

## **Enhancing Students' Learning and Engagement through Formative Assessment using Online Learning Tools**

دراسة عن تطوير أداء ومشاركة الطلاب أثناء عملية التقويم التكويني باستخدام أدوات التعلم على شبكة الأنترنت

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at

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#### Abstract

Because of the rapid development of technology and its web-based applications and online tools, the current study sheds light on the effectiveness of online tools on both learners' performance and their engagement. At ATA (ADNOC Technical Academy) in the United Arab Emirates, fifty students and five teachers have participated in the study by using a multiple of online tools in a six-month foundation course. Students have completed an online survey about their attitude towards the use of line tools. Structured interviews have been conducted with the teachers to answer questions about their experience of using online tools in the teaching process. A convergent parallel mixed methods approach has been followed to analyze quantitative and qualitative data. The current study has presented analytic data for students and teachers' responses. Using descriptive analysis, the study reveals that using online tools in the learning process enhances the performance and engagement of the students in English subject.

#### الملخص

نظرًا للتطور السريع للتكنولوجيا وتطبيقاتها المستندة إلى الشبكة العنكبوتية والأدوات عبر الإنترنت، سلطت الدراسة الحالية الضوء على فعالية أدوات التقويم المستمر عبر الإنترنت على أداء المتعلمين ومشاركتهم في مادة اللغة الإنجليزية. شارك في الدراسة خمسون طالباً وخمسة معلمين في البرنامج التأسيسي في أكاديمية أدنوك الفنية في دولة الإمارات العربية المتحدة. ولقد انتهجت الدراسة مدخلاً تقاربياً موازياً يعتمد على الأساليب المتنوعة في البيانات الكمية والنوعية. قام الباحث بإنشاء بيانات تحليلية لردود الطلاب والمعلمين باستخدام برنامج ميكروسوفت فورمز لتحليل البيانات الكمية وباستخدام التحليل الوصفي للبيانات النوعية. كشفت الدراسة الحالية أن استخدام أدوات التقويم المستمر عبر الإنترنت في عملية التعلم يعزز أداء المتعلمين ومشاركتهم في مادة اللغة الإنجليزية.

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## **Dedication**

To the very special people in my life who made this possible...

- To my soul mate and loving wife, Doaa, who always stands beside me to make all my dreams come true.
- To my amazing sons, Omar, Hussain, Abdulrahman and Yousef who fill my life with happiness and who back me up in all the decisions I make.
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#### 1. Chapter One (Introduction)

#### 1.1 Overview

It is agreed that the improvement of teaching and learning processes is caused greatly by the development of assessment methods, and because of this, educational outcomes are planned according to modern learning theories and practices. As a result of technological development, the education system has improved to utilize online learning and assessment and to suit the rapid growth and development in technology (Stiglitz, 1999). Information technology has become an essential part of education nowadays. For some researchers, e-learning is one of the most common learning environments (Cheng and Wei, 2011). Assessing Students' performance is one of the vital parts of the education system (Aggarwal, 2003). Most of the traditional methods of assessment are replaced by the use of technology and most of the limitations caused by the conventional education system such as the inability to control certain conditions (i.e., preference, tiredness, preference) are treated successfully. It is believed that using e-learning in education leads to better and controlled test management, more efficient methods to select appropriate tasks for each learner, and providing teachers with constant reports about the improvement of students (British Educational Communications and Technology Agency, 2010).

#### 1.2 e-Learning engagement:

Educators consider engagement as an integral factor for teaching and learning in both e-learning and face-to-face instructional environments. However, it seems challenging for online teachers to keep learners motivated and engaged in-class activities (Carwile, 2007). To engage learners effectively, teachers should understand the rapid development in information and communication technology. They can monitor its changes, and observe its impact on learners' learning during a time. In this respect, there are two types of learners: the digital immigrants and the digital native (Wood, 2010). The first type is about learners who start to use technology at a certain point of their life during their teen or adult ages. The second type is learners who grow up with technology, using it from early childhood. The current study shows learners' motivation and their engagement towards using digital tools in learning.

#### 1.3 Statement of the problem:

Some educational institutions tend to challenge digital learning, which has the possibility of a significant change in the teaching and learning process. Learning and management processes and connections among all elements of education can benefit from technology. To ensure connectivity among learners and their teachers, technology links them with the use of online programs and applications. They are known as online learning tools, which can

guarantee the creation of an online environment. They enable learners to acquire skills and knowledge innovatively. It is consistent with learners' abilities and their expectations. The question of why and in which ways does the use of digital online tools serves to improve the teaching and learning process has many answers and is always debatable.

e-Learning has been developed in education, but nowhere close to what all educators first have predicted. For example, an American study in 2004 confirmed that online course enrolment rates are growing faster than the actual population of students (Allen and Seaman, 2004). In the same vein, a study that is conducted in the UK calls the development in e-learning as rapid growth, as universities compete for the change in the requirements of higher education (O'Neill, Singh and O'Donoghue, 2004). e-Learning has been influenced by the growing interest in lifelong education. The relevant impact of this improvement is on the following: the need to improve information and skills; and the need to revive jobs- for-life, which has been disappeared.

Many types of researches about online education state that learners are more isolated so that they need more motivation. Online tools can improve their motivation and engagement. An Australian study makes a comparison between learners' attitudes to campus-based learning and online courses in two universities. They claim that learners prefer asynchronous e-learning concerning course content, individual feedback, and group work activities. Well-planned and high-quality content that is introduced in an interesting way to understand, along with individual feedback on learners' performance is an essential factor of successful e-learning. In addition to these elements are their need to learn in a group of learners and the ability to choose from the asynchronous activities to meet their personal needs (Hisham, Campton, and FitzGerald, 2004).

#### 1.4 Purpose of the study:

In the light of what the Australian study has highlighted on the importance of online tools as a means of motivating learners to synchronous and asynchronous learning, the current study aims to investigate and puts a spotlight on the effectiveness of manipulating these tools on engagement and improving learners' academic performance in English. It also highlights the effectiveness of digital online tools as a means of formative assessment. The effect of digital technology on learners, from their early childhood, seems to be recognized by every teacher; with major reverberations about, they learn a new language. In addition, some specialists develop a hypothesis that mental processes are reconfiguring themselves, and happen in a different method from a previous generation (Monica, 2019). They allow learners who are insecure and have low participation in face-to-face classes to participate in online activities and share with other learners to feel self-confident. Therefore, they can improve collaboration by sharing information and discussions.

Following the recent improvement in using new learning technology, new needs of students have emerged. Educators produce a wide range of knowledge expressions and theories. They introduce many effective methods in the online learning environment. Therefore, teachers can follow many approaches, however, this study recommends using a blend of more than one approach. For example, from various forms of constructivism (with a great focus on behavior and performance) to socioconstructivist, the current study highlights the importance of socio-constructivism and connectivism. The significance of socio-constructivism in technology use is well known nowadays, yet the other approaches are still important.

It is claimed that the improvement in online applications has a great influence on changing the learning approaches from conventional learning to ubiquitous learning. Students and their teachers communicate and share information within a kind of platform. The integration of technology is highly appreciated as it opens a new world of information technology to learners. They experience competitive challenges to maximize learning opportunities by utilizing online applications in the right way. The advantage of practicing these digital applications permits teachers to communicate with their students anywhere. They can share knowledge in an asynchronous or asynchronous method by using online tools and applications. This feature proves that how these online tools can encourage a distant learning environment that is accessible all day.

#### 1.5 Organization of the study

The current study comprises six chapters; the first one is the 'Introduction', which introduces the main concepts and ideas relevant to the topic of the study; the research statement of the problem, the significance of the study, and the organization of the study. The second chapter is the 'Literature Review', which presents a theoretical framework according to which the current study is based on. The researcher in the second section presents several online tools that the participants use during the study. The third chapter is the 'Methodology', which includes the study context, sampling procedure, the research method, and the data collection methods. The fourth chapter is the 'Data Analysis and Results' of the study, which presents the results of both students' online survey and teachers' structured interviews. The fifth chapter is the 'discussion', which compares the current study with similar recent and old studies. The sixth chapter is the 'Conclusion', which summarizes the main benefits of using online tools in learning.

#### 2. Chapter Two (Literature Review)

Because of the increasing concerns about e-learning, such as 'How do teachers guarantee that the students being assessed are answering the questions by themselves?', the standards and criteria of elearning and its means of assessment overcome many barriers to reach effective learning in general. The difficulties of distant learning with synchronous and asynchronous activities force teachers to be very clear when they give instructions to their online students. They should plan for their lessons with effective strategies and attractive online tools and resources. Another issue is that the use of technology in the learning process should not become a barrier but rather a provider of additional resources for learning. It is natural, then, that teachers should try to find more educational resources for successful online learning, include a structured well-planned means of online formative assessment, and make sure that their students can access different types of quizzes and tests using their own devices such as mobile phones or laptops. This would require new assessment types, which enable learners to discover their strengths and address their weaknesses. For instance, a student who encounters difficulty in writing may perform better at a verbal assessment. One solution, which has been adopted widely to make the use of technology much easier, is to create online tools for assessment in a form of games. This approach is known as gamification, which adds additional advantages to create a wide range of different types of online activities. Recently, there has been a recognition of the value of gamification in learning as it includes online interaction, both to give support to learners and to facilitate peer-topeer learning exchanges.

#### 2.1 Formative assessment

Palombra and Banta (1999) suggest that assessment is the organized collection, revision, and use of data about educational activities utilized to improve learners' performance. They divide the assessment process into two types: the summative assessment that occurs after a learning experience to evaluate it and the formative assessment, which is done during the course to check learners' progress and attainment and to give constructive feedback to improve learning. A meaningful definition of assessment is by Huba and Fred (2000) when they define it as the process of collecting data from

various resources to get clear information about learners' performance, knowledge, and skills during an educational experience.

Angelo and Cross (1993) claim that establishing proper assessment tasks is linked to having better learning and enhancing learners' commitment to acquiring information. The assessment of information is one of the most essential parts of the teaching and learning process because if there is an authentic appropriate measurement of learners' performance, it will lead to better learning, and an improved curriculum.

The assessment is a crucial element to make sure that learning has achieved its outcomes, and besides, it is an important method to guarantee to get required accreditation (Buzzetto and Alade, 2006). The main objectives of the formal assessment are assessing the achievement of teaching goals, identifying limitations and eliminating them, motivating learners, and establishing effective communication among learners, teachers, and administration (Aitken and Pungur, 2005).

Black and William (1998) define the formative assessment as all the activities controlled by instructors and undertaken by learners to assess themselves, which offer data as an informative reference to enhance the teaching and learning process. Formative assessment is an effective method to improve a successful teaching and learning process. e-Learning tools offer a wide range of solutions to get a well comprehensive assessment for learning. It also enhances both individual learning and collaborative learning. Formative assessment explains clearly the students' attainment and progress within a time, while summative assessment is to highlight their progress after some time (Crooks 2011). The key success of the online formative assessment tools relies on instant feedback and generated reports which lead to effective future planning. In this domain, Juwah et al. (2004) redefine the role of the formative assessment as it explains the students' weaknesses, which can be observed by teachers, to determine the adjusted remedial pedagogy to suit the needs of learners. Thus, the main goal of this kind of assessment is to explore, identify and evaluate learners' performance rather than to grade or document it. That is why; teachers are forced to change the "teacher-centered learning" method to "learners-centered learning ". The objective of the summative assessment is to focus on learners as they are at the center of the learning process. The knowledge and skills they get are the content of their lifelong learning process, keeping in mind the rapid change in information technology and discoveries. However, they encounter great limitations in using e-learning tools aligned with the application of traditional education methods. Using new ways of assessment provides learners with multiple learning opportunities, more

activities, and online learning programs on the internet (Brut, 2006). By utilizing the student-center-method, Luckner and Bowen (2010) suggest that it helps instructors to detect specific areas of weaknesses for intervention. Such activities require a proper selection of assessment tools "considering the cultural diversity and linguistic understanding and responses of learners'. Thus, teachers are usually asked to implement some online assessment tools in their classrooms (Santi &Vaughn, 2007). e-Learning does not only change the way learners acquire information, but it also changes the role of the instructors from being just providers of information to facilitators and guides. Moreover, the ISTE (The International Society for Technology in Education, 2020) states that the implementation of e-learning is a tool to get rid of the low thinking skills such as memorization and to concentrate more on research skills such as creativity, critical thinking, solving problems, new media tools literacy, and collaborative work. With the help of technology, instructors can care about learners' diversity and focus on individual learning to meet learners' different needs and learning styles.

