Original Research Article

Mobile Learning: Unlocking the Potentials for Female Education in KSA

Dr. Jihan Zayed*

Humanities and Administration College, Qassim Private Colleges, Western Ring Rd, Alhumar, Buraydah 52547, Saudi Arabia

Abstract

Out of their homes, Saudi women are imposed to be accompanied by their male guardians. Therefore, they suffer to complete their education. To overcome this obstacle, they currently use mobile learning (mLearning) – in the form of social networking apps such as WhatsApp or Twitter – to keep in touch with their instructors. Being specified for educational purposes, the present study used ClassDojo and Edmodo as alternatives to these apps for unlocking the potentials of mLearning for female education in KSA. Employing a quantitative, one-group design, a questionnaire was conducted for collecting data during the 2nd Semester of the academic year 2017/2018. It aimed at determining the positive perceptions of 15 Saudi female students enrolled in the last level of a teacher education programme towards mLearning.

Keywords: mLearning, Classera, ClassDojo, Edmodo, Diffusion of Innovations.

INTRODUCTION

As this century goes into rapid technology development, it is so common to see students coming to class with the most recent technological tools, such as laptops, smartphones, or other handheld devices to communicate with each other or to reach knowledge. Several writers [1-3] described today's students with "Digital Natives", "Millennials", and "The Net Generation"; respectively, who often have decreased tolerance for the traditional lecture style. However, higher education in several Arab countries still relies on a teacher-centered approach where students attend lectures and earn marks through exams. In this respect, this "factory-model" approach does not address the learning needs of these students [4, 5].

Besides, Web 2.0 and Web 3.0 technologies have made mobile devices more dynamic and promising as teaching and learning tools with great potentials in both the classrooms and the outdoor learning. Mobile devices can refer to mobile phones, smartphones, iPods, MP3 players, tablet PCs, lap-tops, flash drives, personal media players, portable hard drives, memory sticks, e-readers etc. Accordingly, the use of these devices in teaching and learning has raised an ongoing debate on the concept of mobile learning (mLearning) whose one of its main features is that it can be used independently of place and time [6].

For Alkhezzi and Al-Dousari [7], mLearning is a relatively-new, multidisciplinary approach that attracts many researchers and builds on the assumption that learners are constantly on the move and are always using their handheld devices. The first generation of mLearning researchers investigated its mobility aspect; focusing on the portability, functionality, and smallness of the devices. Unlike traditional one-way knowledge transformation modes, as in a typical lecture, mLearning exposes learners to a variety of learning modes and allows them to be active elements of the learning process. Moreover, advanced technologies have made it easier for instructors to communicate with their students via video, images or in text as sending them messages and receiving their feedback at the same time.

Due to religious and social conservatism, Kingdom of Saudi Arabia (KSA) has its own peculiarity of segregating boys and girls in education. Yet, female students face several obstacles being not allowed to go out of their homes without permission from their male guardians or even accompanied by them. In some occasions, these students suffer, especially when they should come to their colleges at unusual times to revise their senior projects or to get feedback from their instructors in different issues. In this concern, mLearning can help women and girls overcome these obstacles to keep in contact with their instructors.

For a long time and still on, instructors and female students depend on social networking mobile

applications (apps) such as Facebook, Twitter, WhatsApp …etc. to keep in touch with each other. These apps play an important role to keep the students' attention levels high. it is a fact that the use of mobile occupies a great part of students' study routines. For Mokhtar [8], these apps do not help in setting boundaries between professional and personal matters, such as the appropriateness of the amount of shared information and the balance between academic discussion and social activities. Therefore, mLearning, as a recent trend in education, has started using social networking apps for educational purposes. These apps include Kahoot, ClassDojo, Classcraft, Edmodo, Socrative and many others as a non-threatening and private learning environment because they allow only teachers to create and manage accounts, and only their students, who receive a group code to register, can join the group.

mLearning can be accessible both in the classrooms and at homes through smartphones, tablets, laptops and even desktops. This enhances and leads to a sense of ambient co-presence and continuous availability among learners. Its pedagogical functionality includes content delivery, task collaboration and planning, searching for information, assessment, simple use of SMS texting providing availability of on-demand study support and accessing virtual environments such as discussion boards [5, 9].

In addition, mLearning provides a better alternative for gamifying education. Gamification is very promising in applying such aspects as "competition" from a technological game-playing context to a non-gaming situation (in this case, the context of a classroom). To integrate gamification in teaching is to "unchain" a more attractive and effective learning experience for all the students, and to sustain high levels of motivation and engagement through a set of tasks for hours without feeling fatigue or frustration in comparison to conventional learning practices. As mobile apps employ some gaming elements like avatars, badges, leaderboards, and progress charts, students also share common factors such as urgent optimism, social fabric, and productivity in addition to instant gratification or short-term wins [10-12].

To sum up, mLearning is advantageous for its reachability, motivating features, and social interactivity. It is a form of learning that sharing of learning resources among teachers and learners in the same or different places is based on flexibility of time and space. In KSA, female students can have access to learning at their convenience: anytime and anywhere.

Definitions
mLearning: It is operationally defined as a type of learning that takes account of the mobility of technology, learners and learning place and time. Mobile technologies refer to a combination of hardware, operating systems, networking and software; including content, learning platforms, and applications.

