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Education and Modern Technologies: Positive and Negative Impacts of Virtual Classes
Case Study: Third Year Learners and Teachers at Boutaleb Mohammed SecondarySchool

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Abstract

The great development of technology around the has led to the development and change ofmost areas of life and one of the most important of these areas is the field of Education.The word Technology is twofold; the first is the word TECHNE which is a Greek term meaning skills and arts, and for the second which is LOGIES meaning lessons or science, and from the above, we can deduce the meaning of Technology is science of skills or Techniques.The purpose of this study is to investigate what is the importance of using Technology in Education, and see whether all learners can or prefer using technology in education.A descriptive research employed to conduct this research in order to knowing how can this science impacts teaching learning process with using Questionnaire as tools.

Key-words: Distance learning- virtual classes- online learning – virtual process

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General Introduction

Technology is the study and transformation of Techniques/Tools, and machines created by humans. Technology allows humans to study and involve the physical elements that are present in their lives.

According to Soviet Union and Russia '' Education is the socially organized and regulated process of continuous transference of socially significant experience from previous to following generation. Educational Technology is a field of study that investigates the process of developing the instructional environment and learning materials in order to improve teaching and learning. This is variously resources related to educationaltechnology:

A/ The Human resources:

The human element is considered as the first element in educational technology, and this exemplified by teachers assistance an official in charge of educational institutions as well as indirect elements such as: Military, Policeman, engineers, Doctors….etc.

B/ Teaching Methods:

There are many teaching methods such as: Brainstorming, Discussion styles, Workshops, and Group participation.

C/ Places of Learning:

There is lot of places such as: Schools,Universities…ect.

I.   Research questions:

-This study is based on the following Questions:

1/ To what extent does the use of Modern Technologies impacts on Teaching and Learning?

2/How can Modern Technologies help both teachers and learners?

II.   Research hypotheses

-   To address these Research Questions, we formulated the following Hypotheses:

1/ Using some forms of Technology is of a great benefit for learners, as it responds to the different learning styles.

2/ Integrating modern technology in classrooms makes teaching/learning process more effective, as it facilitates it and helps to ease access to huge sum of information.

III.   Research objectives:

Investigate learner's preferences

Investigate learner's attitude

IV.   Study design:

Since our research aims at investigates the importance of using technology in education among secondary school learners, the description method seems to be the appropriate.

V.   Population:

Since the purpose of study is to investigate the importance of using technology in education; the case of third year Boutaleb Mohammed secondary school would be relevant to our study.

a) Learners'sample :

This study deals mainly with a simple of six (6) secondary school classes composed of 178 learners.

b) Teachers sample:

The study deals with a sample of twenty teachers from the same institutions.

VI. **Data collection tools**:

To enhance the work and achieve the research objectives. Two data tools were designed.

1. Learner's questionnaires

The questionnaire devoted for third year secondary school learners. It aims at obtaining their preference and attitude towards virtual classes. It consists of six questions.

2. Techer's questionnaire:

Another questionnaire was designed for the teachers from the same institutions it aims also to obtaining their preferences and attitude towards virtual classes.

VII. **Structure of the study:**

The current investigation examins teachers and learners of Boutaleb Mohamed secondary school preferences and attitude towards virtual classes. This study aims to know what is the importance of using technology in education and how it helps both teachers and learners.
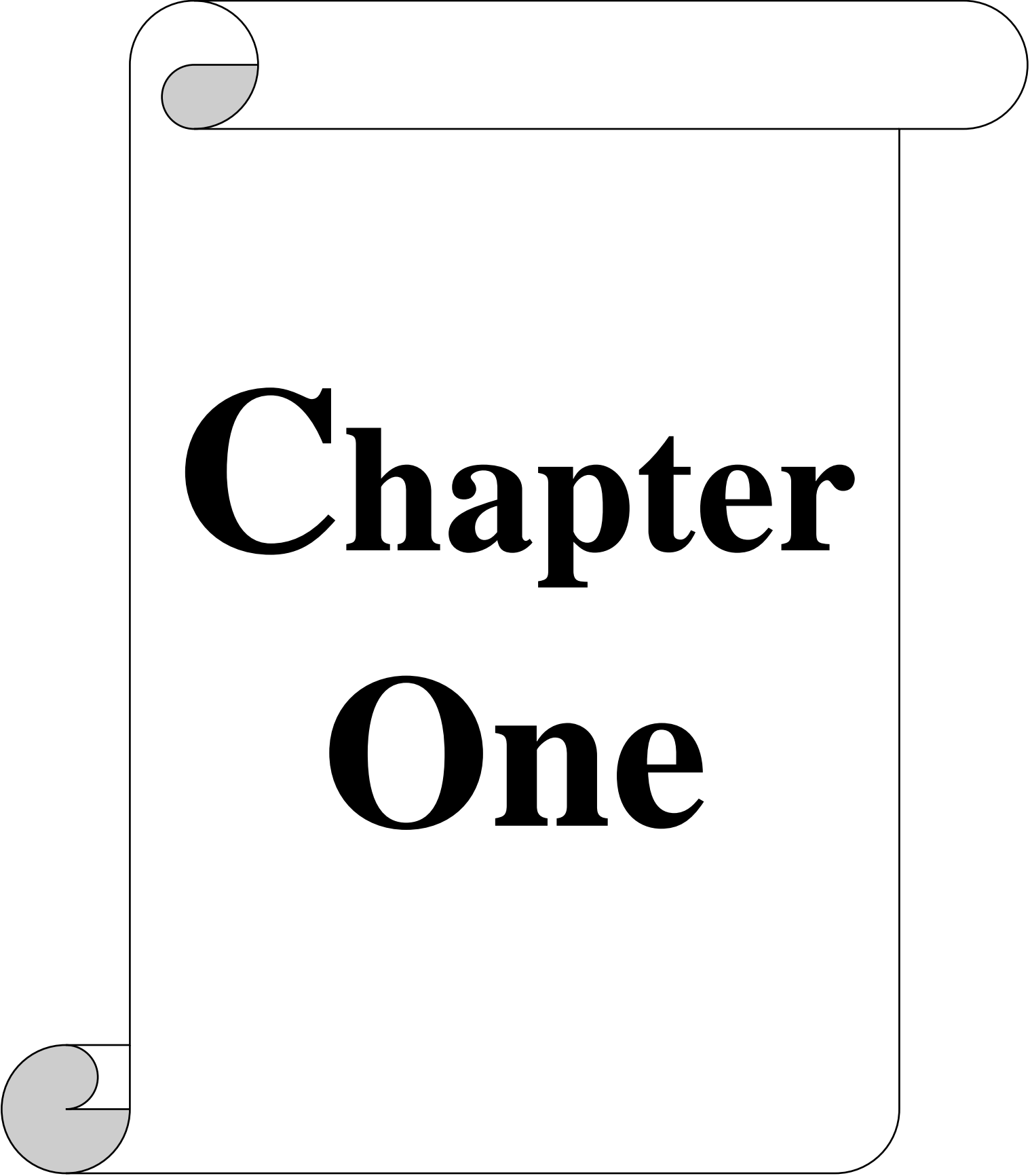
- In the first chapter including the literature review and the main barriers of modern technology use. After reading the first chapter, one can have an idea about the history of using technology in education.

- The second chapter stresses on defining the positive and negative in pacts of virtual classes, the aim of this part was to give an overview about virtual classes.

- The third chapter, is the practical part all through this chapter and along sicle a concise statistical data analysis.

We come finally into specifying the data gained.

Limitation of the Study:

the questionnaire was answered by 178 learners, which took a long time to analyse the results.

The number of professors who answered is small compared to the number of learners, which did not help to determine the results accurately.

Chapter One

Chapter One

Modern Technologies and its Impact on the Educational Process

History of using modern technologies in Education

To effectively evaluate new technologies usage within a classroom setting, how technology is used must be at the forefront of the discussion. Effective student usage of technology relies on technology integration, not technology as a product or outcome. This is the difference between students using technology to create something engaging versus students using technology as the end goal. When students are engaged in a lesson, they are more likely to retain the information (Usher, 2012). For example, researchers found that students engaged in a math lesson that utilized technologiesas a part of the interactive experience were more likely to not only participate but also to encourage others to come to the same conclusions on math problems (Arnesen, 2013). This effect was corroborated by researchers finding that laptops can create learning environments that are more stimulating and can enhance the conversation occurring within a classroom (Devasagayam, Stark, &Watroba, 2013). A crucial component of this successful technology integration appears to be a student-centered approach (Johnson-Martin,2014), where teachers have a strong background in pedagogy prior to incorporating ICT into their lessons (Grant, Ross, Wang, & Potter, 2005). Effective technology usage in the classroom focuses on integration to the lessons, not a focus on the technology as the activity itself.

Technology and education:

Technology integration in education does not begin and end with bringing laptops or other mobile devices into a classroom. Integrating technology within a classroom can be a difficult process for many educators, especially those who lack a strong belief that they can be successful or lack a solid educational foundation (Hall & Martin, 2008; Johnson-Martin, 2014). Often, it is assumed that a teacher's background knowledge of technology or technology-related skills is enough to effectively incorporate technology into a classroom; however, this is generally a false assumption (Hall & Martin, 2008; Ilhan & Ilhan, 2013). Background knowledge is not sufficient for effective implementation; teacher competency using technologieswithin the classroom is largely dependent on training (Lawrence, 2018). With training an essential component of newtechnologies **use** within the classroom, it is essential to employ training methods and procedures that teachers are willing to invest in.

