

COMPARISON BETWEEN E-LEARNING APPLICATIONS DURING BLENDED LEARNING IN IRAQ

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Abstract Blended Learning (BL) is the use of both offline and online methods for teaching and learning; it allows for a planned and deliberate embeddedness of online learning into the education system and tests its applicability alongside offline learning, which ensures adaptability to emerging challenges and the upskilling of the digital capabilities of Iraqi youth. This approach was a serious try to improve the education and E-learning and it indeed had a dramatic effect as it worked to promote the general well-being of learners in Iraq. This paper investigates and presents a comparison between the E-learning applications during BLA (in term of their features, flexibility, ease of use, advantages and disadvantages, and privacy and security). The outcome of the study was relied on a questionnaire made in various Iraqi universities. A total of 100 people participated in the questionnaire, divided into two groups: students and lecturers. The results showed that most lecturers and students prefer Google Meet. Google classroom and Zoom were the second popular applications whereas Microsoft Teams was the least choice for both groups.



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1. INTRODUCTION

A new Despite the COVID-19 Response in Iraq and the whole world, including lockdown and public health measures to ensure social distancing, new educational opportunities have been occurred. The COVID-19 epidemic has served as a wake-up call to make educational systems more crisis-resistant, inclusive, and flexible. It has compelled educational systems to innovate in order to ensure that education continues, lecturers to adapt to distance pedagogical approaches, and parents to provide learning help at home. The lecturers at all Iraqi universities make exceptional efforts to complete the educational curriculum. Training courses and workshops began to spread to train both students and lecturers on how to use E-Learning applications. This online learning led to a new loop of learning in Iraq and it added another layer of opportunity to improve the digital skills and increase employability of youths[1]. All educational systems throughout the world are changing at a rapid pace. Education systems today differ from those of the previous year, and they are being followed. In 2020 education course, there was a need to identify strategic opportunities to strengthen the education. This led to the identification of a strategic opportunity to strengthen online learning, inducing a structural change to the education system in Iraq towards blended learning approach (BLA).

Many challenges that happened during online learning could be solved with blended learning. These issues include: (1) the weak of internet, (2) the electricity problem (3) Universities suffer from a lack of adoption of cutting-edge educational technologies in their teaching operations and (4) Finally By its traditional means, face-to-face traditional teaching is an integral way of teaching [2].

2. LITERATURE REVIEW

2.1 Blended Learning

A total Blended Learning (BLA) is an integrated learning approach that combines in-person interactions in the classroom with online activities [3]. This method allows teachers to design a lecture that is interesting, engaging, and enjoyable for their students. Topics are created with the help of innovative multimedia technologies and presented online and in-class to involve students in interactive activities such as conversations, debates, oral presentations, and the explanation of questions. Students can access online information at any time, making schedules flexible and convenient [4]. The content that must be taught in class and online should be decided and allowed by the professors. Components such as an introduction to a class, presentations, question and answer sessions, and so on are best delivered in person, whereas course information, quizzing, and so on can be delivered online. As a result, they must adhere to online course standards, which include the development of course

objectives, a content overview, and the use of acceptable instructional approaches [5]. The BLA nearly always involves students discussing ideas and addressing problems in class active learning, with students working in groups (collaborative or cooperative learning) doing much of the work in and out of class [4]. Blended learning aids in the achievement of student pleasure and motivation, both of which contribute to a long-term learning process [6]. The BLA is participatory learning and a flexible method that helps students improve their motivation, satisfaction, and performance. BLA helps students stay motivated during the learning process [7]. A study conducted by [8] shown that integrated learning increases student motivation and engagement. Blended learning gives students more freedom and flexibility in their sessions, which attracts and engages students in the learning process in ways that traditional learning does not [9]. The study also found that including these strategies into the learning process increased learning results and student motivation. The BLA is quite successful, and it shows a favorable association between learning results and motivation to learn [10].

