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College of Graduate Studies

Effect of Using Technological Aids in Encouraging Classroom Interaction

أثر إستخدام الوسائل التكنولوجية في تشجيع التفاعل الصفي

A Thesis Submitted to Department of English, College of Languages, in Partial Fulfillment of the Requirement for the Degree of (M.A.) in English Language (Applied Linguistics)

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Dedication

To my dear of parents, aunt, sisters, to all family member and friends

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I would like to thanks Allah, and my supervisor is Dr. Mahmoud Ali Ahmed who offered me his precious time and efforts in follow-up and guidance throughout the achievement of this research.

Thanks are due to teachers who helped in the questionnaire, as well as to the helpful library stuff.

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Abstract (English version)

This study aimed to investigate the effect of using technological aids in encouraging classroom interaction. The researcher designed a questionnaire for the teachers of College of Languages and Faculty of Education in Sudan University of Science and Technology. The researcher used the SPSS to analyzed the data after the analysis of data , The main findings of researcher revealed that Both teachers and students can use technology in the classroom to increasing classroom interaction , Students have positive attitudes towards of using technology tools in the classroom . At the end the research the researcher gives some recommendations, classrooms must have technology means , teachers should have training courses to help them to know how to use classroom technology and Sudanese Universities should provide technology tools to their teachers , students to increase the level of learning .

Abstract (Arabic version)

هدفت هذه الدراسة لبحث أثر إستخدام الوسائل التكنولوجية في تشجيع التفاعل الصفي. صمم الباحث استبيان للأساتذة من كلية اللغات وكلية التربية بجامعة السودان للعلوم والتكنولوجيا. استخدم الباحث طريقة التحليل الإحصائي لتحليل البيانات بعد تحليل البيانات أهم النتائج التي توصل إليها الباحث مايلي: يستطيع الأساتذة والطلاب استخدام وسائل التكنولوجيا في الفصل لزيادة التفاعل الصفي, الطلاب لديهم اتجاهات ايجابية نحو استخدام وسائل التكنولوجيا في الفصل الدراسي.وفي نهاية البحث أوصي الباحث، يجب أن تحتوي الفصول علي احدث أدوات التكنولوجيا وان يعطي كورسات تدريبية للأساتذة لتساعدهم في التعامل مع تكنولوجيا الفصل، يجب علي الجامعات السودانية توفير وسائل التكنولوجيا للأساتذة والطلاب لرفع مستوي التعليم .

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Definitions of Terms

Technology the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society and the environment, drawing upon subjects as industrial arts, engineering, applied science, and pure science.

Technology tools such as, but not limited to, an interactive whiteboard, software, email, computers, and the internet are considered technology tools.

Integrating technology the term means that technology is not taught as a separate class, but integrating into the classroom. It also means that students use technology to learn content and show their understanding of content not just expertise with a tool.

Bloom′s taxonomy is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity.

Chapter One

Introduction

Chapter One

Introduction

1.0 Background:

Technology is a tool that change the nature of learning. The use of technology in various in fields has been so successful and beneficial for teachers to reach some particular goals especially in education and for these who are learning a foreign language .

Technology is around everything we do. But, does it have a place in the classrooms? In this study, teachers were ready to infuse their classroom lesson plans with a variety of technology. Students were assigned to create brochures, PowerPoint presentation and use video cameras along with Movies. This rush of technology could be seen in almost all of the regular classes..Students should benefit from the use of technology in the classroom. Students learn faster and easier than before because of the use of technology in education .Research in this area has the potential to prove that when teacher use technology in the classroom, students become more motivated to learn the material. In addition, their attention spans may increase when teacher uses technology. Some of these tools of technology tools in the classroom include :whiteboard, computer ,projector, the internet, email, and many other options available today.

1.1 Statement of the Problem:

The problem is although many new technologies are available for teachers to use in their classroom, training to must be provided and continuously encouraged for implementation to be successful.

Teacher should realize if they spend the initial time learning to use technology, such as an interactive whiteboard, email ,or the internet, the tools could benefit their students. With practice and a little extra planning time, teachers should be able to integrate technology into their classroom and soon witness the benefits such as improved student test scores and motivation. Some teachers don't know how to use it, also teachers are anxious about change and therefore, shy away from technology. Teacher should have less anxiety about integrating technology into their classroom.

1.2 Questions of the Study:

The researcher tries to find out answers to the following questions:-

1- To what extent are teachers anxious about technology use in the classroom?

2- To what extent can the attitudes of the students be improved through introducing technical devices in the classroom?

1.3 Hypotheses of the Study:

This study hypothesizes the following assumptions and claims:

1- Teachers have anxieties about adding technology to their classroom.

2- The attitudes of the students can be improved through introducing technical devises in the classroom.

1.4 Objectives of the Study:

The main objective that this research focuses on is:

- Improve language acquisition by using technology in the classroom.
- Attain of learning goals for individuals with wide differences in their abilities to see, hear, move, read, write, understand English, sustain attention, organize, engage and remember.

- Use different types of technology in the classroom that affect on all learners.
- Enable teachers to improve the curriculum and enhance student learning.

1.5 Significance of the Study:

- Using technology can help facilitate the knowledge classroom.
- Motivation and engagement are frequently identified as the major benefit of using technology to support literacy learning.
- The use of technology in teaching and learning experiences directly related to the real lives of students.

1.6 The Methodology of the Study:

The researcher used the descriptive analytical method in order to fulfill the data collection process.

The instrument of data collection was a questionnaire for the teachers in Sudan University of Science and Technology.

To analyze the data, the researcher used SPSS; computer program.

1.7 Limits of the Study:

This study will be limited in investigation into Using Technology in Encouraging Classroom Interaction.

The population of the study will include the teachers at Sudan University of Science and Technology 2017.

Chapter Two

Literature Review and Previous Studies

Chapter Two

Literature Review and previous studies

2.1 Introduction:

Close your eyes and make a list of all the technology in the classroom that you can remember

. A chalkboard ?

. Textbooks ?

. An overhead projector ?

. A videocassette player ?

. A computer?

Now, list the technology you expect to see, if you walked into that classroom today. What would still be there? What would be new?

"Technology " is the word of the day in many classrooms. These preparing to become teachers are told repeatedly that they must incorporate technology into their classes, both to hold their students attention in an era when most are used to getting information from TV and computer screens and to train their students to become citizens of a high-technology world

But exactly how do they this? Many of the public schools when future teachers do field placement have outdated or inadequate technology, and the classroom teachers who host teacher-in-training are often unprepared to help, perhaps even less tech-savvy than their student teachers.

Many schools across the country use technology to enhance student learning: such as Internet access, digital cameras, email, interactive whiteboards, laptop computers, LCD projectors, and course specific software that support the curriculum.

Most teachers should have a basic understanding of how to use word processing software, such as Microsoft word …..etc

Fulton (1997) used technology fluency to describe the changing definition of what students need to know about technology. Fulton indicated that teachers model technology fluency by using technology in the classroom, applying technology across the curriculum, and integrating technology to facilitate collaboration and cooperation among students.

Bauer and Kenton (2005) said that computer technology is an effective way to widen educational opportunities, but teachers are not using technology as an instructional delivery system. Bauer and Kenton's research found that teachers were highly educated and skilled with using technology, but teachers were not integrating technology on a consistent basis in the teaching and learning process.

Technology integration is not a 'one size fits all' (Wepner, Tao, &Ziomek, 2006) where teachers do the same thing for their students or where teachers possess the same specific skills to be competent technology users. Teachers need to know how and why to use technology in meaningful ways in the learning process for technology integration to work.

2.2 Use of Technology in Teaching English:

As the use of English has increased in popularity so has the need for qualified teachers to instruct students in the language. It is true that there are teachers who use ' cutting edge ' technology, but the majority of teachers still teach in the traditional manner. None of these traditional manners are bad or damaging the

students. In fact, till date they are proving to be useful also. However, there are many more opportunities for students to gain confidence practice and extend themselves, especially for ESL students who learn the language for more than just fun .For them to keep pace with ELT and gain more confidence they have to stride into the world of multimedia technology .

