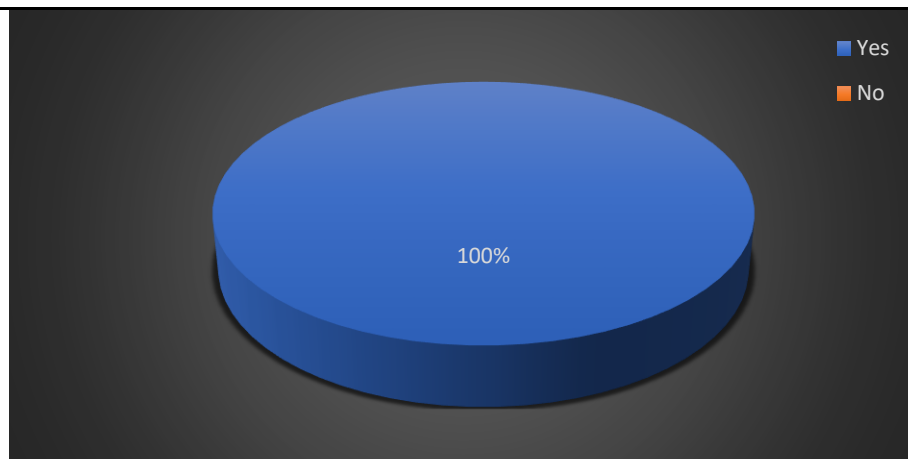
According to Table 3.44; Figure3.44. All of the teachers (100%) are aware of the importance of education.

Q12.1. If yes, which ones among the following list do you think is the most important one?

a) Creating more Employment opportunities/**b)** Developing problem-solving skills/**c)** Improving the Economy/**d)** Giving back to the community/**e)** Creating modern society/**f)** Bridging the Borders/**g)** Creating equal opportunities/**h)** Introducing Empowerment/**i)** All of them/**j)** None of them

Table3.45; Figure3.45

Teachers attitude towards the most important ones from the importance of education

Options	a	b	c	d	e	f	g	h	I	j	Total
Numbers	1	0	0	0	1	0	0	0	8	0	10
Percentages	10%	0%	0%	0%	10%	0%	0%	0%	80%	0%	100%
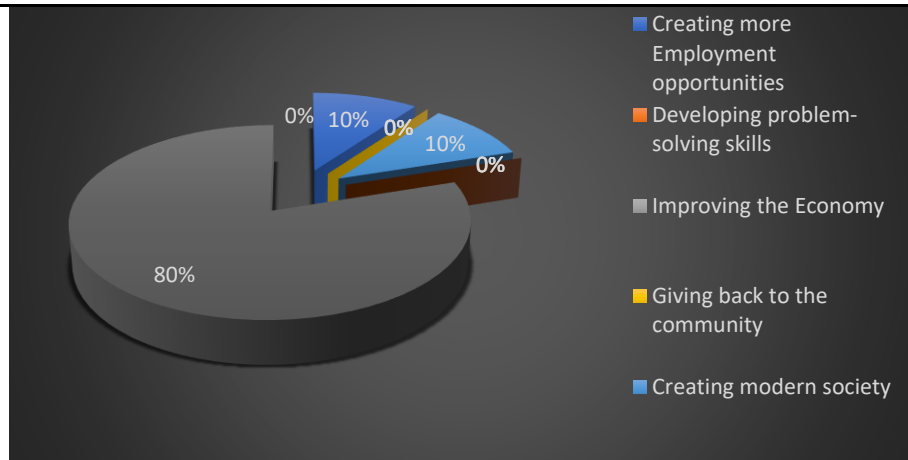
According to Table3.45; Figure3.45. All the teachers say that all the importance of education are important in their opinions. (10%) respond that creating more employment opportunities is the most important. (10%) say creating modern society is the most important.

Q13.Have you faced difficulties while using technology?

Table3.46; Figure3.46

Teachers attitude towards the difficulties while using technology

Options	Yes	No	Total
Numbers	7	3	10
Percentages	70%	30%	100%
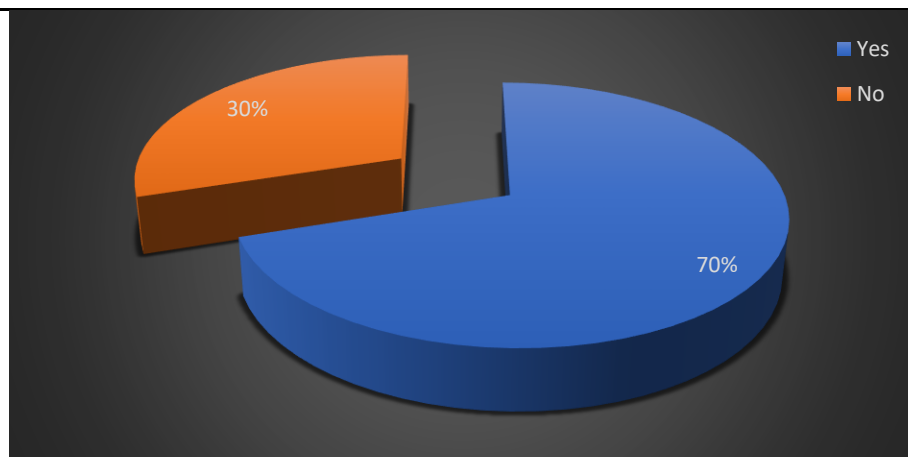
From Table3.46; Figure3.46. (70%) from the teachers say that they did not face difficulties while using technology. Whereas (30%) declare that they face difficulties while using technology.

