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**ABSTRACT**

**Objective:**

**Challenges of Blended Educational Technology**

The expansion of technological applications such as computers and mobile phones in the past three decades has impacted our lives from different perspectives. Educational contexts are no exceptions, and like other environments, they have also been influenced by new teaching sources and software. More recently, there has been a passionate debate about the usefulness of the smart-phones for educational purposes and their possible uses in educational instruction; therefore, in this chapter, a review of the current published literature focusing on the use of technology-based instruction by instructors or students was conducted. The results of the study demonstrated that technology-based instruction has significant effects on learners' achievements; however, there are some challenges such as social and technical barriers in blending technology and education in different educational contexts.

**Methods:** Everyday life has experienced changes and educational settings are not exceptions. This change is more remarkable and rapid with the advent of modern technologies. Learners, for centuries, have experienced various instruments and method to learn more effectively and rapidly. Teaching in educational settings may be influenced by diverse factors. One of these factors is employing modern technologies in teaching environments. Modern technologies and Information and Communication Technology (ICT) provide extraordinary infrastructure to deliver the knowledge in numerous ways, in different regions with different learners. Information and Communication Technology (ICT) has great impacts on human life from various perspectives. People communicate with each other via new technological devices such as mobile phones, social networking, texting via the internet, as well as



visiting various webs without limits. Education world is no exception. The use of ICT in teaching and learning might have a positive effect on learners' academic achievements. Many action plans were adopted at the national and international levels, and considerable investment was made for ICT in teacher education. Most teacher education programs have been redesigning their curricula in order for prospective teachers to become competent users of new technologies when they become teachers (Hartoyo, 2009; Mellati & Khademi, 2014). One of the consequences of modern technology was the advent of new field in education that was Mobile Assisted Language Learning (MALL).

### **Mobile Learning or Mobile Assisted Learning (MAL)**

Employing technological devices in learning improves the quality of education. Social network is a new and updated trend in the technology world that has been referred to networked tools that allow learners to communicate, interact and share their ideas and interests with each other (Anderson, 2010). Social networks such as WhatsApp have opened up new interaction opportunities among teachers and learners. The use of social networks is becoming popular in everyday communication. It is even used for collaborative learning tasks, especially in language learning. Contemporary educational policy, curriculum designing, and instructional pedagogy have been profoundly affected by impressive new global information and communication technologies (CelceMurcia, Brinton, & Snow, 2014). New modern competencies include the ability to collaborate with others on processes of problem-solving, textual co construction, negotiation, and cooperative production and presentation even when working in different locations and connecting only by these new technologies. Like other fields of study, teaching have also influenced by new teaching sources and software. (Chipunza, 2013). They stated that wireless technologies such as laptop computers, mobile phones, especially smart-phones, create a revolution in education that transform the traditional classroom-based learning into lifelong learning. Increasing access to internet resources, learners have an affluence of authentic oral, written, linguistic corpora and concordant programs that help them solve their problems. Guy (2010) declared that the field of mobile learning is relentlessly advancing and there are some research studies that explore the advances of mobile technologies in learning environments unfold on a regular basis and there have been several attempts to classify the definitions of mobile learning used in the literature into a comprehensive framework, e.g. Traxler (2010) identified that three categories of mobile learning have been used in past literature. The first category was those early approaches to define mobile learning tended to focus on the nature of mobile devices, referring particularly to handheld or palmtop electronic devices. The next category exhibited a greater focus on mobility, but was largely still directed towards the mobility of the technology. The last category emphasized the mobility of the learners and the learning process. Farley, Murphy, and Rees (2013) stated that those definitions that incorporate a description of the technology are in danger of becoming obsolete as mobile technologies, mobile applications, and the capabilities of these technologies are changing in a rapid velocity. Although previous research studies pointed out several challenges in adopting E-learning environments in language education and in the EFL contexts, it has also identified numerous advantages of such technology-based instructions. Kukulska-Hulme and Shield (2008) demonstrated that Mobile learning (M-learning) or Mobile Assisted Learning (MAL) refers to any form of learning that happens when the learner is not at a fixed, predetermined location. In these kinds of distance learning, learners take advantage of the learning opportunities offered by mobile technologies and are acknowledged as an interactive type of technology-based instruction. The magnificence of this kind of learning is that learners are actively involved in learning activities and tasks by interaction and collaboration using a smart-mobile phone. In KukulskaHulme's (2006) words, Mobile Assisted Learning (MAL) illustrated an approach to language learning that is enhanced through utilizing a mobile device. MAL is a subcategory of both Mobile learning (M-learning) and Computer-Assisted Learning (CAL). In MAL settings, learners are able to access learning materials, and communicate with their teachers and peers at anytime and anywhere. Hsu, Wang, and Comac (2008) expressed that the emergence of the third generation (3G) of mobile services was a revolution in learning and provided the potential of becoming widely used effective learning tools. Klopfer, Squire,



