

Mobile Learning Age: Implications for Future Language Learning Skills

Bader Alharbi*

Department of English and Translation, College of Science and Arts, Ar Ras Qassim University

Email: bihrbie@qu.edu.sa

ABSTRACT

The dramatic shift in the language learning processes during recent years led to significant changes in the way teaching and learning happen. This is due to the pervasive of smartphones and tablets among new generations which become academically beneficial learning tools. There is a growing research body on the MALL “Mobile Assisted Language Learning.” However, there is still a dire need to explore the students’ personal use of smartphones and their apps for learning benefits. This study attempted to investigate the impact of using mobile dictionary (MD) apps on the students learning of the English language. A questionnaire was distributed among 87 English majors and responses were analyzed. Follow-up interviews were also conducted with 13 students and their responses were qualitatively analyzed. The findings underscored the essential role smartphones and tablets play in extending learning outside the classroom settings. The results also revealed that most of the students rely heavily on their MDs to translate unknown words. The students also revealed that their teachers did not fully welcome the skills to use MD applications. This study suggested that there is a gap between the MALL skills needed by the students and the teaching style employed by the teachers in the classrooms. This gap increases the necessity for further studies that can identify the frequencies and linguistic needs of English language learners. The study recommends that teachers need to foster a new teaching style as new generations of students will need new skill sets to thrive in social communication and technology-rich.

Keywords

eLearning, mLearning; mobile-assisted language learning (MALL); MD (mobile dictionary); MD applications; dictionary use strategies;

Introduction

The learning and teaching environments in recent years are changing very rapidly due to the exceptional resources and features generated for teaching by the advancement of technology. During the last decade, there was fast development in mobile devices and their affordable prices made them available to many students. When using them as learning aids, they may facilitate the development of unique educational experiences. Thus, new research endeavored to shed light on this new trend, MALL. According to Kukulka-Hulme & Shield (2008), mobile learning could be a form of learning that occurs with the assistance of mobile devices and means that learning could happen in any place and at any time. While in the past, mLearning targeted the role of mobile technologies and devices in education, nowadays mobile learning is characterized by the mobility of the user and also the informal learning that might take place outside of the classroom (Sharples, 2007). Therefore, it can be said that all portable devices such as media player devices, mobile

phones, and tablets play roles in mobile learning (mLearning).

It is true to say that mobile phones are the most frequently used learning instruments among digital devices (Pęcherzewska & Knots, 2007) because they are very friendly to use and convenient for learning and teaching purposes in classroom environments (Tayebnik & Puteh, 2012). Some previous studies revealed that smartphones can leverage training (Roschelle, 2003), and enhance the learning practice (Squire & Dikkers, 2012).

In light of this, this study aims to explore the attitudes of Saudi English Majors towards the characteristics of MDs and online dictionaries, as well as to investigate the frequency and purposes for which they use these resources. The perceptions of the students on the influence that utilizing MDs has on their ability to study independently both inside and outside of the classroom, are also explored in this research.

Research questions

1. What are the attitudes of Saudi English Majors about using MD apps when learning English?
2. What is the MD frequency of use by Saudi English Majors when learning English?
3. What influence does the use of MDs have on the self-learning skills of English language learners?

Literature Review

The traditional teaching methods occur inside the classrooms, where the teacher introduces a group of students to the teaching materials. The main focus during the last two decades was on employing technology in education such as using information platforms and educational CDs on PCs, but recently the emphasis has moved to the use of mLearning where students enjoy mobile than PCs (Cohen, 2002) (see figure 1). Mobile devices offer an effective, flexible, and promising learning platform. This can make the current learning system more interesting, interactive, and widespread.



Figure 1. The transformation from traditional learning into mLearning

It seems to many people that both eLearning and mLearning systems might serve the same function and facilitate each other, but this is not always true. It can be said that eLearning focuses on improving different skills and enhancing in-depth competencies. The purpose of mLearning is to obtain instant access to the learning resources during the moment of learning (Kukulska-Hulme & Shield, 2008). Also, the popularity of mLearning is based on the availability and portability features of mobile devices where mobile devices are easier accessible and can be carried compared to permanent devices such as personal computers (PCs). Learning may be accomplished in an efficient, adaptable, and

potentially fruitful manner using mobile devices. This has the potential to make the existing educational system more engaging, dynamic, and accessible.