2.3 Technology in the Classroom:

Early introduction to technology, just as early introduction to language, gives learners ways to engage themselves with language producing task –based language acquisition. D. Briggs (1998) states in his book A class of their own: when children teach children that technology provides affirming and enriching instructional-learning environments and lends itself well to individual use and collaboration (as cited in Anderson, Grant & Speck, 2008). The use of technology in English as a Foreign Language (EL) classroom can provide a meaningful and interesting approach for language learning.

It motivates the learners as well as engage them in speaking, reading, listening and writing easier (IIter,2009) ; however, technology alone is not sufficient to teach ELLs .It requires a teacher with clear objectives, who knows the curriculum and effective instructional strategies, and who can give children engaging learning experiences to grow and to have more experiences to relate to their prior knowledge (Schwartz & Pollishuke ,2013).

Technology can help facilitate the knowledge-constructed classroom. A number of researchers (Bork, 1985); laboratory for Comparative Human Cognition, 1989; Ragosta, 1983) views computers as having an influential effect on the teaching and learning processes. They state that with the use of computers in the classroom, schools would become more student-centered and that more individualized learning would take place than ever before.

In the student-centered classroom of today with the aid of the computer, students are able to collaborate, to use critical thinking, and to find alternatives to solution of problems (Jaber, 1997).

2.4 History of Integrating Technology in the Classroom

The term ' educational technology ' was used during the post-world war II era in the United States for the integration of implements such as film strips, slide projectors, language laboratories, audio tapes, and television.

Presently, the computers, tablets, and mobile devices integrated into classroom settings for educational purposes are most often referred to as ' current ' educational technologies. It is important to note that educational technologies continually change and once referred to slate chalkboards used by students in early school houses in the late nineteenth and early twentieth centuries. The phrase ' educational technology', a composite meaning of technology + education, is used to refer to the most advanced technologies that are available for both teaching and learning in a particular era (Coley &Cradler & Engel, 1997) .

In 1994 federal legislation for both the Educate Act and the Improving American's School's Act (IASA) authorized technology planning (Coley &Cradler & Engel, 1997).

One of the principle goals listed in the Educate America Act is to promote the research, consensus building, and systemic changes needed to ensure equitable educational opportunities and high levels of educational achievement for all students (Public Law 103-227) ,(Goals,2000).

In 1996 the telecommunications Act provided a systematic change necessary to ensure equitable educational opportunities of bringing new technology into the education sector .The telecomm Act requires affordable access and service to

advanced telecomm services for public schools and libraries. Many of the computers, tablets, and mobile devices currently used in classrooms operate through internet connectivity; particularly those that are application based such as tables. Schools in high-cost areas and disadvantaged schools were to receive higher discounts in telecom services such as Internet, cable, satellite television, and the management component (Telecommunications Act of 1996).

A chart of "Technology Penetration in U.S Public Schools' report states 98% percent of schools reported having computers in the 1995-1996 school years, with 64% Internet access, and 38% working via networked systems.

The ratio of students to computers in the United States in 1984 stood at 15 students per 1 computer, it now stands at average all –time low of 10 students of computer. From the 1980s on into the 2000s, the most substantial issue to examine in educational technology was school access to technologies according to the 1997 Policy Information Report for computer and classrooms: The status of technology in U.S. schools. These technologies included computers, multimedia computers the Internet, networks, cable TV, and satellite technology amongst other technology – based resources (Coley &Cradler & Engel, 1997). Computers, tablets and mobile devices may be in educational setting within groups, between people and for collaborative tasks (Dourish, Paul,2001). These devices provide teachers and students access to the World Wide Web in addition to a variety of software applications.

2.5 The Prevalence of Technology in the Classroom:

Although most children lead technology-centered lives, this does not necessarily mean that technology has place in the classroom ; however, " nearly 100 percent of public schools in the United States have Internet access, with 97 percent reporting having a broadband connection" (Tripp & Herr-Stephenson ,2009 ,p.1190).

Various technologies that are typically incorporated into education include mobile learning platforms, interactive videos, complex gaming, electronic blackboards, immersive technologies, and electronic presentation tools. In 1994, 3 percent of public school instructional rooms have Internet access, compared with 93 percent in 2003 (North Central Regional Educational Laboratory, 2005). While digital media and networked technology are increasingly prevalent in the lives of some young people, many still struggle to gain meaningful access to technology (Tripp & Herr-Stephenson, 2009, p.1203).

2.6 Benefit of Integrating Technology:

Computers can also be excellent resource tools for teaching problem solving and critical thinking skills. They provide a way to visually represent numerous real –world situations and identity patterns in data; therefore, they enhance problem solving skills in the learning process (J. Mckenzie, 1999).

The teacher's purpose is to help students understand that the technology does not think for them, and the machine is only as smart as its operator. Technology can never replace the human mind, but it can help expand it. Thus, teachers have a critical role – teaching students how to use technology as a tool to help, rather than hinder, their learning.

In addition to teachers' negative beliefs and attitudes, schools must cope with budget issues around technology in the classroom. First, there is the expense of acquiring the technology and then there is the expense of maintaining it. Since most school cannot afford to have a computer for each student in each classroom, they must determine other means to provide their students with up-to-date technology. Rather than having computers in each classroom, a computer lab, which can be shared, provides a less expensive alternative. In addition, grants, which require a resource who can write a proposal describing how the money will benefit the school's technology needs, are available from a

variety of sources, including the community and the government. The issue of maintenance can be addressed by having the technology instructor teach a class for the singular purpose of maintaining the technology equipment, which is a growing field in the work world.

Too often in education we have failed to find the right blend of technologies. The benefit of technology is not simply its potential to replicate existing educational practice, but its ability to combine idea and product technologies to encourage students to engage in deeper cognitive activity.

Integrating technology into the classroom begins with the teacher preparing lessons that use technology in meaningful and relevant ways, using technology to support curriculum rather than dominate it. Technology should assist the teacher in creating a collaborative learning environment and help the teacher transition from the role of facilitator to that of a learner.

A major goal is to allow students to use technology, experiment with real world problems and manipulate them to see what different scenarios will do to the problem. Thus, students are able to think about possible outcomes if the variable is changed. So when teachers are trying to integrate technology into their classroom lessons, they can teach the basic concepts and then have the student work with the computer or other technology (G.Silverstein, J.Frechtling and A. Miyoaka,2000).

Finally, everyone can gain from using technology if teachers are taught how to successfully integrate it into the classroom.

The belief that technology will hinder students learning has been proven wrong as long as students are taught to use it as a tool.

2.7 Teacher and Technology:

Glassette and Schrum (2009) found that positive influence on teaching and learning and in increase in student achievement and conceptual understanding are all dependent on access to appropriate technology and proper professional development to help integrate technology into the curriculum.

Guthrie (2003) questioned why society seems to embrace technology, yet schools seem more hesitant. The problem is not the use of technology or lack of its presence in schools. Rather, technology should be left up to teachers' discretion, and should not be made a directive by policy markers (Guthrie, 2003). The demand for technology should come from teachers and administrators (.Guthrie, 2003; Herold, 2015).

Herold (2015) agreed with this assertion that voices of demand should be from teachers and not forced upon them. Technology is slow to be used in classroom because of local policies, erratic training, and lack of support from administration. The internet policy makers had when they require the introduction of computers into the classroom was to improve academic achievement. In contrast, Herold (2015) found that computers are used by teachers to make their job easier and improve instructional strategies.

2.8 Integration Approaches:

Teachers begin with tools that best fit their styles, classroom contexts, level of confidence, and students' abilities. Almost any idea can be an entry point for increasing students' use or teachers' instructional use to technology.

2.8.1Types of Integration Approaches:

The paths to implement the use of technology with students can be categorized into a few types : instructional uses, software and websites, non-computer tools,

technology centers, teacher-directed projects, web 2.0 tools, collaborations with colleagues, and project –based learning.

2.8.1.1 Instructional Uses

For some teachers, the easiest entry to using technology is to model it first as an instructional tool and then advance to student demonstrations with technology.