When schools invest money in integrating modern technologies without appropriate training, they often find that teachers are hesitant to adopt that these technologies into their planning without strong foundations. When planning with it does occur, its effectiveness and level of incorporation often varies based on teacher's technical and pedagogical knowledge (Hall & Martin, 2008; Ilhan & Ilhan, 2013;

Teachers and modern technologies usage:

Teacher's personal feelings are a significant determiner of whether technology will be integrated with a classroom, with many teachers considering how it will impact them personally, before considering the impact on students or the classroom learning (Donovan et al., 2007). Hall and Martin (2008) find that teachers feelings toward their own personal technology ability, exposure to PD related to ICT use, and years of experience all influence whether or not a teacher will incorporate technology into their lessons. When key barriers to

technology integration are removed, such as availability and access to devices, availability of materials, and teacher's beliefs, teachers tend to incorporate technology more meaningfully (Lowther, Inan, Daniel Strahl, & Ross, 2008). Teachers who receive training related to technological knowledge and pedagogical knowledge and how they overlap and intersect plan more student-centered lessons that focus on thoughtful integration of technology (Harris & Hofer, 2011). When training is not provided or prior ability level is not considered and accounted for, ICT usage in a classroom setting can have mixed results, ranging from full implementation to no utilization at all.

Barriers to modern technologies Usage

Not all barriers to moderntechnologiesusage are related to the instructor; some are related to the course design or the structure. In a Tennessee district, researchers investigated whether or not their implementation program would assist teachers in incorporating technology within their school (Lowther et al., 2008). Researchers reported that as a result of the program, there were significant changes to technology culture, teacher confidence in technology integration, and student technology usage (Lowther et al., 2008). As early as 1999, in the infancy of technology integration in schools, Ertmer (1999) recognized two types of barriers to change for teachers, internal and external. It was noted that much was done to remove these barriers; however, at the time, significant research was not conducted to define the link to these two barriers.

These factors were noted and expanded upon by a multitude of researchers (AgyeiVoogt, 2014; Ahmad et al., 2016; Bettis, 2015; Çetin, 2016; Hew & Brush, 2007; Tallvid, 2016). Through their research it has been determined that there are **four** main barriers to **modern technologies** usage. **First**, a lack of technical competence, or skill, on the part of the teachers was showing that they were hesitant to incorporate technology into their classroom (Agyei&Voogt, 2014; Hew & Brush, 2007; Tallvid, 2016). **Second**, even when technical

competence was present, there was often noted a lack of resources or training on how to use the materials provided within a classroom setting, suggesting even when teachers know how to use technology themselves, they may still struggle with effective pedagogical implementation (Ahmad et al., 2016; Hew & Brush, 2007; Tallvid, 2016). For example, teachers with knowledge of business office-style software may struggle with how to implement these programs effectively in an educational setting (Hew & Brush, 2007). **The third** issue noted was a lack of time for teachers to prepare and implement technology within their classrooms. This lack of time was both classroom time and preparation time, with classroom time simply being the time it takes to distribute, log in, and navigate through devices (Bettis, 2015; Sharma, 2004). **The final** barrier to integration was a perceived lack of control noted by teachers. There are times when the district or state requirements can seem to be at odds with technology integration. For example, this was noted by a researcher who found that teachers often felt as though curricula were too restrictive to effectively implement technology (Çetin, 2016). If the common barriers to modern tech classroom usage can be removed, research suggests that teachers may implement more technology and at more advanced levels within their classrooms (Hew & Brush, 2007).

Challenges related to Technology

Due to the geographical location of many regions, internet issues are the most problematic issue in online teaching and learning, especially for those living remote countryside areas and villages. Internet connections are unstable and costly due to which having a good and high-speed internet connection is rare and unaffordable.

Lack of digital competence is another challenge hindering the online teaching and learning process, especially in teachers. Many teachers and several students lack the required skills to access the internet on developed devices and deal with the learning management system and its tools or engage in active teaching and learning.

Majority of the educators and the learners in the city lack computer literacy and fail to solve hardware or software-related issues on time and depend on specialized shops and computer-repair technicians that wastes a lot of time and money.

Technophobia is a significant emotional obstacle in learning and teaching online. The study reported some teachers as well as students fearing the evolving technology and facing troubles using it and feeling negatively towards it. This leads to frustration which causes them to withdraw from the frustrating situation, making them do not want to continue learning or teaching in frustrating environment and putting them always under fear and pressure. This largely affects their teaching and learning performances especially in important subjects.

Lack of digital resources for learners is another hamper in implementing effective teaching. Teachers waste a lot of effort and time in searching related resources and references or making it themselves. There are also some resources but are not easy to access for teachers and students. All technology-related challenges of this study support the findings of Akhter (2020), Hakim (2020) and Mahyoob (2020) which reveals that technological obstacles are the key challenges hampering effective online teaching and learning process.

Review of related literature

Many researchers have made numerous studies on virtual classes and their roles in learning and teaching. Researchers from different parts of the world conducted studies about engaging virtual classes in the education process. In this part, the researcher presents some of these related studies. Some studies relate to investigating teachers' and students' reflections on their experiences with virtual classes, and some relate to engaging learners through virtual environments. Others are about the advantages and disadvantages of virtual classes.

Students and teacher's perceptions of online classes

Conrad (2004) investigates teachers' perceptions of their experiences with online teaching. He uses the term *online learning* to refer to computer-mediated, web-based learning environments like virtual classes. The writer focuses only on asking the participants in the study to reflect on their roles as online teachers. He interviewed five instructors who were engaged in online teaching for the first time in a graduate program at a Canadian university. In the result of his study, he followed Collins and Berge's work (1996) in categorizing online instructional roles into four general areas: pedagogical, social, managerial, and technical. According to pedagogical issues, some of the teachers are happy and interested in that internet technology allows them to present information to their students clearly, and strengths their passion for the subjects. Others disagree on the side of content delivery by commenting that online structure does not give them enough time on specific topics and a lack of physical presence like in **face-to-face** settings. On the side of managing the process of learning online, the instructors mention that each new instructor enters his virtual classroom with knowledge of the cohort model. The cohort model refers to collaborative learning and preparation to teach online and incorporating new technologies.

Additionally, Salbego and Tumolo (2015) investigate students' and teachers' reflections on their experiences with synchronous online classes in Brazil. They aim to obtain the perceptions of students and teachers on Skype language classes in relation to face-to-face classes. The results of this study point out that teachers and students consider that Skype language classes create possibilities for language learning opportunities and their advantages overweigh and more than the disadvantages. All the participants in this study assure that speaking and listening are in advantage of online classes' platforms when compared to face-

to-face classes. The results also suggest that it is possible to increase the development of student language and knowledge through Skype classes.

Cakiroglu (2014) evaluates students' perspectives about virtual classrooms according to seven principles of good practice. Chickering and Gamson (1987, as cited in Cakiroglu, 2014) assert that effective teaching practices encourage seven principles, namely student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning. In this study, the researcher assesses distance learners' perceptions about the quality of course delivery in virtual classrooms at the Faculty of Education in Turkey. The researcher focuses on investigating the quality of distance learning setting in three dimensions (teaching, learning, and interaction) by a questionnaire based on seven principles of good practice (SPGP). After analyzing the questions that relate to interaction dimension, the researcher came up with the following results, student-faculty contact considers as effective element in the virtual classroom, and he got highly satisfactory responses on this side. The researcher also finds that cooperation among students rarely practices in online instruction. In the context of analyzing questions that relate to teaching practices, the researcher finds learners' overall assessments of time on task shows that the students satisfied. Most of the learners indicate that the course is organized in such a manner as to allow them to complete assignments effectively and sufficient time provided for learning activities. The mean response is (M = 3.58) regarding technical problems, especially when the line is busy, negatively affect the lesson time. The researcher states that the feature of lessons recording consider as an important advantage of synchronous sessions and assessed by students as excellent. The researcher receives some negative opinions about the delays in timely feedback. The results of student assessment of the high expectation questions through the virtual classroom are rated as highly satisfactory

(from M= 3.33 to M= 3.99). According to the results of students' responses about questions of learning, most of the students agree that the instructor successes in coordinating the learning activities through the virtual classroom. The participants evaluate the item that the instructor uses different kinds of instructional materials as highly satisfactory. This is convenient for learners to present their talents and is rating as excellent. The researcher in his study presents some of the potential of virtual classrooms for teaching, learning, and interaction, and some suggestions for instructors who wish to use virtual classrooms in their teaching.

Student's reflection over virtual classes:

students (particularly those in rural, remote areas, and small schools) to overcome issues of distance and resourcing. In these classes, students learn through videoconferencing with teachers, emails, contact management systems and relevant websites. The research includes both qualitative and quantitative data collection and was carried out over one year. Overall, the survey data suggests that students have different experiences (some positive and others less positive) with learning in virtual classes. Most students indicate that they are learning more useful study skills, and the learning is enjoyable through virtual classes. The findings suggest that students experience different degrees of success, and comfort in the virtual classroom environment. In the survey data of this research, four key themes selected. These are independence and support, shared learning, e-learning, and personalizing learning. In the analysis of independence and support data, the researchers found that 61% of students think they learn more independently in virtual classrooms than face-to-face classes. Other teachers see that they have a significant role in supporting learners through virtual classrooms. This occurs by adapting their teaching approaches and using different pedagogical strategies to keep students active and engaged. On the side of shared learning analysis as a feature of virtual classrooms, the researchers indicate that shared learning rarely occurs in the virtual classes environment. According to the use of e-learning materials in virtual classrooms, the

researchers found that more than half (53%) of students search the Internet for useful websites through virtual classrooms. Only 58% use their own virtual classroom websites, or other websites recommend by their teachers. The researchers notice that virtual sessions focus largely on communication between teachers, students, and less between students to communicate with each other. In analyzing personalizing learning, the researchers came up with these findings, the most common activities during virtual classes sessions are the exchange of questions between teacher and students where teacher's direct questions to their students rather than vice versa, so exchanges between students were less frequent.