and Jenkins (2002) declared five features of mobile technology that can increase educational benefits. These five features that are among the most important ones are as follows: Portability, social interactivity, context sensitivity, connectivity, and individuality. Wong (2012) claimed that the most significant feature of MAL is that it is instructive and stated that in a mobile learning context, learners can take part in the interactive creation or analysis of internet video clips, or they can read or respond to blogs with English language users worldwide who share their interests and knowledge. There have been many research studies that were conducted on the applications of mobile phones and the potential of mobile devices for language learning environments in language learning and teaching in different contexts (Stockwell, 2007); however, there have been debatable claims about the effectiveness of smart-phones for educational purposes and their possible uses in English language instruction (Zurita & Nussbaum, 2007; Yang et al., 2013).

### **Social Learning, Social Networks, and MALL**

With the blooming of the digital age in 1990s, teachers were among the first that found creative and innovative ways to teach through integrating digital technologies such as Internet and other similar digital technologies like E-mail, Web quest, instant messaging, and Web-based groups in their classrooms (Bachmair, Pachler, & Cook, 2009). The advances in technology and wireless networking expanded the opportunities of utilizing mobile phones in educational environments. Mobile phones and similar technologies suggest communicative language practice, access to authentic content, and task completion (Chinney, 2006). A review of the literature has revealed that many researchers have highlighted the advantages of technology-based learning; especially mobile learning that is also called M-learning in the field of English language teaching. In fact, M-learning deals with concepts such as spontaneous, informal, pervasive, private, context-aware, and portable learning environments (Traxler, 2010). Bachmair et al. (2009) defined M-learning as the process of coming to know and the ability to operate successfully in modern and ever changing learning contexts and to know how to utilize modern technological devices. These devices have generated a branch of studies that relates to language learning and mobile technologies that are called Mobile Assisted Language Learning (MALL).

MALL allows learners to access learning materials and information from anywhere and at anytime. Due to the wireless technology, smart-phones can be used both for formal and informal language settings where learners can access additional and personalized learning materials from the Internet. Indeed, learners do not have to wait for a certain time to learn or go to a certain place to learn what is prescribed to them (Ally, 2009). Smart-phones are excellent tools to assist learners to learn English vocabulary more effectively (Gao, Luo, & Zhang, 2012; Lu, 2008; Looi et al., 2011). Smart-phones are effective, especially for synchronous and asynchronous learning environments and for promoting learners' listening and speaking skills (Kukulska-Hulme & Shield, 2008; Chinnery, 2006). They asserted that most mobile devices support collaborative speaking and listening activities successfully. Similarly, Chang (2010) declared that technologies and mobile devices facilitate the development of collaborative learning environments. Shen et al. (2009) maintained that the opportunities that these devices offer to learners engaged them enthusiastically in the English language process. They added that social networking services such as mobile devices are high-quality means of enhancing learners' communicative competence. Mobile phones are widely used among young people for two important reasons: first, they are much cheaper and more available than other devices such as laptops and palmtops; second, they not only support the transmission and delivery of multimedia materials, but also support discussion and discourse, real-time communication, synchronous and asynchronous environments, audio capability, text and multimedia inputs; therefore, stakeholders and curriculum designers seek to use them in educational environments (Kress & Pachler, 2007; Kukulska-Hulme & Shield, 2008; Traxler, 2010). These kinds of tools can be best put into practice in language teaching and learning contexts. For example, mobile phones can be used to send educational materials and contents to learners via Internet or in the simplest one in Short Message Services (SMS) (Kaplan & Haenlein, 2010; Lu, 2008; Looi et al., 2011). In contrast, some researchers contended that in an effective language