Teachers can provide learners with different formative assessment tasks aligned with their curriculum and use the generated reports to improve the learning and teaching process. e-Learning may help teachers monitor and collect data about learners' progress easily (Burns, 2015).

Douglas Wren (2008) claims that online tools provide instant feedback and encourage teachers to modify tasks and delete all the ones that require a higher thinking process. In this context, Corciu (2008) suggests that the role of a teacher has four directions: a content planner as he plans the content of the curriculum to meet the needs of learners, a learning counselor, an evaluator of the learning outcomes, and a manager of a group of learners. Some examples of the online tasks that provide instant feedback are online discussion boards, e-quizzes, and e-portfolios. These tools can determine learners' present or prior knowledge to keep developing their performance according to this feedback. Sometimes the reflection of their teachers or their peers needs to be recorded, otherwise, most of the tasks are time-consuming. In addition to this, Paloff and Pratt (1999) describe the roles of a teacher as First, he plans for learning goals and evaluates results. Second, he gives instructions to students in an online learning environment. Third, he designs different tasks for online collaborative and individual learning and involves them in designing assessment criteria. Fourth, he organizes funny activities such as teambuilding competitions, debate activities, puzzles, etc. Fifth, he monitors learners' online behavior. Sixth, he gives feedback for different tasks. Seventh, he solves arguments, which may occur among students.

Eighth, he monitors the success of online activities. Ninth, he assists learners with their weaknesses. Finally, he encourages learners to evaluate their online group and individual work.

#### 2.2 Gamification

The rapid improvement of technology has a great influence on all fields of teaching and learning approaches. Technological development encourages teachers to design their teaching approaches and techniques (Abik et al. 2012). In the past, many activities could take days or months to be completed, but nowadays they are done in just few minutes. This advancement in technology leads to the excellent quality of different markets products and a time-saving factor in delivery. Yet, in the education sector, implementing e-learning in education has faced a lot of reluctance and continuous discussions. For example, one of the essential controversy is about the following question: Do e-learning tools have better effect on learners' performance than the traditional learning? It is suggested that technology proves to be one of the important elements of the classroom. It is also important to include motivational elements in a learning environment such as gamification.

Several learning activities are implemented to overcome the issues created by conventional education. Gamification is one of these effective methods. Dishev and Disheva (2017) think that gamification is a new method of improving learners' engagement and motivation by practicing game activities in an educational context.

It becomes common in learning because it increases students' engagement, adapts their behavior, offers a friendly competitive environment, and empowers group work activities. While there is a huge suffering from the weak engagement of most learners, online games are found to be one of the most essential parts of learners' daily life. Hence, practicing gamification in their learning becomes an important demand. Teachers focus on the significance of practicing gamification inside the classroom. However, more researches are needed to explain the influence of digital games on learners' engagement and how to assess their effect (Simoes et al, 2015).

A rewarding system is commonly used to encourage learners to compete with their peers and to identify their performance and motivation (Tomaselli, Sanchez & Brown 2015). Therefore, many of game designers create the rewarding features for online digital applications with a highly attractive design. For teachers, the important objective of using rewarding features is to improve students' engagement.

Today's generations are growing up with digital devices that provide them with multiple learning opportunities. However, they tend to perform many activities at the same time, so they are distracted and their learning is affected. To get the maximum advantage of using technology for educational purposes, teachers encourage learners to use digital devices in the right smart way using online applications that mitigate distractions. Online tools are platforms that are very useful in connecting learners with their instructors and peers. They do not only offer types of gamification, but also they provide different competitions and collaborative work opportunities among learners. They also enable teachers to assess learners' works and share them with their classmates. The community approach of these tools help learners be accountable and dedicated to their work. So that learners can be engaged and learn more by the use of them.

Online tools are essential for social interaction (Lee & Hammer, 2011). Therefore, class management of learners can be effective through particular strategies, which focuses mainly on student-centered learning. Teachers have become aware of the importance of interactive online platforms to engage learners in learning tasks. When learners motivation to learn improves, their attendance in school increases. Dornyei and Ushioda in 2011 claimed that motivation is close to participation. Moreover, online tools can create a better learning environment and enhance engagement (Goehle, 2013). According to Reeve (2012), engagement explains the state in which a student shows his active participation, interest, enthusiasm, and his involvement in the learning process, which can increase performance. On the other hand, lack of engagement can cause ineffective learning (Heaslip, Donovan, & Cullen, 2014). The current study focuses on innovative online tools, which are used for educational purposes to add a motivating environment to many class activities such as discussions, language activities, and writing tasks. Therefore, using online tools is an effective approach to motivate students, enhance their enthusiasm, promote and monitor their understanding (Kim, 2015; Simões, Diaz Redondo, & Fernández Vilas, 2013).

#### 2.2.1 The educational idea of gamification through cyberspace:

In recent years, more interest has been placed on the concepts used to strengthen human motivation for various activities. One of these concepts is the idea of gamification (Huotari, Hamari 2017, pp. 21-31; Robson, Plangger, Kietzmann, McCarthy, Pitt 2016, pp. 29-36). The essence of gamification is motivating and activating people to act through the mechanisms found in games. It allows a learner to identify himself as the hero of the game located in the world of real challenges-social, professional, educational, and many others. Gamification has big potential in the field of education. It helps not only to improve existing skills but also to gain new and constant development. By maintaining a high level of motivation, gamification significantly facilitates learning. Game-based education in confrontation with traditional education is more cost-effective, has a greater involvement of students, and helps to adjust the pace of work to individual preferences. It allows immediate feedback and a more enjoyable transfer of knowledge. Cyberspace provides a wide range of opportunities, which are adequate to the implementation of the concept of gamification in the field of education. Online platforms increase the use of computer games, web portals, and mobile applications based on elements of game mechanics. They usually include challenges, rankings, level acquisition, points for completed tasks, score tables, and a system of bonuses and rewards. Moreover, they build a communication system between participants through forums, e-mails, chats (supporting the building of social networks between participants), and cooperation to achieve a common goal. The ranking rewarding system would contribute to raising the performance and the skills of students. Probably in the coming years, gamification will be one of the leading trends in the world of education. Harder, Trevisan and Miller (2013, p. 165) explain how to accommodate learners according to their different learning styles. Therefore, online tools should have a clear instructional design and specific information for each quiz and activity to keep students interested.

The following lines represent an overview of selected online tools, which help apply gamification in the UAE institutions:

#### 2.2.1 Online Tools:

#### 1. Kahoot

This platform is for online games. At (http://kahoot.com), teachers can design activities in the form of quizzes and generate codes. Students log in by these codes and answer questions to get points for each correct answer. The highest scorer is announced at the end of the game to increase learners' enthusiasm.

#### 2. Quizizz:

Quizizz is a simple tool to use by students (http://quizizz.com). They can register by using their google accounts or they can get access to the game by entering just the codes of games. For teachers, they can create as many quizzes as they like after signing up.

#### The difference between Kahoot and Quizizz:

Quizizz application uses the same online quiz technique as Kahoot. However, there are still some differences: Kahoot game has one mode, which is used for real-time formative assessment, surveys, and discussions. While Quizizz has two modes; the first one is synchronous in real-time during class time, and the second one is asynchronous at any time after the class time as extra curriculum activity.

In the first mode which is a simultaneous interaction, in Kahoot all students should answer together before moving to the next questions; it means that the first student should wait till the last student answers to go to the next topic. On the other hand, Quizizz is different; each student can work at his own pace. Another difference between Kahoot and Quizizz is that the teacher dominates Kahoot because all answers are displayed on his device only. Quizizz, on the other hand, allows students to take full control of the application as all questions and answers are shown on their devices.

#### 3. Socrative:

More question types and answer patterns are found in the Socrative platform (http://socrative.com). It is both a web and mobile-friendly online tool. It allows teachers to create quizzes with many types of questions such as multiple-choice questions, short and long answers questions, and true or false questions. Teachers can also search for quizzes that other teachers have saved in the Socrative library. Socrative online tool provides instant results and detailed reports about students' grades, which help teachers to get a complete analysis of students' progress. When students use Socrative, they can answer

quizzes at their own pace. They can get instant results, but the feedback from their teachers can be sent later.

#### 4. NearPod:

NearPod (http://nearpod.com) is one of the most common online tools that most students use and like. It offers interactive slides, which may have different types of questions such as pols, multiple-choice questions, open-ended questions, and quizzes. Teachers can insert videos, pictures, YouTube links, feeds from Facebook or Twitter, and blogs. Learners use their devices to interact with the NearPod slides. It can be used in both ways as synchronizes (instant) and asynchronies (at the student's self-paced). In synchronized online lessons, students sign in with an automatically generated code, and the teacher controls the transition of the slides.

Each slide is displayed on students' devices to keep them on task. In asynchronies online lessons, on the other hand, students answer questions on slides at their speed. Teachers then can get results by generating analyzed reports.

#### 5. Quizlet:

It is an online study platform (http://quizlet.com), which allows learners to study vocabulary and different topics through learning tools and games. It is designed by Andrew Sutherland in 2005 and is released to all learners in 2017. Teachers train their students by creating attractive flashcards, games, and tests. In 2019, Quizlet had more than 300 million user-designed flashcards collections and over 50 million registered users. It is among the best 50 online tools around the globe. Many teachers in ATA have created many tasks with help of the Quizlet online tool. They even create live activities; teachers can break their classes into groups of students according to the number of them. They can start games with the definition of words or the terms themselves. Each group has to choose the correct term/definition to win the competition. The group which collects the most points wins.

#### 6. Microsoft Forms:

It is an online platform (http://office.com), which is a part of office 365. It allows teachers to design quizzes, surveys, polls, and many types of tests with automatic grading. Then they can export the results of all the quizzes and assignments into Microsoft Excel. In 2019, Microsoft introduced the Forms Pro, which enables teachers to export data into a Power BI platform. It is the most used platform in the UAE

nowadays because the ministry of education has generated accounts for all the students and teachers in office 356.

#### 7. Word Wall:

Word Wall is an online tool (http://wordwall.com), which is used to generate both online interactive quizzes and printable activities. Interactive activities are completed on any device, such as laptops, mobile phones, tablets, or interactive smart whiteboards. This game can be played inside the classroom, online, or after school time as extra work. Printable activities can integrate the interactive ones as they can be printed out or saved as PDF files.

Any activity that a teacher creates using the Word Wall application can be made for all students everywhere. This feature enables a teacher to share Word Wall activities links via email, on social media platforms such as Facebook, WhatsApp, or any other means. It also enables other teachers to find the public activities in the community section search results; then, they can edit and save them.