Moreover, McBrien, Jones, and Cheng (2009) conduct a study at the University of South Florida. The study aims to collect students' reflections about their experiences with virtual classes. Elluminate Live is the software that employs in the virtual classroom. The researchers constructed a short, open-ended survey to collect students' responses to virtual courses. Questions design according to transactional distance theory that consists of three elements: dialogue, structure, and learner autonomy. Overall, the students get positive attitudes toward their learning experiences using virtual classes. In analyzing dialogue aspect in the virtual classroom, the researchers find that 91% of students' comments were positive in terms of the quantity and quality of the dialogue experienced. Structure refers to the course organization and its impact on students' participation (Moor, 1993, as cited in McBrien, Jones, & Cheng, 2009). They found that students reveal the need for clear and consistence structure, expectations, and roles in virtual classroom sessions to reduce their experience of distance. Most students agree that synchronous online classes offer convenience. In the findings, the researchers mention some limitations of virtual classes such as confusion that result from too many simultaneous interactions, lack of non-verbal communication, and technology issues.

Engaging learners through virtual worlds:

On the other hand, Iqbal, Neittaannmaki, and Kankaanranta (2010) conduct a study of engaging learners through virtual worlds. They try to explore how virtual worlds could support the engagement for learning. They review the results of studies that utilized the virtual world to engage learners and for education. The researchers state the effectiveness of the use of educational virtual worlds or technologies on facilitating the learning of different subjects and improving students' behavior. For example, several researchers reported the development of learning outcomes in relation to the use of virtual worlds in science classrooms. Based on the literature review, the researchers define *engaged learning* as a situation in which learners are active, and it has five aspects: learner activeness aspect, cognitive aspect, socio-collaborative aspect, behavioral aspect, and emotional aspect. They mention that a virtual environment in education should include three elements, namely education, entertainment, and social commitments, to make sure that learning through the virtual world is meaningful, engaging, and understandable. They state that the virtual world has many benefits or affordances for learners, such as enhancing interaction between students and communication materials. They also mention that a virtual world is fundamentally social and enables collaboration between the learning community in many ways. It also can provide practical ways to create authentic and challenging tasks that are contextual as well. The researchers suggest that virtual classes also offer many new ways to evaluate and assess the progress of students, such as performance-based assessment for engaged learning. They conclude that learning through a virtual world can be engaging for learners and can affect their test scores as well as their attitude and motivation toward it.

The advantages and disadvantages of virtual classes

Yadav (2016) discusses the advantages and disadvantages of using computers and the Internet in education and discusses the role of teachers in Internet education. Yadav states how the use of the Internet and web lead to the significant changes in educational models and in

communication tools that are adapting easily with learning methods. He mentions that virtual classes are a new term of E-learning, where the students will be present with their professor and fellow learners in a classroom via the Internet. He also states that the availability of different communication materials between teachers and students in virtual classes considers as a beneficial role is of synchronous online classes. It plays an important role in maintaining interaction. Moreover, he points out the interaction capability of the synchronous virtual classroom and the importance of learner-learner, learner-instructor, learner-content, and learner-interface interaction within the virtual classroom. He also concludes with the need for training and technical problems consider as disadvantages of virtual classes.

The role of technology in distance education

Similarly, Danesh, Bailey, and Whisenand (2015) highlight the role of technology in interaction and communication as relates to distance education. They state that many universities in higher education are expanding their online course. They focus on technology and media as its relation in collaboration, interaction, and communication. They also mention that the increasing interest in distance education attributes to two significant factors. These factors are the progress of computing and telecommunication technologies, the second is the change in the demographic population of college students. They also assert that communication plays a significant role in the success of distance education and is a collective activity. Effective communication is possible when participants share a similar ground relates such as mutual knowledge, beliefs, and assumptions in a conversation. According to extending the interaction model by Moore's interaction model in 1989, Danesh et al. (2015) point out that there are three essential types of in distance education interaction. Learner-content communication occurs where the learners obtain intellectual information from the session. The learner-learner occurs through exchanging information, ideas, and dialog among students about the course. The learner-instructor interaction involves the feedback and

dialogue between the teacher and learner. To determine the impact of various interaction methods, use in distance education on the success of the educational outcome, the researchers constructed a questionnaire. The courses were from both Master of Business Administration, and Management Information System disciplines and all classes use a mixed-mode format, combing face-to-face and online classroom discussions. The results reveal that sixty-two of students showed that learner-instructor and learner-learner interactions as useful discussion modes and play an essential role in the success of the class when use synchronously and asynchronously. Sixty- four of the students mention that they participate more in synchronous sessions. Secondly, the students participate more in online sessions than in face-to-face discussions. Thirdly, the combination of face-to-face and online classrooms discussion is preferable to understand the materials better.

Definition of the virtual world:

Bower, Groom, and Cram (2010) define virtual worlds as an electronic environment that minimizes sophisticated physical space, where people can interact with each other via virtual objects. They also describe a blended reality as a combination environment where the physical and virtual combined in the service of interaction goals and communication. Their study investigates the use of a blended reality environment for learning and teaching in a tutorial setting. In their study, a virtual classroom includes a live video stream of activity that is occurring in the face-to-face classroom. The face-to-face classroom includes a projection of virtual classroom space. Through that, they could examine issues and potentials associated with the use of blended reality classes. Their project evaluates how people participate in physical and virtual worlds. The participants were three researchers, students, and seven volunteers associated with the department of education at Macquarie University by using several items of equipment. Their study points out to some advantages for learning and

teaching, such as enhanced remote access to face-to-face classes, increased online interaction, and the influence of both worlds within the one learning environment depending on needs.
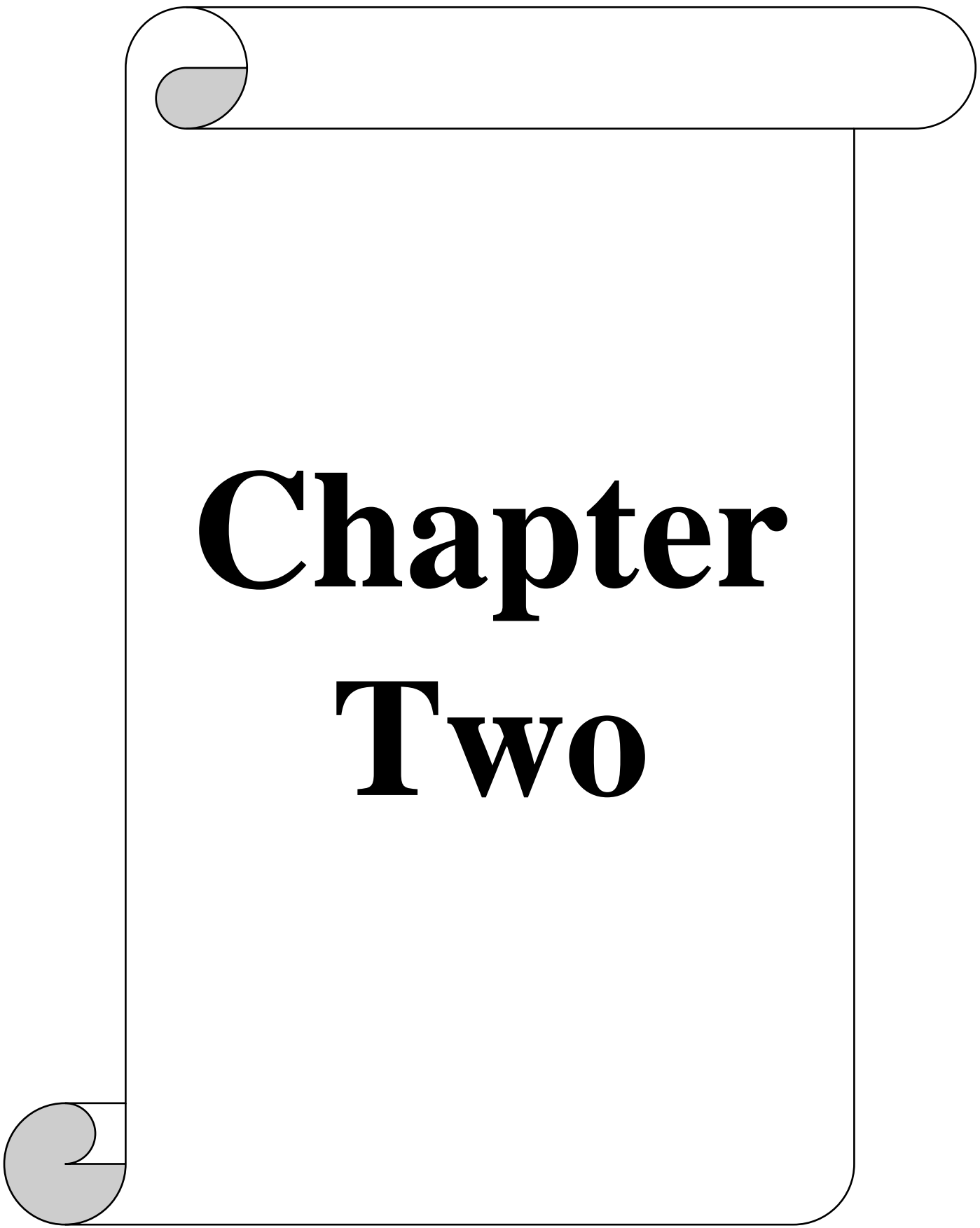
Conclusion:

Using modern technologies in a classroom is not a new concept; however, there are new technologies being used that teacher need to be prepared for. It is known that technology can improve student engagement, and when student engagement is high, so is retention of information (Usher, 2012). There are a variety of devices being used in classrooms from Chromebooks to iPads to traditional laptops. All of these devices present significant benefits (Capra, 2014; Chou et al., 2012; Kay &Lauricella, 2011). Benefits to utilizing devices include improved writing skills (Peckham, 2008; Sharma, 2004) and increased student engagement (Bebell& Kay, 2010; Bebell&O'Dwyer, 2010; Harris & Al-Bataineh, 2015).