Q13.1. If yes, which one among the following difficulties have you faced within EFL classes?

a) Major means replaced by the assisting one/**b)** Loss of speaking communication/**c)** The restriction of students' thinking potential/**d)** Integrating technology in teacher development/**e)** All of them/**f)** None of them

Table3.47; Figure3.47

Teacher's difficulties have faced within EFL classes

Options	a	b	c	d	e	F	Total
Numbers	0	4	0	0	3	3	10
Percentages	0%	40%	0%	0%	30%	30%	100%
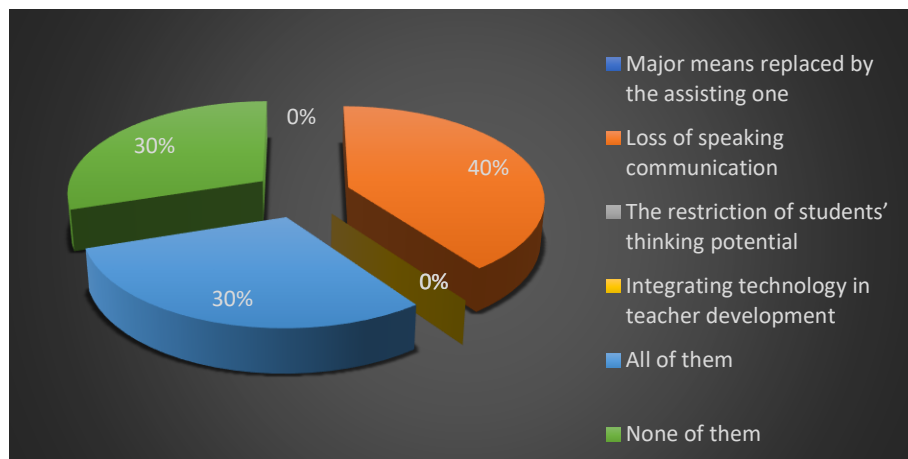
According to Table3.47; Figure3.47. (40%) say that they face loss of speaking communication within their EFL classes, (30%) declare that they face all the difficulties mentioned before. While (30%) answer by none of them which means they faced other difficulties.

Q14. Are you aware of the important role of integrating technology during 21st century?

Table3.48; Figure3.48

Teacher's awareness of the important role of integrating technology

Options	Yes	No	Total
Numbers	9	1	10
Percentages	90%	10%	100%
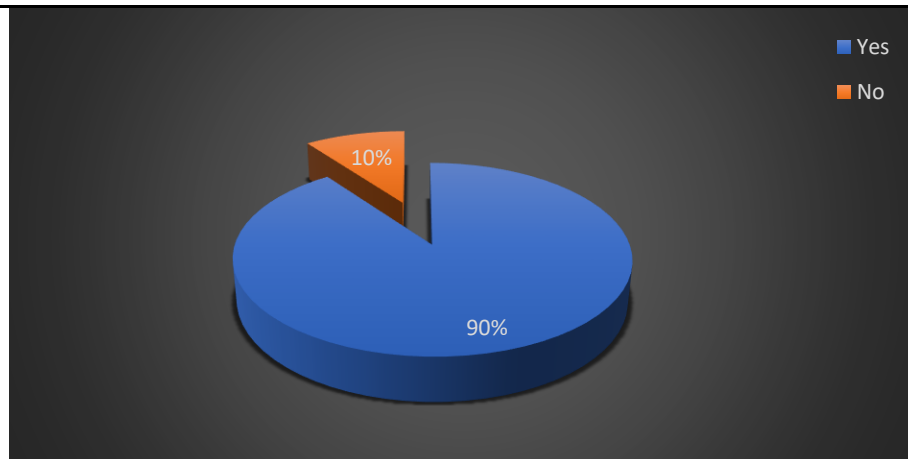
Table3.48; Figure3.48 show that the majority of teachers (90%) are aware of the important of the role of integrating technology in the 21st century. However (10%) of the teachers say that they are not aware with the role of integrating technology.

Q14.1. If yes, which one among the following role are you aware with?

a) Wider participation/**b)** Empowerment of learners/**c)** Facilitate application of senses, memory and cognition/**d)** Differentiated instruction/**e)** Continuing Education/**f)** Multiple learning resources/**g)** All of them/**h)** None of them.

Table3.49; Figure3.49

Teachers attitude towards the important role of integrating technology in the 21st century

Options	a	b	c	d	e	f	g	h	Total
Numbers	0	0	0	1	1	1	7	0	10
Percentages	0%	0%	0%	10%	10%	10%	70%	0%	100%
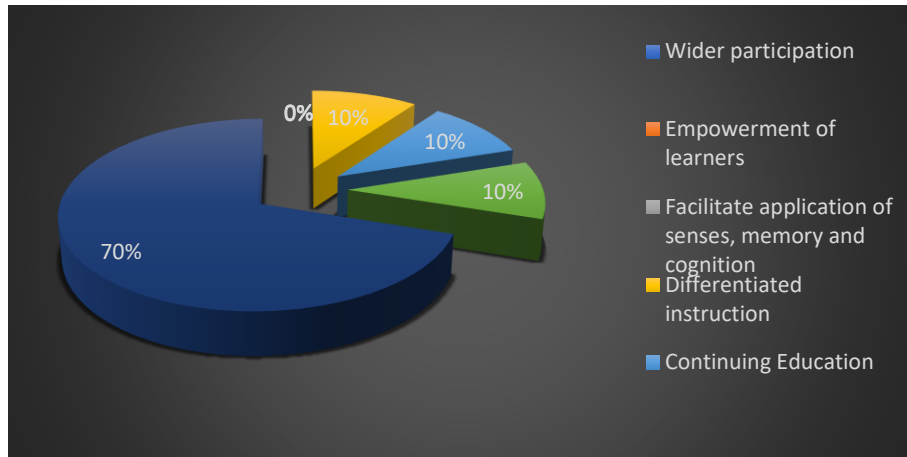
Table3.49; Figure3.49: Teachers attitude towards the important role of integrating technology in the 21st century

Table3.49; Figure3.49 illustrate that (70%) of the teachers say that are aware of all the role of integrating technology during 21st century mentioned before. (10%) say that they are aware of differentiated instruction, (10%) respondby multiple learning resources.(10%) declare that they are familiar with continuing education.

Q15.Are you aware of the 21st century skills?

Table3.50; Figure3.50

Teacher's awareness of the 21st century skills

Options	Yes	No	Total
Numbers	9	1	10
Percentages	90%	10%	100%
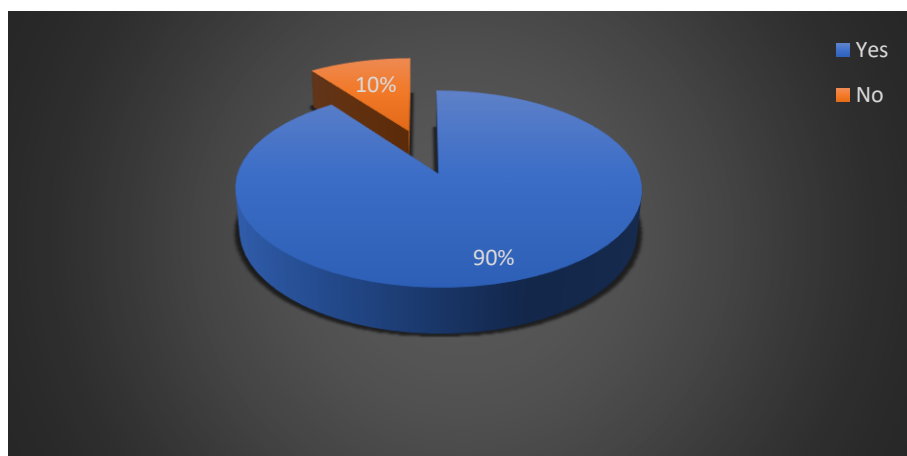
From Table3.50; Figure3.50, (90%) of the teachers are aware of the 21st century skills. Whereas (10%) are not aware of the 21st century skills.