One major advantage of beginning integration in this way is the low level of risk ; when technology stays in the teachers' hands, malfunction do not disrupt the entire lesson. Depending on how technology is used, lessons can stretch students' thinking as well. On the other hand, teacher's control of technology frustrates students who want the freedom to express themselves using technology. While teachers' control of technology tools may make them feel comfortable, students are not building their technology skills. Teachers who begin with instructional technology use should plan to transition to student demonstration use within a year and preferably sooner.

2.8.1.2 Software and Websites

For many teachers, the use of educational software and websites feels like the safest way to manage students on computers and even to incorporate technology into instruction. Many interactive websites provide rich experiences for students that can introduce, support, extend, or assess classroom instruction. The better sites provide simulations, where students manipulate online objects, such a math virtual manipulatives or science experiments.

This approach offers little differentiation, does not scaffold technology skills, and is not likely to engage all students. For students to experience higher levels of learning, consider having them work partners to access websites, which encourages students to discuss their work (Boni Hamilton, 2015)

2.8.1.3Non Computer Tools

Some teachers start students with non-computer tools. Students may use digital cameras to capture photos related to themes, video cameras to tape presentations, or audio recorders for stories or books .This method is often used by teachers as an introductory experience until students have built the skills to manage some of the files themselves.

Students feel empowered by this approach because they can control the technology and make decisions about what is important to capture. Teachers become facilitators of the final products.

2.8.1.4Teacher–Direct Projects

Some teachers design projects that students can complete using technology. Teacher-directed projects should not be disparaged; they can be useful when students are building basic technology skills and need introductory experiences. Simple projects, such as drawing self-portraits on the computer or making basic slideshows with a program's templates, are scaffold for future, more complex projects. Teacher-directed projects would be situated at the lower end of Bloom's taxonomy, even when they take several weeks instead of one day, because the teacher controls how and why students use the technology tools.

2.8.1.5Web 2.0 Tools

Some teachers prefer to start students with internet-based tools that allow them to be both consumers and producers of information. Web 2.0 tools enable students to create content and publish it on the internet. These students may maintain blogs, contribute to wikis, or develop products that post online. They collaborate with peers in their classrooms or across the globe. The collaborations may lead to email pals, teleconferencing, and virtual visits. (Boni Hamilton, 2015)

2.8.1.6Technology Centers

Teachers who use learning centers in their classrooms can design complementary technology centers as well. Technology centers may be content –based with a combination of digital tools. Sometimes the centers can involve a highly engaging website or the use of digital tools like cameras or audio recorders. Teachers should also plan multiple opportunities for students to communicate – writing online, creating a presentation, or contributing to a class site.

2.8.1.7Collaborations with Colleagues

Many teachers partner with colleagues to plan for, implement, and evaluate technology use. In some schools, grade level teachers have combined their classes for technology experiences, while others have combined older and younger students as " buddy classes ". Schools with teacher / librarians or teacher / technologists often encourage coteaching. Sometimes parents and community members express interest in helping with technology in a classroom, particularly if they have expertise that complements the teachers' skills. Collaborations divide the work and time spent on tasks while increasing teachers' technology capacities. When the collaboration works, it works well for everyone. When collaborations do not work smoothly, partners may give students mixed or frustrating messages.

2.8.1.8Project –Based learning:

Project-based learning (PBL) is a specific learning approach that engages teams of students in investigating and responding to complex questions or challenges.

Thomas (2000) defined projects-based learning as having five components:

1. The projects are central to the curriculum, not peripheral.

2. The problems or challenges drive students to encounter and struggle with the essential concepts and principles of the content area.

3. Students construct new understandings through their investigations.

4. The projects are, to a large extent, driven by students, not prescribed.

5. The projects are realistic and authentic.

Students are given driving, intriguing problem-solving projects, such as " Design a study, including the best destination, for you and your colleagues to research how giraffes communicate".

Project-based learning is at the high end of Bloom's taxonomy and is highly constructivist and differentiated. Because students have timelines to meet, another advantage is that students have a responsibility to complete their work at the same time. Disadvantages include the difficulty of finding balance between teacher direction and student autonomy, the potential that students will tackle technology tools for which they do not have the skills, and the challenge of monitoring group work .(Boni Hamilton, 2015).

2.9 Types of Technology Used in the Classroom:

Karehka Ramey. Use of technology .Google .web .N 2012.6 June 2017)

2.9.1 Use of Computers in the Classroom:

Computers have evolved and they have changed the way the look and the way they function. New technologies have also emerged and birthed some new computer related gadgets like the ipad or Galaxy tablet. These computers can be used by teachers to assign work to students and Study groups in a classroom. Also teachers can use computers to illustrate visual related subjects which help students to learn easily. Modern computers come with installed applications which can help students study well. Teachers can also help their students to

learn complicated applications on these computers as a way of making it easier for students to lean and also make the teachers' job easier.

2.9.2Create Class Websites and Blogs:

It is very easy to create a website or blog using Word press or any other content management software. Teachers can create class blogs were they post assignments. If the school has no website sever to host these class blogs, the teacher can use free website hosting services like word Press.com or blogger.com .

For example, matchclass, wordpress.com, so students will find all academic assignments via that blog. It is very easy to manage and post data to a blog, because they have simple HTML editors.

2.9.3Use of Digital Microphones in the Classroom:

Big classrooms are characterized by endless noise, so teachers can resort to these wireless digital microphones. The microphone will transmit the voice to the loud speakers and every student will hear their teacher clearly. This helps the teacher not to strain their voice while trying to explain points to their students. These digital microphones are not too expensive so even a small income generating school can manage to buy a wireless microphone for every classroom. Also students can use the same microphone when asking questions to their teachers in class, or when they are explaining a subject to their fellow students during a classroom debate.

2.9.4Use of Mobile Devices:

Teachers and students can use smart-phones for academic purposes in the classroom. Mobile learning is becoming so popular. It is similar to e-learning or long distance education. Though it’s based on mobile phones. M-learning is convenient because it is accessible from anywhere. Mobile phones are very light

yet they can also have the same application a simple PC can have, a student can access academic information like assignments via an educational mobile application (APP). And also to post questions about specific subjects, all this it can be done in the classroom or outside the classroom.

2.9.5Use of Smart Interactive Whiteboards:

Modern smart whiteboards have a touch screen functionality, so the teacher can illustrate points using a pen or their finger. Using a projector, teachers can display visual images on these whiteboards which improves the learning process. Students will learn more or easily with visual images. Also students can use a whiteboard to draw, write or manipulate images. Smart whiteboards come in various sizes, the wide ones are better, because they can show a large image and can also be used by two students at a time. Most of them are electronically powered, so they can be switched on with a button, and they can also save teachers work for later use.

2.9.6Use of Online Media:

Teachers and students can both use online streaming medias to learn in the classroom. With the aid of a projector, computers, internet and a whiteboard, a teacher displays a real-time example using sites like Youtube.com. This website has videos which can be used for academic reference. Let's take a simple example on how a Geography class cans technology.

2.10 Technologies to Support Bloom's Taxonomy:

Benjamin Bloom's Taxonomy of Educational Objectives (1956, 2001) can help teachers classify their objectives to determine the various challenges of students' learning. Students need experiences at all levels of the taxonomy. Here's how technology fits into the domains of Bloom's taxonomy.

2.10.1 The Knowledge Level or Remembering:

The lowest level of taxonomy, remembering refers to recalling, listing, describing locating, recognizing, or naming. Many of these tasks involve memorization and show basic knowledge. In technology use, tasks at the remembering level might include conducting simple online searches, making an acrostic or bulleted list, writing facts, or listing main events.

2.10.2 The Comprehension Level or Understanding:

One step up from remembering comes understanding. At this level, students explain, compare, discuss interpret, restate, summarize, sort, and infer. Technology tasks that demonstrate understanding include conducting an advanced Boolean search, drawing a picture of an event, making a flow chart of events in a story or history lesson, outlining or summarizing a text, sorting into a Venn diagram, journaling, or commenting on a blog.