Mobile apps: They are operationally defined as secure social learning platforms designed to run on desktops, smartphones, tablets and other mobile devices supplied with Internet access, which enable teachers and students to facilitate collaboration at any time and any place so as to accomplish pedagogical achievements. The current research used two widely-used mobile apps which are ClassDojo and Edmodo for their different design features.

Background
As a mother of a KG2-son, the researcher had the experience, for the first time, to be a user of a learning platform. Her son's school used Classera app – with its integrated features for gamification – as a social learning platform which enable the parents to follow and participate in the learning process. At home, she lived a sense of competition helping her son to cope with his classmates in gathering points to reach a good position in the app leaderboard. Another detail was that when kids with their parents perceived a form of social presence, they tended to respond in a natural way to feelings such as happiness, empathy, and frustration, or even follow social rules like taking turns. Each Thursday morning assembly, her son's school used to give 10 prizes for students who got the first positions in all stages. Unfortunately, that school stopped using Classera due to some financial issues. Being engaged in this beneficial experience, the researcher put an objective for herself to search for free learning platforms to use with her university students to help them benefit in learning using such apps.

Generally speaking, teacher education programmes involve theoretical courses which offer pedagogical knowledge, in addition to practical courses which help students practice pre-service teaching experience. In the English Department, Humanities and Administration College, Qassim Private Colleges, KSA, certain theoretical courses are given to pre-service teachers in a teacher education programme over the course of 7 levels. In Level 8, they register 2 practical courses: the first is Senior Project (ENG 490) in which students write a research paper on a practical teaching-related issue; and the second is Practicum (ENG 491) where they go to schools for training and getting field experiences. The present study used ClassDojo and Edmodo in teaching the former course for Saudi female students.

ClassDojo is a play-assisted class management application which can be used by teachers, parents and students. A teacher rewards the students instantly with both a "thumbs-up" picture and a point. Finally, the teacher can use the ClassDojo certificate to appreciate their positive behaviors. Via Edmodo, teachers can send out quizzes and assignments, give feedback, receive

completed assignments, assign grades, store and share content in the form of both files and links, maintain a class calendar, conduct polls, as well as send notes and text (SMS) alerts to individual students or to the entire class. As ClassDojo does, it offers parent accounts in which they can view their sons and daughters' assignments, due dates, and progress. In addition, they receive updates on class and college events. The fear of using Edmodo as more of a social networking site than a learning tool appears unlikely to happen here due to the secure learning platform of the website in which no personal student pages can be created and to the careful teacher-directed monitoring.

LITERATURE REVIEW
Previous Studies
Several researches [13, 14, 5, 9, 12, 15, 16] have studied mLearning from different perspectives. They generally stated that it helps students focus on the learning process, give support in researching and constructing their knowledge. For example, Kaliisa and Picard's study [9] is a systematic review that collated and compared the studies published between 2010 and 2016 in the African context on mLearning in higher education to explore the apps, impact and challenges. Findings showed that mLearning increased student and lecturers' collaboration, participation and engagement in addition to facilitating authentic learning and reflective practice. Therefore, that review highlighted enabling certain conditions for successful integration of mLearning in the African institutions addressing Internet access, training, curriculum design, support and technical requirements.

On the other hand, some studies focused on the effects of using certain mobile apps as in Bicen and Kocakoyun [6], the apps of Kahoot, ClassDojo, Classcraft and Socrative, which are suitable for gamification, were examined. The study was conducted among 130 students in the department of preschool education at Near East University. According to the results, it was revealed that Kahoot was the mostly preferred.

Other studies, for instance, Chiarelli, Szabo and Williams [17] examined 24 first-grade students who attended a school district in northeast Texas to see if ClassDojo was successful to help them recognize and self-monitor their behaviors while working in centers during teacher-directed, reading time. The study found that ClassDojo allowed those students to redirect their behaviors with fewer interruptions. The same was confirmed by Homer, Hew and Tan [18] who gamified a classroom experience of 120 elementary school ESL pupils in Hong Kong by implementing digital badges-and-points in ClassDojo which students could earn by

achieving specific behavioral and learning goals. The results showed that student learning improved significantly. Teacher observational data displayed more positive and on-task behaviors.

Certain studies [19, 8, 20-22] confirmed the effective use of Edmodo in achieving their objectives in different contexts: Iraqi, Malaysian, Turkish, and Omani; respectively. In a Saudi context, Al-Kathiri [23] concentrated on 42 Saudi EFL secondary school female students' perceptions and challenges regarding Edmodo use in EFL learning. Findings showed that students' perceptions towards Edmodo were highly positive and that although there were considerable challenges to its integration, it appeared to have excellent potential for generating more positive attitudes towards EFL learning. Similarly, Khodary's study [24] aimed at exploring the effect of Edmodo use on developing 45 Saudi students' Self-Directed Learning (SDL) in a northern university. It employed a quasi-experimental design that included a one-group design. The researcher taught the participants during the treatment which was based on allowing them to use Edmodo in carrying out a project. Hence, the study concluded that Edmodo helped the participants develop their SDL.