Q.15.1. If yes, which one among the following skills have you been used in your EFL classes?

a) Critical thinking/**b)** Collaboration/**c)** Communication/**d)** Creativity/**e)** All of them/**f)** None of them

Table3.51; Figure3.51

Teachers attitude towards the skills have used in their EFL classes

Options	a	b	c	d	e	f	Total
Numbers	2	1	0	0	7	0	10
Percentages	20%	10%	0%	0%	70%	0%	100%
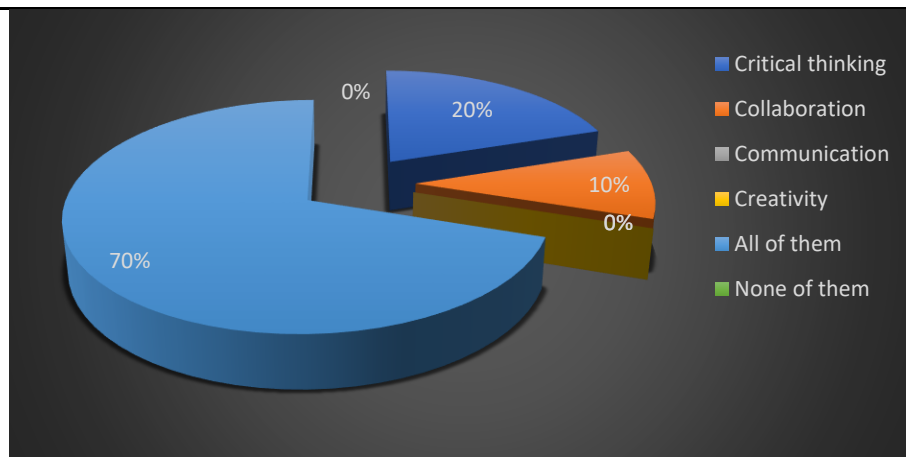
From Table3.51; Figure3.51, the majority of teachers (70%) have used all of the skills in their EFL classes, (20%) say they use critical thinking. (10%) declarethatthey use collaboration in their EFL classes.

3.6.Discussion of the Results

After analysing the questionnaire data provides, several key findings emerged. Firstly, in terms of personal information, the majority of the participants are female. Additionally, regarding age distribution, students aged 22 years old comprise the largest percentage, with decreasing percentages observe in older age groups.

Moving on to E-learning awareness, it is found that the majority of students and teachers are aware of the definition of E-learning and know various E-learning terminologies, with

"Online learning" being the most recognize term. However, awareness of E-learning types is relatively lower. In terms of the purposes and characteristics of E-learning, a significant proportion of the participants are aware of these aspects. "Enhancing accessibility and flexibility" isconsider the most important purpose, while "Ease of Use" is the most recognize characteristic. Moreover, the advantages and disadvantages of E-learning are well-known among students and teachers. "Conserves Time and Fast Learning" and "Internet Connection and Interruption" are the most recognize advantages and disadvantages, respectively. Regarding the uses of technology in education, a high level of awareness is observed, and the participants have experienced various uses such as "Facilitating learning" and "Managing processes and resources." Furthermore, the participants display awareness of education concepts, knowing the definition of Education and aware of educational characteristics, particularly the "Scientific" aspect. In terms of integrating technology in education, Regarding the importance of education, the data reveals a high level of awareness among students, with recognizing its significance. Notably, creating more employment opportunities is acknowledged by students as an important aspect of education. When examining the difficulties of using technology in education, it is foundthat students and teachers are aware of these challenges. "Loss of speaking communication" emerges as the most recognized difficulty. The participants are aware of its role, with "Multiple learning resources" being the most recognized role among those aware. Lastly, regarding 21st-century skills education, the majority of the students and teachers know about it, with "Critical thinking" being the most studied skill among them. Overall, the data indicates a generally high level of awareness among the participants regarding E-learning, technology's role in education, educational concepts, and 21st-century skills, with specific variations observe across different aspects of E-learning and education.

Conclusion

To sum up, this chapter offered a thorough review of the study's methodology, participants, research tools, and the data processing techniques. The questionnaires were discussed, as well as their administration and outcomes analysis. The teachers and student's questionnaire gave useful information about their perspectives and experiences with E-learning. The majority of the participants indicated delight and thought E-learning had become a necessary technique in 21[st]century education. The questionnaire findings also revealed that the participants were aware with E-learning terminologies, type,

advantages and disadvantages, and the use of technology in educational field. In addition to the characteristics of education, importance, difficulties of using technology in education, the role of integrating technology in education. To conclude, the use of technology can transform EFL students' education in the 21st century by using E-learning technique.
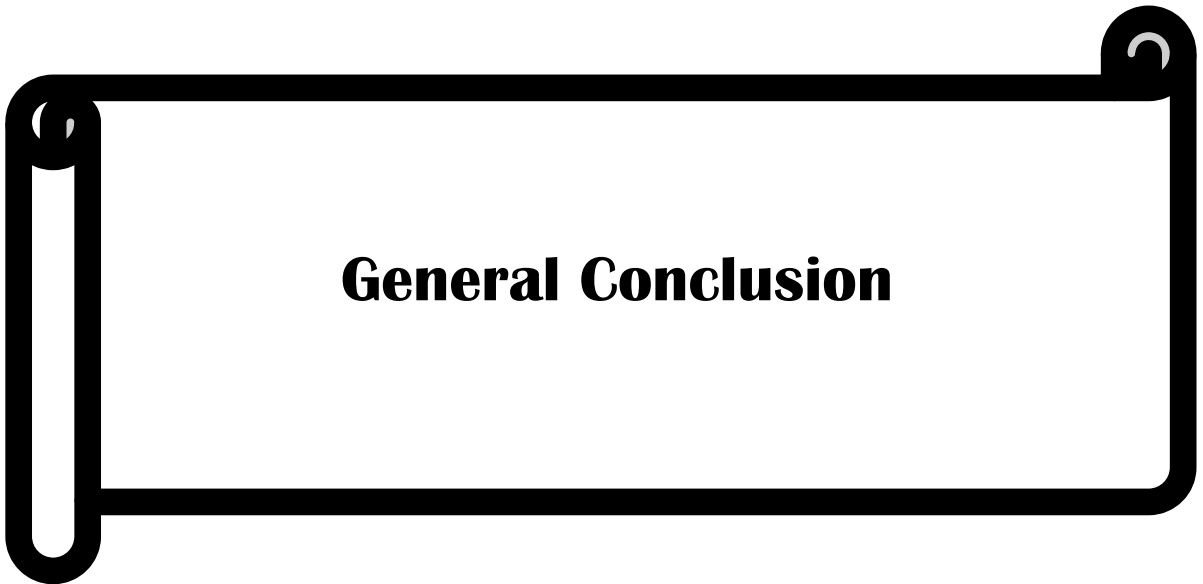
General Conclusion