Mobile Learning

Traxler (2005) defines mobile learning as “any educational provision where the sole or dominant technologies are handheld or palmtop devices” (p 266). Three elements can be defined for this form of learning according to the evolutionary history of mobile learning:

- x Mobility of technology,
- x Mobility of learning,
- x Mobility of the learner.

Technology mobility is focused on investigating the opportunity of applying smartphone and wireless devices for teaching applications. The focus of mobility in learning is on using mobile devices intensively to learn outside the learning environment. The third element emphasizes “the mobility of the learner, the design or the appropriation of learning spaces and on informal learning and lifelong learning” (Pachler, Bachmair, & Cook, 2009, p. 41).

Over the past decade, the rapid evolution of cell phones from simple phones to smartphones, which can operate as a micro-computer, phone, or camera, and transfer data as well as video and audio files, has made mobile phones important learning resources. Due to their growing popularity among students at universities and their roles in education, mobile phones have got more attention as one of the useful tools that might assist learning experiences. According to Klopfer and Squire (2008), the affordances of mobile phones are because of their portability, social interactivity, context sensitivity, connectivity, and individuality.

Mobile-Assisted Language Learning

Kukulska-Hulme & Shield, (2008) argue that “MALL differs from computer-assisted language learning in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use” (p. 273). Continuity is also extended through the use of personal devices, as learners can continue to access information at times and places that suit

them. Various studies (e.g. Zarei and Gujjar, 2012; Rahimi and Miri, 2014; Alhaisoni, 2016; Murugan & Sai, 2017 among others) found that EFL learners viewed their electronic and mobile dictionaries as effective instruments for use in educational situations and considered them to be a helpful, relevant, and stimulating sort of assistance for learning foreign languages. Additionally, the participants saw their mobile phones as an effective tool for use in educational contexts. While some scholars (Erasmus, 2003; Kukulska-Hulme & Shield, 2008) emphasize the beneficial function that MALL plays in terms of self-access. They are thought to be very effective tools for general language learning (Prensky, 2005), have an advantage in the acquisition of language skills (Chang & Hsu, 2011), enhance the attitudes and motivation of language learners, promote their interaction, communication, and knowledge building (Sharples, Taylor and Vavoula, 2007). It is possible to argue that the impact of MALL on language learning solves many of the most significant difficulties associated with the acquisition of a second language. These difficulties include meaningful or interactive learning (Sharples, Taylor, and Vavoula, 2007), and learner autonomy (Murugan & Sai, 2017). Research studies suggest that MALL affects language learners' vocabulary acquisition (Saeidi and Mozaheb, 2012), that it encourages interaction among language learners (Dias, 2002), and enhance peer-assisted language learning (Lan, Sung, & Chang, 2007). This study attempts to understand the students' attitudes toward the use of MD while learning. It also explores their frequency of use and their linguistics needs to refer to the dictionary. It investigates the learners' autonomy for mobile use inside and outside the classrooms.

Research on electronic and mobile dictionaries

There have been several studies conducted to investigate the perspectives and attitudes held by students on the use of electronic dictionaries in higher education settings. The findings of the majority of studies indicated that students adopt positive attitudes toward the use of electronic dictionaries including smartphone dictionaries and find them to be beneficial for their learning. In general, these findings showed that students have

a favorable stance toward the use of electronic dictionaries (Chatzidimou, 2007; Boonmoh, 2010; Golonka et al., 2012). Surprisingly, there is a lack of study regarding the perspectives held by students concerning the application of electronic dictionaries in the Saudi context (Alhaisoni, 2016; Alhatmi, 2019).

In an experimental study, Zarei and Gujjar (2012) compared the effectiveness of using paper dictionaries versus electronic dictionaries to acquire vocabulary. Paper dictionaries were used by the group serving as the control, whereas the experimental group utilized electronic dictionaries. The findings of the study showed that the experimental group made substantial progress in terms of their vocabulary learning in comparison to the control group. In a similar vein, Jian, Sandnes, Law, Huang, and Huang (2009) looked at the role that electronic dictionaries play in the Higher learning institutions of undergraduate students majoring in engineering and the humanities. According to what was reported, the speed of reference was a very obvious advantage of using electronic dictionaries, whereas the multimedia features were not seen to be a substantial benefit of using electronic dictionaries. After researching the electronic dictionary look-up patterns of Japanese EFL students, Koyama and Takeuchi (2008) concluded that the usage of electronic dictionaries might lead to improvements in the look-up patterns and behaviors of EFL students. The students' reading comprehension would not increase as a result of their habit of frequently consulting reference materials. According to Stirling (2005), students from eastern Asian countries prefer electronic dictionaries exclusively because of the educational systems in those countries, which place a greater emphasis on accuracy instead of on risk-taking and guessing in the context of language teaching and learning. According to Korat and Shamir (2006), using an electronic dictionary can result in beneficial rewards for EFL acquisition. "*read-with-dictionary tasks*" are more beneficial, in their opinion than "*read-only tasks*".