Nevertheless, those studies indicated that the lack of technology resources and the imposition of traditional methods of instructional delivery could be possible internal and external impediments to the use of Internet technologies in the classroom. Furthermore, the mobile apps may cause some challenges regarding small-sized screens, time-consuming typing and slow speeds of connection. Therefore, the present study will encourage the participants to make use of the web interface of Classdojo and Edmodo on their tablets and laptops to face the mentioned challenges.

Theoretical Background
Proposing instructional technology for teachers is not new; however, the process of integrating mLearning is a recent trend in teacher education programmes as proved by the above mentioned previous studies. For Sahin [25], Diffusion of Innovations Theory is one of the most appropriate for investigating the adoption of technology in higher education and educational environments. In this theory, the sociologist Everett Rogers focuses on the rate of a new idea, behaviour, product or object can spread in a certain group. Rogers uses "innovation" as a synonym for "technology" which consists of two parts: hardware and software, the former refers to "the tool that embodies the technology in the form of a material or physical object," and the latter to "the information base for the tool" [26].
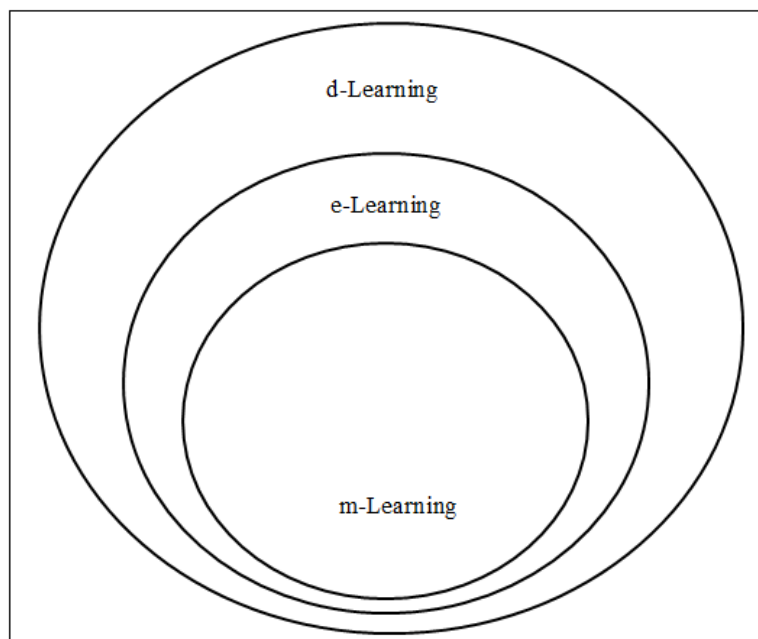
Fig-1: The place of m-Learning as a part of e-Learning and d-Learning (Source: Georgiev, Georgieva, & Smrikarov, 2004 [27])

Instead of focusing on persuading individuals to change, this theory views change as being primarily about the evolution or "reinvention" of products to fit the needs of individuals and groups. In this respect, Figure-1 shows that mLearning is a reinvention of e-Learning (electronic learning) which is in its own a reinvention of d-Learning (distance learning). Even within mLearning, a lot of reinventions keep going on as its apps are developed each second. For example, numerous studies were conducted in the last few years to prove the effectiveness of Social Networking apps (e.g., WhatsApp, Facebook, Twitter, …etc.) in achieving several instructional purposes. Nevertheless, recent studies use apps other than these as they do not keep the learners' privacy issues [20]. Therefore, apps developers seek to make users active partners in improving apps by surveying subscribers' preferences. Confirming this, Robinson [28], mentions five qualities determining the success of an innovation which are *relative advantage*, *compatibility with existing values and practices*, *simplicity and ease of use*, *trialability*, and *observable results*.

According to Marcial [14], this theory could lead to the development of a systematic, prescriptive model of adoption and diffusion. For Rogers [26], adoption is a decision of "full use of an innovation as the best course of action available" and rejection is a decision "not to adopt an innovation" (p. 177). Rogers defines diffusion as "the process in which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). In simpler terms, innovation-decision process is the process through which an individual passes from first knowledge of an innovation; to forming an attitude toward an innovation; to a decision to adopt or reject; to implementation of the new idea; and finally to confirmation of this decision.

Objectives of the Study

The objectives were neither to model expert teaching nor to teach any specific subject but to discover the opinions of some pre-service, Saudi, female teachers, which would lead to understanding how mLearning can be beneficial for them, in terms of:

- Substitution for repeated coming to college for revision of their senior projects; being a secure means of receiving feedback from their instructors,
- Improvement of leaning in other courses; for keeping all course materials, a grade book, chat messages, assignments, … etc. in the same app; and
- Teaching English to kids at schools as parents can monitor their kids' progress.

Statement of the Problem

Though there are several constraints to drive motor vehicles, it is only on 24th June 2018 when Saudi women were granted this right. The Saudi environment poses certain restrictions on women and girls as they are not allowed to go out of their homes alone; even worse, some of them are not allowed to hire a taxi or have a private driver. They are regularly allowed to attend their colleges in specific times that suit their male guardians, if not, they suffer too much to complete certain requirements. For instance, a female student can be always late for her first lecture just because her brother gets up late. In graduation level, female students at the Department of English, Qassim Private Colleges, are required to come to college for revising their senior projects at least twice a week. One of them, for instance, may come to college at 8:00 a.m. to meet her

instructor at 12:00 p.m. for just 15 minutes, and wait till 1:30 p.m. when her father will come back to pick up her at that time.