General Conclusion

Our study investigated the use of technology in transforming EFL students' education in the 21st century. We sought to answer our research question: how can technology transform education in 21st century for EFL students? Through the questionnaires we had designed, we found out that the use of technology can transform EFL students' education in 21st century, which helped them to continue their learning easily anywhere and anytime. However, they may face some difficulties in using technology.

The first chapter focused on the future of E-learning, highlighting the exact definition of E-learning, other terminologies of E-learning, in addition to different types, characteristics and purposes of e-learning were discussed in this chapter, and the uses of technology in educational field.

The second chapter included the definition of education, the historical review, the main characteristics of education and its importance. In addition to the difficulties that students may face while using technology in their education. It also emphasized the role of integrating technology in education, and the 21st century education skills.

The third chapter first presented the methodology employed in the study. It detailed the research design, participant selection, and the data collection procedures. Students and teachers' questionnaires provided insights into students' perceptions of the use of technology in transforming EFL students' education in 21st century. This study was devoted to Master students and teachers at KasdiMerbah University-Ouargla. We choose this sample because they used e-learning technique during corona pandemic. After analysing both of students' and teachers' questionnaires, we conclude that the use of technology can transform EFL students' education in 21st century. It contributed to transform education easily for students, enhanced accessibility, personalized learning experiences, and fostered collaboration among students globally.

Based on the findings of this research on the use of technology in transforming EFL students education in the 21stcentury , the following recommendations for further study are proposed :

- The government should pay more attention to the application of e-learning in higher education in a strategic and planned manner to be an essential part of the

educational system , through launching training courses for both teachers and students for the better use of electronic education.

- Universities should provide the needed tools and electronic devices in its departments so all students can have the chance to deal with e-learning to help in developing the idea of electronic education.

- Teachers should combine traditional classroom instruction with online learning to create a hybrid model . This can provide students with greater flexibility and access to resources , enabling them to engage with content both in and out of the classroom.

- Teachers should use collaborative tools such as Google classroom , Microsoft teams, or other educational platforms that facilitate communication and collaboration among students.

Bibliographical / References

List of References

• Afaneh, M., Basile, V., Bennett, J., Berman, P., Bond, M., Border, J., Brink, S., Chen, C. L., Comerchero, M., Delaney, C., Delvecchio, K., Dunkleberger, R., Dunlap, K., Eckel, N., Ekwensi, F., Ferrett, L. J., Forst, N., Heisman, B., Hoffmaster, D., ... Zelenak III, J. M. (2006). *E-learning concepts and techniques*. Institute for Interactive Technologies, Bloomsburg University of Pennsylvania, USA.

• Arfield, J., Hodgkinson, K., Smith, A., & Wade, W. (2013). *Flexible Learning in Higher Education*. Routledge. [Google Books link: http://books.google.ie/books?id=FU-MAQAAQBAJ]

• Association, I. R. M. (2022). *Research Anthology on Service Learning and Community Engagement Teaching Practices, Vol. 3.*
http://books.google.ie/books?id=1OjbzgEACAAJ

• Bomze, I. M., Csendes, T., Horst, R., &Pardalos, P. M. (2013). *Developments in Global Optimization*. Springer Science & Business Media.
http://books.google.ie/books?id=AGXTBwAAQBAJ

• Chang, T. W., Huang, R., & K. (2017). *Authentic Learning Through Advances in Technologies*. Springer. http://books.google.ie/books?id=EMM2DwAAQBAJ

• Chetna, J., &Sonal.C. (2015) 'the Use of Technology in Teaching and Learning Translation: Student Opinion Survey', *Sustainable Multilingualism*, 7. Available at: https://doi.org/10.7220/2335-2027.7.9.

• City of London College of Economics. (n.d.). IT Consultant Diploma - City of London College of Economics - 12 months - 100% online / self-paced.
Retrievedfromhttp://books.google.ie/books?id=2afREAAAQBAJ

• Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning (4th ed.)*. Wiley.

• Dorathy, A.A., &S.N.Mahalakshmi. (2014) 'Technology in Teaching and Learning English Language', *International Journal on Studies in English Language and Literature (IJSELL*, 2(9), pp. 132–137. Availableat: www.arcjournals.org.

• Francis, K. (2018). Major goals and expectations of eLearning. *UniversitiTunku Abdul Rahman*.
https://www.researchgate.net/publication/328163310_Major_Goals_And_Expectations_Of_eLearning

- Garrison, D. R. (2017). *E-learning in the 21st century: A community of inquiry framework for research and practice (3rd ed.)*. Routledge. https://doi.org/10.4324/9781315667263

- Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st Century*. Psychology Press. https://books.google.ie/books?id=wRQnQtUUTXoC

- Hills, H. (2017). *Individual preferences in e-Learning*. Routledge. [Google Books version]. http://books.google.ie/books?id=-AgkDwAAQBAJ

- Hofmann, J., & Minor, N. (2009, May 1). *Tailored Learning: Designing the Blend That Fits*. Association for Talent Development. https://books.google.ie/books?id=wY3Rb5yXkGMC

- Idrizi, E. (2023) 'Contemporary Issues in Language Teaching Edited by', (January).