There are also some noted drawbacks to device use. Students may become too reliant on devices, diminishing skills, such as recall and note-taking ability (Goodwin, 2011; Mueller & Oppenheimer, 2014). Students may also struggle with staying on task and multitasking at inappropriate times (Kraushaar& Novak, 2006). Many frameworks have been developed to support teacher and administrative implementation of modern technologies.

Different frameworks can be applied to different situations with differing results. Frameworks can sometimes cause confusion as to how they should be applied (Hamilton, Rosenberg, &Akcaoglu, 2016; Hilton, 2016). Integrating more technologies in a classroom does not guarantee high engagement, and it may be difficult to get technology into a classroom without teachers feeling comfortable with that technology (Ertmer, 1999; Grant et al., 2005). PD is a way to encourage

teachers to change their practices and offer them support. When appropriate PD is applied, there are significant growths in both student achievement and teacher integration of technology (Curwood, 2011; Harris et al., 2015; Kihoza et al., 2016; Sahin, Top, &Delen, 2016).

Chapter Two

ChapterTwo

I. What is aVirtual class?

Virtual classroom uses video conferencing for the purpose of allowing teachers to Virtual classes are a digital learning environment that allows teachers and learners tocommunicate via the internet in real time.

hold live lectures and discussion with students in an interactive environment. Virtual classes are meant to reoccurrence the experience of virtual classroom, with theadded usefulness of file sharing, instant feedback and interaction and are effective in distance learning situation.

A Virtual Classes refers to online system that allows students and teachers to communicate and cooperate.Virtual classroom is part of larger learning managementsystems they are highly allocatable and are accessible to users on a variety of devices, like Smartphones Laptops…

The Virtual classroom environment includes human contact and is a virtual element of classroom instruction not available on video-on-demand courses and rarely missed in a virtual classroom.Teachers interact with learners in real time, learners can voice theirquestions and interact with similar peers how they would be in normal classroom and if it is over in the internet.

Physical classrooms ofen limit seating to a maximum number of seats, so that students can sit confortably and have sufficiently space to themeselves by constract, virtual classrooms use virtual meeting solutions that have an above cap on numbers, allowing more students to attend fun classes in one time.

II. Positive impacts ofVirtual Classes:

1- Access to coursework from anywhere at any time:

You can study and complete your coursework anywhere and at any time, no need to step out of the house to go to school to learn also, study at any time. All you need is your smartphone

or other digital device. Once you log into the student's portal on your high school's website online you can access assignments, post homework, watch faculty presentations, contact your teacher or classmates, receive comments, and access your test scores.

2- Combination of structure and freedom:

Online degree programs are built on a structure of weekly tasks and due dates that you must fulfil, whether it's taking an online test; posting homework, papers,and projects;watching a faculty presentation; or participating in a discussion with fellow classmates. However, within the program's structure you have the freedom to choose the appropriate time to participate that coincides with your schedule.

3- Effective time management :

Online education provides a welcoming environment for working adults, who need to balance work, family, and new requirements for returning to school immediately. You cansave hours per week without commuting to and from campus classrooms and this is only the ginning. Going back to school increases your time management skills because you have to be disciplined and find time to study.

4-Expended world view:

Online degree programs attract students around the world, who present different news agency from a variety of cultures. You may have prospects to work on group projects and collaborate with international classmates. Other actions, situations, and problem-solving techniques can inform your approach to problems and opportunities.

5-Immediate feedback on tests:

When you are enrolled in one of the many degree programs available online, you do not have to worry and wait for days to get the test results as the test is done online and usuallyit is recourded upon completion you can quickly see where you did well or need improvement

when submitting papers and projects will use a special drop-box where your teacher can access your assignments confidentially and provide written or video notes.

6- Sharpened digital skills:

As you increase your knowledge and skills in your field of study, you will also work on refining your digital skiils on the most advanced online educational technology. As you continue to learn and study in an online world; you will become credible and high productiveness using reactive online tools such as online tests, drop boxes for homework…

III. **Negative impacts of Virtual classroom**:

1/Safety:

Virtual learners are often predisposing to the demerits of the internet. Theysubject

to inappropriate websites and adverts, scammers and hackers. Their safety is at risk aswell. Also, unlike brick-and-mortar schools, students are not under the constant supervision of a teacher (Bell,2001).

2/Lack of Interaction:

Online learners lose face-to-face interaction, which dampens their communication skills because they cannot communicate with fellow learners and high schools on daily bases.They also miss out on personal instruction from teachers as well as classroom discussion (IIIinois online network, 2010).

3/Lack of motivation:

Online learners must demonstrate self-discipline in order to be successful. Students who have trouble with temporizing and managing time will have difficulties completing? their work and avoiding dispersals. Virtual schools also lack the structure found in traditional schools (IIIinois online network, 2010).

4/Unpreparedness:

Students enrolled in virtual schools are not prepared for life's challenges.They often lack the social and academic skills to succussed at next level. Many have trouble adapting the challenges of collegiate life.

5/Regarding assessment:

Teachers should create challenging tests with questions which are not easly accessible over the internet because learners have access to the content. Also, teachers should be pliable with any problems that the learners may have during the test. Since learners are at home, they are not always in a private space and may getdistracted and interrupted easly.

6/Rapport:

Report is another problem that may affect the online class environment, as it can be difficult to build rapport without face-to-face contact. Teachers lose body language andother hints that allow them to evaluate the engagement of the class.

IV. Features of virtualclassrooms :

1/Seeeveryone :

Virtual classes are not just seminars. They are a dynamic space for a small to a larger group of poeple to learn together. As such, everyone should connect with their webcams and microphones. Trainer scan see every learner to get visual stimulators about how lesson is going and remote learners get a great sense of community.

2/A digital whiteboard:

Is a reactive whiteboard that reach you to draws ideas with learners in real time? Most of digital whiteboard include layout that allow other participants in the class to empower the tools as well. Key tools are free draw, shapes, text editor, and formatting options to add some personality.

3/Cloud Recording:

Registering your classes is the perfect way to enhance learning after class and this is also, a major added value for the virtual classroom. You can record physical classes but there are a lot of production costs associated with this some virtual classroom recording solutions allow you to record directly on your computer. I recommend those who have Cloud recording options as recordings are instantly available to share with your learners.

4/Screen Sharing:

Screen sharing is the ideal way to show remote learners how to use specific software

or how to lead critical functions on the computer. This is a very important feature for those teaching coding as well as teaching sales team on how to manage new customer relationships.

5/Breakout:

The best part of virtual classrooms is that they encourage learners to interact with each other. One of the number one reasons MOOC's have such high exhausting averages are lacking of interaction with the trainer and with other learners. Breakout

rooms are the ideal tool for promoting peer-to-peer engagement.Devide learners up to smaller group of learners then push them to breakout rooms to achieving a group learning activity.

6/Real-time Quizzing:

We need to evaluate learner's success. Assessment is key to measuring learner success. Of course, you can take tests in a number of ways. Virtual classrooms often include features for real time exams. This allows instructors to monitor tests in them virtual classrooms as if they were in the same room. You can see learners taking the exam and unlike the physical classroom, you can see the results as soon as they enter in real time.

 V. **Types of Virtual Classes** :

1/Tutorroom :

This type of form cheapens every learner viewing most of their online projects at home. However, the learners can have a one-on-one session with their teachers. You do not have to

attend the class every day. You can attend some lessons for two days of the week according to your schedule. This platform is changing the experience of many learners out there through the online learning method.

2/Rotation Model:

This includes a reference topic, which learners can be a part of. It is a popular form of blended learning.Students will rotate one schedule with or without the teacher'sgrade.
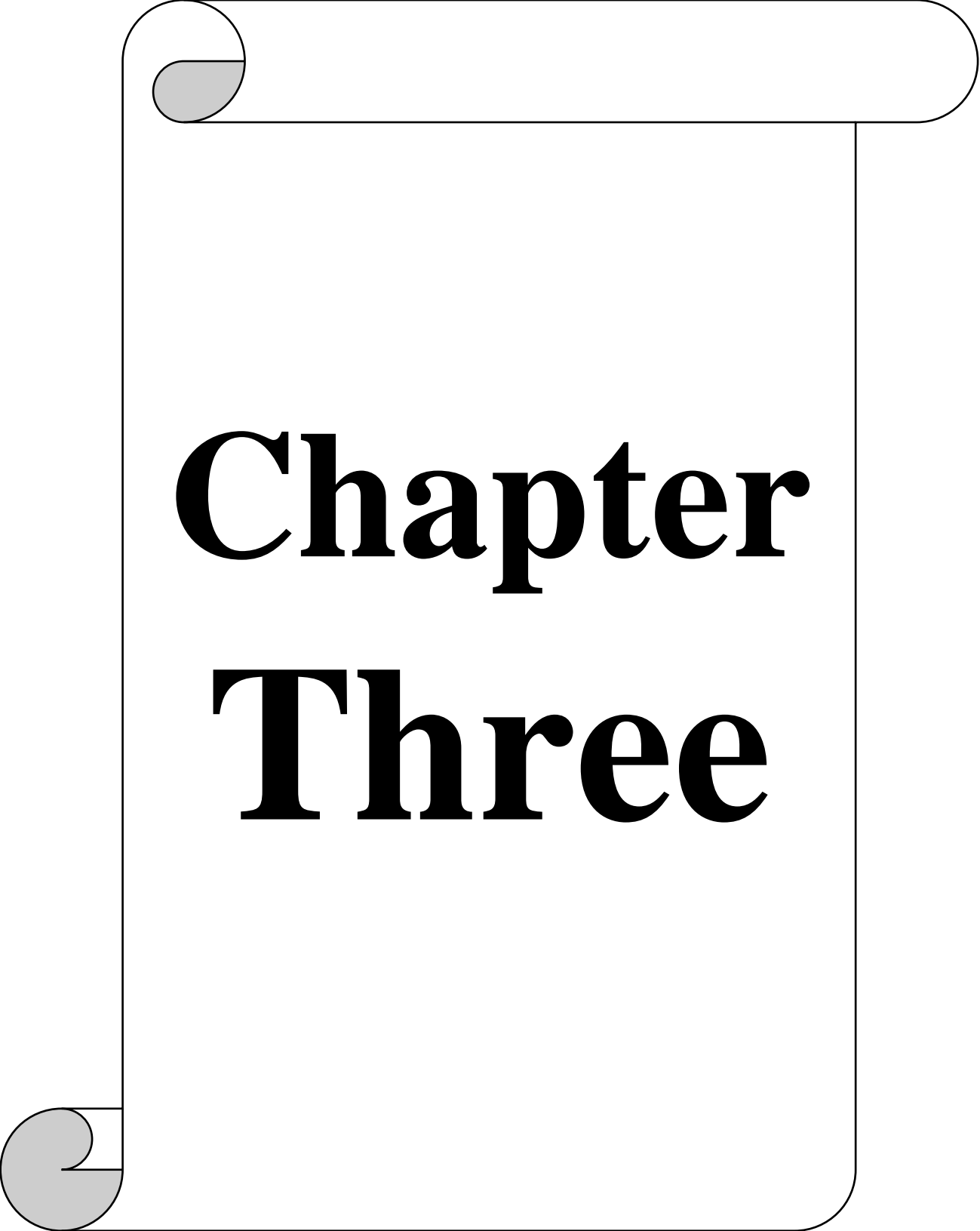
Most of the time, students rotate during the group discussion.