Teachers can assign Word Wall activities as student-completed home assignments. When a teacher designs an online assignment, learners are informed to follow a link without visiting the main activity page. This feature can be used inside the class where learners can use their own mobile devices or outside the classroom after class time. The results are recorded and a teacher can send his feedback to his learners.

#### 8. Padlet:

Padlet is an online board (http://padlet.com), which is designed to encourage learners to work together in collecting different types of data, brainstorming ideas, and generating solutions. Teachers can ask their students to post comments, images, videos, or links to their work or any related topic in real-time. Then, teachers can modify and send feedback on these posts later. The Padlet application can be displayed on a screen in front of the students. All the posts can be viewed and edited during class time.

The Padlet is a free application that can work on any device. More features are added to the premium paid plans of Padlet. The different setting options enable teachers to take control of those who can access their work before you approve it. Padlet is both a simple and innovative educational tool. Its feature to collect data quickly and randomly has great potential. Padlet has many advantages of generating ideas, brainstorming new topics, and planning for entertaining events. Learners feel the importance of using technology and the effectiveness of human interaction.

#### 9- Classkick:

It is an online learning platform (http://classkick.com). It eliminates barriers between learners and their teachers as it enables learners to get the support they need at any time anywhere. Teachers can upload their own designed content, which can be in the form of texts, images, videos, recordings, or web links. They can give instructions, explain an activity, or assess their students' performance. In groups or individually, learners respond by texts, drawings, images, videos, or answers such as filling in the blanks or multiple-choice responses. Then, teachers provide instant feedback to each student and grade his/her work with the help of an array of tools of grading and rewarding stickers. Students can get help from their peers as well. The most important feature is that the teacher can monitor students while they are doing their activities. Therefore, he can access their performance and their progress throughout the assignments.

#### 2.3 M-Learning:

Leavoy (2017) suggests that educators began to use digital devices that could help learners acquire knowledge anywhere, and anytime. In the past, learners used to spend several hours on their cell phones; they were surfing different sites on the internet, playing online games, watching movies, or chatting with their friends or families. However, nowadays most learners have started to study online by themselves and look for the knowledge they need. Technology has changed the form of e-learning to be Learning Management System (LMS). Because of this improvement in e-learning, a clear evolution in digital devices and smartphones has emulated the presentation of m-learning. Therefore, many educators have started to provide a significant definition of mobile learning. They define it as "a type of learning that happens if a student is not in a specific place, or when he has the privilege of

mobile technology (Bertrand 2006). Yet, this definition is not complete because, based on e-learning, learners can also get information anywhere. They can get knowledge with their devices at a certain place and then they can continue their work using any other devices anywhere. M-learning is that kind of learning which uses wireless network technologies to increase learners' mobility (Shon, 2008).

Mobile learning is usually seen as a hardware literacy advancement in using technology in learning, and it depends on the physical geography and location of both teachers and learners (Traxler, 2007). In this regard, mobile devices are considered one of the methods to improve engagement in English classes

(Kukulska, 2005; Kukulska-Hulme 2005). Traxler identifies it as hardware involvement in learning such as laptops, tablets, and cell phones. It is also seen as distant learning because learners do not study by the traditional face-to-face method (Kukulka-Hulme, 2005). Besides, m-learning has multiple activities and applications, which are designed to be suitable for all types of learners, subjects, and teachers. Traxler (2010) claims that m-learning acquires support from organizations and institutions, which is similar to distant learning that is promoted from being just a concept to be implemented in classes. The difference between distance learning and mobile learning, as Royale Stager and Traxler explained in 2014, is the nature of both approaches. M-learning becomes popular in a very short time because it is reliable, cheap, and robust. The challenges of using new approaches to technology are not limited to tertiary education. Teachers in schools have similar issues when they use m-learning in their traditional classes. To find solutions for these challenges, educators have started to adapt pedagogical courses and curricula to be suitable from their learning approach. They do so because they have discovered that technological skills advancement in classes needs improvement. Daniels, Lowery, and Becker conducted a questionnaire of 463 participants in 2005. They found that many program designers and educators tend to change the curriculum because they discovered that some media agencies are looking to hire employees with particular technological skills. They concluded that m-learning has a great impact on the decision-makers in the media industry.

#### 2.4 Online learning during Covid19 pandemic:

The coronavirus pandemic influences the process of online learning worldwide. Most countries have closed their schools and universities in an attempt to control the quick spread of the Covid19 pandemic. This worldwide lockdown has its influence on over 60% of the students' population in the world. Other countries have implemented local closure, which has its impact on millions of additional learners (UNISCO, 2020).

In the UAE, the education sector decides to close all schools and universities and to rely on distant learning. The current situation of the spread of the Covid19 pandemic has its effect on teaching strategies and methods. All the teachers turn to virtual classrooms, which encourage them to integrate technology and online platforms in their teaching.

They have to direct their online teaching strategies to suit the content of the curriculum and to meet learners' needs. Meanwhile, teachers should have the skills to use technology to succeed in delivering the content of their subjects, assess learners' performance, and use online student-centered strategies

(Babacan, 2016). It is claimed that there is a difference between the experiences of online teaching as compared to face-to-face teaching. Teachers should understand their students' needs and interests and provide them with individualized instructions. Teachers also have to familiarize themselves with virtual communication devices and tools. Therefore, teachers need to get away from teacher-centered pedagogies and utilize more effective student-centered learning approaches (Borup et al., 2013). Kennedy & Archambault (2012) confirmed that many teachers think that their face-to-face strategies are not suitable to be applied in online teaching. Therefore, they have to change their methods of teaching and their attitudes towards teaching online as well. It means that they have to get away from the old methods of teaching, which depend mainly on giving instructions. They should apply new methods of guiding learners to acquire knowledge. By these new approaches, teachers can provide students with what they need to learn, as they allow teachers to deliver the content in different methods. Teachers can use texts and multimedia, which offer many chances for learners to interact effectively with their teachers (DiPietro, 2010). Thus, using online tools in teaching strategies and methods will help to improve learning (Oktay & Cakir, 2013). On the other hand, Sintema (2020) has stated that online learning has a negative impact on learners in national tests. He also claims that teachers expect a decline in the Grade 12 students' scores in the final academic examinations if the number of covid-19 cases increases.

#### 3. Chapter Three (Methodology)

#### 3.1 Study Context:

The study is conducted at ADNOC Technical Academy to monitor the impact of e-learning tools on the effectiveness of the formative assessment process. ADNOC Technical Academy is established in 1978 to develop young Emiratis' skills to work as technicians or operators at ADNOC various companies. ATA campus is located in Shamkha city near Abu Dhabi, and it has new facilities that enable trainers and trainees to get a high-quality learning environment. Young learners are divided into two categories: the reskilling program is dedicated to ADNOC employees and the foundation program is for high school graduates. The training program lasts for two years and a half and consists of both theoretical and practical studies. The syllabus is an Intensive English Program (IEP) to prepare learners for passing the PET official exam as a requirement for graduating. Trainees join the pre-program to start the first phase of their training program. After that, they join the petro-core program. Then they go to the specialization program.

Finally, they perform practical training in one of ADNOC's big companies during the last phase of the training programs (O J T program). The Academy contributes to building the learner's technical skills and capabilities and enables them to start their jobs in oil fields. This is the first time to research the ATA to investigate the effectiveness of using online interactive digital platforms as formative assessment tools.

#### .3.2 Sampling Procedure:

Selecting the involved population and the type of research, the researcher, who works as an instructor of English at ATA (ADNOC Technical Academy), has selected a random sample of fifty students who are in level three and five teachers. The study examines the efficiency of formative assessment on the learners' performance and their engagement. To ensure validity, students are exposed to multiple planned e-quizzes and online interactive tasks. They interact with their instructors and their peers using online tools such as (Nearpod, Quizizz, MS Forms, Word Wall, Classkick, Padlet, Socrative, Kahoot, and Quizlet). These online tools provide teachers with interactive educational activities in a fast and simple way. They are intended for both learners and teachers who can interact through different online

tasks. They are methods of assessment that teachers can usually give, analyze results, and adapt instructions to keep the required improvement of learners' performance. Learners use these digital tools and get reports about their attainment and progress.

The current study combines probability and purposive sampling techniques. Teddli and Yu introduced these techniques in 2007. This mixed-method of sampling is highly effective as it focuses on the breadth of data and its depth at the same time. It enables the researcher to get data that is relevant to the research questions, targeting a representative sample of learners and valid to be applied externally (Creswell et al 2003; Teddlie & Yu 2007; Tedlie & Tashakkoi 2008; Evankova & Creswell 2009; Mertens 2010; Graff 2012). In this way, the probability sampling method is used to get quantitative data through conducting students' online surveys (N=100). On the other hand, using the purposive sampling method is to get qualitative data by conducting instructors' interviews (N=10). In this concern, the study tries to get a clear description of the research problem as an indicator for the qualitative side of the study by interviewing the instructors who use digital tools in their teaching. From the other side, a random sample of fifty students that represents the entire population of level three students in ATA (ADNOC Technical Academy is chosen to introduce the quantitative strand of the study. Therefore, by following this strategy, the researcher has succeeded in getting a sample that provides significant data about the influence of digital online tools on learners' engagement.

#### 3.3 Research Method:

An educational study statement is an issue, topic, or question for which researchers try to find an answer. They adopt many approaches to discover the solution. Therefore, most studies combine the theoretical and the practical framework. In most cases, they have research on a particular educational case to collect some data. After that, they analyze this data and come up with findings to answer the main issue. Examples are such as language learning, engagement in high school stages, implantation of educational policies, and bullying in primary schools. Generally, educational studies are based on the empirical traditions of the social sciences (commonly called quantitative and qualitative methods). They are different from other forms of scholarship such as conceptual, theoretical framework, methodological approaches, literary criticism, customs and traditions, and those researches that are based on humanities (e.g. philosophy, literature, history, arts-based topics). The main purpose of using such an approach is that quantitative data presents a different type of data than qualitative information

(Creswell, 2009). The researcher depends on the meta-inference strategy to come up with results (Tedddlie and Tashakkori, 2008). The quantitative method depends mainly on numbers and data collected from learners' answers to survey questions. While the qualitative approach is a descriptive analysis of teachers' and learners' responses during interviews.

To obtain clear answers to the research questions, the current study adopts the mixed-method approach (qualitative and quantitative). It depends on an online survey to follow the quantitative approach and on structured interviews with teachers to follow the qualitative approach. Then it presents an analysis for data to find answers to the research questions. It means that Quan and Qual procedures are carried out to tackle different facts of the research questions.

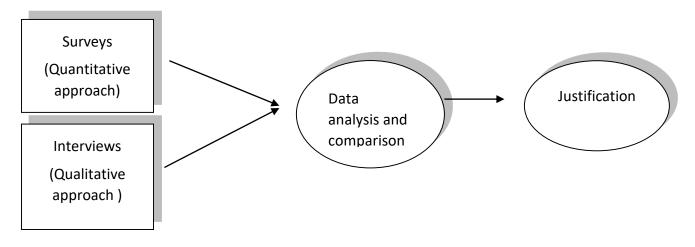


Figure 1 (Qual & Quan procedure)

This method, which is a combination of the two approaches, is seen to be effective since it increases the positive sides and reduces the negative sides of each method. Generally, a mixed-method can explain more comprehensive and meaningful answers to the research question than one single approach can (Johnson and Onwuegbuzie, 2004). It is believed that studying people's behavior in their community using the mixed method is more reliable as it has fewer errors than depending on one method. As in the mixed method, each type of data can validate the other. Jick (1979) calls the implementation of this method a convergent validation method or triangulation method. He claims that

using different methods to collect different types of information can check the validity of specific data. He says that implementing more than one approach will enhance the study validity because by using them together, the research results will not be methodologically artifact. Moreover, the mixed-method approach is suggested to be essential in scientific researches as it provides high-quality data and enhances scientific power (Klassen et al. 2012).