- Januszewski, A., & Molenda, M. (2013). Educational technology. Routledge. http://books.google.ie/books?id=JO3Yc0UuK74C&printsec=frontcover&dq=Educational+Technology:+A+Definition+with+Commentary%0D%0Apubli%C3%A9+par+Al+Januszewski,+Michael+Molenda&hl=&cd=1&source=gbs_api

- Jolliffe, A., Ritter, J., & Stevens, D. (2001). *The Online Learning Handbook: Developing and Using Web-based Learning*. Retrieved from http://books.google.ie/books?id=_MRGvQEACAAJ&dq=The+Online+Learning+Handbook:+Developing+and+Using+Web-based+Learning&hl=&cd=2&source=gbs_api

- Jyaishtha, 1936 (2014) *Education Basics in Basics in*.

- Khan, B. H. (2005). *Managing E-learning: Design, Delivery, Implementation, and Evaluation*. IGI Global. http://books.google.ie/books?id=WVL9ix9EZskC&printsec=frontcover&dq=Managing+E-learning:+Design,+Delivery,+Implementation,+and+Evaluation&hl=&cd=1&source=gbs_api

- Kyei-Blankson, L., Keengwe, J., & Ntuli, E. (2024). *Designing Equitable and Accessible Online Learning Environments*. IGI Global. Retrieved from http://books.google.ie/books?id=mtzzEAAAQBAJ&printsec=frontcover&dq=Designing+Equitable+and+Accessible+Online+Learning+Environments&hl=&cd=1&source=gbs_api

- Lea, M. R., & Nicoll, K. (Eds.). (2013). *Distributed Learning: Social and Cultural Approaches to Practice*. Routledge.

- Mangal, S. K. (2009). Essentials of educational technology. PHI Learning Pvt. Ltd. Retrieved from
https://books.google.ie/books?id=Sc9upWs956cC&lpg=PP1&dq=Essentials%20Of%20Educational%20Technology%20%20De%20S.%20K.%20Mangal%2C%20Uma%20Mangal&hl=fr&pg=PP1#v=onepage&q=Essentials%20Of%20Educational%20Technology%20%20De%20S.%20K.%20Mangal,%20Uma%20Mangal&f=false

- Mason, R., & Rennie, F. (2006). *E-learning: The Key Concepts*. Routledge.
http://books.google.ie/books?id=gZx-AgAAQBAJ&printsec=frontcover&dq=Elearning:+The+Key+Concepts+De+Robin+Mason,+Frank+Rennie

- Martocchio, J. J., Joshi, A., & Liao, H. (2012). *Research in Personnel and Human Resources Management*. Emerald Group Publishing.
https://books.google.ie/books?id=h9xtCsuwcJkC

- Montoute, R. (2013, August 24). *16 Essential Tips For Planning To Moderate A Virtual Classroom Event*. Rosanna Montoute. Retrieved from
http://books.google.ie/books?id=cnFoAwAAQBAJ&printsec=frontcover&dq=16+Essential+Tips+For+Planning+To+Moderate+A+Virtual+Classroom+Event&hl=&cd=1&source=gbs_api

- Onebunne, Jude.I. (2022) 'Sex education in the 21st century', *Jama*, 312(2), pp. 125–126. Availableat: https://doi.org/10.1001/jama.2014.4789.

- Pandey, P., Kundu, P., & Mukherjee, A. S. (n.d.). *Educational technology: Emerging trends in the digital era.*REDSHINE Publication. Link to the book

- Perveen, A. (2016, January 1). Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan. *Open* Praxis, 8(1), 21.
https://doi.org/10.5944/openpraxis.8.1.212

- QUIS Team. (2005). Cost effectiveness and cost efficiency in E-learning [Report]. TISIP ResearchFoundation.

- Ragaprabha, M. S. D. R. V. D. B. I. P. D. T. K. M. M. (n.d.). Implementation of ICT skills for the students for their employment in skill-based jobs. Kavya Publications. Retrieved from
http://books.google.ie/books?id=TU2uEAAAQBAJ&printsec=frontcover&dq=IMPLEMENTATION+OF+ICT+SKILLS+FOR+THE+STUDENTS+FOR+THEIR+EMPLOYMENT+IN+SKILL&hl=&cd=1&source=gbs_api

- Roberts, T. S. (2004). Online collaborative learning. IGI Global.
https://books.google.ie/books?id=01qB45CoC-
UC&printsec=frontcover&dq=Online+Collaborative+Learning:+Theory+and+Practice&
hl=&cd=1&s

- Ruhe, V., & Zumbo, B. D. (2009). Evaluation in Distance Education and E-learning:
The Unfolding Model. Guilford Press. [Google Books link:
https://books.google.ie/books?id=owZFV-
PwUJgC&printsec=frontcover&dq=Evaluation+in+Distance+Education+and+E-
learning:+The+Unfolding+Model&hl=&cd=1&source=gbs_api]

- Sankey, M. D., Huijser, H., & Fitzgerald, R. (2023). *Technology-Enhanced Learning
and the Virtual University*. Springer Nature.
http://books.google.ie/books?id=iHXYEAAAQBAJ&printsec=frontcover&dq=Technolo
gy-Enhanced+Learning+and+the+Virtual+University&hl=&cd=1&source=gbs_api

- Sayah Lembarek, S. (2017) 'Educational Psychology: From Theory To Practice In
Higher Education', مجلة مقاليد, p. 181. Available at: https://doi.org/10.35156/1175-000-013-
020.

- Seale, J. K. (2013). E-learning and disability in higher education: Accessibility
research and practice. Routledge. https://books.google.ie/books?id=STlGAQAAQBAJ

- Seel, N. M. (2011). *Encyclopedia of the Sciences of Learning*. Springer Science &
Business Media.
http://books.google.ie/books?id=xZuSxo4JxoAC&printsec=frontcover&dq=Encyclopedi
a+of+the+Sciences+of+Learning&hl=&cd=1&source=gbs_api

- Shank, P., & Sitze, A. (2004). *Making Sense of Online Learning: A Guide for Beginners
and the Truly Skeptical*. John Wiley & Sons. [Google Books link:
http://books.google.ie/books?id=OJ0QYkqW-
V4C&printsec=frontcover&dq=Making+Sense+of+Online+Learning:+A+Guide+for+Be
ginners+and+the+Truly+Skeptical&hl=&cd=1&source=gbs_api]