3/Fully Virtual Classroom:

It is a model that aimed at research, conceptualization, and design. All school works should be done online; then, it means, learners will never meet others to have a reactive session. Yet, they can communicate though simultaneous virtual classroom app.

4/Flex Virtual classroom:

This is a model that focuses on educating non-traditional learners.On this platform, instructions are provided, as well as educational materials.Teachers are always available and learners can devise a new concept independently. Learners can always leave the classroom and attend any time they want.

Chapter Three

Chapter Three

Field Work

The current chapter's field investigation attempts to shed light on using virtual classesamong 3rd year learners at Boutaleb Mohammed secondary school and how it affects the teaching and learning process.Two questionnaires make up the practical side of this study, the first questionnaire was distributed to learners, while the second was given to teachers of the same institution. It is also devoted to the statistical analysis of the findings.It contains the chosen method that suits the research, the sample, the research

design and the tools needed to fulfil the study.it concludes with a general conclusion.

1. Research Methodology:

To conduct the investigation, two questionnaires have been chosen for learners and teachers alike. The research instruments for data analysis will be presented statistically using relative circles. To acquire accurate data, this section comprises a research sample and case study, and research tools.

1.1 Research Sample and Case study:

This research is undertaken in Boutaleb Mohammed secondary school, and the targetgroup in this investigation are third-year learners, one hundred and seventy-eight (178) learners are selected randomlyas sample and twenty teachers are respond to the questionnaire.

1.2 Researchtools :

The investigation is going to be based on two questionnaires;The first questionnaire hasbeen distributed to learners, while the second has been given to teachers.

2.Learners Questionnaire :

2.1Learners Questionnaire description :

A questionnaire six (6) questions regarding learners' reflections on their experiences with virtual classes and its role in enhancing communication skills at Boutaleb Mohamed Secondary school learners who have an experience with virtual classes.
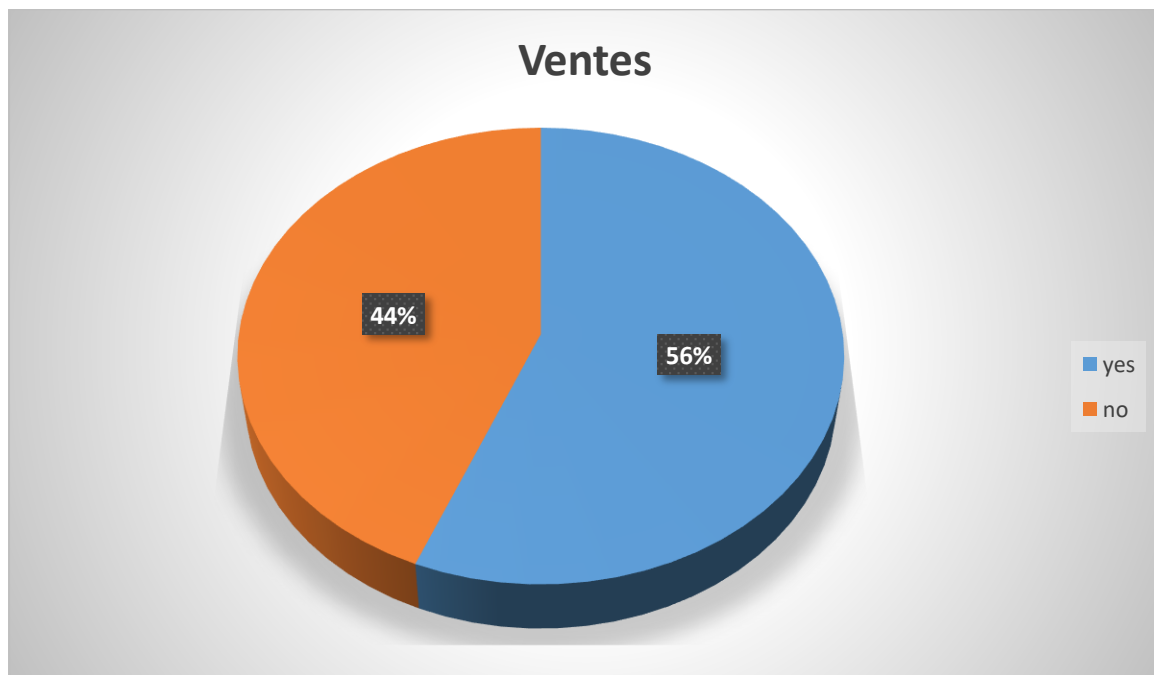
2.2 Learners questionnaire analysis :

Figure1: Learners preferences

Question 1:

Do you prefer using virtual classes?

Yes   No

Figure1:

Relative circle represents learners preferences of using virtual classes in their learning.

Through relative circle data, it becomes clear to us that most of them 56% learners preferusing it, while wefind 44% learners do not prefer using it, and this difference becausethrough virtual classes you can learn anytime and anywhere.

Question2:

What kind of attitude do you have towards virtual classes?
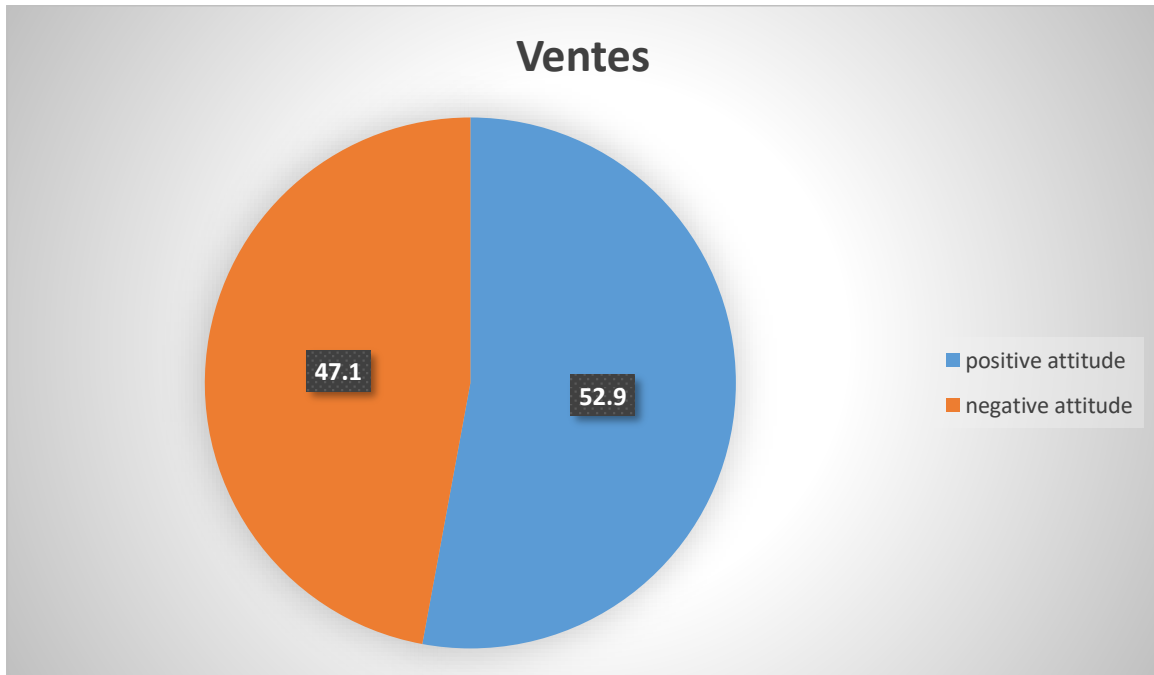
Positive attitude   negative attitude

Figure2: learners attitude.

Figure2:

Relative circle represents learners attitude towards virtual classes.Through the information in

the relative circle, we can see that most of learners have positive attitude

towards it around 52.9%; In the other hand 47.1% of learners have negative attitude,because it

helps them to easy access to the information.

Question 3:

Do you think that using a virtual class can cause difficulties or problems that may handicap

your learning process?