Several Saudi researchers have called for EFL teachers to utilize mLearning technology in order to support teaching and learning activities. Al-Kathiri [23], for example, concluded that mLearning can provide out-of-class language learning opportunities to reach students. Saudi students' usage of mobile language apps is limited to translation activity, search for vocabulary and chatting. Female students at the English Department, Qassim Private Colleges commonly use WhatsApp to keep in touch with their instructors. However, this app has some limitations since it does not offer personalized spaces and they have insufficient security features. The use of such apps like ClassDojo and Edmodo as secure learning platforms for learners and educators are not yet readily available, preventing the potentials of mLearning to have an effect on female education in KSA. Therefore, the current research tried to unlock those potentials through answering the following main question:

What are the potentials of mLearning for female education in KSA?

For answering this question, it attempted to answer three sub-questions as follows:
1. What are the pre-service, Saudi, female teachers' opinions concerning mLearning as a substitution for repeated coming to college for revising their senior projects?
2. What are the pre-service, Saudi, female teachers' opinions concerning integrating mLearning in other courses?
3. What are the pre-service, Saudi, female teachers' opinions concerning using mLearning in teaching English to kids at schools?

METHOD
Design
The present research drew on a quantitative design that focused on examining the overall perceptions of participants towards the potentials of mLearning for college, Saudi, female students in the form of using ClassDojo and Edmodo which were chosen as two social networking apps with different characteristics.

Subjects
They were chosen due to their status being both students and future teachers who could reflect on the relevance of using ClassDojo and Edmodo for female education in KSA. The participants were eighth-level students, English Department, Qassim Private Colleges. They ranged from 21-24 years old, who had no former practice of Edmodo nor ClassDojo. The researcher trained the participants to use the 2 apps for one week. Out of 15 students, 9 students responded to

questionnaire: One student refused to respond to the questionnaire as she did not like the apps, 3 ones retired in the middle of the experiment and announced their reluctance to use modern methods other than the traditional, and 2 students remained passive neither participated nor retired from the experiment.

Setting
The present study was administered to 15 eighth-level, female students at Qassim Private Colleges, Humanities and Administration College, English Department during the second semester of the academic year 2017/2018. The instructor, the researcher, used her book: Journey to Research Writing to teach those students 10 steps for writing their senior projects for 2 months, one lecture a week. After this, students had to stay at home to finish their projects. WhatsApp was used to keep following up this process. Meanwhile, the researcher introduced ClassDojo and Edmodo for them. For one week, she trained them to use these apps. After this, she asked them to send her the separate parts of their papers via the apps till they completed their papers in three weeks.

Instruments
In order to determine pre-service female teachers' perceptions towards mLearning, the researcher designed a questionnaire as the data collection tool. It was validated by 2 instructors (one is associate professor and the other assistant professor) at the English Language Department. According to their views, some statements were removed from the questionnaire, some were rearranged, and others were added. The questionnaire was administered to the study sample once. Then, its internal consistency reliability was measured by Cronbach's Alpha to be 0.73.

In its final form, the questionnaire consists of 40 statements divided into 3 dimensions representing the potentials of mLearning for female education in KSA as: *a)* alternative for repeated coming to college for revision (Statements 1-13), *b)* integration in other courses (Statements 14-30), and *c)* teaching English to kids at schools (Statements 31-40). Students responded to each statement ticking one choice of: *strongly disagree*, *disagree*, *neutral*, *agree*, and *strongly agree*. The questionnaire concludes with one open-ended question to let the participants to describe the differences between ClassDojo and Edmodo for educational purposes. To help students fully understand the questionnaire items, they were translated into Arabic.

Limitations
Several limitations of this study have to be kept in mind:
*   The number of participants in the current study is small (9 students). As they were accustomed to straightforward conventional methods and they were not obligated to participate, 6 students of a

15-student class retired from the experiment at different stages of it.

- The data was collected for only one month.
- The classroom instructor – the researcher – possesses expert computer skills and personally found ClassDojo and Edmodo to be engaging.
- Students were not asked to collaborate in any task as the focus was only receiving students' assignments for the completion of their senior projects.

Experiment

It should be mentioned here that it was planned that the current research would start in the very beginning of the second semester 2017/2018 aiming at improving the writing quality of the students' senior projects. However, the research did not start as was planned for several administrative reasons among them was students' late registration of the course. The researcher started teaching the steps of writing a paper in her book: Journey to Research Writing without conducting the experiment. Till the mid of April, she finished those steps and it was the time for students to write the drafts of their projects and come to college to revise them. For this, modified that aim to be unlocking the potentials of mLearning when they could use mobile apps to combine the different parts of their papers into the final form without repeated coming to college for revision; otherwise, they had to come to college several times to revise their work with the instructor.