- Srinivasa, K. G., Kurni, M., & Saritha, K. (2022). *Learning, Teaching, and Assessment
Methods for Contemporary Learners*. Springer Nature. Google Books

- V. (n.d.). *Distance education*. APH Publishing. (Reprint published 2007). Retrieved
from
http://books.google.ie/books?id=GSVMX2BlTWcC&printsec=frontcover&dq=Distance+
Education+De+V.k.rao&hl=&cd=1&source=gbs_api

- Wang, H. (2011). *Interactivity in E-Learning: Case Studies and Frameworks*. IGI Global.
https://books.google.ie/books?id=kq1U5eXrJccC&printsec=frontcover&dq=Interactivity +in+E-Learning:+Case+Studies+and+Frameworks:+Case+Studies+and+Framwork

- Weippl, E. R. (2005). Security in E-Learning. Springer Science & Business Media.
http://books.google.ie/books?id=yoUIFYdFnvQC&printsec=frontcover&dq=Security+in +E-Learning%0D%0ADe+Edgar+R.+Weippl&hl=&cd=1&source=gbs_api

- Wulandari, R. (2021) 'Characteristics and Learning Models of the 21st Century', *Social, Humanities, and Educational Studies (SHEs): Conference Series*, 4(3), p. 8. Availableat: https://doi.org/10.20961/shes.v4i3.49958.

- Zajda, J., Davidovitch, N., &Majhanovich, S. (2023). *Discourses of Globalisation, Multiculturalism and Cultural Identity*. Springer Nature. Google Books link

Appendices

<center>**Appendix A :Students' Questionnaire**</center>

<center>**Students' Questionnaire**</center>

Dear student,

Your participation in this study is important to achieve the objective written below.

This questionnaire is to collect data needed for a dissertation for the requirement of **Master degree speciality Linguistics** entitled with **« The Future of E-learning: the use of Technology in Transforming EFL Students Education in the 21st century ».**

Would You please answer the following questions by putting a cross (×) in front of the answer that reflect your opinion?

Q1. Gender:

A. Male ☐   Female ☐

Q2. Age: ………………………………………

Chapter 1: The future of E-learning

Q3. Do you know what is E-learning?

Yes ☐   No ☐

Q3.1. If yes, would you define it briefly.

………………………………………………………………………………………………
...………………...…………………………………………………………………………
……………

Q4. Do You know other E-learning terminology?

Yes ☐   No ☐

Q4.1. If yes, which one among these E-Learning terminologies are you aware with?

a) Computer Conferencing.   ☐
b) Telelearning.   ☐
c) Blended Learning.   ☐
d) Web-Based Learning   ☐
e) Online Learning.   ☐

f) Virtual Classroom. ☐

g) Distance Education. ☐

h) Open Learning. ☐

i) All of them. ☐

j) None of them ☐

Q5. Do you know E-learning types?

Yes ☐   No ☐

Q5.1. If yes, which one among the following types are you aware with?

a) Computer Managed Learning (CML). ☐

b) Computer Assisted Instruction (CAI). ☐

c) Synchronous Online Learning. ☐

d) Asynchronous Online Learning. ☐

e) Fixed E-Learning. ☐

f) Adaptive E-Learning. ☐

g) Linear E-Learning. ☐

h) Interactive Online Learning. ☐

i) Individual Online Learning. ☐

j) Collaborative Online Learning. ☐

k) All of theme. ☐

l) None of them ☐

Q6. Do you know E-learning purposes?

Yes ☐   No ☐

Q6.1. If yes, which one among the following purposes do you consider the most important one?

a) Improvelearningquality. ☐

b) Meetstudentneeds/styles. ☐

c) Enhanceeducationefficiency. ☐

d) Enhanceaccessibility and flexibility ☐

e) All of them ☐

f) None of them ☐

Q7. Do you know E-learning characteristics?

Yes ☐   No ☐

Q7.1. If yes, which one among the following characteristics are you aware with?

a) Interactivity. ☐

b) Authenticity. ☐

c) Learner Control. ☐

d) Convenience. ☐

e) Ease of Use. ☐

f) Online Support. ☐

g) Course Security. ☐

h) CostEffectiveness. ☐

i) Collaborative Learning. ☐

j) Formal and Informal Environments. ☐

k) Online Evaluation. ☐

l) Global Accessibility. ☐

m) All of them. ☐

n) None of them. ☐

Q8. Do you know E-learning advantages?

Yes ☐   No ☐

Q8.1. If yes, which one of this advantages you know?

a) Conserves Time and Fast learning. ☐

b) Cost-Effective. ☐

c) ImprovedEfficiency and Collaboration. ☐

d) Low Price. ☐

e) Usability and Practicality. ☐

f) Individual Pace and Flexible. ☐

g) Theory Application. ☐

h) Training Access. ☐

i) Anytime Materials Access. ☐

j) GreenerApproach. ☐

k) All of them. ☐

l) None of them. ☐

Q9. Do you know E-learning disadvantages?

Yes ☐   No ☐

Q9.1. If yes, which one of this disadvantages you know?

a) Internet Connection and Interruption. ☐

b) Discipline. ☐

c) Social Isolation and Skill Deficits. ☐

d) Lack of PracticalKnowledge. ☐

e) Easy to Lose Focus. ☐

f) Expensive. ☐

g) HealthConcerns. ☐

h) Prevention of Cheating is Difficult. ☐

i) Limited. ☐

j) All of them. ☐

k) None of them ☐

Q10. Do you know the uses of technology in educational field?

Yes ☐ No ☐

Q10.1. If yes which one among the following uses, do you know?

a) Facilitatinglearning. ☐

b) Improving Performance. ☐

c) CreatingResources. ☐

d) UsingResources. ☐

e) ManagingProcesses and Resources. ☐

f) All of them. ☐

g) None of them. ☐

Chapter 2: Education in the 21st century

Q11.Do you know what is Education?

Yes ☐ No ☐

Q11.1. If yes, would you define it briefly?

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……

Q12. Do you know the characteristics of Education?

Yes ☐ No ☐

Q12.1. If yes, which one among the following educational characteristics do you know?

a) Integrative ☐

b) Holistic ☐

c) scientific ☐

d) Contextual ☐

e) Thematic ☐

f) Effective ☐

g) Collaborative ☐

h) Student-centred ☐

i) All of them ☐

j) None of them ☐

Q13. Are you aware of the importance of Education?