2.10.3 The Application Level or Applying:

Tasks in the application level require students to apply what they understand to new situations. Applying refers to solving, using, illustrating, constructing, classifying, and examining. Students working at this level may be solving problems on a math site, taking or selecting pictures to illustrate a concept, editing written work, developing a plan, uploading documents to a wiki, interviewing with a digital recorder, making a pattern, building a presentation or contacting an expert.

2.10.4 The Analysis Level or Analyzing:

With analysis, students begin to use critical thinking skills to understand concepts. Verbs that fit into the analysis level include compare, contrast, investigate, organize, plan, structure, link, and deconstruct. Students working at this level with technology tools may be writing an advertisement, creating a

Venn diagram on a subject of study, researching a concept, building a concept map, developing a questionnaire, writing a blog, conducting a survey, or developing a spreadsheet.

2.10.5The Evaluation Level or Evaluating:

In evaluation, students use higher-level thinking skills to appraise ideas or materials based on criteria. Students might decide, choose, justify, debate, recommend, rate, or prioritize at this level. In the past, when students conducted research in library books, the materials had already been vetted, so while the information might not be current, its source could be trusted. With online research, however, students must appraise the credibility of a source before using it. Other technology-based tasks also require evaluation skills, such as writing a persuasive argument, engaging in an online discussion group, narrowing a search to target results, or critiquing books on a book review site.

2.10.6The Synthesis level or creating:

Synthesis, the highest level on Bloom's taxonomy, describes what happens when students use their knowledge to create or produce something new .when students engage in synthesis, they are active learners who make choices about how to demonstrate what they know. At this level, students create, compose, invent, predict, design, or propose. With technology, students might create a public service announcement video, compose and perform a musical composition, change a current song or poem with rhythms or words, design a long or book cover, collaborate on a discussion board or wiki, write and record a podcast, or propose an invention. At this level, what students produce generally has significance to them. (Boni Hamilton, 2015)

2-11 Critics of Integrating Technology into the Classroom:

Although there are many educators who believe that it is essential for instructional technologies to be integrated into the classroom, there are many educators who believe the exact opposite. These educators believe that integrating technology into the classroom will cause more harm than good. One main argument that critics of educational technologies state is that rather than aiding the students in learning the material, they create a major distraction for the students. Another reason critics say that they are against the integrating of instructional technologies into the classroom is because they disrupt the flow of the class. Almekhlafi & Almeqdadi (2010) did a study called " Teachers' perceptions of Technology integration in the United Arab Emirates School classroom " In this study, Almekhafi & Almeqdadi surveyed 100 United Arab Emirates teachers in order to gain an insight about teachers' perceptions of implementing technology into the classroom. After surveying these teachers they found that the most common response to teachers felt was the biggest challenge of using technology in the classroom was that too often the technology does not work. Often times, teachers create and prepare lessons and activities that implement the use of technology, but when it comes times do the activity, the piece of technology that is needed does not work correctly if at all. The teacher than has to either fix the issue or completely change the activity so that technology is not needed. This disrupts the natural flow of the class and creates additional problems for the teacher as well. While the teacher is trying to fix the problem or come up with a new activity, some students might start doing things that they shouldn't be doing which could distract the other students in the class and cause a major disruption which would make it difficult for the teacher to get under control. If technology was not being used, the teacher would not have this problem because they would not have to try and fix a technical issue or spend class time coming up with an alternative activity that they could have

the students do instead of the activity that requires technology. In order for the use of technology to be effective, the teacher needs to know how to correctly use them, and how to teach their students how to use them correctly.

Oliver, Osa & Walker (2012) describe that " Within a sound educational setting, technology can enable students to become:

. Capable information technology users

. Information seekers, analyzers, and evaluators

. Problem solvers and decision markers

. Creative and effective users of productivity tools

. Communicators, collaborators, publishers and producers

. Informed, responsible, and contributing citizens (International Society for Technology in Education, 2000) (2012).

In order for this to occur, students need to understand how to appropriately use the technologies. It is the teacher's job to teach their students how to use the pieces of technology correctly so that they know exactly what they are supposed to do when they are allowed to use them.

2.12 Challenges of Technology Use in Classroom:

Wherever teachers introduce technology in their classroom, they have to be aware of the potential frustrations in order to avoid them, some of these challenges may be summarized as : a) technical difficulties ; b) classroom management situation (i.e. when a link on the website is broken, or when a server that hosts a website is temporarily down) ; c) security blocks in place at some schools for students to stop from accessing questionable sites from school computers ; d) quality and appropriateness of the technology or software or

websites ; e) broadband speed too low in some schools, causing video conferences to appear pixilated video on a screen ; and f) classroom control in whish teachers have to facilitate learner-centeredness and student independence. (Erben, 2009)

Introducing a new technology into the classroom in order to transform teaching and learning has been a long –standing tradition in education. Some technological innovations had strong support to be used in the classroom, other have not. Some have stayed, some have not. Despite increased investments in technology, the statistics of computer use are disheartening to say the least. Recent studies indicate that on average, teachers use computers several times a week for preparation but only once or twice a year for instructional purposes (Russell, Bebell, O'Dwyer, & O'Connor, 2003) .These statistics raise quite a conundrum ; why is there such a large disparity between classroom professional and instructional use of computers? Why is it that so many teachers use computers to increase their own efficiency productivity, yet do not strive to find effective applications for their use as instructional tools? What is it that keeps teachers from making this quantum leap? The answer to these questions are multifaceted. Several authors have already provided a long list of factors influencing the integration of technology into classroom instruction.

2.13 Factors Influencing Classroom Technology Use:

Why aren't computers an essential tool in every classroom? What factors influence teachers' success in technology integration?

A review of the literature has produced six critical factors, each with its own variables, that influence the implementation of technology and a teacher's ability to successfully integrate innovations in the classroom (figure 1) : (a) legislative factors, (b) district / school-level factors ,(c) factors associated with the teacher, (d) factors associated with the technology-enhanced project ,(e)

factors associated with the students, and (f) factors inherent to technology itself. Other factors, however, are closer to teacher's immediate experience and can be directly manipulated or addressed to create an environment that facilitate the process of technology integration. According to Zhao, (2002), those are factors associated with the: (a) school environment or the context in which technology will be implemented; (b) the teacher who serves as the innovator; and (c) the technology-enhanced project or innovation.

2.13.1Legislative Factors:

Why should we use resources to support technology integration? What evidence do we have that technology can enhance teaching and learning?

- **Policy**

Over the last two decades policy-makers have articulated different rationales for the integration of technology into the school curriculum. These rationales often emphasize three key themes: (a) using technology to address challenges in teaching and learning. (b) Using technology to foster changes in the context and quality of teaching and learning. And (c) using technology to prepare students for an increasingly technological world (McMillanCulp,Honey ,& Mandinach,2005). Concrete recommendations on how to achieve these goals, however, are rarely included in policy reports, thereby making it difficult to draw any practical implications.

- **Research**

While most researchers agree that technology can change the teaching process, making it more flexible, engaging and challenging for students, little evidence exists to support these claims. Further, it appears that opinions on how to best establish such evidence also differ. Earlier studies followed comparative research designs and sought to find out whether use of computers increased

student learning compared to other instructional approaches (Honey, McMillan, & Carrigg, 1999).

2.13.2 District / School Level Factors

How does district administration and community influence teachers' efforts to implement technology? How does school leadership influence teachers' efforts to implement technology? How can teachers be supported in their efforts to implement technology-based projects?

- **District Administration and Community:**

With the amount of money invested thus for in technology purchases administrators are under a lot of pressure to see these technologies put to use. In particular, McKenzie (2003) explained that the teacher should: (a) select objectives that support state curriculum standards ;(b) identify learning activities likely to deliver the desired outcomes ; and (c) select appropriate tools (technologies). Successful technology integration is not defined by the amount, but the nature of its use (Earle, 2002). Unfortunately, administrators are often more concerned with the frequency rather than the quality of technology use in the classroom (Mckenzie, 2003).