Information technology sciences have built educational platforms, which are designed according to the learners' needs. They offer new methods of education instead of conventional ones. Formative assessment is a continuous process that can be more effective within the environment of e-learning and blended learning. It has many shapes, however, this study; depends mainly on the reports generated by the online tools and the feedback of teachers. These online assessment tools have an important role to improve students' knowledge as well as connect them to real-life communities where they can practice their skills and knowledge. That is why teachers start to rethink of formative assessment role in education as an essential factor.

#### 3.4 Data collection method:

The research questions are about the role of online learning as a formative assessment tool to improve learners' performance and engagement. Before the experiment, the researcher conducted a training session for teachers in ATA on how to use online learning tools. Then, he encouraged them to design different activities for the assessment using specific online tools. During the experiment, reports about learners' progress are generated and analyzed. After the application of the experiment, the researcher has the following procedures to measure the impact of the study tools:

- 1- For the quantitative approach, participants answer questions of an online survey to check their attitude and satisfaction with using online assessment tools in learning.
- 2- For the qualitative approach, interviews are conducted to identify teachers' reflections on the effectiveness of the use of online assessment tools in the learning process.

#### 3.4.1 Quantitative Method:

The quantitative method is a research strategy, which depends mainly on collecting and analyzing data (Bryman & Alan, 2012). It is known as a deductive method that relies on experiments or theories and is shaped by empiricist philosophers. The process of data analysis is essential in quantitative research because it explains the link between empirical observation and mathematical processes in quantitative relations. In other words, quantitative research has numerical forms of data such as statistics, percentages, etc. (Given, Lisa M., 2008). The current study uses statistics and numbers to analyze data to generate results that can be generalized to a larger number of people.

#### - Students' Online Survey:

Surveys are the most effective applied scientific instruments of academic researches (Dorneyei 2013). They are one of the tools in which participants react to a set of questions. They test and investigate the attitudes of a number of participants and provide researchers with a numeric description of the results (McMillan & Schmacher 2010). The data, which is generated from surveys, save time and effort. Surveys can be conducted to a big number of population and collect a great amount of data in a very short time (Dorneyei 2003). In addition to this, the results of a survey can be generalized in application from a small sample of people to the whole population (Fowler 2009; Creswell 2014). Surveys present potential anonymity, which other types of tools lack (Munn & Drever 2004). However, online surveys are still in the process of growing and evolving. Until recent years, designing and conducting an online survey is a waste of time task. Researchers should possess essential knowledge about online applications and programs before they start relying on online surveys.

Nowadays, these applications and programs have become easier and faster. However, several researchers are still not aware of the merits and the drawbacks that resulted in conducting online surveys. The first advantage is that online surveys can reach individuals in distant places. They create reliable and authentic feedback from a diversity of participants. Secondly, they are convenient enough to generate automated results; and consequently, they reduce the effort and save the time of researchers. One of the disadvantages of online surveys is that we are still uncertain of the data validation and sampling choice. Besides, other researchers may suffer from the effectiveness of fake evaluation of the online surveys.

The online survey of the current study is designed to yield the students' attitudes towards the use of online tools as part of their learning process. It also measures how these tools are effective in distant learning. The online survey has twenty questions, which measure different aspects of the teaching and

learning process. The first part of the survey targets the effectiveness of the learning process by using online tools, the success of formative assessment, and the fruitful teaching strategies of using them.

The second part of the survey highlights the challenges and difficulties learners may face when they use online digital tools in learning both on-campus and online. The two-page long survey includes twenty close-ended questions. Students have spent about ten to fifteen minutes to complete the survey; this period is enough to answer this number of questions as Dornie (2003) recommends. All of the questions are easy to decode and understand. In this way, the researcher can eliminate any personal subjectivity. The online survey answers are based on a five agreement rating scale (strongly agree, agree, neutral, disagree, and strongly disagree). Participants can make their judgment on the questions by choosing one of these options. This multiple-choice type of question is used because it is direct and reader-friendly. On the other hand, Johnson and Christensen in 2012 stated that it is better to have both open-ended and closed-ended questions in a survey because it can provide participants with more choices to express their points of view than to get only a quantitative survey. The questions of the survey are sequenced according to the research questions, and to the points that the researcher needs to focus on. In this way, he can avoid any possible misinterpretation, which may be caused by the study context or the design of the questions.

The introduction of the survey includes the purpose of the study, the context of the study, and a confidential consent statement. These elements can help the researcher get an informed approval from the participants (Peterson, 2000). The structure and the overall framework are aligned with the recommendations of some academics like Dornyei (2003), Wallen, Frankel, and Hyun (2012), and Voegtel (2010).

The researcher has informed the participants about ethical statements such as a pledge that no responsibility or harm will happen to them. As a result, he promised the participants to guarantee and protect their rights of privacy, and their choice of refusing to answer any of the survey questions. Finally, he has acknowledged them with the decision of the persons to whom the study will be sent, and how the results of the study will be accessible (Dornyei, 2003).

#### 3.4.2 Qualitative Method:

It is believed that studies are based on previous researches that include a collection of analyzed data. These studies have conducted interviews as a tool for qualitative researches. For example, many qualitative types of research have included psychological interviews, which are grounded on theories (Glaser & Strauss, 1967). They are often about positivism and postpositivism (Charmaz, 2005). While conducting these interviews, the researchers have prior knowledge about previous studies and theories. They use the interviews to check whether their hypothesis and beliefs are correct or not. Furthermore, they act as objective observers who seek to keep a professional distance away from the interviewees. During the last few decades, qualitative researchers have moved to another new paradigm, which focuses on constructivism theory (Charmaz, 2005).

They become more involved with the participants to get a comprehensive understanding of their experiences. In this respect, they work collaboratively with the interviewees in a number of activities and projects to get a clear idea about their interests. Then, the researchers make use of this information in designing the interview questions that stimulate fruitful conversation with the participants. To sum up, researchers, based on their philosophical beliefs, which have an essential effect on designing the questions of the interviews, are encouraged to understand the impact of the participants' attitudes and interests on the interview results.

#### 3.4.2 .1 Teachers' interviews:

#### - Types of interviews:

Researchers have examined three types of interviews: unstructured interviews, semi-structured interviews, and structured interviews. The unstructured type of interview has a protocol of using openended questions, which rely on the focus of the study. These questions are developed to get specific data and to make comparisons among the participants. Researchers, however, remain flexible to get unexpected detailed answers and stories from the participants (DiCicco-Bloom & Crabtree, 2006). Kvale explained in 1996 that the conduction of unstructured interviews might lead to unexpected answers. In addition, it is difficult to compare the interview findings across the answers of the participants if they do not answer the same number of questions. To solve this issue and to hold the continuum from the middle, they use semi-structured interviews. The interviewers, then, ask all theparticipants the same questions, but they may highlight some particular areas, which mark each

participant (Hill et al., 2005; Hill, Thompson, & Williams, 1997). They may also vary the sequence of questions for each respondent. This protocol of semi-structured interviews works as a foundation guide (Flick, 2002). The interviews are designed according to this guide, which allows flexibility and creativity to guarantee that each respondent's story has been uncovered. On the other side of the line, there are standardized interviews in which all the participants have the same questions and experience (Fontana & Frey, 2005). Therefore, if any differences may appear they are because of the diversity among the participants themselves rather than any differences of the interview questions (Singleton & Straits, 2002). Thus, these types of interviews fall under the category of highly structured interviews in which most of the questions are closed (Those questions which have definite answers with yes or no and are always seeking facts and are introduced to all the interviewees in the same sequence). Moreover, the interviews themselves are highly regulated and organized (e.g., the same standardized prompts are used, the questions are written as they are read and the chance to have interviewer disclosure does not occur). That is why; the researchers seem to be neutral and consistent while they are conducting the interviews (Fontana & Frey, 2005). In this regard, then, Groves in 1989 suggested that the objective of structured interviews is to reduce the claim that the interviewer can be the reason for some measurement errors. To sum up, standardized interviews have many advantages that make them described with great uniformity among the participants.

However, they can not uncover their personal experiences, especially those who do not fall under the same category of interests that the interview questions investigate.

#### - Considerations before an interview:

The researcher should consider some important factors before designing the questions of an interview. As Seidman (1991) explains that understanding the experience of the interviewees is very crucial from the very beginning. Therefore, the interviewer can limit his questions from being unstructured openended questions to structured open-ended ones. He can control it to be a reliable data-collection interview and it is not just a friendly conversation (Seidman, 1991). It can be also a highly structured process with standardized and preset questions that have very little variance. In this respect, the researcher should keep in mind some relatively unstructured approaches, such as participants' ethnography and the different grounded theories they are adopting. These factors may encourage him to prepare different sets of questions according to the theoretical background and the ethnicity of the interviewee. The researcher, then, collects initial data, analysis them, and refines all the questions according to the focus of the study. Finally, he generates new questions for all the participants (Glaser

and Strauss, 1967). This claim is similar to what Kyale suggests in 1996. He suggested that the design of qualitative interview research depends mainly on open-ended questions, which are attuned to the nature of each participant and are not following the same interests of all the participants. For example, in questions related to ethnography, the researcher can start the interview with a friendly conversation, and then he slowly introduces supporting prompts to help the participants to respond to the interview questions (Spradley, 1979). After that, he directs the questions to the way of a standardized focus of the study. The main topics or the theme of the study is likely set before conducting the interviews. However, it can have different content or the questions are in a different sequence. As Kvale (1996) explains that, the interviewer can ask the first question to introduce the topic of the study. Then, the following questions are an expansion on the participant's answer to the first question.

#### - Considerations during an interview:

The strength of the relationship between the interviewer and the interviewee is one of the most essential aspects of qualitative research. It can strengthen also the collection of data and its validity (Adler & Adler, 2002; Kvale, 1996). Moreover, the quality of this relationship has an impact on the participants' self-disclosure; including their own experiences they might share with others. For instance, those participants who discuss bad experiences in which their reactions towards inflexible supervisors usually turn to be a very difficult and hostile relationship Brinkmann, (2013). During these interviews, they usually react with their feelings while discussing such bad experiences. That is why; they do not feel safe with the interviewer and would not continue in practicing such difficult situations anymore (Thomas & Pollio, 2002).

To highlight the importance of this type of relationship during an interview, the following section has more information about how to conduct an interview. It discusses some elements which affect the strength and the development of relationships between a researcher and his participants.

#### - Conducting an interview:

Educators depend heavily on interviews to collect data. Interviews are one of the effective tools of qualitative researches. However, there are few and limited resources and studies, (such as Kvale, 1996 and Seidman, 1991), which discuss interview strategies and their procedures. Qualitative methods provide little information about the right techniques for successful research interviews (Fassinger, 2005). Qualitative studies use interviews as their essential data collection method. Researchers should present and explain the interview protocol to the participants. Moreover, they may introduce detailed descriptions to the real used strategies such as additional clarifying prompts, summarizing, paraphrasing, interpretations, closed questions, and open-ended questions. However, after conducting the interview, a researcher might discover the following problems. Firstly, he may discover that there is no transparency in clarifying the purpose of selecting interviews as a means of the data collection method. So that, the researcher should offer introductory ideas to help the participants in advance to improve the transparency of the interview. Secondly, the components of the interview might be not clear from the previous studies, because the practical definition of the interview is changeable according to the used method. For example, some interviews may not be a planned conversation or even discrete event between the researcher and the participants. Yet, the normal process of the interview and the data collection will be between the researchers and the participants. Consequently, the data may emerge because of this actual relationship. On the other hand, other interviews may are called semi-structured qualitative researches in which the participants receive the protocol of the interview in advance.