setting, the emphasis should be on language learners, because employing such a novel and unproven technology in learning environments is a real waste of time and money than save them (Colpaert, 2004; Beatty, 2003). Another significant feature of modern technologies is their evolutionary role in social networking. Social networking sites like Facebook, twitter, and mobile social networks such as WhatsApp, Viber, and Line attract and support networks of people and facilitate connections between them. Gee (2004) called these social network contexts as affinity spaces, where learners acquire both social and communicative skills. While developing a range of digital literacy in these spaces, the youth involve in informal learning activities, creative and expressive forms of behavior, and seek new identities. Effective use of social networking and media technologies provide extraordinary opportunities for course designers and instructors to interject emotions in the online learning environments, thus providing learning opportunities for learners to make emotional connections with classmates just as they do in the real time out of the classrooms (Richard & Haya, 2009). Obviously, the key to a successful online learning course is to help learners find innovative ways to establish strong relationships with their peers and teachers, although simultaneously meeting their technology-based learning styles (Kirschner & Karpinski, 2010). These social media tools create a constructivist learning environment which allows learners to construct interpretations of their data and utilize their individual life experience while working as a part of a collaborative team (McLoughlin & Lee, 2007). Learners can use social networking to create their own learning and social communities and their new identities (Richard & Haya, 2009). These online, social, and self-directed learning settings provide resources that enhance learners' engagement in the course. There are many social media tools that can be integrated into the curriculum to support learning and provide innovative and effective directions for content delivery in both synchronous and asynchronous language learning environments (Klamma et al., 2007).

### **Massive Open Online Courses (MOOCs)**

Baggaley (2015) argued that e-learning is a domain which covers the integration of Information and Communication Technology (ICT) in educational environments. The digitalization of educational resources and learning materials has enabled the re-use of these resources across countries and scholarly domains (Richter & McPherson, 2012). These systems focus on online social networks to create connection and to improve engagement (Alraimi, Zo, & Ciganek, 2015). MOOCs use social networks to create and sustain the social dimension of learning, and to enhance knowledge production rather than simply providing a platform for knowledge consumption. Yet very little is known about the types of messages that are appropriate to be shared between instructors and students in these communities (Barak, Watted, & Haick, 2016). A Massive Open Online Course (MOOC) is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, readings, and problem sets, many MOOCs provide interactive user forums to support community interactions among students and professors (Chen & Chen, 2015). MOOCs are a recent and widely researched development in distance education which were first introduced in 2008 and emerged as a popular mode of learning in 2012 (Xing, Chen, Stein, & Marcinkowski, 2016). The first MOOCs emerged from the open educational resources (OER) movement. The idea of Open Educational Resources (OER) has numerous working definitions. The term was firstly coined at UNESCO's 2002 Forum on Open Courseware and designates teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work. MOOC was coined in 2008 by Dave Cormier of the University of Prince Edward Island in response to a course called Connectives and Connective Knowledge. This course which was led by George Siemens of Athabasca University and Stephen Downes of the National Research Council, consisted of 25 tuition-paying students in Extended Education at the University of Manitoba, as well as over 2200 online students from the general public who paid nothing. All online students could participate through collaborative tools, including blog