On 15th April 2018, a virtual class on ClassDojo was set sending an invitation to 15 students and their parents to join the class. Students faced some problems to join the class, but the researcher could not help them as they were at home. They kept helping each other via the class WhatsApp group till the third day when the entire group appeared "connected" to the researcher. The researcher sent them a video showing how ClassDojo works. Students began to interact sending photos and texts, but they could not see class stories and scores given unless they entered the class with the parent account.

Generally, they did not like the app. Some of them asked to stop participating in this app and to send assignments via the emails only. Then, the researcher asked them to try Edmodo sending them a code for a virtual class on it. 3 students refused participating and asked if there would be given marks for that or not. As the participation was voluntary and no marks were granted, they left the group and stopped sending assignments to ClassDojo or Edmodo. The students were inducted on the features of Edmodo and how to use them. For example, the teacher explained to them how to write and respond to a post, how to attempt a quiz, how to submit an assignment, how to upload a material, and how to view their scores.

On 20th April, the name of the group was changed from "Graduates" to be "Senior Project" and its logo changed to be a mix of the logo apps. Students began trying the two apps. Some prefered ClassDojo while the others prefered Edmodo. Students suggested to vote for one app to keep uising it only. The researcher informed them that after graduation they would work in schools which could use the app that they did not prefer. Therefore, it would be better for them to know the differences between them and to state their opinions by the end of the experiment. Thus, they started started sending the assignments on both apps Figure 2 & 3.
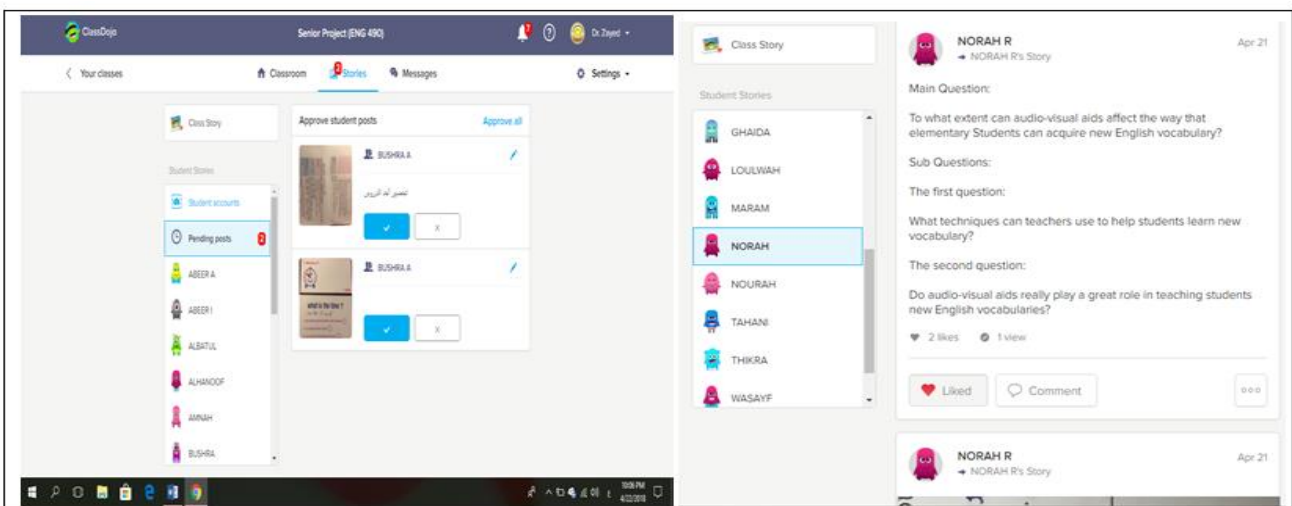

Fig-2: Assignments sent on ClassDojo to be revised by the instructor

Only 10 stutents participated in the experiment; 3 students left, 2 students were passive as they had problems related to the Internet or their mobile devices. The researcher used badges, avatars, scores and other means to enncourage students to keep participating till the end of the experiment on 15th May

2018. On that day, she sent a link to the questionnaire asking them to respond to it. 9 students responded while the 10th students refused stating that she did not like the experiment.

RESULTS AND DISCUSSION

10 pre-service, Saudi, female teachers used mLearning in the form of two mobile apps: ClassDojo and Edmodo for 4 weeks in order to combine all the parts of their senior projects without the necessity of repeated coming to college for revision. Descriptive and content analysis methods were used to analyse the data obtained from the questionnaire. One student announced her refusal to respond to the questionnaire.

The results of investigating the problem of the present study can be shown in the following way:

The First Sub-Question: What are the pre-service, Saudi, female teachers' opinions concerning mLearning as a substitution for repeated coming to college for revising their senior projects?
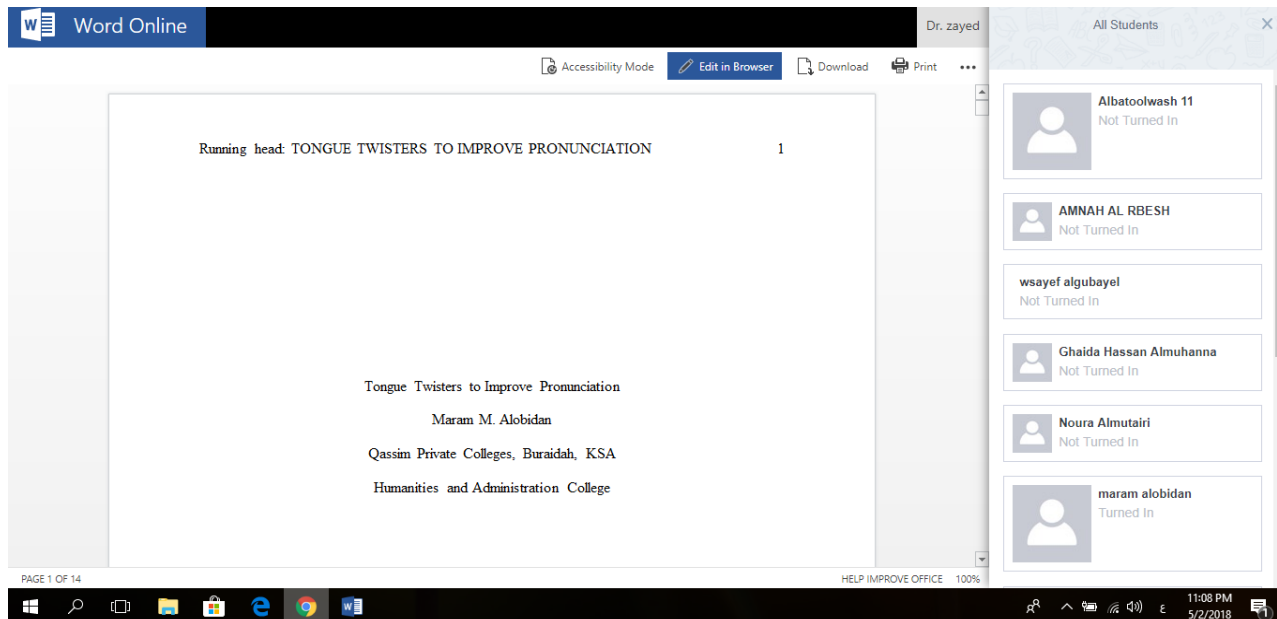

Fig-3: A senior project sent on Edmodo to be revised by the instructor

In this digital age, the educational needs of the growing populations cannot be met in a traditional classroom. As teachers have less time for interaction with learners, using mobile apps can raise learner motivation and engagement in EFL learning. Mobile apps let learners to initiate discussion and sharing beyond the classroom facilitating many benefits of mLearning some of which are its reachability, mobility, motivating features, and social interactivity; learners can access to these apps at their convenience (i.e., anytime and anywhere). This freedom allows learners more space and less stress, which eventually motivates and encourages them [19, 7, 12, 20].

According to the results of the above-mentioned previous studies, mLearning proved its usefulness particularly for individuals who cannot attend classes due to financial, physical, geographical or social reasons. Therefore, it was adopted in the current study as students, who have most of the recent technological devices connected to the Internet 24/7, did not often prefer repeated coming to college due to social factors. Table-1 shows the results of the participants' responses to Dimension I of the questionnaire.

According to Mokhtar [8], students prefer going on the internet to going to school. That is, there is a need to rethink the education system that still relies only on traditional teaching of language skills. Although, students explored the use of 'backpack/library' in Edmodo which allowed extended storage (i.e., documents, references, previous papers and others), 64.4% of them were neutral about their benefit of this facility. In addition to storage, 84.4% of the participants found other facilities such as SMS alerts, which gave them a running record of "what is due," useful in enhancing their learning experience. The web interface of the apps was considered more effective than the mobile interface in uploading and downloading their papers.

The Second Sub-Question: *What are the pre-service, Saudi, female teachers' opinions concerning integrating mLearning in other courses?*

The European Commission 2002 has called for "lifelong learning" which includes digital competence covering both the self-confident and critical use of information society. In this concern, Mokhtar [20] considers that using mobile apps for educational purposes prepare students to be lifelong learners.

Marcial [14] and Baş and Sarıgöz [12] recommend that mLearning should be integrated in the all teaching practices. Thus, Dimension II of the questionnaire focused on the determination that these pre-service

teachers have for renewing themselves to gain life-long learning skills using technological devices and apps in learning.

Table-1: Results of Dimension I

No.	Statement	Mean	Std Deviation	Percentage	Result	Rank
1.	Using mobile apps (e.g., ClassDojo and Edmodo) was problematic at the beginning then it became easy.	4	0.67	80	Agree	5
2.	I felt confident sending messages to my teacher at any time.	4.44	0.68	88.8	Strongly agree	1
3.	Mobile apps added entertainment to finish my project at home.	4.22	0.63	84.4	Strongly agree	3
4.	The feedback I received using (e.g., Edmodo or ClassDojo) was helpful than that I always received using (e.g., WhatsApp).	3.44	0.68	68.8	Agree	7
5.	I got enough feedback using mobile apps at home.	4	0.67	80	Agree	5
6.	I received instant feedback on my writing.	4	0.67	80	Agree	5
	Revising online saved time and effort.	4.11	0.57	82.2	Agree	4
8.	I had a virtual classroom open 24/7.	4.33	0.67	86.6	Strongly agree	2
9.	There was no need to go to college for revision of my project.	4.33	0.47	86.6	Strongly agree	2
10.	Revising online saved learning cost.	3.89	0.57	77.8	Agree	6
11.	I benefited from the library on Edmodo in writing my project.	3.22	1.03	64.4	Neutral	8
12.	Using mobile apps met my need for mobility.	4	0.67	80	Agree	4
13.	SMS alerts gave me a running record of "what is due."	4.22	0.79	84.4	Strongly agree	3