Yes   No
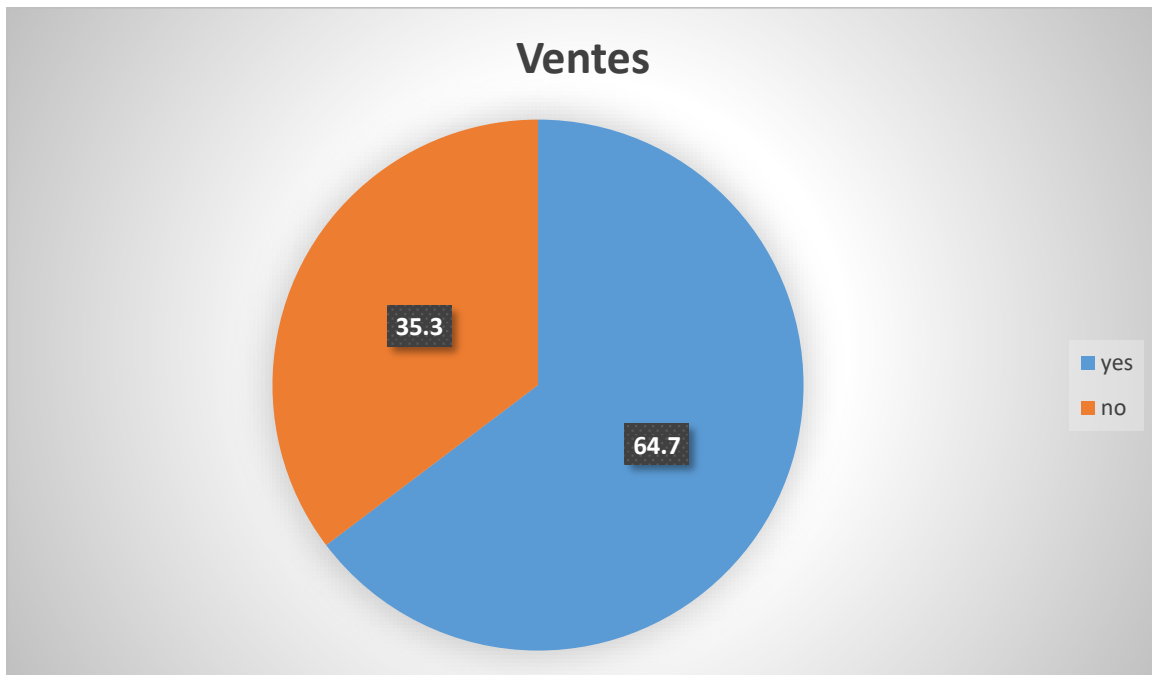
If yes,list the major difficulties you have encountered.

Ventes

35.3

64.7

- yes
- no

Figure3:

Relative circle represents the extent to which virtual classes can caus difficulties that affect the learning process.

Through the relative circle data, we find that most of learners are facing difficulties 64.7%, while only 35.3% do not have difficulties.

Here are some difficulties:

- Poor internet connection.

- There medium learners that cannot understand lessons without teachers help, some countries cannot provide web connection to all learners like undeveloped countries.

- Technical challenges are the main problem that may face the virtual classroom, I have less technological skills.

- Slow internet, inability to access to such classes.The lack of instruction.

- The main problem is connection distraction, technical problems.

- Communication trend will be more motivated and visual aids are more efficient.

- The network is the major problem that we have in Algeria, lack of materials, the lack of evaluation.

Question 4:

Rate your opinion of the statement '' Virtual classes facilitate the learning process in the same manner compared to face-to-face classes''
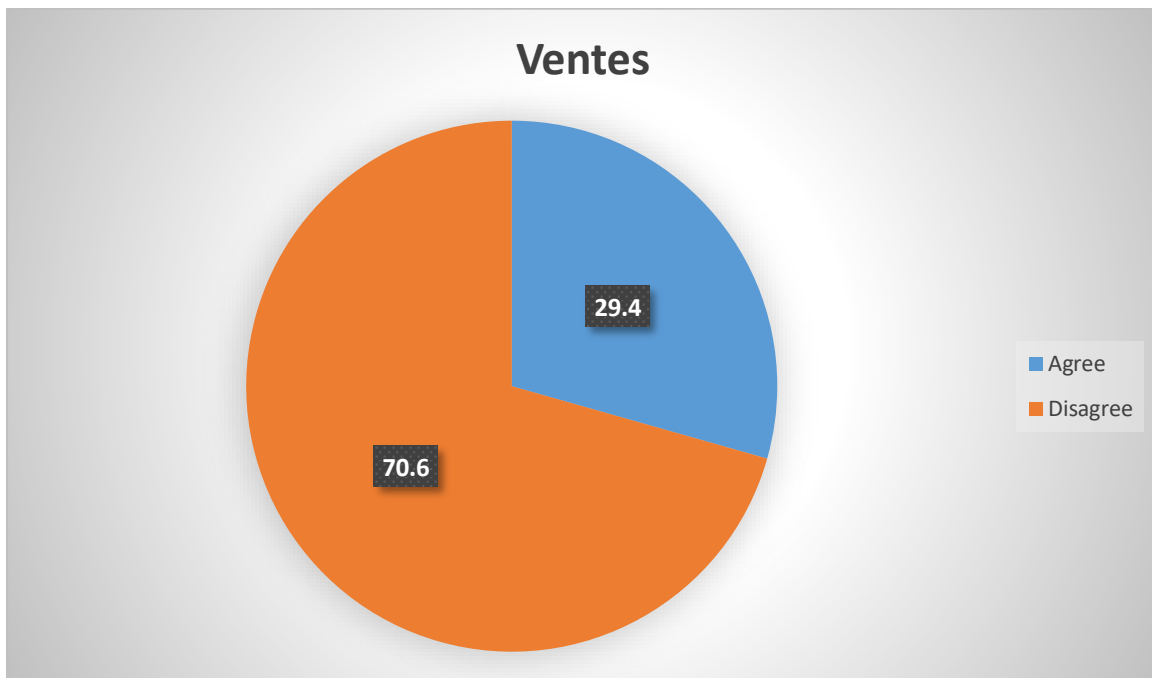

Figure4 Face-to-face classes Vs virtual classes

Figure 4:

Relative circle represent learners opinion about the statement ''virtual classes ...face toface classesThe data shows that around 70.6% are disagree with the statement, and around 29.4% are agree with, and this difference may be because that there are some learners who cannot understand without teachershelp

Question5:

Based on your experience, do virtual classes play a significant role in enhancing communication skills?
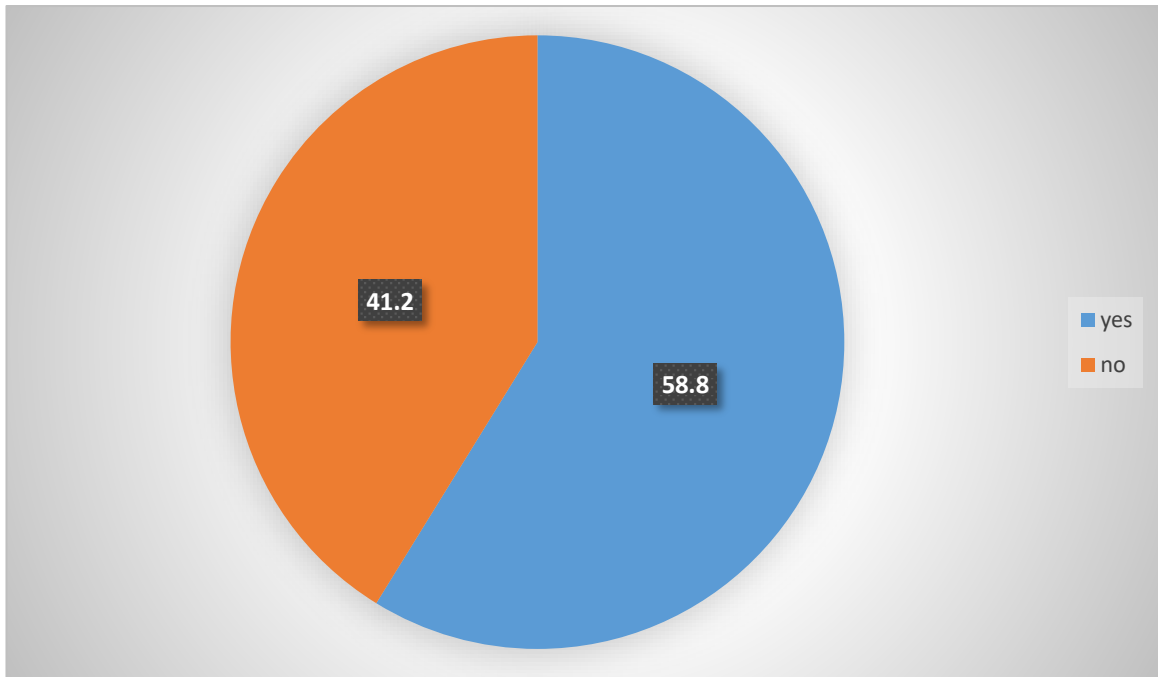
Figure5 The role of virtual classes in enhancing communication skills.

 Figure5:

Results shows that around 58.8% are agree with this idea, on the other side 41.2% aredisagree

with it; because virtual classes improve technical skills, it will often get to meet and learn with

children from all over the world.

Question6:

In your opinion, what are the advantages and disadvantages of a virtual class?

6.1/ Advantages of virtual classes:

- It improves technical skills.

- It helps slow understanding learners

- It allows learners to catch up the lessons inconfortable way.

- It makes learning process joyable to learners.

6.2/ Disadvantages of virtual classes:

- There is no interaction between teachers and learners.

- Not all learners have access to network.

- The lack of the availability of materials

-   Learners have their own smartphones, laptops … that may be a source of distruction.

3.Teachers' Questionnaire

3.1 Teachers' Questionnaire description :

Aquestionnaire contains six (6) questions regarding teachers reflection on their experiences with virtualclasses and its role in enhancing communication skills at Boutaleb Mohamed secondary school teachers who have experience with virtual classes.