posts, threaded discussions in Moodle and Second Life meetings. Stephen Downes considers these so-called cMOOCs to be more creative and dynamic than the xMOOCs, which he believes resemble television shows or digital textbooks (Zhou, 2016). Definitions and their features shed light on the differences between cMOOCs and xMOOCs. In general xMOOCs have the following common design features: it is a specially designed platform software: it means that xMOOCs use specially designed platform software that allows for the registration of very large numbers of participants, provides facilities for delivering digital materials, and automates assessment procedures and student performance tracking. It has the opportunity to use video lectures: xMOOCs use the standard lecture mode, but delivered online by participants downloading on demand recorded video lectures. It has the infrastructure to use computer-marked assignments: students complete an online test and receive immediate computerised feedback. These tests are usually offered throughout the course, and may be used just for participant feedback. Alternatively the tests may be used for determining the award of a certificate (Greene et al., 2015). Another option is for an end of course grade or certificate based solely on an end-of-course online test. Most xMOOC assignments are based on multiple-choice, computer-marked questions, but some MOOCs have also used text or formula boxes for participants to enter answers, such as coding in a computer science course, or mathematical formulae, and in one or two cases, short text answers, but in all cases these are computer-marked. It has the potential to support different materials: sometimes copies of slides, supplementary audio files, urls to other resources, and online articles may be included for downloading by participants. Finally, learners can share comments and discuss in it where participants can post questions, ask for help, or comment on the content of the course (Loizzo & Ertmer, 2016). xMOOCs therefore primarily use a teaching model focused on the transmission of information, with high quality content delivery, computer-marked assessment (mainly for student feedback purposes), and automation of all key transactions between participants and the learning platform. There is almost no direct interaction between an individual participant and the instructor responsible for the course (Zhang, Peck, Hristova, Jablokow, Hoffman, Park, & Bayek, 2016). On the other hand, cMOOCs have a very different educational philosophy from xMOOCs, in that cMOOCs place heavy emphasis on networking and in particular on strong content contributions from the participants themselves. Zemsky (2014) has identified four key design principles for cMOOCs: the first principle is autonomy of the learner: in terms of learners choosing what content or skills they wish to learn, learning is personal, and thus there being no formal curriculum. The second one is diversity: in terms of the tools used, the range of participants and their knowledge levels, and varied content. The third one is interactivity: in terms of co-operative learning, communication between participants, resulting in emergent knowledge. And finally, openness: in terms of access, content, activities and assessment. Therefore, for the proponents of cMOOCs, learning results not from the transmission of information from an expert to novices, as in xMOOCs, but from sharing of knowledge between participants (Richter & McPherson, 2012; Watson et al., 2016). cMOOCs therefore primarily use a networked approach to learning based on autonomous learners connecting with each other across open and connected social media and sharing knowledge through their own personal contributions (Hew & Cheung, 2014). There is no pre-set curriculum and no formal teacher-student relationship, either for delivery of content or for learner support. Participants learn from the contributions of others, from the meta-level knowledge generated through the community, and from self-reflection on their own contributions (Higashi et al., 2017).

### **Flipped Classroom**

The flipped classroom describes a reversal of traditional teaching where students gain first exposure to new material outside of class, usually via reading or lecture videos, and then class time is used to do the harder work of assimilating that knowledge through strategies such as problem-solving, discussion or debates (Henrie, Halverson, & Graham, 2015; Zhou, 2016). The term flipped classroom was popularised by teachers Aaron Sams and Jon Bergman from Woodland Park High School, Colorado in 2007 in response to a realization that class time would be best spent guiding knowledge and providing



feedback rather than delivering direct instruction. Zemsky (2014) reasoned that direct instruction could be delivered by recording video content for students to engage with before class and any time freeing up class time for activities that allow deeper exploration of content (Hew & Cheung, 2014; Zhuhadar, Kruk, & Daday, 2015). Since then, the flipped classroom has grown in popularity in higher education as a potential model to increase student engagement, leverage technology and provide greater opportunities for active learning in class. Many educators argue that the flipped classroom model is not new, citing similarities with existing strategies where students are expected to prepare before class and engage in active learning in class. Structured pedagogies such as peer instruction, case-based learning, problem based learning and project-based learning are also underpinned by expectations that students should engage in set sequences of preparation and active learning to maximise the quality of their learning. There is no set formula for the designing the flipped classroom as it is very much dependent on your teaching and learning context (Higashi, Schunn, & Flot, 2017; Yang, Shao, Liu, & Liu, 2017).