To sum up, the effective interview questions and the data collection method should be planned and conducted in the same way with all the participants. Despite the different approaches of interviews, few researchers present clear purposes for their interviews as data collection methods. They claim that the interviews are the right means of data collection and they have to conclude some explanation to prove their articulation. Furthermore, qualitative research seeks a high level of transparency in the practical definition of an interview. As an important part of the definition, researchers should include the philosophical rationale of a research (e.g., positivist/post-positivist, constructionist-interpretivism) and explain the actual interview strategies and techniques used (e.g., minimal encouraging prompts, paraphrasing of questions, open-ended questions, a reflection of feelings, interpretations). This data has to be recorded in the method part of the research. Thus, the current study encourages showing more transparency of the reasons for conducting interviews according to the nature of the research statement.

#### - The interview protocol:

Some researchers may conduct similar or parallel studies, but each one of them has his interview protocol and his certain level of structured interviews. A comparison of the results can be occurred according to the type of data of each study, how each one has richer or deeper data than the other, and how they are similar in their final findings. On the other hand, researchers may discover useful data about the strengths and weaknesses of each type of interview protocol.

Another essential area of investigation is to focus on the impact of different procedures before the interviews. In order to avoid any misunderstanding of the interview protocol, the participants should get clear sufficient information before they sign on any required consent forms. For example, the researchers may begin their studies by sending a copy of the interview protocol to the participants, so that they are aware of the types and levels of questions they are going to answer. They can reflect, by this method, on their personal experience and get ready to discuss different topics and answer questions about the main theme of the interview (Hill et al., 1997; Hill et al., 2005). However, there is no evidence to support the assumption that having more prompts gives more data. Thus, researchers can introduce different examples of introductory information to the participants before the interview. Then, they compare the results with the interviews that do not have such introductory data. To summarize, whether the interviewees get information about the interview protocol a long time before the actual interview or even just before it, they are going to react in different ways; some of them might say that the interview is interesting and he accepts the challenge. Others might think that they do not feel comfortable when they talk about a certain topic. Therefore, after reading the protocol, it is possible that some participants do not agree to participate in some types of studies because they focus on sensitive topics. Thus, researchers may contact the persons who did not agree to take part in the study to ask them about the reason for their decision. In this way, they can change the sensitive topics and convince the participants to participate in the interviews. Understanding the reason for this decision will minimize the possible future rejection of similar studies and also will help prepare future participants to get more supportive interview protocol data. Therefore, they feel more comfortable when they take part in a study which topic is quite away from their interests.

#### 3.5 Pilot study and pretesting:

A pilot phase aims at applying the survey to a small sample that resembles the whole population of the study (Mertens 2010). Pretesting a survey gives a researcher the chance to paraphrase the wording or terminology of the survey and its instructions. Moreover, he makes sure that all the questions are easy to understand, and he may figure out whether they are in the right order or not (Bell 2005). Since it is difficult to evaluate how questions may be understood in many ways by different participants, five participants in the current study work through the

online survey in the presence of the researcher, then they discuss what might increase the understanding of all the questions (Munn & Drever 2004, P. 33). This sample of five students answers the questions of the survey to help the researcher determine the survey validity and reliability. Reliability means that all the questions are assessing or measuring what they are designed to assess.

Another way of evaluating and examining the survey is by asking experienced educators to test the questions it and give their feedback. They can spot and identify linguistic or breakdown problems to rectify them before conducting the survey (Olson 2010). Two professors of TESOL have revised the online survey questions of the current study. They contribute to revising the formality and the content of the online survey. According to their feedback, the researcher does some amendments to the linguistic and the structure of the questions used in the survey to make them formal and academic; for example, one of the questions contains the following phrase ( to measure what is going on ); because it is not formal, the researcher changes it to (to measure their performance ).

The study applies the commensurability mixing validity method on the survey as it targets both the positive sides and the negative sides of the online digital tools. The participants' ability to understand all the questions of the survey helps in making it valid and reliable. Triangulation is another method to get a clearer image of what the researcher tries to answer. This term refers to using many sources of data and multiple methods to collect it. It is believed that triangulation is an effective method to add an internal validation to the interpretations of the questions. It also adds confirmability to the study instruments (Shenton 2004; Ivankova & Creswell 2009; Creswell 2014).

#### **3.6 Ethical Consideration:**

It is claimed that the problem of research misconduct can be caused by the wrong method of dealing with the participants and the wrong deceitful practices in conducting the study and reporting its findings (Howe & Moses, 1999). Researchers seek new data when they conduct any research to improve educational practices and policies. Therefore, reliability and accountability are very important factors Research methods, which are described as misconducting, include in the research enterprise. intentional fabrication of the research chapters or plagiarism as well as the false interpretation of the research results, which meet the needs of the study (Creswell, 2014). In this respect, researchers have to be responsible for conducting the research properly. It is believed that the research can be misconducted due to intrinsic deception. Rallis and Rossman in 2009 proposed the theory of consequentialism, which adopts the idea of "ends justify means". This theory is similar to what Howe and Mosesproposed in 1999. If we compare this theory to "Non-consequentialism" in an ethical way, it is said that if telling a lie is not correct in a case, therefore., it is not correct in all similar cases. Bell in 2005 described deception, which may mislead the participants from understanding the purpose of the study, as it has a wrong impact on safety, confidentiality, the infringement of privacy and anonymity.

Therefore, to solve this ethical problem, Rallis and Rossman in 2009 suggested that researchers should emphasize ethics individual responsibilities and their rights. I addition to this, they should promote great value and respect to all human beings in every point of their researches. In this regard, Creswell in 2014 paid great attention to the significance of predicting ethical problems and designing plans to resolve them.

Any researcher needs to consider the ethical factors, which protect participants' rights during the research process. The researcher in the current study has informed consent from the participants before they answer the online survey questions. The researcher shares all the information they need about the study before they start. He informs them about the purpose of the study and its tools and research methods. He tells the contributors that he respects their privacy and the security of data considering the positive measures (Burgess 2005). To make sure that the participants understand they have the right to choose to participate in the study or not, the researcher acknowledged to them that they can withdraw from the study at any time they wish. In this case, he can minimize any potential intrusiveness. The researcher has a great understanding of the culture and traditions of the United Arab Emirates society.

Therefore, to avoid any ethical problems, he makes sure that all the participants understand the nature of the study and are ready to deal with any ethical problem that may happen.

# 3.7 Research questions:

Many studies indicate that the use of online assessment tools in assessing learners' performance is effective. Using technology, therefore, influences the improvement of learners' achievements if it is used in the right way. After reviewing these studies, the researcher in this study tries to find the connection between using technology and the implementation of online tools as means of formative assessment to monitor the performance and the engagement of learners.

Does the use of online tools affect learners' performance?

Does the use of online tools affect learners' engagement?

# 4. Chapter Four (Data Collection and results)

# **4.1 Online survey for students:**

The online survey includes two parts. The first part consists of fifteen questions, which focus on the positive features of online tools. The second part has five questions, which survey the negative points of online tools. The researcher in these two parts tries to keep close to the study's main statement, which is about the impact of online learning tools on learners' performance and engagement.

During the pandemic of the Covid19 period, all teachers in the ATA use the online learning tools to increase the engagement of students and as a means of formative assessment. The researcher surveys the learners 'attitudes towards the use of these online learning tools. He uses Microsoft Office Forms to conduct the online survey and to exports reports its analyzed data. The survey intends to check students' attitudes towards the positive impact of using the online learning tools on one hand, and their negative influence, if any, on the other hand.

In the following lines, the researcher presents a detailed analysis of the students' responses to the online survey questions.

An overall of 23 students with a percentage of 46% uses Nearpod and Quizziz, while 17 and 12 of them with a percentage of 34% and 24% respectively prefer to use Microsoft Forms and Kahoot. On the other hand, the online learning tools of, Classkick, Wordwall, Socrative, and Padlet have the lowest preference with a percentage of between 18% and 4%.



Figure 2 (the most used online tools)

About 30 students with a percentage of 60 % think that using online learning tools improves their grades in English, while 20% of them do not think that there is any progress in their performance in the English subject.

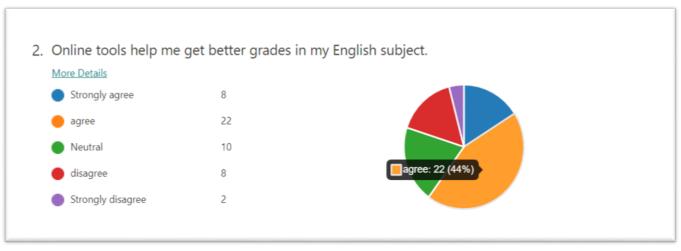


Figure 3 (students' grades improvement)

A number of 34 students with a percentage of 68% agree that using online learning tools improves their understanding of English. However, 4 students with a percentage of 8% don't agree that they understand English more deeply with the use of online learning tools.

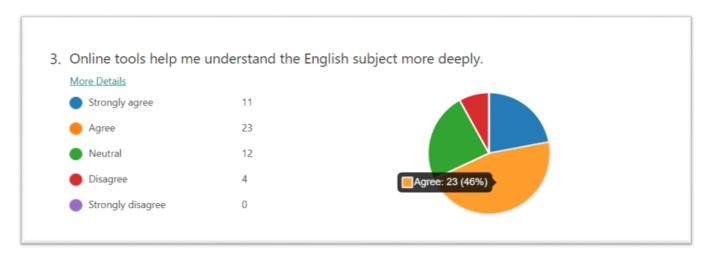


Figure 4 (improvement of students' understanding of English)

A number of 28 students with a percentage of 56% believe that using online learning tools enhances collaborative learning in both campus and online platforms. On the other hand, 7 students with a percentage of 14% don't think that the online learning tools have a role in their collaborative work.

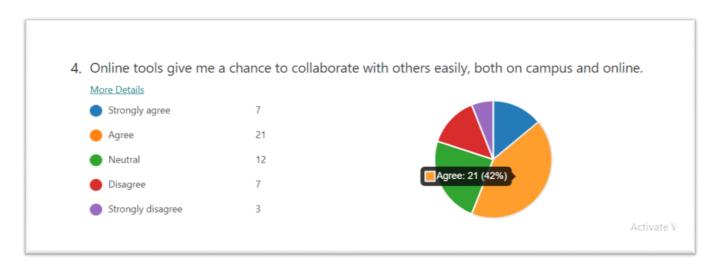


Figure 5 (Enhancement of collaboration among students)

A total number of 36 students with a percentage of 72% see that learning with the use of online learning tools improves their information technology skills. Yet, 5 of them with a percentage of 10% think that their skill of using online tools doesn't improve.

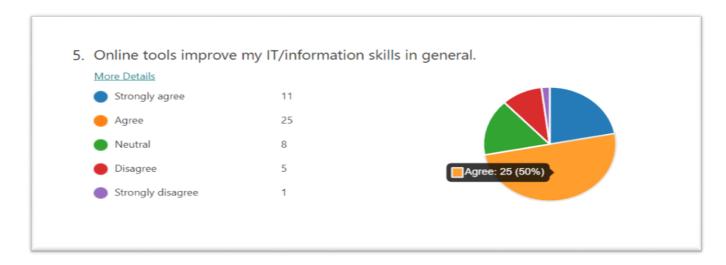


Figure 6 (Improvement of students' information technology skills)

A group of 32 students with a percentage of 64% says that they can complete their tasks in English subject more easily with the use of the online learning tools. Four of them, on the other hand, with a percentage of 8% decline this claim.