3.2. Teachers' questionnaire analysis:

Question 1:

Do you prefer using avirtual class in your teaching rater than a face-to-face classroom setting?

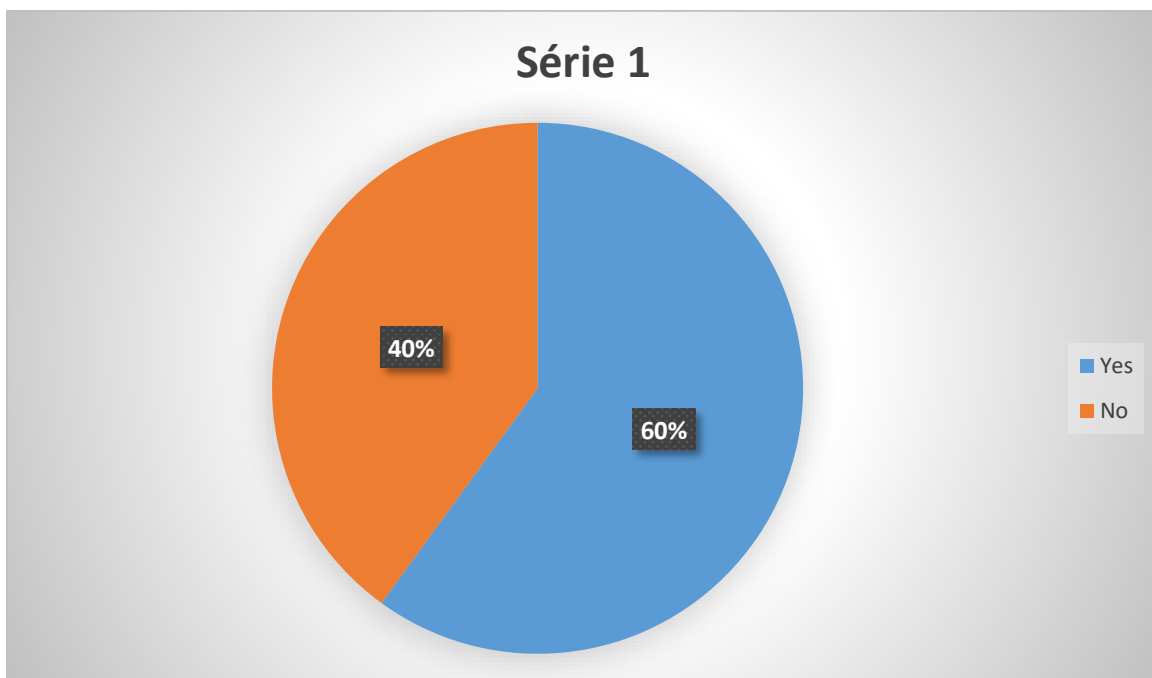Yes   No

Série 1

40%

60%

Yes
No

Figure1 Teachers preferences

Figure1:

Relative circle representsteachers preferences of using virtual classes.The results shows that

60% teachers prefer using it and only 40% teachers do not pefervirtual

classes, because it helps them to introduce the lesson anytime they want.

Question2

What kind of attitude do you have towards virtual classes?

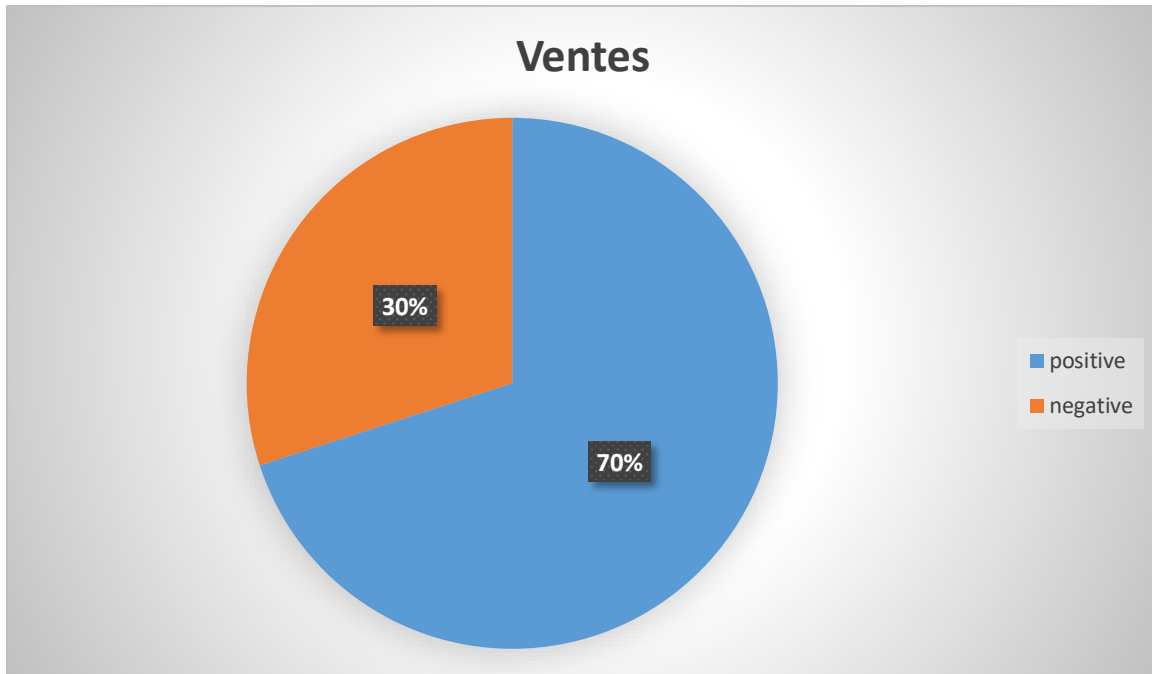Positive attitude   Negative attitude

Figure2 Teachers attitude

Figure2:

A relative circle represents teachers attitude towards virtual classes.

The relative circle data shows that most of teachers have positive attitude towards it because it gives them much of time to explain the lesson.

Question 3:

Do you think that virtual classes can cause difficulties or problems that may handicap your teaching process?

Yes   No
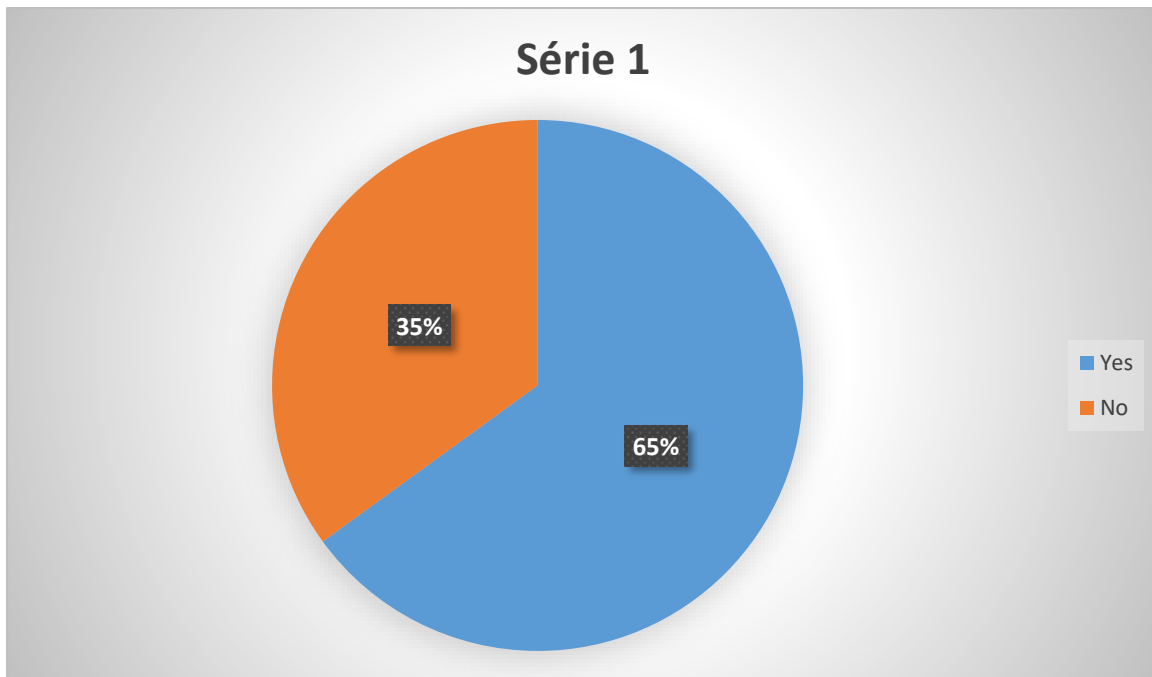
Série 1

35%

65%

■ Yes
■ No

Figure 3 Virtual classes difficulties

If yes, please list significant difficulties.

Figure 3:

Relative circle represents the extent to which virtual classes can affect the teaching process;

around 65% of teachers are facing difficulties with it.

Here are some difficulties:

-   It limits the ability to communicate effectively

-   It makes teachers unable to know which learner understand or not.

-   The lack of facial expressions and body language.