Deshtestani (2013) carried out research to contrast the perspectives of EFL teachers and students concerning the utilization of electronic dictionaries in English. There were a total of 66

instructors of EFL and 81 students of EFL that participated in this research. To obtain insight into the participants' points of view, the researcher has asked them to fill out questionnaires. The study found that both instructors and students viewed electronic dictionaries favorably as tools for improving language proficiency. This study found that EFL learners and teachers prefer e-dictionaries for learning English because of their audio-visual features, time efficiency, portability, input for student autonomy, and ease of access and usage. Nonetheless, the findings of this study bring to light some concerns that have been raised about the use of electronic dictionaries in EFL classrooms. This research claims that lack of training, poor audio quality, and distraction make e-dictionaries difficult to use.

Zheng and Wang (2016) performed research into the benefits and drawbacks of using electronic dictionaries in EFL education. The researchers in this study discussed the use of electronic dictionaries in EFL classrooms from the perspective of instructors. Findings from this research show that electronic dictionaries may be used to introduce sophisticated reading materials to EFL students. The problem of these kinds of dictionaries being intrusive and noisy has also been raised by (Zheng and Wang, 2016). According to the findings of the study, some teachers believe that paper dictionaries are superior to electronic dictionaries. These educators claim that paper dictionaries are superior because they are designed specifically for language learners by language specialists and lexicographers who compiled the paper dictionaries. On the other hand, technology companies are the ones that develop many mobile and portable electronic dictionaries.

To investigate the influence of the use of MD on language learning, Rahimi and Miri (2014) conducted a pretest-posttest quasi-experimental study. According to the findings of this research study, using a dictionary on a mobile phone leads to a greater level of language learning than using paper dictionaries. In addition to this finding, the researchers assert that the average score of the experimental group (85.29) is greater than the score of the control group (77.35). In the Saudi context, Alhaisoni (2016) studied 3993 male and female students and instructors' preferences and

dictionary practices in the Preparatory Year at the University of Ha'il, Saudi Arabia. This study collected data from student and instructor questionnaires. To understand students' dictionary use, the researcher conducted semi-structured interviews. According to the findings of this research, students make use of a wide variety of dictionaries because previous research has shown that they are less proficient dictionary users. However, he has also shown that English as a Foreign Language (EFL) students rely on E-A bilingual dictionaries more than other kinds of dictionaries. According to the findings of this study, female students are more likely than male students to utilize mobile phone dictionaries and Google Translate. This study also reveals that advanced-level students utilize mobile phone dictionaries and google translator more than low achievers ones. A similar study was conducted by Alhatmi (2019) to investigate the strategies Saudi students employ to check dictionaries. 90 students majoring in English at King Abdulaziz University in Jeddah, Saudi Arabia, served as participants in the study. The data-gathering procedures consisted of the researcher administering a questionnaire. The findings demonstrated that the strategy of the participants' preferences was strongly impacted by their like of aspects such as the ease of search and use of electronic dictionaries, as well as their dislikes of features such as the hurdles of searching and using paper dictionaries. It was also discovered that students relied on electronic dictionaries rather than paper dictionaries for the majority of their lexical needs.

Methodology

Research design

This study used a mixed-methods research design to investigate the impact of using MD apps for learning the English language. A mixed research study design is more appropriate for a study such as this that seeks to measure human perceptions objectively because the shortcoming in validating the results will be triangulated by using the second approach (Creswell & Clark, 2011). A survey was designed to elicit information on the students' attitudes toward using MDs and the frequency of use when searching for lexical details. The questions were formulated based on a review of the literature to collect the views of students and

the popular practices used by them. Moreover, the interview was used to consolidate the survey. Thematic analysis, thematic coding, and selective coding were the processes that were used to derive themes. This will particularly be critical to the endeavor of this study since there is a need to obtain students' perceptions and preferences concerning the impact of using MD apps for learning the English language.