- **School Environment:**

School administration any teacher can testify to the use importance of school administration. As directors, administrators influence school structure and culture, constituting the venue for any instructional initiative. Thereby, administrative support (or lack thereof) can make or break teachers' endeavors to integrate technology into the classroom. School administrators should not only advocate the use of technology but also provide support mechanisms such as professional development, time for planning and collaboration, and necessary resources (Earle, 2002; Groves, Jernigan, & Eller, 1998). Necessary resources

include (a) adequate access to hardware and software ; (b) technical and pedagogical support ; (c) professional development plans that allocate time and resources for follow-up ; and (d) social support from colleagues, including mentoring and time to explore new technologies (Morris ,2002 ; Zhao et al, 2002) .

2.13.3The Teacher:

What skills or qualities are required for teachers interested in integrating technology into their classroom? In what ways do teachers need to change their practice in order to effectively use technology? Be it the "sage on the stage " or the guide on the side " the teacher is undoubtedly a critical factor determining the level of success for any technology-based project. Similar to other initiatives, the teacher is the decision marker/director who has the greatest influence to classroom events. Callister and Dunne (1992) cautioned us that, "If the teacher does not know what to make of the tool, or fears it, or misconstrues its uses, will be used badly or not at all " (p.325)

- **Technology Skills and Proficiency:**

Often, the most foreseeable hurdle for teachers implementing technology into their classroom is their own lack of computer knowledge and experience. Those teachers with prior computer experience are more likely to learn new necessary skills quickly and seamlessly than those who have no prior experience .They are also more apt to use technology for instructional purposes(Hanks ;2002) It also need to support teachers in developing and sustaining alternative pedagogies and teaching strategies (Dede,1997).

- **Teacher Perspective:**

To implement technology successfully in their classroom, teachers must develop a positive attitude towards computers and feel comfortable using them

as instructional tools (Rakes & Casey, 2002). Teachers often feel apprehensive about technology because use of computers requires them to challenge their current role in the classroom (Earle, 2002; McKenzie, 2004; Zhao & Frank, 2003). When attempting a technology-based project, teachers may find themselves taking on roles they never before had to fulfill such as the role of instructional designer, trainer, collaborator, team coordinator, advisor, and monitoring / assessment specialist (McGhee & Kozma, 2003).

- **Knowledge of Support Resources**

Implementation of technology-based projects requires access to a wide range of resources, often beyond the teachers' immediate control. Knowing where to look and how to tap different types of support and resources is an important teacher quality (Zhao, 2002) .Teachers' abilities to identify the human and digital resources, within and outside their school, that can provide the help they need, can have a dramatic impact on the success of technology project .

2.13.4The Project / Innovation

What kinds of technology-based projects are more likely to succeed in schools? How can teachers decide on technology-based projects suitable for their particular context and classroom?

The qualities or characteristics of technology-based projects can significantly influence the possibilities for success (Zhao et al, 2002). Simply put, some technology-based projects are more difficult to implement than others.

In particular, Zhao (2002) identified two dimensions related to the project itself that could impede its success: distance and dependence.

- **Distance**:

Distance refers to the deviance of technology-based projects from existing instructional contexts. A technology-based project might also be too distant from teacher current practices and prior experiences, not only requiring new classroom pedagogy but also new roles, instructional technologies. Finally, distance from school resources is also factor.

- **Dependence:**

Dependence on others outside the classroom or resources can also decrease the likelihood of project success (Zhao et al, 2002). Technology-based projects with a low level of dependence on others are more likely to be successful.

2.13.5 The Students

What prior experience, skills, and attitudes are necessary when implementing instructional projects that make use of technology? How do students respond to the classroom environment when technology introduced?

As with any project or lesson, students affect the manner in which instruction is initiated, designed, and delivered. It is logical, therefore, to assume that the students who impact the likelihood of success. The background, attitudes, belief, and skills that students bring to a proposed project can significantly influence its direction and success.

- **Experience and Background:**

Since many technology-based projects require active student involvement, students must be comfortable with this new paradigm. Therefore, students experience with constructivist learning can facilitate the success of a project.

- **Technology Proficiency:**

Just like teachers, students need to know how to use the technologies embedded in a project in order to achieve success. If the majority of students in a class are

not proficient with the tools they will be using, appropriate training should be provided prior to the beginning of the project or get embedded in the project itself.

Some technologies and software programs require an intense amount of training of training and for these tools this can become a project in itself.

- **Attitudes and Belief:**

Technology-based projects are often challenging because they require students to organize and manage their progress, monitor time on task, and regulated their own learning (McGhee & Kozma, 2003). When presented with something unfamiliar, feelings of anxiety and concern of performance can quickly develop. Student concerns of attitudes toward an innovation can be broken down into enjoyment of computer use, motivation toward computer use, level of importance students assign to learning computer skills, and anxiety toward computer use (Liu & Johnson, 1998). These attitudinal factors can affect students in the classroom and can leave the project floundering.

2.13.6 Technology:

What is it about technology that makes it inherently and uniquely difficult to integrate? How do these characteristics interact with classroom dynamics?

To present a complete picture of the barriers to integrating technology into the classroom, we must also discuss the difficulties inherent to computers and technologies themselves. The nearly infinite list of potential problems that the technology itself can present includes: hard drive failures, insufficient memory, computer systems incompatibility with peripherals and software, misplaced, lost or corrupted files, and so on. The strongest strategy for avoiding such challenges is to work with up-to-date technologies and build a strong

infrastructure that is composed of uniform computer systems and a coherent technology team.

2.14Previous Studies

2.14.1First previous study

By Lourdes M, April 2014.In his entitled study Role of Technology in supporting English Language Learner in Today's Classroom qualitative research study examined the role that technology plays in supporting Kindergarten to Grade 8 English Language Learners (ELLs) in the classroom. The purpose of this study was to identify different teachers' methods and strategies used in the classroom to support ELLs, as well as to identify some technological tools, such as computers tablets, and Smart Board that can be used to assist classroom teachers and English as Second Language (ESL) teachers and their students during the language learning process. The data collected from an in-depth literature review and two interviews with experience teachers from different grade levels were analyzed. Five themes emerged from the findings and included : 1) A variety of teaching strategies support ELLs during the learning process, including the use of technology such as computers, tablets ,and Smart Board; 2) Some benefits in using technology with ELLs include a positive increase in their independence and language skills ;3) Students and teachers face some challenges when using technology in the classroom, including technical difficulties, student engagement and off-task behavior, lack of teacher familiarity with the technology, and new technologies not being children /user –friendly; 4) Students, parents, and teachers have a positive perception about the use of technology in the classroom. The discussion explored some strategies teachers can use which teaching ELLs. The pros and cons of using technology in the classroom, as well as the way technology is

perceived in the classroom by students, parents, and teachers. This paper is intended for teachers who are interested in using technology with their ELLs.

2.14.2 Second Previous Study

By Marowa Mahjoub ,November 2015. In his entitled study The importance of Using Technology Means in Enhancing English Language Learning at Tertiary Level,

This study aimed to explore the technology challenges to the educational field and present exciting opportunities. However, it is sad to observe the downward trend of English Language proficiency among graduate students of Sudanese universities .The research carried out through both questionnaires and interviews. The study finds out: - the important of availability of new technology in classrooms, the need for technology's training process, authentic language materials correct, promote, and purify language standard. Lastly, the study recommends:-technology should be part of classroom facilities, partners of education shout accept combining technology with learning process and technology devices should replace old mediums of teaching to save time and energy.

Chapter Three

Methodology

Chapter Three

Methodology

3.0 Introduction

This chapter describes the research methodology. It gives full description of the research tool which was used to collect the data besides the population and the procedure. The research used the descriptive analytical method to analyze data collected.

3.1 Data Collection Tool

The data of the present study was obtained by using questionnaire for teachers. The researcher constructed close-ended question to gather information from teachers, college of languages and Faculty of Education at Sudan University of Science and Technology. The questionnaire was about the effect of using technological aids in encouraging classroom interaction, it contains of eight statements.