Question 4:

Are you agree with the statement that vitual classes facilitate the teaching process in the same

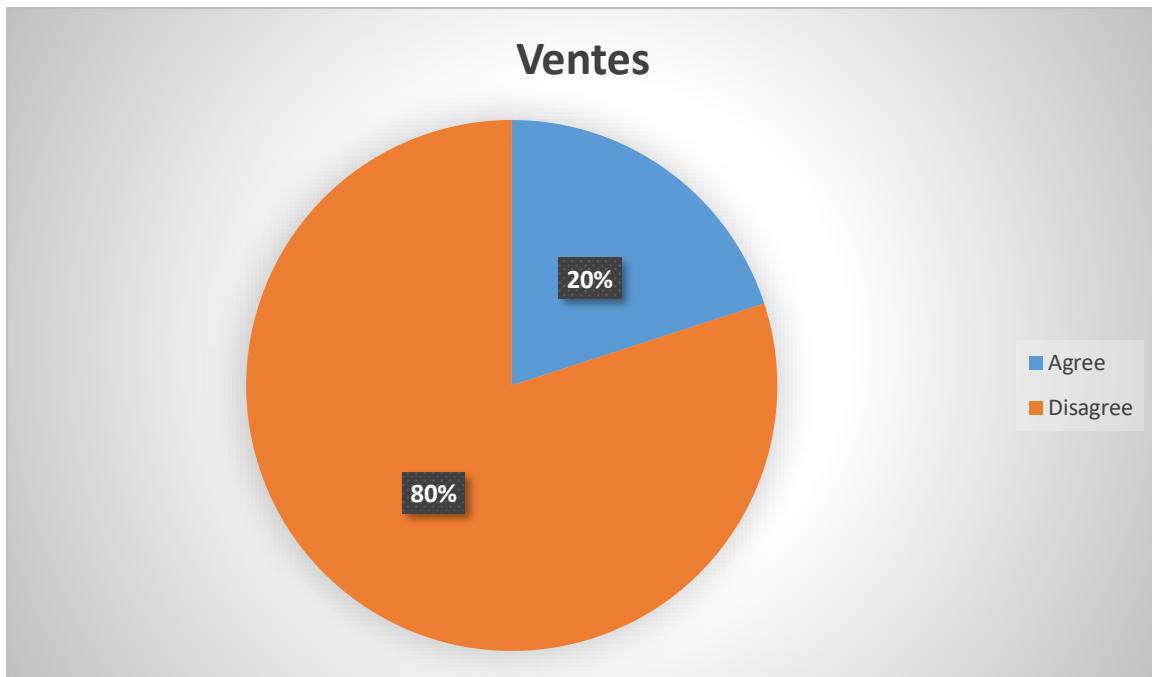manner?

when compared to face-to-faceclasses?

AgreeDisagree

Ventes

- Agree
- Disagree

20%

80%

Figure4 Face-to-face classes Vs virtual classes

Figure 4:

A relative circle represents teachers' opinion about the statement ''Virtual classes…. Faceto face classes.'', through the relative circle data we can see that most of teachers are disagree with this idea, and this difference because it takes time more than face to face teaching.

Question 5:

Based on your experience, do virtual classes play a significant role in enhacing communication skills?

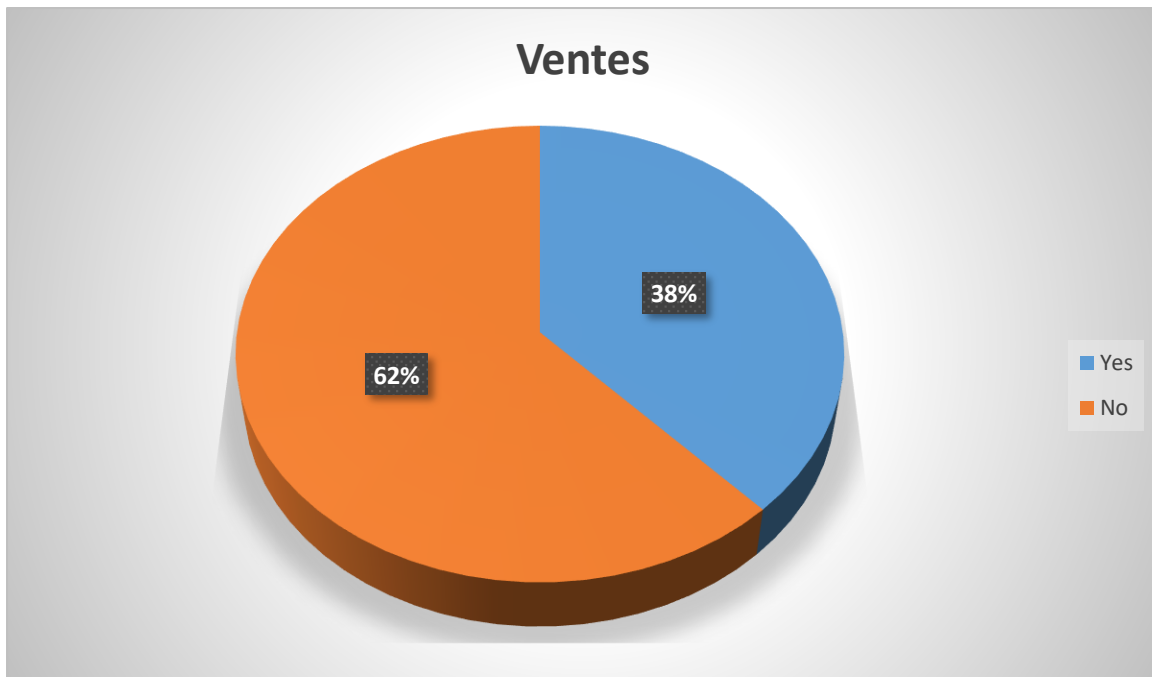Yes   No

Figure5 the role of virtual classes in enhancing communication skills

Figure 5:

A relative circle represents teachers' opinion about those virtual classes play significant role in enhancingcommunication skills; through the relative circle data it becomes clear to us that most ofteachers are agree with this idea because it facilitate the communication between teachers and learners and among learners

If yes, how?

Some pupils feel more confident in virtual classes because the talk better than in face-to-face classes without feeling embrased this makes them communicate better.

This through the benificial features of virtual classes that enhance communication skills like typing easily and sharing content and other educational sites.

Makes learning easy and they can record lessons and lectures.

It gives them opportunity to talk freely and without complex from otherblearners.

Learners can use modern technologies and internet to learn and get informations that helpsthem tocommunicate with teachers easly.

It helps learners in doing their homeworks at anytime and anywhere.

Question 6:

The Question	The Advantages	The Disadvantages
In your opinion, what are theadvantages anddisadvantages ofvirttual classes?	- The chances provided to theteachers to use multimedia and sensoryrichenvironmentswhich are very motivated for thestudents. - Increased convenience,effectivetimemanagement,sharpeddigital skills,emmiatefeedback. - Share informations, can beaccessed anytime andanywhere. - Implementation new technologies rather thanold one. - Equal chances for learners tolearn. - Remove the limitations of timeand place.	- Technical problems that could occur. - The need of extratraining. - We cannot depend onclassesTotally, andblending is a good way. - Difficulties to check learnersComprehension. - Learners are not serious to punctuality. - It isenoughalone.

Conclusion :

In this study, one of the research questions is intended to address learners and teachers'attitudes towards using virtual classes in learning and teaching in Bouyaleb Mohamed high school. Six items in the questionnaire design to elicit respondents regarding the perceptions of the participants on virtual classes. In general terms, regarding the first two

questions in the questionnaire that directly intended to ask participants about their attitudes and what kind of classes they prefer in their leaning and teaching, virtual classes seem to raise positive attitudes concerning teaching and learning. Similar results find in the study conducted by Salbego and Tumolo (2015), the participants possess positive perspectives towards their experiences with online classes. The other three questions in this part aim to ask participants about the difficulties of virtual classes that may handicap their teaching and learning process and the differencebetween face – to – face classes and virtual classes in facilitating learning and teaching.The majority of respondents realize that virtual classes facilitate their learning and teaching process in thesame manner when compared to face-to-face classes and do not cause difficulties that may handicap the educational process. Eighteen of the participants agree that there is no difference between virtual classes and face-to-face classesin facilitating the the process of teaching and learning.

General Conclusion

The great development of technology had led to the development of most areas of life, and one of the most important area is education.The main objectives of this study are to investigates what is the main reason behind using technology in education and what kind of classes do the teachers and learners prefer.This study based on the following questions:

To what extent does the use of modern technologies impact on teaching and learning?

How can modern technologies help both teachers and learners?

To addressthese questions, we formulated the following hypothesis:

Using some forms of technology is a great benefit for learners, as it responds to the differentlearning styles.Integration modern technologies in classroom makes teaching/learning more effective, as it facilitates it and helps to ease access to hug sum of informations.

After analysing the data, the results shows that both teachers and learners prefer to use technology in education and it helps to course work from anywhere at any time.All in all, the data obtained confirmed our hypothesis.

Recommendations:

- Provide network for learners to pursue their lesson.

- Orgnize direct devises to learners to participate.

- Parents observe their children.

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Summary:

This study aims to investigate what is the importance of using technology in education and see whether all learners can or prefer using technology in education. Two quantitative questionnaires were conducted at Boutaleb Mohamed secondaryschool one for third year learners and another one for teachers. The results show that most of learners prefer using technology in education because it facilitates the learning process.and helps them to access to the informations quickly.

Key words:

Distance learning; Virtual classes; Online learning; Virtual process.

Résumé :

Cette étude vise à étudier quelle est l'importance de l'utilisation de la technologie dans l'éducation. Deux questionnaires ont été menés au lycée de Boutaleb Mohammed, un pour les apprenants de troisième année et un pour les enseignants. Les résultats montrent que la plupart des apprenants préfèrent utiliser la technologie dans l'éducation car elle facilite le processus d'apprentissage et les aide à accéder aux informations rapidement.

Mots clés : enseignement à distance ; classes virtuelles ; apprentissage en ligne ; processus virtuel.

ملخص

تهدف هذه الدراسة الى التعرف على أهمية استخدام التكنولوجيا في التعليم. تم اجراء استبيانين كميين في ثانوية محمد بوطالب أحدهما لطلاب السنة الثالثة والاخرللمعلمين. تظهر النتائج ان معظم المتعلمين يفضلون استخدام التكنولوجيا في التعليم لأنها تسهل عملية التعلم وتساعدهم على الوصول الى المعلومات بسرعة.

الكلمات الأساسية: -التعلم عن بعد. - الفصول الافتراضية.-تعليم على الانترنت. -عملية افتراضية