Participants

Identified with pseudonyms, the students were selected with regard to meeting the criteria of comprehending both the Arabic and English languages. 87 English majors enrolled in the English language and Translation department at Qassim University were selected for this research study. The students met the criteria where Arabic was their first language and they aged between 19 and 25 years old. They all own smartphones that are compatible with installing apps on them.

Data collection

Data collection for this study was done through questionnaires and interviews. The questionnaire aimed to capture the students' dictionary frequency of use, opinions, challenges, and thoughts regarding their preferred dictionary to be used inside and outside the classroom. The questionnaire was formulated using the Arabic language to eliminate any misunderstanding that might threaten the participants' responses to the questionnaire items. The interviews were undertaken to qualify the information sought from the students on various viewpoints regarding their underlying reasons and attitudes toward the use of mobiles for language learning purposes. The instrument consisted of semi-structured questions that stimulated participants to expound more on their reasons and answers to the questions.

Data analysis

The acquired data were classified and statistically and qualitatively examined. Descriptive statistics tests were performed for quantitative analysis. Descriptive statistics are used to describe the main parts of the data in a study. They provide concise explanations of the sample as well as the statistics employed. Using SPSS 21.0, the dataset was also treated for testing and subsequent inferential statistics. In addition to quantifying the frequency

of the replies provided in the survey, qualitative analysis information was employed to qualify the descriptive statistics data.

Results and Discussion

Q1: What are the attitudes of Saudi English Majors about using MD apps when learning English?

Generally, the obtained data showed that most of the students possess MDs and their opinions regarding their use of them inside and outside the classroom. Most of the students reported in the interview that they prefer to use one of the common English-Arabic dictionaries apps which is available for download on both IOS and Android platforms, namely, "Dict box". It was found that it was installed on all students' mobiles who came for the interview. It is important to say here that the features that *Dict box* has when showing the meaning of the word from various dictionaries. This feature allows students to see the meaning in both English and Arabic languages. Students also stated that they have some other MDs installed on their phones such as *Almawrid dictionary*, *Oxford dictionary*, and *Longman dictionary*.

Attitudes and Ownership

From the study, it was established that the majority of students preferred the use of their smartphones for checking unknown words. As shown in (Figure 2) 99% of the participants claimed that they own smartphones and 85% of them claimed that they have dictionary apps installed on them. The MD applications can be freely downloaded through application stores such as the App Store and Google Play. This can explain the high percentage of ownership of dictionaries. During the interviews, the participants mentioned that the most common way in which the students obtained their dictionaries was by downloading dictionary apps freely. One of the students mentioned, "I downloaded my dictionary to my phone from Google Play." Another student stated that he "got the dictionary from the App store with no charge". This method of dictionary ownership is often preferred by most EFL learners because it is free of charge, in contrast to PEDs and printed dictionaries, both of which need payment and can be rather costly.

77% of the students showed positive attitudes toward their MDs. They preferred referring to their dictionary apps on their phones. When students were asked in the interview *“how can you obtain the meaning of unfamiliar words?”* most of the students reported that they either refer to their MDs or go to the online search engines to know the meaning of the sought words. They reported that they would not hesitate to check the dictionary while in the classroom. For example, student 3 said, *“I check my MD to know the meaning of the new words, but in some cases, I go online to search for the meaning.”* This result agrees with (Kukulka-Hulme, 2012) who said that using mobile dictionaries is time efficient and helps language learners acquire all the lexical details.