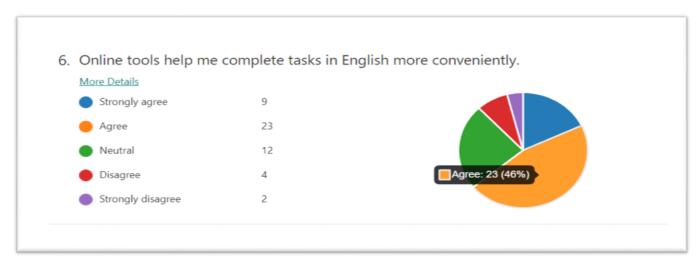


Figure 7 (Completing English tasks)

To the answer to a question about whether the online learning tools help students discover topics in English, which are new, 34 of the students with a percentage of 68% think this claim is correct, while 3 of them with a percentage of 6% disagree.

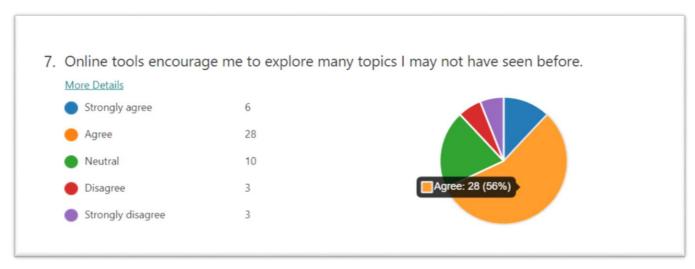


Figure 8 (Exploring new tools)

About 32 of the students with a percentage of 64% believe that online learning tools help them a lot when they take online courses in English. However, 7 of them don't think that they don't get any help from online tools when they take a training course.

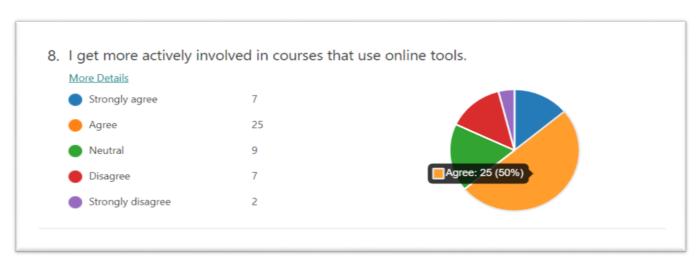


Figure 9 (Helping in taking online courses)

A group of 31 students with a percentage of 62% agrees that online learning tools improve their engagement in learning English. On the other hand, 6 students with a percentage of 12% don't agree with that claim.



Figure 10 (Improvement of students' engagement)

A number of 30 students with a percentage of 60% claim that they have a clear idea about how to use online tools in their learning. On the other hand, only 4 of them say they have technological problems in dealing with online learning tools. The researcher explains the nature of the participants and the context of the study. All of the students are adults who are qualified enough to be able to use their mobile devices and laptops in learning process easily. This factor helps the researcher to avoid any technological awareness issues during the study.

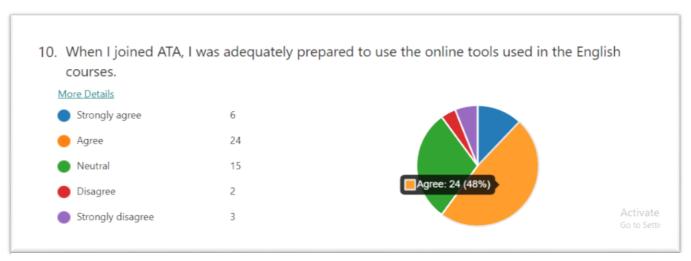


Figure 11 (Readiness for using online tools)

A total of 33 students with a percentage of 66% agree that they are connected easily by the use of online learning tools. However, 4 of them with a percentage of 8% see that these tools don't have any effect on their connection with their peers.

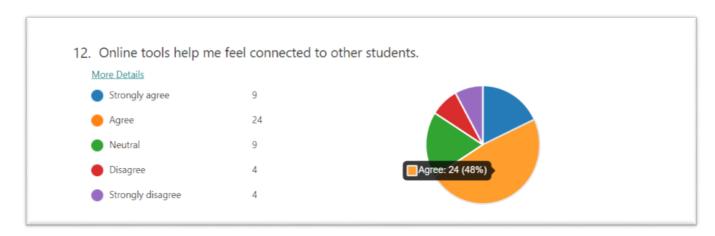


Figure 12 (Students' connection with their peers)

Most of the students with a percentage of 72% feel that they are more connected with their teachers by using the online learning tools, while 6 students with a percentage of 12% don't feel that they have more connection with their teachers

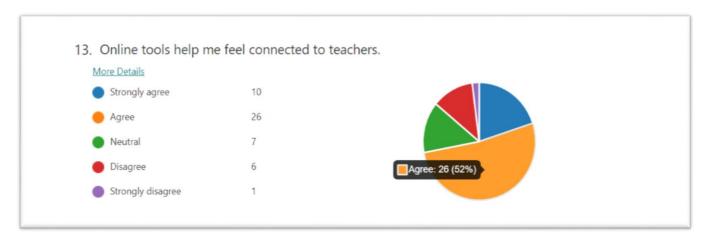


Figure 13 (Students' connection with their teacher)

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A total number of 34 participants with a percentage of 68% recommend that all the instructors in ATA would use more online learning tools in their teaching process, while only 2 participants with the percentage of 4% don't recommend using more online tools.

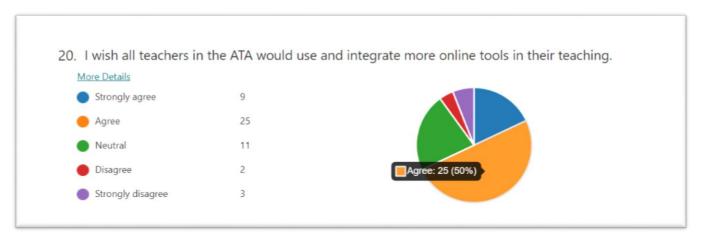


Figure 14 (Recommendation of using online tools)

To summarize the previous data, it is clear that most of the participants with an average percentage of 65% agree that the online tools have an effective impact on their learning and performance in English. On the other hand, an average percentage of 4% see that online tools do not have any impact on their learning process.

A group of 22 students with a percentage of 44% says that their privacy is affected by the use of online learning tools, while about 5 students with a percentage of 10% think that online tools don't have any influence on their privacy.

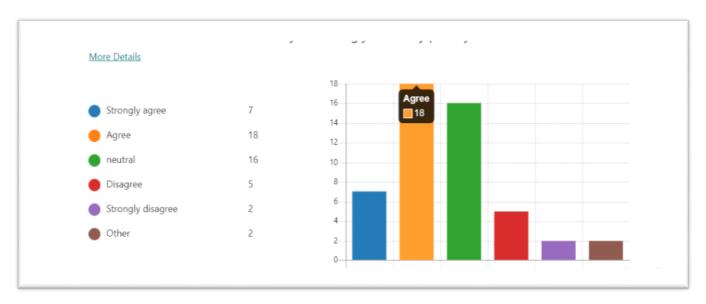


Figure 15 (Online tools effect on students' privacy)

Similarly, 22 students with a percentage of 44% are worried about being hacked by using online tools. However, 12 participants say that they do not have any concern or fear of hacking by the use of these tools.



Figure 16 (Hacking issues)

About 28 students with a percentage of 56% think that using mobile devices may distract them from concentrating during English classes, while 4 of them with a percentage of 8% don't see that they are distracted by the use of online learning tools.

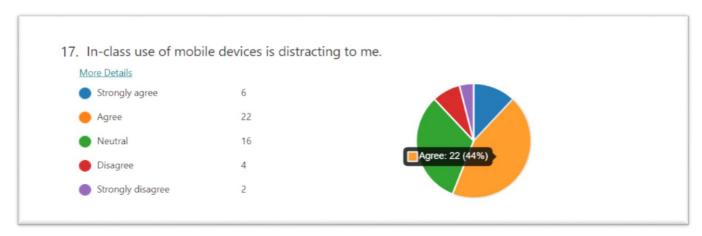


Figure 17 (Students' distracting issues)

A number of 34 students with a percentage of 68% students claim that using mobile phones can be a distraction factor to their teachers during English classes, while 4 participants with a percentage of 8% think that online learning tools are not distracting to their teachers at all.

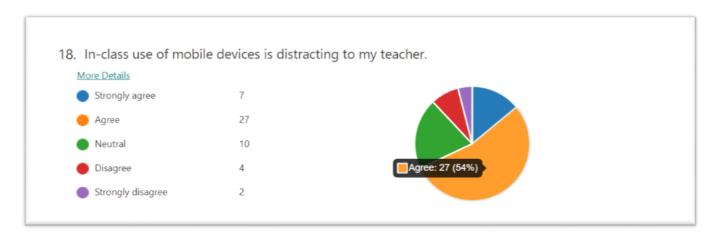


Figure 18 (Teachers' distracting issues)

A number of 27 students with a percentage of 54% think that using many inline learning tools at the same time may deviate them from concentrating on the most important tasks of their lessons. On the other hand, 5 students with a percentage of 10% see that they can learn with no issues by using multiple online tools at the same time.

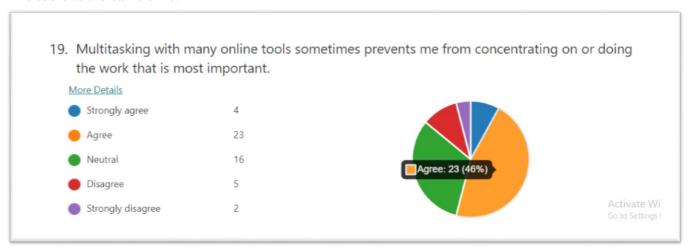


Figure 19 (Multitasking issues)

To conclude, the survey answers analysis proves that the use of online tools has improved learners' performance and engagement. Some of the learners think that using online tools should be focused and related to their content. Also, they recommend that the use of online tools should be with a purpose, otherwise it will distract them from achieving their main goal of learning. The questions of the students' online survey are divided into two main streams. The first one targets the benefits of using online tools in the learning process. The other stream is asking about the disadvantages, if any, of using these tools. The study results succeed in answering the two research questions, which are about the influence of online digital tools on learners 'performance and engagement. Most of the students agree that they are getting better learning with the use of online tools. The twenty-first skills which include critical thinking, innovation, and creativity have been improved by the implementation of online tools as a means of formative assessment during classes. A great number of students are satisfied by the use of these online tools as they collaborate more with their teachers and colleagues. Most of them state that they recommend the use of these online tools with different subjects.

#### **4.2 Teachers' Interviews:**

Themes and codes of teachers' interviews are derived from the answers that have the same concepts and ideas (Braun & Clarke, 2012). The current study follows a deductive thematic approach in analyzing the five participants' answers. The researcher has transcribed all the questions and answers of the five interviews. He has highlighted the two main concerns of the two research questions., namely students' performance and engagement. After that, he reviews the coded data that happens in order to identify the similarities and differences of the teachers' answers. There is no standard layout for transcribing qualitative types of researches. Therefore, the researcher in the current study has an initial opportunity to settle on data that is relevant to the research's main objectives. He also excludes the irrelevant answers and focuses more on the potential themes and the overall tone of answers, which are the most relevant elements and concepts of data, concerning the two research questions. The researcher gives the interviews pseudonyms to ensure the privacy and confidentiality of the participants as agreed in the consent form.