## **CHALLENGES AND BARRIERS**

Digital technologies caused many changes in distance education and this issue arise many debates regarding the effectiveness of such apparatuses in educational environments and their possible barriers. Hood, Littlejohn, and Milligan (2015) stated that the contextualization of OER has raised many concerns. The adaptation of open E-Learning systems for local contexts and cover local needs has often failed so resources are not used in many projects. Richter and McPherson (2012) claimed that Open E-Learning Resources are not meaningful to learners if the digital apparatuses and their practices fail to personify socio-cultural characteristics of the particular learning context. Similarly, Hsu and Wang (2014) stated that research efforts are directed to define how socio-cultural contexts influence the use and development of open E-Learning systems and resources. Greene, Oswald, & Pomerantz (2015) numbered three main barriers of conducting E-Learning system. The first one was the lack of resources to realize projects. The second one that they considered it as a subcategory is the lack of finances to invest on this cost effective solution of education. They believe that a lack of budget can impede the realization because investments are delayed. The third barrier, according to them, is the lack of time. Since employees have a high workload and they face difficulties to conduct learning sessions during work. Probably, this is the most important barrier of traditional educational settings and Imlawi, Gregg, and Karimi (2015) believed that this remains even in the modern educational environments. But Kent, Laslo, and Rafaeli (2016) believed that the main barrier can be political or the managerial coordination on a policy level. This barrier embraces the lack of regulatory frameworks for collaboration with other organizations and also the lack of coordinated implementation. According to Loizzo and Ertmer (2016), the next barrier is the aspects of managerial culture. This one relates to established practices and administrative structures. Littlejohn, Hood, Milligan, and Mustain (2016) stated that other barriers can be the lack of leadership in the public sector, a lack of assigned responsibilities to organize learning programs, and a lack of tutors on the established platforms. In Kent et al. (2016) words, the perceived technological fit of evolving technical systems is the main barrier in conducting such programs in educational settings. Generally, the barriers of technology support systems of education can be divided into two main categories: social barriers and technical barriers that are explained in detail in the following paragraphs.

### **Social Barriers**

Sharrock (2015) stated that in the social dimension, the first aspect of challenges is the value of these systems on the national level. There are many differences in ethnic, national beliefs, and common understanding towards the features of these new settings. Luaces, Díez, Alonso-Betanzos, Troncoso, Bahamonde, and Factorization (2015) believed that the main barrier in the social dimension relates to individual concerns. A subcategory in this respect is socialization. The term stands for the fear to lose social contacts among colleagues when individual exchange during learning activities becomes technically mediated. Margaryan, Bianco, and Littlejohn (2015) observed that another subcategory in



this regard is the concern about misunderstanding colleagues due to the loss of information richness. Individuals fear to get hold of experiential and tacit knowledge if collaboration shifts to virtual platforms. They added that another barrier is related to the characteristics and value of information and knowledge such as a lack of mutual trust which means employees have concerns about sharing information within the organization or they fear to lose their position; therefore, they are not apt to share what they know about best practices. Phan, McNeil, and Robin (2016) expressed that the quality of information is a subcategory of the social dimension. The subcategory lack of quality may appear to be related to the value of information; however, it is focused more on the nature of digital, online information. Muñoz-Merino, Ruipérez-Valiente, Alario-Hoyos, Pérez-Sanagustín, and Kloos (2015) declared that ICT skills and knowledge about open E-Learning is another main category to approach barriers on the social dimension. Issues such as a low level of objective competence levels, the low familiarity with frameworks like IPR issues as well as technical practices of the applications, and the lack of knowledge about virtual learning platforms can lead to resistance of change. Finally, Vu, Pattison, and Robins (2015) believe that one important aspect of social barriers deals with learners' cognitive and personal backgrounds which includes the lack of common identity and knowledge backgrounds, differences in curricula and training programs, and the orientation to experts or experienced colleagues.