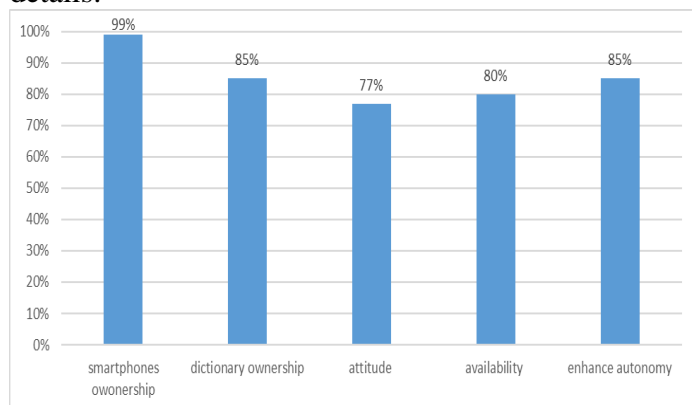


Figure 2: the students’ attitudes and ownership of mobile dictionary

80% of the students showed a positive stance toward the availability statements in the questionnaires. This favorable attitude by the students toward the MDs confirmed previous findings by various studies such as (Rahim and Miri 2014; Alhaisoni, 2016; Alhatmi; 2019; Hakim, Aryati & Kurniawan, 2020) who found that their students liked the quick reference to their MDs and EDs. Because of its mobility and ease of access, many academics are beginning to contemplate their use in educational settings for the sake of both learning and teaching (Tayebinik & Puteh, 2012). 85% of the students stated that their MDs allowed them to be less dependent on their teachers and enhance their autonomy of learning. In the interview, most of the participants explained that their dictionaries increase their self-learning skills. Student 8 stated that he does not *“need his teachers to know the meaning of the new words.”* Research has shown that mobile

phones may be used to increase learning and facilitate place-based learning (Squire & Jan, 2007), and enhance learning (Roschelle, 2002). (Squire & Dikkers, 2012).

Q2: What is the MD frequency of use by Saudi English Majors when learning English?

Regarding the frequency of use the results clearly show that the students use their dictionaries mainly for checking the meaning of unfamiliar words (92%) (see figure 2). This confirms the findings of other research (Nesi, 2002; Alhaisoni 2016 among others) in which students reported consulting mobile dictionaries to look up unfamiliar words. In the interview, several students described that they utilize their MDs or Google Translate to look up unfamiliar words. This highlights the increasingly common practice of using smartphones and online translation services in place of traditional print dictionaries. It seems that reading textbooks also requires frequent use of dictionaries. 86% of the students showed that they use their MDs for the reading strategies. This result agrees with Bower and McMillan (2007) found that 96% of the students owned electronic dictionaries, and 53% of them were very active electronic users of reading tasks Writing comes next to the student's need to refer to the dictionary (73%). This result confirms Bower and McMillan (2007) found that 37% of their participants use their EDs for writing activities. It also agrees with This result agrees with the findings of Nesi (2010) who found that her students preferred to use an electronic dictionary while writing. As for the other skills, only 42% of participants reported using their MD for speaking and 33% for listening.

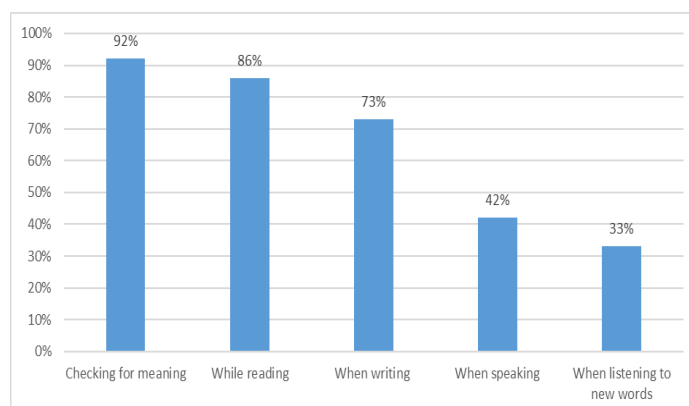


Figure 3: Mobile dictionary frequency of use by the students (daily basis)

Q3: What influence does the use of MDs have on the self-learning skills of English language learners?

Most of the students reported that their MDs provided them with immediate access to the needed information. Students agreed that the dictionary apps available on apple and google stores were easy to be used and they can choose the most suitable apps for each of them. The students also stated that they became less dependent on their teachers and peers because their dictionary can offer to them the wanted information. One of the students stated that he refers to the MD with no delay depending on the lexical detail presented to him on his phone. For example, student 10 mentioned, *"I refer to my MD because I do not want to wait for my teachers to ask them."* In the interview students implies that the teachers' role in technology has changed and their reliance on the teachers become very less. They stated that it takes time for their teachers to reply to their questions. In contrast, their MDs can provide them with instant assistance. Student 7 stated that *"teachers are not always available for me"*. It is true to say that there are distinct features of mLearning. mLearning's main features enable students to learn anywhere and anytime. For instance, student 4 said in the interview *"I carry my MD with me everywhere and can get an instant answer to my sought information."* Smartphones are more spontaneous than any other kind of learning tool. They are also portable which allows learners to use them anywhere and anytime. Students said in the interview that teachers can also use the mobile for teaching and checking the dictionary for unknown words too. Student 2 mentioned that he *"checks his dictionary outside the classroom more than inside the classroom"*. Normore (2006) claims that this new change in the information-revolutionary age contradicts the traditional teacher role when seeking information. It can be said that teachers' interaction with students became much reduced over the last decades (Ghaln, 2011) (See figure 4). According to Ghaln (2011), teachers in the past played the role of the information expert and the main source of knowledge for the students. However, the transformation in media formats has changed the task of the teacher from being an expert to being