The current study has interviewed five teachers from ADNOC Technical Academy. The purpose of these interviews is to find the answer to the research questions, which are mainly focused on learners' performance and their engagement by the use of online tools and mobile applications. The researcher encouraged teachers to use different online tools in their teaching. He conducted a professional development session during the early stages of the current study. The purpose of that session is to train teachers on how to implement a number of online tools in their online teaching. The researcher has introduced eight online tools to the teachers, and he explained the importance of using them as a part of his Master's study. These online tools are Nearpod, Microsoft Forms, Quizuzz, Classkick, Word Wall, Socrative, Kahoot, and Padlet, The five participants have the same structure and order of the interview questions to guarantee its reliability and validity. As the online survey, the ten questions-interview is divided into two categories; the first category focuses on the positive impact of online tools on the learning and teaching process and whether it improves the students' performance in English or not. The second category of questions investigates the negative impact of the online tools, if any, on students' engagement and performance.

All the five participants agree on using Nearpod in their online teaching because, as they say, it is a fun way to assess student skills and it is a good way to give immediate feedback. It means that it is the most preferable tool among both teachers and students. About 80 % of the teachers prefer to use Microsoft Forms because it is the official tool used by the education sector in the UAE, and all students are

familiar with it. Four teachers with a percentage of 80% explain in their answers that they use Classkick in their online teaching because it helps them informative in-class assessment to evaluate how well learners grasp writing, grammar, and reading topics.

Quizizz online tool comes next as 60% of the teachers use it, and they justify their choice by saying it is easy to use and free of charge. Other online tools such as Padlet, Socrative, Word Wall are rarely used by two teachers as they use the other online tools more. None of the teachers uses Kahoot online tool in their online teaching.

All of the participants think that the use of online tools improves students' grades. One of them says, "Using these apps is extremely important in helping students improve their grades. They are attracted to them and they help them practice at their own pace and time. They can even use them to study their materials when they do the activity more than once. They are user friendly and fun'. Three of the teachers add conditions to make it happens; when they claim that these tools can help improve students' grades only if students take them seriously and the learning outcomes are met.

All of the five teachers agree that online tools help them in their distance learning because they engagingly deliver lessons as they improve interaction, and they can give feedback and recommendations of improvement. Moreover, online tools provide them with resources and activities.

Four of the teachers agree that online tools do not enhance collaborative work among students because, with many limitations of the online tools, collaboration in live lessons is a challenge. Only one teacher explains that he assigns tasks to be done in groups and he finds out that it is an effective and successful method of online teaching.

Three of the teachers believe that students are more engaged when they use online tools because they are familiar to use, and some of the activities can be completed anytime according to each student's pace. Two of the teachers, on the other hand, say that face-to-face class activities are more engaging than online tools tasks.

All of the teachers think that online tools help students complete their assignments because they are available anytime and they can access their accounts at their convenient time.

All of the five participants agree that using the online tools does not distract students' attention unless the teacher misuses them in class. For example, if the instructions are not clear, the tasks are very challenging for the students, or if the teacher does not choose the suitable tool for the skill, he wants to enhance. Otherwise, online tools help students focus more in class and perform better since they are motivating and engaging.

All of the five teachers think that the use of online tools does not affect their privacy at all because all the sites, apps, and portals are trusted and they have a clear policy. These online platforms protect the users' privacy whether they are teachers, students, or parents. Teachers can manage what they want to share; for instance, they can decide whether they share their activities in public or in private for their students and their organization only.

Four teachers believe that multitasking with many online tools sometimes prevents them from concentrating on or doing the most important work. They suggest that teachers should concentrate on one or two tools in one lesson to help students focus and understand more. One teacher, on the other hand, says 'I do not think that Multitasking with many online tools prevents me from concentrating or doing the important work. On the contrary, it helps me vary my presentation techniques and my activities based on my students' needs and levels. For example, some tools are more suitable for individuals; others are more suitable for groups. Some apps are good for listening and others are good for writing. Some applications are good for testing and others are good for practice. The teacher must choose his/her tools properly and carefully to achieve his/her learning objectives. Therefore, he thinks that a teacher should use more than two online tools every lesson to make the activities more engaging.

All five participants recommend that all teachers in the ATA would use and integrate more online tools in their teaching. They think that if these online tools are officially part of the curriculum, they will facilitate teaching and learning and they prepare students for the digital education that is evolving so rapidly.

In conclusion, all the five teachers' responses during the interviews support the use of online tools in learning as they improve the performance and engagement of the students.

#### **5. Chapter Five (Discussion)**

During the past decade, a quick development has emerged in using mobile phones applications in teaching English language; and the focus of many studies is to show the impact of these applications on learning English as a second language. One of the most famous initially used application is the SMS (Short Message Service). Many studies make a comparison between the approaches of using SMS to teach vocabulary with using different traditional types of teaching. For instance, Zhang et al. (2011) and Lu (2008) investigated the influence of SMS teaching vocabulary method with printed vocabulary method. The results of their researches prove that the students who learn with the help of SMS method perform better than the other group of learners who learn vocabulary through the traditional printed papers method. In a similar study, Suwantarathip and Orawiwatnakul (2015) compared the impact of traditional class paper-based activities to teach vocabulary with SMS messages method with students who are outside the school in order to learn and practice new words within six weeks. The study shows that the students who study with SMS method outperform the students who study inside the classroom with papers. In another study, Saran and Seferoglo (2010) used MMS (Multimedia Message Service). One group of students learned new words using MMS messages which have multimedia such as videos, images and sounds, while another group studied the vocabulary inside the classroom with the traditional way. The grades of those who learn by MMS are significantly higher the grades of the other group.

On the other hand, Alemi et al. (2012) discovered that there is no significant difference between vocabulary learning between the two groups. However, they noticed that students have positive attitudes towards the use of SMS to learn new words.

In 2005, Thornton and Houser examined the impact of using e-mails as a vocabulary teaching tool on mobile phones. During the first weeks of the experiment, they sent short vocabulary lists to students by emails. For the first two weeks, students had their lessons of new words on their mobile phones, and then in the second two weeks, they received them on their laptops. In another experiment, they divided students into two groups; the first group learned by getting emails on their phones, while the other group learned by the traditional paper-based method. The results of the two experiments reported that mobile phone method is more effective than the computer and paper-based methods. The third experiment was to check the effectiveness of online learning using a website to teach idioms. The author

and the developers of the web site introduced idioms in a form of multimedia (images, videos and sounds). They asked a group of students to evaluate the website of teaching idioms. They found out that learning idioms using the website was very significant and entertaining. Similarly, Thornton and Houser in 2005 created a website to teach English idioms. They called the website Vidioms, which includ idioms with explanation and examples using different types of multimedia. They surveyed the students' opinions on using this online website. The results showed that most of the students recommend the use of it as they enjoy while they learn. Another study is by Hayati et al. in 2013 when they investigated learning English idioms on a group of eighty students whose nationality is Iranian. They divided the students into three groups. Each group had different type of instructions to study about eight English idioms. The first group of students studied idioms with their definitions and examples using printed papers. The second group, on the other hand, learned idioms by receiving SMS messages, which have the idioms with their meanings and examples. The third group studied inside their classrooms by teaching them the idioms through short paragraphs rather than their definitions for more contextualized instructions. The results of the post-test show that there is a significant difference between the results of the three groups. The second group which studied by using the SMS had the highest scores, while the self-study group had the lowest grades. In additions to the post-test, they conducted a survey to check students' attitudes towards using mobile devices. The results show that most of them find the use of mobile applications and SMS in learning is effective than the traditional method.

It is clear that many studies have experimented the use of mobile devices, however, none of them is able to show what smartphones with their applications can provide to make learning more interesting and easier. It is claimed that the above-mentioned studies find out that SMS messages and the use of computer software, which is adapted to be mobile devices-usable, are effective methods of teaching vocabulary. However, the affordance of these tools is still limited.

For example, the use of SMS messages in learning can be expensive for some students (Cavus & Ibrahim, 2009). In addition, some computer software need adjustment to work on mobile devices, which can cause bad quality of their use (Thornton & Houser, 2005).

Because of Covid19 pandemic many teachers are teaching remotely, therefore other programs and platforms, other than messages method, are recently widely used. Nowadays, all education sectors

around the world are adopting distant learning as a means of communication and learning methods Therefore, the current study as well as many recent studies try to prove that learning by the use of smartphones applications become more popular and better functioning among learners. These applications can facilitate the mobile use in learning. Moreover, they are advantageous in teaching English language (GodwinJones, 2011). A good example of these application is WhatsApp which has become the most widely used and popular application. It is a free mobile messenger mobile application; learners can send and receive texts and different types of multimedia messages. They can make audio calls as well. It is usable on mobile systems (android, IOS, windows mobile, etc.). It has become the most effective way of communication, and it has used in some researches to monitor the influence of on the learning process. Plana et al in 2013 aimed at providing EAP (English for Academic Purposes) learners with extra reading activities by using WhatsApp application. They studied short reading comprehension passages, answered questions, and shared the answers in groups. This activity has replaced the SMS method, which is more costly and less convenient without the use of computer to send messages. After that, they conducted a questionnaire after twelve weeks of the study. The results show that the students enjoy the activities of the application and their reading skills increase. Al Saleem (2014) examined the impact of dialogue journals by the use of WhatsApp application on the students' writing in terms of vocabulary and understanding its meaning. He spent six weeks in collecting data by giving students 30 topics to write using WhatsApp application. He asked students to complete writing tasks before and after the study to make a comparison between them, and to check if there is an improvement in their performance in terms of learners' word choice and voice or not. Lawrance in 2014 divided the students into groups in using WhatsApp to introduce new vocabulary to a group of five undergraduate students from Africa. The study lasted for seven weeks during which Lawrence sent new words with their explanatory translations and attached with different types of media such as images and sounds. The researcher, then, has elaborated the messages content in each following course to test the improvement of learners' knowledge. He found out that WhatsApp use in learning is an effective tool which offer outside-classroom opportunities to learn new vocabulary especially for slow learners; However, teachers should plan carefully for the messages content. Castrillo et al. (2014) investigated the impact of WhatsApp in improving discussion on new words use among eighty-five German students who learn Spanish language. They asked students to answer questions of a questionnaire before the study. They divided the students into five WhatsApp groups. Each group has five students.

The students discuss topics of messages, which are sent by their teacher. Then the teacher analysed the students' negotiation of meaning and their engagement. They found out that the students have a high level of motivation and engagement. They also proved that WhatsApp group strategy improves the students' discussion skills. Basoglu and Akdemir (2010) had a research on teaching vocabulary to examine the difference between the use of flash cards and mobile devices in learning process. The two researchers divided the students into two groups and used a mobile application to teach vocabulary with the first group and flash cards with the other one. The results show that the students who use mobile learning are better that those who use flash card leaning. Another similar study is about a development of VocabTutor application, which was first used by Stockwell in 2010. The study monitors the percentage of achievement of learning vocabulary, the speed of learning and the time spent to learn by the use of computer and mobile devices within three-year period of time between 2007 and 2009. This system is a moodle-based application, which shows that there is no significant difference of students' scores. However, a great number of students have preferred to use the computer than the use of mobile devices. Another study is conducted by Wu in 2015 who created an application called Word Learning-CET6 to teach new words to a group of Chinese students who study at colleges. He let the experimental group to learn by using the application, while the other group learned by text messages. The results show a big difference between the two groups; the students of the first group learned better than the second group.

Finally, it is clear that the results of the above-mentioned studies are similar to the results of the current study as they share the idea of highlighting different methods of mobile learning applications and online tools. These online applications are mainly designed to teach English vocabulary. They find out that the students who learn by using the online learning tools exceed those who learn by conventional methods using papers.