### **Technical Barriers**

The second main category of e-learning barriers deals with the technical dimension. Many researchers focused on this dimension and emphasized the challenges that they had in their studies, for instance, Watson, Kim, and Watson (2016) argued that the low availability of technology which embraces the subcategories shortage of appropriate infrastructure and software can be the main barrier in many contexts. To Wiebe, Thompson, and Behrend (2015), the low quality of broadband connections which impede the inter-connectivity among administrations is the main barrier. Related to this aspect, a lack of common data references, definitions, and channels which impede a data and information exchange via technical means (Margaryan et al., 2015), concerns about security and privacy (Luaces et al., 2015), restricted the access to online resources and platforms in technical manner (Phan et al., 2016) are some other barriers that learners are faced with in their educational contexts. However, Zhang (2016) expressed that many universities around the world focused on dual mode universities which are courses in both traditional face to face interaction as well as online or virtual courses. Nevertheless, in the education sector, developing countries are facing problems like lack of skilled teachers, educational infrastructure, and technology access to enhance the education at different levels (Hsu and Wang, 2014). Barak et al. (2016) believed that lack of resources including furniture, buildings, qualified teachers and learning material are the main obstacles in promoting open and distance learning.

**Results:** The findings of the present study may have some suggestions for policy makers, stakeholders, and English teachers. Technology-based instruction can be a complementary teaching tool that proposes learners and teachers respectively multitudinous learning and teaching opportunities. Technology-based instruction encourages learning experiences outside of formal education; that is the learning process takes place away from the classroom environment while the learners are involved with their daily activities. The results of this study demonstrated the usefulness of social networking in comparison with conventional learning classrooms. The mobile learning technologies help learners to create learning communities that are able to construct knowledge easily and to share it with other members. In addition to the social interaction between learners in such social networks, the interactions of learners with their online teachers should not be overlooked. The online teachers facilitate effective learning Technology-based instruction allows the users to send and receive messages synchronously and asynchronously; besides, it is simplistic, intuitive, and very easy to use. Learning is becoming more personal and also sociable that enables collaborative, networked and portable processes. Moreover, learning is becoming ubiquitous and different types of learning happen outside of the classroom through social cooperation and collaboration between learners to improve construction and sharing of content and knowledge. Technology-based platforms facilitate easy and quick transference of links to study materials. The high availability of teachers to the learners' questions can potentially enhance the learning process.



Technology-based instruction enables learning beyond the classroom's borders. On technology-based platform, learners get to go over the material again at home and return to the classroom with additional knowledge. The teachers feel that their presence gives the students a sense of security. They have someone of whom they can ask questions, they don't feel alone. Even the shy learners can see other learners' questions and enjoy the answers shared with everyone. In brief, these kinds of teaching enhance communicative competence in learning environments. Besides, forms of delivery for CLT or communication-driven learning tasks increasingly include both in-class and out-of-class online programs involving websites, internet-based project works, emails, chats, blogs, podcasts, and electronic portfolios. New online tools and devices (e.g., smart-phones) become more widely available and more versatile, new possibilities will exist for learners to access and produce knowledge in innovative ways online. Moreover, live tutoring systems and other social networking tools enable learners to practice using the knowledge with others around the world. Indeed, the internet and other digital tools provide endless possibilities for teachers and learners to connect with other L2 language users for a variety of meaningful purposes. Online discussion forums and distance learning such as OMLL, furthermore, are increasingly part of language courses and other academic courses as well, providing learners with alternative means of participating in and contributing to discussions outside the classroom. Learners and classes in different locations can meet online via email, Skype, or other programs through formal or informal class exchanges or partnerships. Teachers and learners in more self-directed learning contexts must carefully select sites, activities, and texts to ensure that they are appropriate for the cognitive, social, and linguistic levels of their learners. However, developments in digital information and communication technologies offer learners almost limitless access to language input, interaction, and output, and offer real purposes for communication. Like other innovations, the actual learning, skills, and forms of participation should be monitored carefully to ensure that they are compatible with learning objectives of the learners and the programs. That is, novel interaction formats may initially engage learners' interests, but soon disappear if the content is unsubstantial and motivation is not in meaningful ways. In addition to its advantages, using Technology-based platform in the classroom has faced learners with some learning challenges. The main challenge is the fact that not all learners possess a Smart-phone or the required application. Next, it is possible that some teachers and learners been swamped with too many messages, in a way that bother and annoy them, especially if they have more than one group or groups that are bigger than 20 learners; it is really time-consuming. Or teachers were bothered by the late hours in which the messages are sent. Beyond the learners' high expectations of teacher's availability, teachers are exposed to the personal lives of their learners and find themselves witnessing conversations that are not compatible with the educational path. Finally, learners tend to use less formal language, even when the subject at hand is academic; teachers wondered by their learners' manner of expression.