According to Ekici [21], teachers who keep developing their practices, skills and teaching strategies help their students gain lifelong learning skills. Kaliisa and Picard [9] viewed teachers' perceptions a key challenge in integrating mobile technologies since recent research reports that some educators see mobile technologies as disruptive tools that are not useful and increase distraction from learning. Nevertheless, they mentioned that a research done in Australian schools noted that students liked to be assigned more innovative and engaging activities that involved technologies. Even, they confirmed that whole courses could be studied and assessed in mLearning. In a study by Ally and Stauffer [29], students felt that the use of mobile devices to access the course materials was useful and provided both flexibility and convenience.

Although the present study did not focus on collaboration and conversational exchange among the participants, the chat features of the apps allowed students to increase their communication offering them opportunities to increase their confidence and motivation. Al-Kathiri [23] mentions that, "As a Course Management System, Edmodo facilitates … making EFL instruction a continuous process that is not limited to the seating capacity of the classroom" p. 198. Table-2 presents the results of the study participants'

responses to Dimension II of the questionnaire.

mLearning parallels with the needs of today's students as it encourages social and active learning in which more avenues can be created for fostering independence, cooperative skills. As 86.6% of the students agreed that mLearning can develop their autonomous learning skills. 88.8% of them found mobile apps provide shy or passive students with information that facilitates enough prior knowledge to understand the course materials before coming to class.

At the same time, 80% of them considered mLearning helpful in developing their writing skills. That is, students can improve their grammar and vocabulary by looking at others' replies. They wanted to write the best they can could because they were not allowed to use "textisms". Moreover, Mokhtar [8] referred that students can suggest materials they find online in contrast to classroom learning where teachers alone provide materials. 77.8% of the participants viewed mLearning beneficial as they could control their own learning pace being able to access learning resources wherever and whenever they liked. In such a way, students developed their "self-directed learning" which, as Khodary [24] mentioned, increases control over knowledge and enables learners to determine information relevant to them. Then, they could have

better academic performance when online media

supplement normal face-to-face lectures.

Table-2: Results of Dimension II

No.	Statement	Mean	Std Deviation	Percentage	Result	Rank
14.	I feel relax using mobile apps in learning.	3.78	0.79	75.6	Agree	6
15.	Using mobile apps is vital for my development as a learner.	4	0.94	80	Agree	4
16.	I can improve my learning being able to talk to all teachers.	3.78	0.63	75.6	Agree	6
17.	I can ask my teacher when I need help with my homework.	4.22	0.42	84.4	Strongly agree	3
18.	I can find all the course materials in one app.	4	0.5	80	Agree	4
19.	When absent, I can find all class materials and assignments.	3.89	0.87	77.8	Agree	5
20.	I can control my own learning pace being able to access learning resources wherever and whenever I like.	3.89	0.74	77.8	Agree	5
21.	Using mobile apps leads to a different level of understanding from traditional education.	3.67	0.67	73.4	Agree	8
22.	It improves my spelling being not allowed to use textisms (i instead of I, u instead of you, ... etc.)	3.78	0.42	75.6	Agree	6
23.	It improves my grammar and vocabulary in writing complete sentences.	4	0.47	80	Agree	4
24.	It encourages passive and shy students to participate in learning.	4.44	0.5	88.8	Strongly agree	1
25.	I am happy that my parents can follow my progress.	3.56	0.96	71.2	Agree	9
26.	It improves my lifelong learning skills.	3.89	0.57	77.8	Agree	5
27.	It gives me different information than that I get from the college portal.	3.75	0.83	75	Agree	7
28.	It is vital for my professional development.	4.33	0.67	86.6	Strongly agree	2
29.	Using mobile apps complement classroom teaching and learning.	4.22	0.92	84.4	Strongly agree	3
30.	Using mobile develops my autonomous learning skills.	4.33	0.47	86.6	Strongly agree	2

The Third Sub-Question: *What are the pre-service, Saudi, female teachers' opinions concerning using mLearning in teaching English to kids at schools?*

As they are prospective teachers, Dimension III of the questionnaire aimed at determining the current study participants' opinions concerning using mLearning in teaching English to kids at schools. Baek, Zhang, and Yun [5] stated that teachers' attitudes toward mLearning could be a driving factor in initiating its usage in schools. According to Mokhtar [8], teachers can create tasks to overcome limited methods and materials or time constraints in the classroom with such features as quizzes which help make learning interactive and getting immediate feedback using polls,

which help a teacher reflect on the effectiveness of the teaching strategies used.

mLearning enables teachers reach students wherever and whenever they are. In addition, teachers may communicate with other colleagues and they can cooperate with each other. Shortly, teaching youngsters calls for a change in education approach from conventional to more comprehensive, communicative and technological methods. Conventional teaching methods make students uninterested in class, bored, and perform poorly in exams. Table-3 presents the results of the study participants' responses to Dimension III of the questionnaire.