# 6. Chapter Six (Conclusion)

The current study highlights the importance of online learning as it a motivating and engaging approach to enhance education in the UAE and around the globe. Online tools, which are presented as one of the formative assessment tools, are seen as part of gamification strategies to attract students to interact with their peers and teachers. Because of the improvement in communication technology, mobile learning has become an essential part of online learning. Educators have developed applications and online tools to support the improvement of mobile learning and gamification approaches. Online learning is an approach, which explains that education can happen without face-to-face interaction between teachers and their students. In the past, this may have been impossible to conceive. From the postal ways of communication services, to spark transmitters, to television and radio broadcasting, to the advancement in the use of the internet, technology of communication has affected the education field. Nowadays, with this rapid advancement in all means of communication technology, online learning has become common everywhere in the world.

Online learning plays an essential role in the education sector in the UAE as it offers great opportunities for learning with affordable options and innovative learning tools. Online learning is the fastest-growing approach of distant learning, and it is recommended by both traditional and modern educational institutes. It has not only changed the landscape of education in schools, but it has its effect on higher education as a whole across the world. John Sener in 2012 stated that the main objective of the first stage of online learning is to make access to the internet easier, while the second era has the objective to enhance the quality of education as a whole.

It is believed that as long as technology continues to develop, gamification by the use of online tools will continue to increase. Governments around the world will expand the use of online tools by increasing the fields of use, methods of use, and the number of educational institutes. Therefore, as long as the world is interconnected to technology, the current study recommends that all the teachers should keep up with that rapid development; otherwise they will be left behind. The use of books should be reduced gradually and is replaced by online resources. However, we should consider that some teaching methods do not depend on electronic means, and using books is essential for them. Moreover, technology will still be stumbled upon old beliefs of teachers who do not understand its importance in learning. Yet, using online tools is still very crucial and effective,

The first stage of online tools implementation in the education system is to cast away these wrong ideas by organizing meetings, training sessions, seminars, etc.

For example, the researcher has conducted a number of professional development courses to introduce the most innovative online tools that can help them in their distance teaching. What is gratifying after applying the current study is that the "snowball" has started to go higher and higher, as all the teachers in ATA use the online tools in their distant teaching.

In conclusion, online tools in the form of gamification, help teachers enhance their learners' performance and engagement. The online learning tools offer great opportunities for both teachers and students to communicate in a safe virtual educational environment. Fiori (2010) states that it is very easy to offer engaging interactive online tools for students when they have an effective instructional methodology to enhance the quality of the learning experience. The key features of the online tools in learning are as follows: First, they draw and keep the students' attention as they motivate them to compete together in order to reach a goal or to receive a reward. Second, they offer not only informative content, but they provide also fun and interactive activities to improve learners' responses. Students can acquire new knowledge while they are having fun. When the teacher designs a quiz by using the online tools, whether his focus is on the content or not, his goal of introducing the new information efficiently remains the same. Third, online tools allow learners to gain knowledge when they need it in their real life. For example, when they do a task or compete together, they have the opportunity to explore new subjects and innovative methods of using the acquired knowledge outside the classroom (virtual or physical). Finally, online tools improve the student-teacher relationship. Where learning occurs by the use of online tools, learners no longer have the reluctance to communicate with their teachers, which in some cases can be a negative factor in acquiring knowledge. With that structured relationship with the help of online tools, a teacher can be seen as a friend or a guide to support learners to reach their goals.

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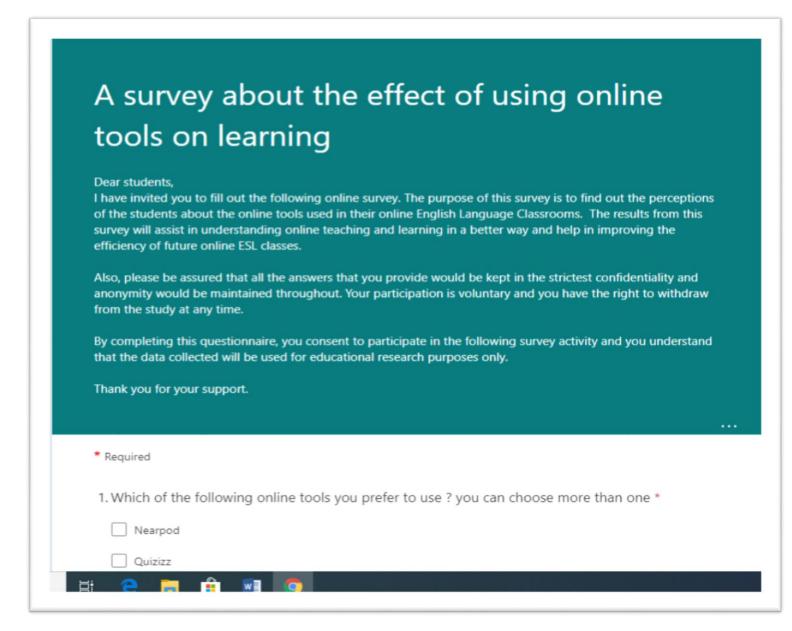
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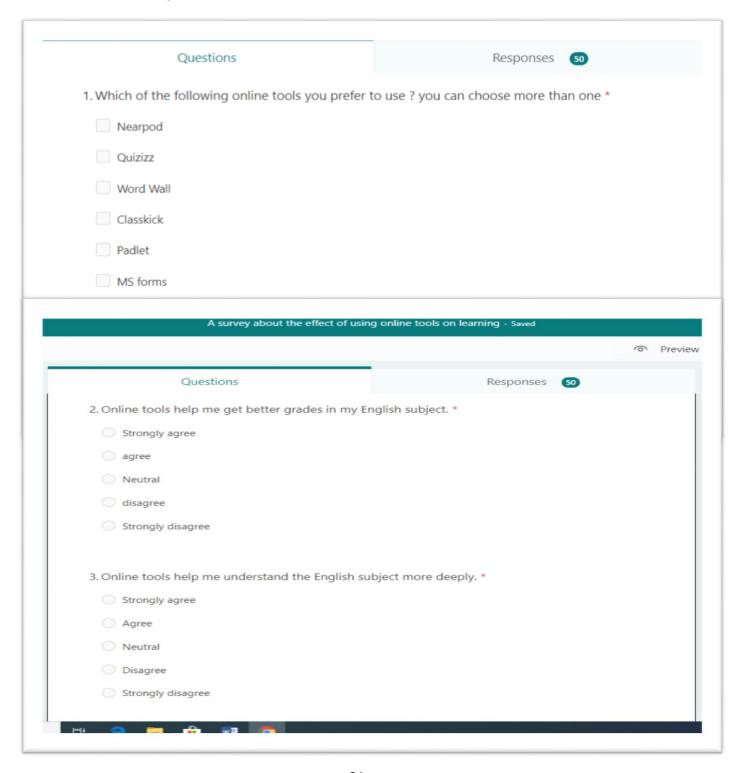
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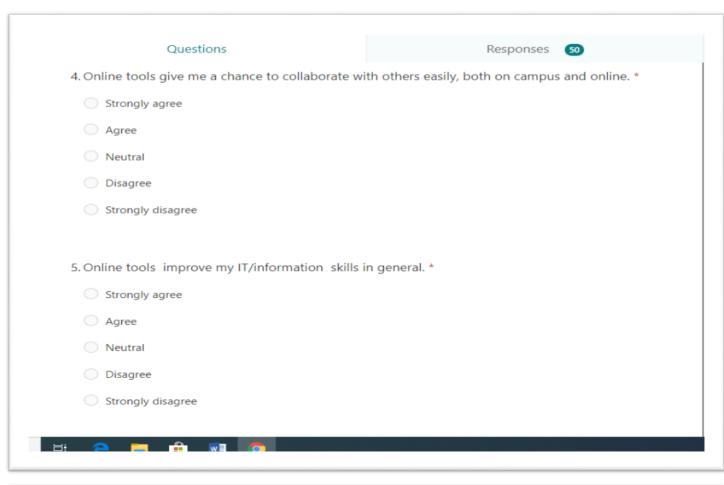
# **Appendix:**

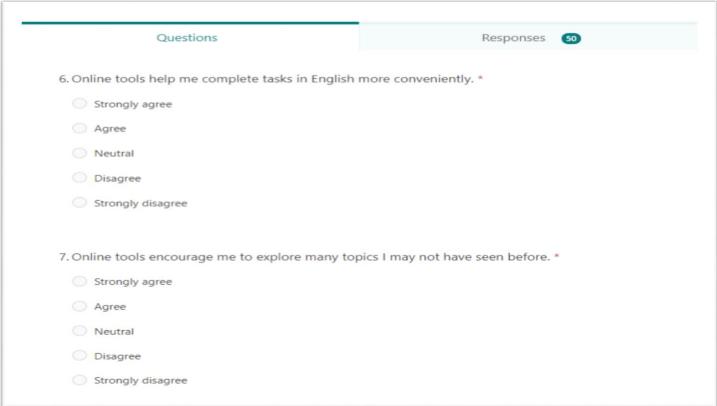
# 1- Online survey Introduction



# 2- Online Survey Questions:







	6			
Questions	Responses 50			
8. I get more actively involved in courses that use online tools. *				
Strongly agree				
Agree				
Neutral				
Disagree				
Strongly disagree				
9. Using online tools in class improve my engagement during lessons. *				
Strongly agree				
Agree				
Neutral				
Disagree				
Strongly disagree				

Questions	Responses 50
10. When I joined ATA, I was adequately prepared to u	se the online tools used in the English courses
Strongly agree	
Agree	
O Neutral	
Disagree	
Strongly disagree	
11. Online tools help to be aware of the latest technol	ogy used in the ATA. *
Strongly agree	
Agree	
O Neutral	
Disagree	

Questions	Responses 50
12. Online tools help me feel connected	I to other students. *
Strongly agree	
Agree	
O Neutral	
Disagree	
Strongly disagree	
13. Online tools help me feel connected	d to teachers. *
Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	

Questions	Responses 50
14. Online tools help me concentrate and think dee	eply about English subject tasks. *
Strongly agree	
Agree	
Neutral	
Disagree	
Strongly disagree	
15.I am worried that online tools may increasingly	affect my privacy. *
Strongly agree	
Agree	
neutral	
Disagree	
Strongly disagree	

Questions	Responses 50			
16. When I use online tools, I am concerned about cyber security(password protection and hacking).				
*  Strongly agree				
Agree				
Neutral				
Disagree				
Strongly disagree				
17. In-class use of mobile devices is distracting to	me. *			
Strongly agree				
Agree				
Neutral				
Questions	Responses 50			
Questions  18. In-class use of mobile devices is distracting to				
18. In-class use of mobile devices is distracting to				
18. In-class use of mobile devices is distracting to  Strongly agree				
18. In-class use of mobile devices is distracting to  Strongly agree  Agree				
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral				
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree				
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree				
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree	my teacher. *			
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree  19. Multitasking with many online tools sometime work that is most important. *	my teacher. *			
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree  19. Multitasking with many online tools sometime work that is most important. *  Strongly agree	my teacher. *			
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree  19. Multitasking with many online tools sometime work that is most important. *  Strongly agree  Agree	my teacher. *			
18. In-class use of mobile devices is distracting to  Strongly agree  Agree  Neutral  Disagree  Strongly disagree  19. Multitasking with many online tools sometime work that is most important. *  Strongly agree  Agree  Neutral	my teacher. *			

20. I wish all teachers in the ATA would use and integrate more online tools in their teaching. *
Strongly agree
○ Agree
O Neutral
Disagree
Strongly disagree

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