3.2 Population of the Study

The population is teachers at College of Languages, Faculty of Education in Sudan University of Science and Technology.

3.3 Sampling

The sample of this study consists of (30) English Language teachers selected randomly from the population.

3-4 Validity and Reliability of the Questionnaire

Validity

The questionnaire was first given to Dr.Mahmoud Ali Ahmed supervisor and Dr. Ali Alhila, Dr. Hillary Marino, Dr. Abbas Mukhtar who are staff members at Sudan University of Science and Technology, department of English Language .They made some modifications to assure its validity .

Reliability

The researcher used the questionnaire to investigate the effect of using technological aids in encouraging classroom interaction.

Since questionnaire target teachers of English department because are related to the objectives of the study, therefore, the answers are more valid and reliable.

The questionnaire focused on teachers have anxieties about adding technology in their classroom and also focused on student's attitudes towards classroom technology.

Statistical analysis

To calculate the validity and reliability of the study tool (test) the researcher used the following equation :

Validity = $\sqrt{reliability}$

Reliability Coefficient $= \frac{2\ r}{1+r}$

Reliability Statistics	
Cronbach's Alpha	N of Items
.374	8

$= \frac{0.374*2}{0.374+1} = 0.54$

$= \sqrt{0.54}$

$= 0.73$

This value an accepted reliability coefficient **(r c ≤1)**so the study tool is valid to use.

3-5 Procedure

The researcher distributes the questionnaire to the teachers to look over the items and make up their minds, then give them enough time to do it after that the researcher will collect the questionnaire for analysis.

Chapter Four

Data Analysis and Discussions

Chapter Four

Data analysis and Discussions

4.0 Introduction

In this chapter the researcher is going to analyze the data, presentation and discussion the data which obtained through the questionnaire which distributed to teachers. By using the output of (SPSS) program**.**

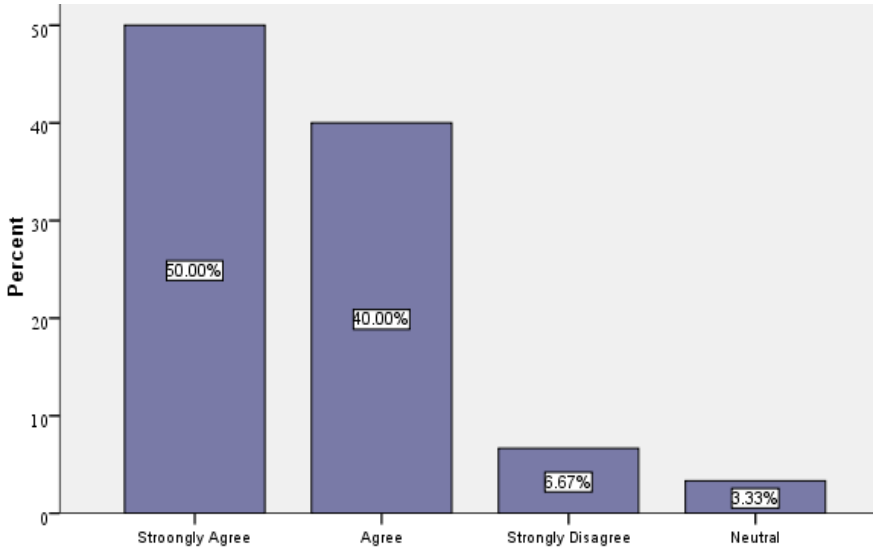
4.1 Teachers Questionnaire

The following tables show us the answer of the respondents***(Teachers***)about the statements of the questionnaire*:-*

The following table from(1-4) investigate the first hypothesis of the study **(Teachers have anxieties about adding technology to their classroom.)**

Table 4.1:Statement (1)Teachers are anxious about the use of new classroom technology due to the lack of knowledge:

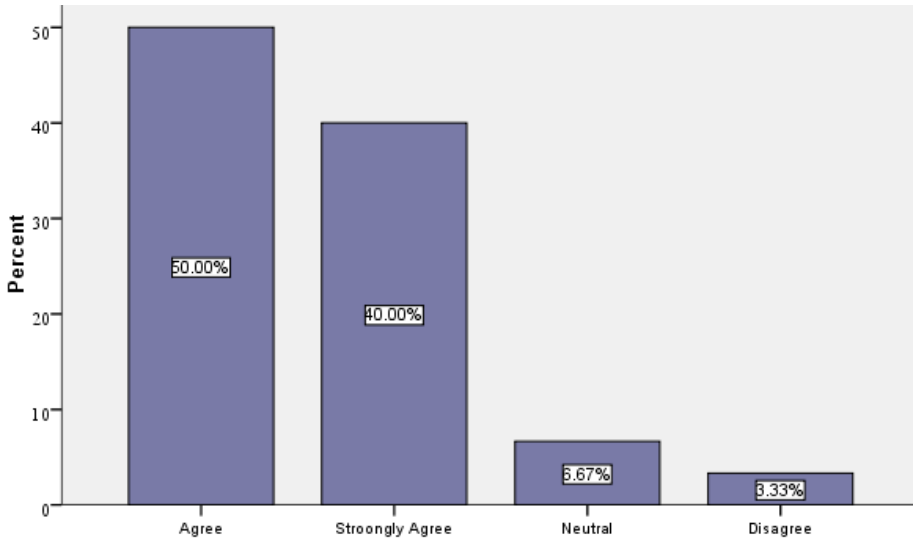
Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
1-Teachers are anxious about the use of new classroom technology due to the lack of knowledge	**15**	**12**	**1**	**0**	**2**	**30**
	50 %	**40%**	**3.3%**	-	**6.7%**	**100 %**



The data in table (4-1) show that the majority of the respondents 90% agreed with **(Teachers are anxious about the use of new classroom technology due to the lack of knowledge).**

Table 4.2:Statement (2)The level of the teachers' confidence depends on their personal background about the new digital technology.

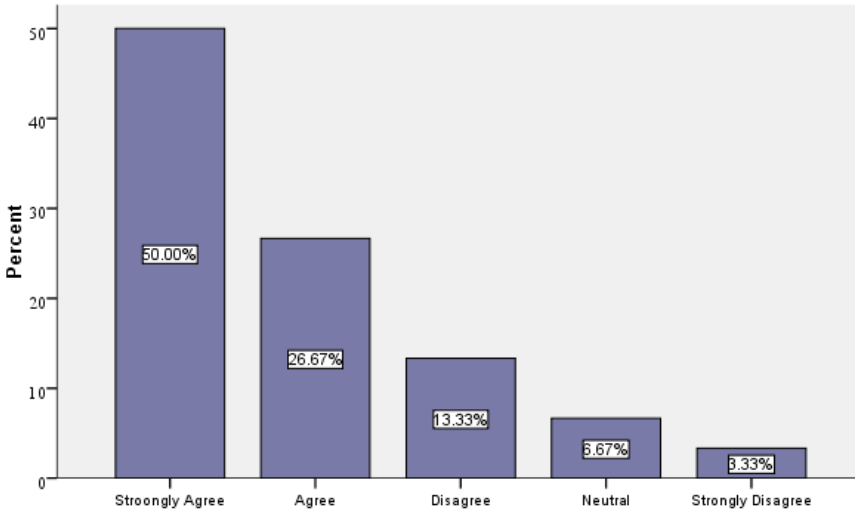
Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
2-The level of the teachers' confidence depends on their personal background about the new digital technology.	**15**	**12**	**2**	**1**	**0**	**30**
	50 %	**40%**	**6.7%**	**3.3%**	**-**	**100 %**



The data in table (4-2) show that the majority of the respondents 90 % agreed with **(The level of the teachers' confidence depends on their personal background about the new digital technology.).**

Table 4-3:Statement (3)No improvement is expected from teachers unless they have received more training on the classroom technology.