Table-3: Results of Dimension III

No.	Statement	Mean	Std Deviation	Percentage	Result	Rank
31.	It adds attraction to kids (e.g., avatars, leaderboard, … etc.)	4.22	0.42	84.4	Strongly agree	3
32.	It allows parents to participate in the educational process.	4.44	0.5	88.8	Strongly agree	1
33.	It connects teachers, students, parents, and administrators.	4.33	0.47	86.6	Strongly agree	2
34.	It avoids paper waste.	4.33	0.47	86.6	Strongly agree	2
35.	It saves much time spent in paper work.	4.11	0.57	82.2	Agree	4
36.	It gives kids instant feedback on their progress.	4.33	0.67	86.6	Strongly agree	2
37.	It can be used as an assessment tool (e.g., grade book, progress, what is due, … etc.)	4.11	0.31	82.2	Agree	4
38.	It helps kids be lifelong learners.	4.22	0.42	84.4	Strongly agree	3
39.	It improves communication skills through international connection.	4.22	0.63	84.4	Strongly agree	3
40.	It improves all language skills: listening, speaking, reading and writing.	4.33	0.47	86.6	Strongly agree	2

Collaborative learning mainly encompasses the application of the language learnt as students communicate and express their opinions on the topics assigned. When they interact with their classmates, they have more opinions and ideas on the subject matter and use the target language. Using features such as quiz, poll, multiple choice questions, fill in the blanks and others, these assessments become an engaging alternative to hand-writing homework questions.

The Main Question: *What are the potentials of mLearning for female education in KSA?*

As the data collection tool, the questionnaire consisted of 3 dimensions representing the potentials of mLearning for female education in KSA. The results obtained from the data analysis showed that those students generally had positive views about mLearning in teacher education programmes. Table-4 shows these positive views.

Table-4: Results of the Questionnaire 3 Dimensions

No.	Statement	Mean	Std Deviation	Percentage	Result	Rank
I.	Alternative for repeatedly-coming to college for revision of senior projects	4.02	0.67	80.3	Agree	2
II.	Integration in the teaching-learning process of other courses	3.98	0.65	79.5	Agree	13
III.	Use in teaching English to kids at schools	4.26	0.49	85.3	Strongly agree	1
	Questionnaire Grand Total	4.06	0.7	81.2	Agree	

Still, it has to be mentioned that mobile apps for educational purposes are designed to include three basic game elements: meta-centered activities, rewards, and progression. Educational objectives are shown as challenges to be accomplished to move from one stage to the other. This means that all learning activities are oriented towards winning to enable the learners (players) to receive rewards. A leaderboard, where learners are classified according to their success, serves as a strong motivator. Motivation increases when the teacher distinguishes a student by giving him/her a golden star or a badge. Finally, achievements are publicly shown in the learner's online profile which shows the goals that were accomplished and tasks to be

completed [10].

Open-ended Question
Was your benefit the same when using Class Dojo and Edmodo? Describe what is different regarding using them for educational purposes.

22% of the students mentioned that their benefit was the same using ClassDojo and Edmodo. Nevertheless, 78% of them preferred Edmodo to ClassDojo as the latter enables only parents to follow-up their sons and daughters' progress. A student expressed her opinion saying, "*Edmodo program, it is nice, useful for adults and more effective. Unlike classDojo, useful to children and can be followed only*

with parents, because it is not effective. Adoption of Edmodo in the department is nice and stimulating, with duties, and marks. I feel the achievement if done. It was a beautiful and successful experience." Another student said about Edmodo, *"It is easier and comfortable to contact with our teacher, but I wish I used before in all subjects. It helped me and saved my time in my senior project."*

Generally speaking**,** students had very positive attitudes towards using Edmodo because it mobile app is very easy to use, and it has a friendly interface like Facebook which most of them are familiar with. Besides, students appreciated having quizzes and assignments online because they could get immediate feedback.

Recommendations
For further research in mLearning, the following areas could be recommended:
- Developing quality writing skills is still needed
- Edmodo needs to be introduced gradually to the educators.
- Gender differences in using Edmodo is a valuable focus.
- A study can be conducted using an experimental design where a group using Edmodo and another one using conventional teaching methods.
- Policies to guide the implementation of mLearning
- Offering students innovative opportunities to improve their self-confidence, to monitor their own learning and to practice their language skills in and outside the classroom.
- Tasks must be planned carefully; otherwise, it can be distracting as learners may listen to music, watch movies, or update their status on social networking sites rather than use them for educational purposes.

CONCLUSION
Based upon the results of the study, the pre-service, Saudi, female teachers pointed out the potentials of m-Learning for female education in KSA. In particular, they preferred Edmodo to ClassDojo. They came to know for the first time how mobile apps are specified for educational purposes. In the study, the pre-service teachers also stated that mLearning helps students to overcome their anxiety of face-to-face communication and express their views more comfortably by overcoming their fears of criticism. In this concern, it is vital to recognize the role of mLearning as a facilitating tool for EFL teachers to design a communicative and non-threatening classroom.

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