Yes ☐   No ☐

Q13.1. If yes, which one among the following importance are you aware with?

a) Creating more Employmentopportunities. ☐

b) Developingproblem-solvingskills. ☐

c) Improving the Economy. ☐

d) Giving back to the community. ☐

e) Creating modern society. ☐

f) Bridging the Borders. ☐

g) Creatingequalopportunities. ☐

h) IntroducingEmpowerment. ☐

i) All of them ☐

j) None of them ☐

Q14. Do you know the difficulties of using technology in Education?

Yes ☐   No ☐

Q14.1. If yes, Which difficulty among the following list you have faced?

a) Major means replaced by the assisting one ☐

b) Loss of speaking communication ☐

c) The restriction of students' thinking potential ☐

d) Integratingtechnology in teacherdevelopment ☐

Q15.Are you aware of the role of integrating technology in Education?

Yes ☐   No ☐

Q.15.1. If yes, which one of the following roles are you aware with?

a) Wider participation ☐

b) Empowerment of learners ☐

c) Facilitate application of senses, memory and cognition ☐

d) Differentiated instruction ☐

e) Continuing Education ☐

f) Multiple learningresources ☐

Q16.Do you know the 21ˢᵗ century skills Education?

Yes ☐   No ☐

Q16.1. If yes, which one among the following skills have you studied before?

a) Critical thinking ☐

b) Collaboration ☐

c) Communication ☐

d) Creativity ☐

<div align="center">

Appendix B :Teachers' Questionnaire

Teachers' Questionnaire

</div>

Dearteachers,

   We would be very grateful if You accept to answer the questionnaire below. It aims to collect data needed for a dissertation for the requirement of **Master degree speciality linguistics**entitled with **« The Future of E-learning: the use of Technology in Transforming EFL Students Education in the 21st century ».**

Thank you very much for your time and effort.

   Would You please answer the following questions by putting a cross (×) in front of the answer that reflect your opinion?

Q1. Years of teaching experiences?

a) 1 - 5 years ☐
b) 5 - 10 years ☐
c) 10 – 15 years ☐
d) More than 15 years ☐

Q 2. What is your degree?

a) Professor ☐
b) MCA ☐
c) MCB ☐
d) Assistant teacher A ☐
e) Assistant teacher B ☐
f) Other ☐

Chapter 1: The future of E-learning

Q3. What is E-learning? (briefly)

....
....
....
....

Q4. Do you know other E-learning terminologies?

Yes ☐ No ☐

Q4.1. If yes, which one do you know?

a) Computer Conferencing. ☐
b) Telelearning. ☐
c) Blended Learning. ☐
d) Web-Based Learning ☐
e) Online Learning. ☐
f) Virtual Classroom. ☐
g) Distance Education. ☐
h) Open Learning. ☐
i) All of them. ☐
j) None of them ☐

Q5. Do you know E-learning types?

Yes ☐ No ☐

Q5.1. If yes, which one among the following types you did within EFL classes?

a) Computer Managed Learning (CML). ☐
b) Computer Assisted Instruction (CAI). ☐
c) Synchronous Online Learning. ☐
d) Asynchronous Online Learning. ☐
e) Fixed E-Learning. ☐
f) Adaptive E-Learning. ☐
g) Linear E-Learning. ☐
h) Interactive Online Learning. ☐
i) Individual Online Learning. ☐
j) Collaborative Online Learning. ☐
k) All of them. ☐
l) None of them. ☐

Q6. Do you know E-learning purposes within educational field?

Yes ☐ No ☐

Q6.1. If yes, which one among the following purposes do you think is the most important for your EFL students?

a) Improvelearningquality.   ☐

b) Meetstudentneeds/styles.   ☐

c) Enhanceeducationefficiency.   ☐

d) Enhanceaccessibility and flexibility   ☐

e) All of them.   ☐

f) None of them   ☐

Q7. Do You know E-learning characteristics?

Yes   ☐   No   ☐

Q7.1. If yes, which one among the following characteristics have been presented to your EFL students?

a) Interactivity.   ☐

b) Authenticity.   ☐

c) Learner Control.   ☐

d) Convenience.   ☐

e) Ease of Use.   ☐

f) Online Support.   ☐

g) Course Security.   ☐

h) CostEffectiveness.   ☐

i) Collaborative Learning.   ☐

j) Formal and Informal Environments.   ☐

k) Online Evaluation.   ☐

l) Global Accessibility.   ☐

m) All of them.   ☐

n) None of them   ☐

Q8. Do you know advantages and disadvantages of E-learning?

Yes   ☐   No   ☐

Q8.1. If yes, would you state some advantages and disadvantages of E-learning within the educational field?

Advantages:

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………

Disadvantages:

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………

Q9. Which of the following do you consider the most important use of technology in the educational field?

a) Facilitatinglearning.　　　　　　☐

b) Improving Performance.　　　　　☐

c) CreatingResources.　　　　　　　☐

d) UsingResources.　　　　　　　　☐

e) ManagingProcesses and Resources.　☐

f) All of them.　　　　　　　　　　☐

g) None of them.　　　　　　　　　☐

Chapter 2: Education in the 21st century

Q10. What is Education? (briefly)

………………………………………………………………………………………………………

………………………………………………………………………………………………………

……

Q11. Do you know the main characteristics of Education?

Yes　☐　　　　　　　No　☐

Q11.1. If yes, which one of the following educational characteristics have been presented to your students?

a) Integrative　　　☐

b) Holistic ☐

c) scientific ☐

d) Contextual ☐

e) Thematic ☐

f) Effective ☐

g) Collaborative ☐

h) Student-centred ☐

i) All of them ☐

j) None of them ☐

Q12.Do you know the importance of Education?

Yes ☐ No ☐

Q.12.1. If yes, which one among the following list do you think is the most important one?

a) Creating more Employmentopportunities. ☐

b) Developingproblem-solvingskills. ☐

c) Improving the Economy. ☐

d) Giving back to the community. ☐

e) Creating modern society. ☐

f) Bridging the Borders. ☐

g) Creatingequalopportunities. ☐

h) IntroducingEmpowerment. ☐

i) All of them ☐

j) None of them ☐

Q13. Have you faced difficulties while using technology?

Yes ☐ No ☐

Q13.1. If yes, which one among the following difficulties you have faced within EFL classes?

a) Major means replaced by the assisting one ☐

b) Loss of speaking communication ☐

c) The restriction of students' thinking potential ☐

d) Integratingtechnology in teacherdevelopment ☐

e) All of them ☐

f) None of them ☐

Q14.Are you aware of the important role of integrating technology during 21ˢᵗ century?