**Conclusion:** The present study explored the advantages and challenges of technology-based instruction in educational settings. The reviewed literature demonstrated that the learners who participated in online or technology-supported course could significantly outperform the ones in conventional groups; therefore, Technology-based instruction has a significant effect on learners' performance in e-learning educational environments. Exploring the educational aspects of Technology-based instruction has demonstrated a variety of benefits. The open style discussions in such learning environments enable the teachers to get to know their learners in depth and to create a positive atmosphere and a sense of belonging. Nevertheless, challenges such as the demand for constant availability, informal language and behaviour and witnessing the learners' private world, may cause adults feel uncomfortable. It is also worth taking into account this important point that operating such a kind of learning and establishing a group requires the teachers to invest additional time beyond their regular work hours. Stakeholders and policy makers should consider these issues that require special attention and special tools to assist teachers to cope, feel more comfortable, and become more efficient and less burdened in these teaching styles. The findings of the present study confirmed the findings of previous research studies that the advances in technology and wireless networking expanded the opportunities of utilizing mobile phones in educational environments. Mobile phones and similar technologies suggest communicative practice, access to authentic content, and task completion (Chinney, 2006); M-learning deals with concepts such as spontaneous, informal, pervasive, private, contextaware, and portable learning environments (Traxler, 2010); Smart-phones are excellent tools to assist learners to learn more effectively (Gao, Luo, & Zhang, 2012; Lu, 2008; Looi et al., 2011); Smart-phones are effective especially for synchronous and asynchronous learning environments and for promoting learners' listening and speaking skills (Kukulska-Hulme & Shield, 2008); technologies and mobile devices facilitate the development of collaborative learning environments (Chang, 2010); the





opportunities that these devices offer learners, engage them enthusiastically in the learning process (Shen et al., 2009). From the preceding discussions, it is evidently clear that; Technology-based instruction can be an effective learning platform for learners in different countries with different infrastructures. This stems from the fact that, it can enhance the performance of learners if used positively. With that, it makes communication easier and faster, thereby enhancing effective flow of information and idea sharing among them. However, if used negatively it has adverse impacts on the performance of learners. Among the negative impacts that have identified include the following: it takes much of the learners' study time and leads to lack of concentration during lectures and difficulty in balancing online activities and academic preparation. Social networking devices and software provide abundant opportunities to take the social interaction to deeper levels and concentrate on learning styles that are rooted in modern digital technologies. It is time to reform our perception of instructional design and investigate new content delivery options to support both the asynchronous and synchronous educational tasks that most benefit the expectations of today's learners; therefore, course designers and teachers should consider new social networking technologies and integrate them into the curriculum and adopt them into learning style of the online course design. However, there are some questionable notions that should be highlighted in future studies; e.g. having access to a wealth of resources and new communication media does not lead to learning; nor does it constitute pedagogy. Critics of E-learning often characterize online classrooms as neutral spaces devoid of human connection, emotion, or interaction with instructors or peers. For future research, it may be more helpful to examine how learners' psychological state influences motivations for the use of Technology-based instruction and other social networking technologies.

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