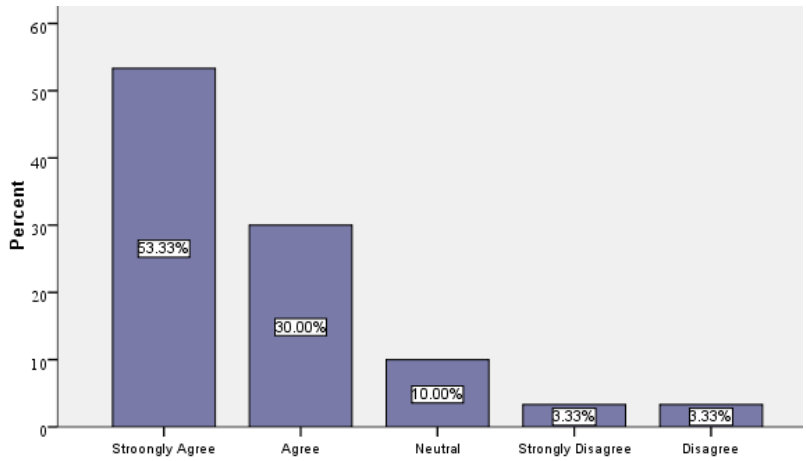
Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
3-No improvement is expected from teachers unless they have received more training on the classroom technology.	**15**	**8**	**2**	**4**	**1**	**30**
	50 %	**26.7 %**	**6.7%**	**13.3%**	**3.3%**	**100 %**



The data in table (4-3) show that the most of the respondents 76.7 % agreed with **(No improvement is expected from teachers unless they have received more training on the classroom technology.).**

Table 4.4: Statement (4)Classroom technology is very important part of teaching process and better education, so teachers should have good command of these new digital teaching aids.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
4- Classroom technology is very important part of teaching process and better education, so teachers should have good command of these new digital teaching aids	**16**	**9**	**3**	**1**	**1**	**30**
	53.3 %	**30 %**	**10.3%**	**3.3%**	**3.3%**	**100 %**

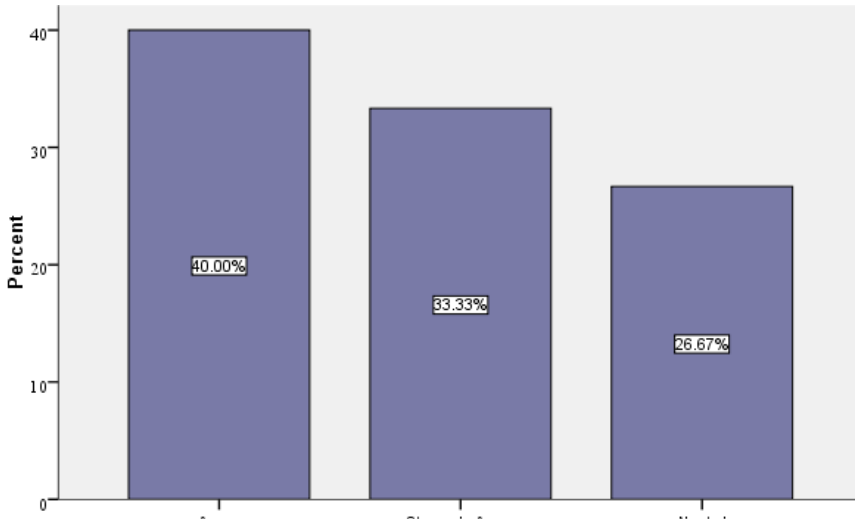


The data in table (4.4) show that the majority83.3%of the respondents agreed with **(Classroom technology is very important part of teaching process and better education, so teachers should have good command of these new digital teaching aids.)**

The following table from(5.8) investigate the second hypothesis of the study **(The attitudes of students can be improved through introducing technical devices in the classroom)**

Table 4-5:Statement (5)The students' attitudes towards classroom technology is positive

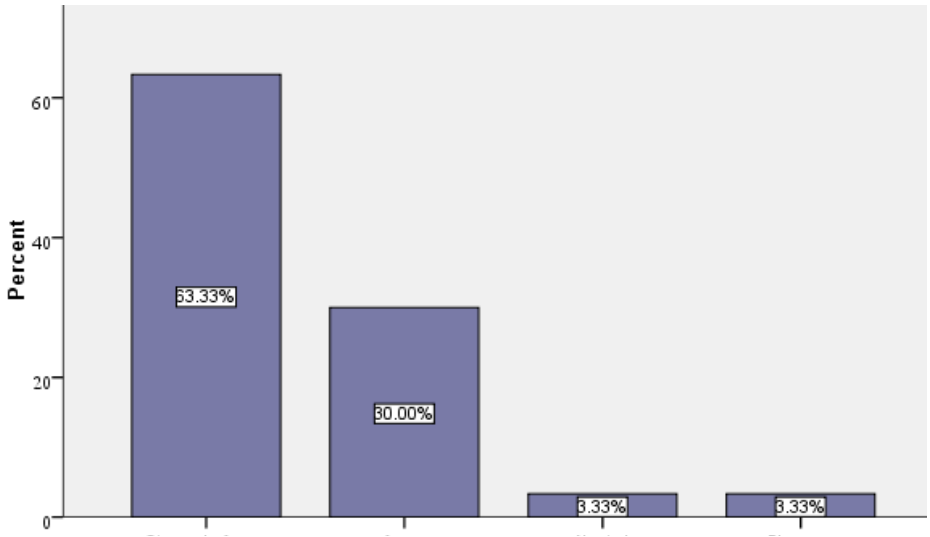
Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**	**Total**
5- The students' attitudes towards classroom technology is positive	**10**	**12**	**8**	**0**	**0**	**30**
	33.3 %	**40 %**	**26.7%**	**-**	**-**	**100 %**



The data in table (4-5) show that most73.3%of the respondents agreed with **(The students' attitudes towards classroom technology is positive).**

Table (4.6):Statement (6)The use of classroom technology increases motivation, independence and self-confidence of English language learners.

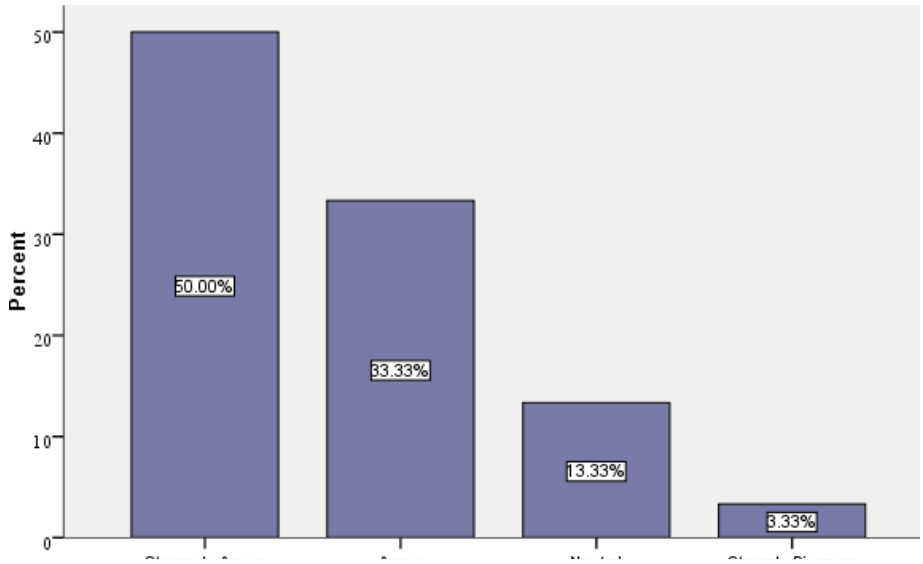
Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disa gree**	**Strongly Disagree**	**Total**
6-The use of classroom technology increases motivation, independence and self-confidence of English language learners	19	9	1	1	0	30
	63.3 %	30%	3.3%	3.3%	-	100 %



The data in table (4-6) show that the majority93.3%of the respondents agreed with **(The use of classroom technology increases motivation, independence and self-confidence of English language learners).**

Table (4.7): Statement (7)Students are highly interested in learning English through multi media.