Yes ☐   No ☐

**Q14.1. If yes, which one among the following role are you aware with?**

a) Wider participation ☐

b) Empowerment of learners ☐

c) Facilitate application of senses, memory and cognition ☐

d) Differentiated instruction ☐

e) Continuing Education ☐

f) Multiple learningresources ☐

g) All of them ☐

h) None of them ☐

Q15.Are you aware of the 21ˢᵗ century skills?

Yes ☐   No ☐

Q.15.1. If yes, which one among the following skills have you been used in your EFL classes?

a) Critical thinking ☐

b) Collaboration ☐

c) Communication ☐

d) Creativity ☐

e) All of them ☐

f) None of them ☐
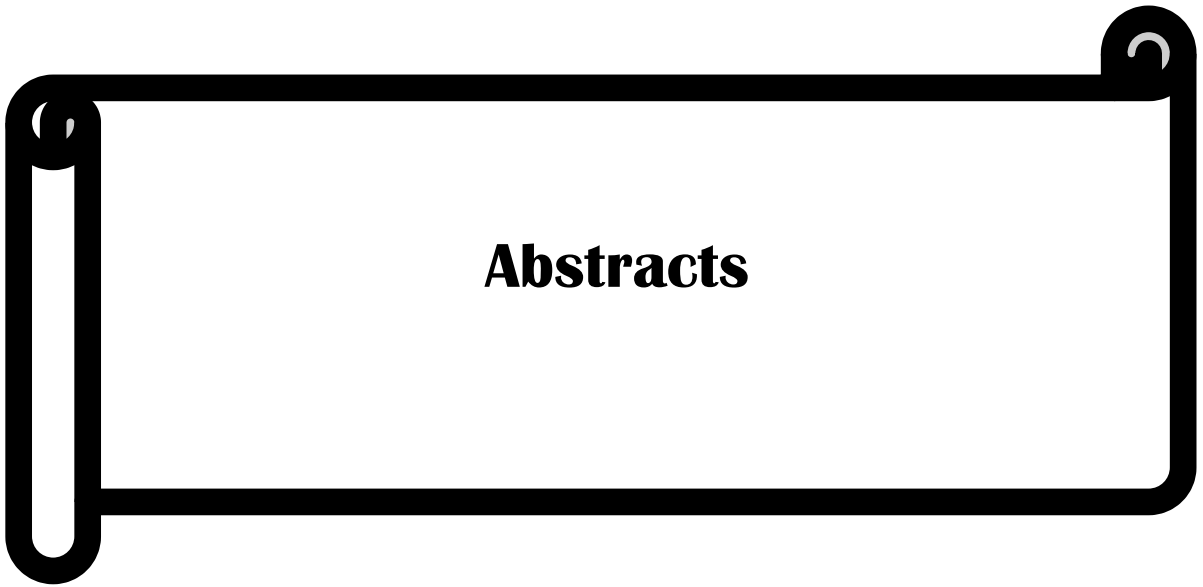
Abstracts

Résume

Dans le domaine éducatif en évolution rapide, l'intégration de la technologie était devenue impérative, en particulier dans le domaine de l'enseignement de l'anglais langue étrangère (EFL). Cette thèse a exploré l'utilisation de la technologie dans la transformation de l'éducation des étudiants EFL au 21e siècle parmi les étudiants en master du département d'anglais de l'Université KasdiMerbah-Ouargla. Le but de cette étude était d'étudier comment l'intégration de la technologie transforme l'éducation des étudiants EFL et améliore leurs résultats d'apprentissage. Ce travail a commencé par la définition de l'apprentissage en ligne, d'autres terminologies, types, objectifs, caractéristiques, avantages et inconvénients, ainsi que par l'utilisation de la technologie dans le domaine éducatif. En outre, il comprenait la définition de l'éducation, un examen historique, ses caractéristiques, son importance, difficultés liées à l'utilisation de la technologie dans l'éducation, le rôle de l'intégration de la technologie dans l'éducation et l'éducation aux compétences du 21e siècle. Pour le côté pratique nous avons utilisé une approche de méthode mixte pour atteindre les résultats attendus ; deux questionnaires ont été remis à un échantillon de quarante (44) étudiants de Master et dix (10) enseignants du département d'anglais de l'Université KasdiMerbah-Ouargla. Nous concluons que l'apprentissage en ligne est devenu une technique importante dans l'éducation du 21e siècle.

Mots clés : Apprentissageélectronique, éducation, étudiants EFL, technologie

ملخص الدراسة

في مشهد التعليم سريع التطور أصبح دمج التكنولوجيا أمرا ضروريا خاصة في مجال تعليم اللغة الإنجليزية كلغة أجنبية.وقد استكشفت هذه المذكرة استخدام التكنولوجيا لتحويل التعليم لطلبة اللغة الإنجليزية كلغة أجنبية في القرن الحادي والعشرين بين طلبة الماجستير في كلية الآداب واللغة الإنجليزية في جامعة قاصدي مرباح ورقلة. كان الهدف من هذه الدراسة هو استكشاف كيفية دمج التكنولوجيا في تحويل التعليم لطلبة اللغة الإنجليزية كلغة أجنبية وتعزيز نتائج التعلم لديهم. بدأ هذا العمل بتعريف التعليم الإلكتروني، مصطلحات أخرى للتعليم الإلكتروني، أنواعه، أغراضه،خصائصه، وايجابياته وسلبياته. بالإضافة إلى استخدام التكنولوجيا في المجال التعليمي. كما تضمن أيضا تعريف التعليم وتاريخه، خصائصه، أهميته وصعوبات استخدام التكنولوجيا في التعليم ودور دمج التكنولوجيا في التعليم بالإضافة إلى مهارات التعليم في القرن الحاديوالعشرين. في الجانب التطبيقي، استخدمنا منهجا هجينا لتحقيق النتائج المتوقعة؛ وقد تم تسليم استبيانين إلى عينة من أربعون طالبا في طور الماستر وعشرة أساتذة في قسم اللغة الإنجليزية في جامعة قاصدي مرباح ورقلة. ومنه نستخلص أن التعليم الإلكتروني أصبح تقنية هامة في القرن الحادي والعشرين.

الكلمات المفتاحية: التعليمالإلكتروني، التعليم، طلبة اللغة الإنجليزية كلغة أجنبية،التكنولوجيا.