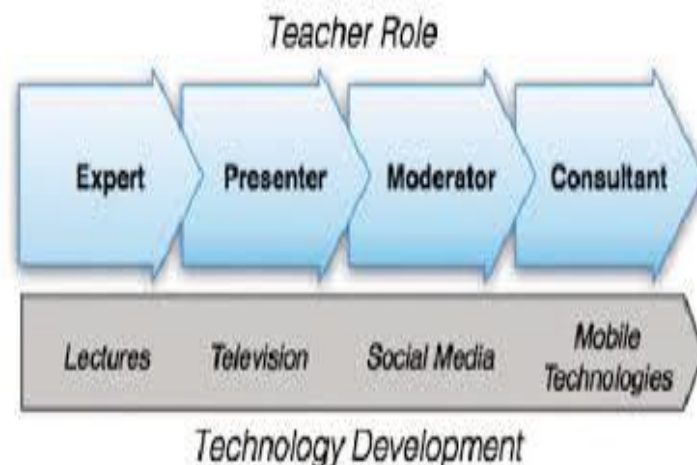


Figure 4: teachers' role in the technology era (Ghaln, 2011 as cited in Ozdamli, & Cavus, 2011).

a presenter of the knowledge of others. With the social network revolutions in recent years, various things have shifted again. In these settings, the teacher's role needs to change from the provider of specialized knowledge to the mediator of conflicting situations.

As the role and responsibility of learners change for mobile technologies, the role of the teacher is slowly changing towards the role of the advisor. In this role, teachers need to be able to identify students' interests, relate these interests to learning objectives related to the topic, and provide opportunities to reach these goals related to the specific circumstances in which the learner is present.

Conclusion and Implication

The purpose of the present research was to study the influence of using MDs on language learning. The study proved the positive impact of using MDs on language learning which echoes the previous studies' findings. The current study results support previous studies that integrating technology into the learning environment can improve English learners' performance and autonomy in academic contexts. Using technology increases the motivation of the students, establishes positive attitudes toward English language learning, and reduces the anxiety of students when learning English.

With the help of a single mobile app, the use of mobile dictionaries in English classes and learning

can be broadened to situations outside the school environment, social interactions, and various learning settings. The mLearning features are more practical support to increase the learners' autonomy and learning motivation. Furthermore, since EFL learners require regular informal practice, phones and tablets provide learners with extensive resources to have sustained links with the target language. EFL teachers should be able to recognize the interests of students, link them with the goals of learning and provide opportunities to achieve the goals that are related to the particular circumstances in which the learners are involved. Thus, the teachers are responsible for:

- Expand their skills to utilize the mobile technology and resources needed
- Assess the strengths and disadvantages of the methods used and change the teaching style to allow space for independent learning.
- Play the role of the facilitator and the advisor.
- Obtain high self-confidence levels in classes
- Reduce obstacles and improve learners' autonomy and motivation
- Apply various methods of assessments.

The new generation of students is more to technology and heavily uses it on an everyday basis. According to Du Plessis (2011:28), “*there is a need to explore and understand the elements of technology, social media and social networking that students find so compelling and to incorporate those elements into teaching and learning*”. This means incorporating technology not only as part of teaching-learning but also finding a “*creative classroom setup*”.

Finally, in the past decade, language learning practices have witnessed a lot of developments and transformations. The current educational challenges are to create motivated, engaged learners who might tackle difficult matters in a variety of educational situations. Many conventional pedagogical methods allow students to be purely reactive and receivers of knowledge and expertise may thus struggle to achieve the appropriate skills. Teachers should, therefore, be

prepared for future students' needs and the process of teaching and learning in the digital era. They have to admit that the traditional techniques of teaching need to be linked to the student's lifestyle inside and outside the classroom. It is very important to leave space of freedom for technology use inside the classroom and encourage learners to be self-reliant. The teacher should be critical and creative to build a classroom environment that is contributing to thinking and creating. The establishment of a suitable learning environment is important. Moreover, the modern design of the classrooms, opposite desks to encourage student interaction, and outdoor teaching possibilities should form part of this new thinking.

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