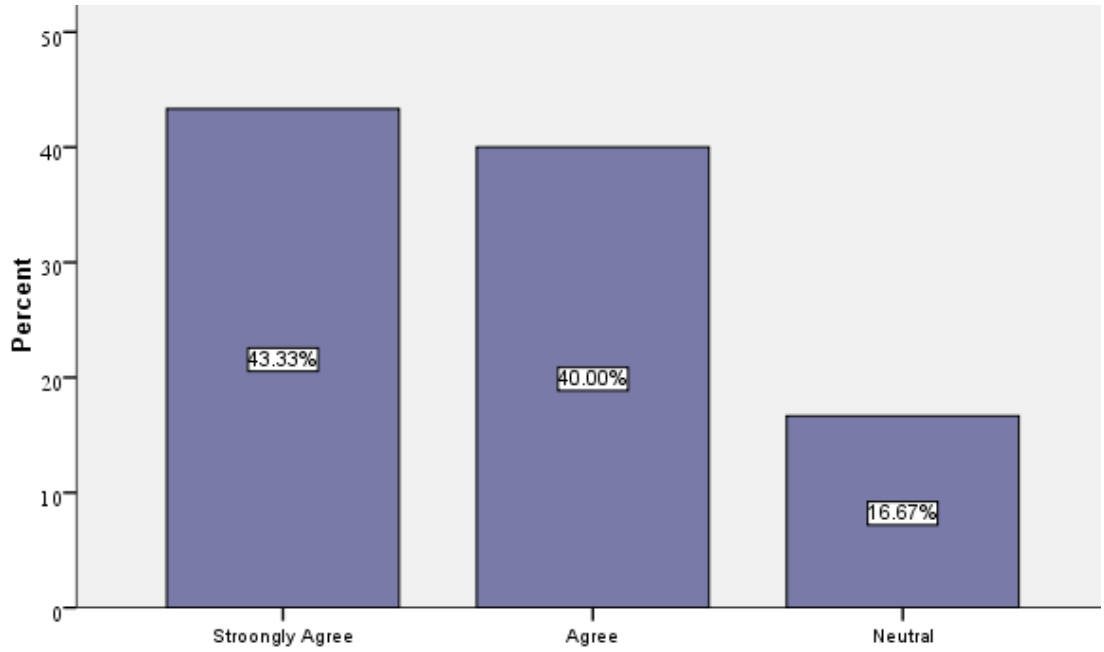
Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**	**Total**
7- Students are highly interested in learning English through multi media.	**15**	**10**	**4**	**0**	**1**	**20**
	50 %	**33.3%**	**13.3%**	**-**	**3.3%**	**100 %**



The data in table (4.7) show that the majority 83.3% of the respondents agreed with **(Students are highly interested in learning English through multi media.)**

Table (4-8): Statement (8)The use of classroom technology enables students to have favorable attitude towards learning.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
8- The use of classroom technology enables students to have favorable attitude towards learning.	13	12	5	0	0	30
	43.3 %	40 %	16.7 %	-	-	100 %



The data in table (4-8) show that the majority 83.3% of the respondents agreed with **(The use of classroom technology enables students to have favorable attitude towards learning.)**

Verification of the study hypotheses:

Hypothesis: (1)

The researcher depend on (Likart scale) to investigate the mean of the statements, where the statement with mean less than (3) accepted and the statements with mean more than (3) will not be accept.

Table No. (4.9) Chi-Square Test Results for Respondents' Answers towards The Statements of the first hypothesis:

Statement	Mean	Std	Chi Square	P-Value
1- Teachers are anxious about the use of new classroom technology due to the lack of knowledge	1.67	0.84	19.86	0.000
2-The level of the teachers' confidence depends on their personal background about the new digital technology	1.76	0.85	19.86	0.000
3-No improvement is expected from teachers unless they have received more training on the classroom technology	2.03	1.40	21.66	0.000
4-Classroom technology is very important part of teaching process and better education, so teachers should have good command of these new digital teaching aids	1.73	1.01	28.00	0.000
Total	**0.94**			

Source: The researcher from applied study, SPSS

The data in table (4.9) show that the mean of all statements (0.94) is lower than the mean (3).

The standard deviation of these statements ranges from (0.84 to 1.4)indicating a homogeneity of respondents' responses to these statements. And also all the statements have significant (P.value) (0.000) comparing with (0.05). Based on the results of the statistical analysis described in the preceding paragraphs, the first hypothesis of the study is accepted. Which is says "**Teachers have anxieties about adding technology to their classroom** "

Table No. (4.10) Chi-Square Test Results for Respondents' Answers towards The Statements of the second hypothesis:

Statement	Mean	Std	Chi Square	P-Value
5- The students' attitudes towards classroom technology is positive	**1.93**	**0.78**	**0.800**	**0.670**
6-The use of classroom technology increases motivation, independence and self-confidence of English language learners.	**1.50**	**0.86**	**29.200**	**0.000**
7-Students are highly interested in learning English through multi media.	**1.70**	**0.83**	**15.600**	**0.001**
8-The use of classroom technology enables students to have favorable attitude towards learning.	**1.73**	**0.73**	**3.800**	**0.150**
Total	**1.72**			

Source: The researcher from applied study, SPS

The data in table (4.10) show that the mean of all statements (1.72) is lower than the mean (3).

The standard deviation of these statements ranges from (0.73 to 0.86)indicating a homogeneity of respondents' responses to these statements, And also the statements (5 and 8)have insignificant (P.value) (0.670, 0.150) comparing with (0.05), whereas the statements (6 and 7) have significant (P.value).Based on the results of the statistical analysis described in the preceding paragraphs, the second hypothesis of the study is accepted. Which is says "**The attitude of students can be improved through introducing technical devices in the classroom.**"

Chapter Five

Main Findings, Conclusions, Recommendations and Suggestions for further studies

Chapter Five

Main findings ,Conclusions, Recommendations and Suggestions for further studies

5.0 Introduction

This is the final chapter of the study. It consists of Conclusions, recommendations and suggestion for further studies.

5.1 Conclusions

The researcher achieved the data analysis and come out with the following conclusions :-

- The positive affected of using technology on learners enhance English Learning in the classroom.
- Using technology in classroom to encourage students on Language Learning .
- Using technology in the classroom increase motivation ,decrease anxiety.

5.2 Findings

- Classroom technology is very important part of teaching process and better education.
- The students' attitudes towards classroom technology is positive .
- The use of classroom technology increase motivation, independence and self- confidence of English Language Learners .
- Some English Language teachers have traditional method for teach the students.

5.3 Recommendations

Depending on the result of the study. The recommendations are as follow:-

- Government and other partners of educations should pay on using technology in teaching.
- Teachers should have training courses to help them to know to use classroom technology.
- Integrating technology into the classroom must be continued.
- Encouraging Collaboration between teachers and students to share ideas.

5.4 Suggestions for further studies

This study was restricted to specific geographic location and population other studies should be done on a large to compare this study with what is happening across the nation and concluded with and to the following suggestions :

- The Attitude of Teachers towards the use of Technology in Teaching English Language .
- Role of Technology in Supporting English Language Learners.
- The Effect of using Computer in Learning English Language.

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Appendices

Sudan University of Science & Technology

College of Graduate Studies

College of Languages Department of English

Questionnaire

Dear Teacher,

This questionnaire is part of my M.A study on effect of using technological aids in encouraging classroom interaction.

I would be very grateful if you would respond to the following questionnaire.

Please tick (√) one of the alternatives given next to each statement.

No	Statement	Strongly agree	Agree	Neutral	Strongly Disagree	Disagree
1	Teachers are anxious about the use of new classroom technology due to the lack of knowledge.					
2	The level of the teachers' confidence depends on their personal background about the new digital technology**.**					
3	No improvement is expected from teachers unless they have received more training on the classroom technology.					
4	Classroom technology is very important part of teaching process and better education, so teachers should have good command of these new digital teaching aids.					
5	The students' attitudes towards classroom technology is positive.					
6	The use of classroom technology increases motivation, independence and self-confidence of English language learners.					
7	Students are highly interested in learning English through multi media.					
8	The use of classroom technology enables students to have favorable attitude towards learning.					