2.2 E-Learning Applications

2.2.1. Google Meet. is a paid service from the global company Google within the group of paid Google G Suite services, but after the outbreak of the Corona pandemic and almost everything is done from home, whether it is work or education, Google decided to turn the service into a free service for all users; Where anyone can use the new Google Meet service, join group video chats, and fully protect your privacy through a phone or computer[11]. The features of Google Meets are: (1) No need for plugins (2) Available on smartphone systems (3) No need for codes or passwords (4) More stable and secure (5) 100 participants per call (6) Hold video calls for 60 minutes. The flaws that annoy users, including: (1) Only one screen is allowed to share at a time (2) A limited number of participants (3) The lack of a so-called “room” waiting,” unlike “Zoom”, which provides waiting rooms; Where participants can wait and hosts control when they join[11].



Fig. 1 Google Meet Application

2.2.2. Google Classroom. is one of the important applications that has spread and is used by many countries, and its knowledge is not limited to specific countries. Rather, the transition to online education has become the first thing that increased the use of many applications, and among those applications, the most important of which was the distinguished Google Classroom application. Through the Classroom application, it has become easier and more enjoyable to attend lectures and lessons through the Internet than any other application[12].

Google classroom app features: (1) The Classroom application is powered by Google, which provides all the applications that everyone needs. (2) The ease of dealing with the application for everyone makes it one of the best applications used. (3) You can share many of your lessons with friends in the same course and class. (4) The tools that you use through the application are simple and convenient to handle. (5) We can use the application in the language we want, and through the settings, we can control the selection of various changes that make us use the application more comfortably than any other application[12].

Google classroom app flaws: (1) No automatic updates: Students should make sure they keep it up to date so they don't miss an announcement or assignment from the teacher. (2) Calendar issue: Google Classroom is not yet integrated with Google Calendar or any of the other calendars causing issues with assignment dates or class dates.

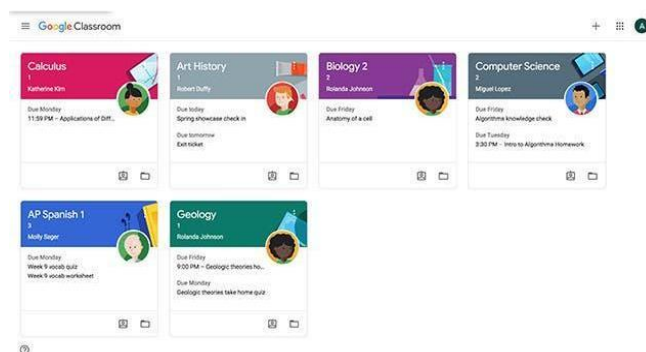


Fig. 2 Google Classroom Application

2.2.3. Zoom is one of the most important and leading programs in video and audio meetings, whether for educational institutions or the business sector. Where the Zoom program is available on various devices, whether computers or smartphones, Android and Apple. It also provides the ability to make video and audio calls with many features.

Zoom program features: (1) Record meetings and calls and save them to your device. (2) Providing written conversations or comments in meetings from all attendees, according to the allocation of the admin. (3) Providing the feature of screen

sharing with others, whether from computers or smart phones. (4) Providing a whiteboard to provide a unique educational feature that enables you to teach and learn online. (5) It is characterized by high quality, whether in voice or video calls, compared to other similar programs.

ZOOM app flaws: (1) Need to download the app. (2) Time is limited to 40 minutes. (3) Drawback related to security and protection.



Fig. 3 Zoom Application

2.2.4. Free Conference Call (FCC) This program is considered one of the most successful programs in this field, as it contains many options, which is fast internet, fast registration, and a lot of callers at the same time, which makes the program integrated in all respects. This program is considered one of the most important programs at the present time for universities and conferences[14].

FCC program features: (1) It is completely free to download, plus it is also fully registered. (2) It allows you to join a lot of people, and this number may reach more than 500 people and even more than 1000 people at one time, which facilitates the process of organizing conferences. (3) It provides high definition voice calls and high definition video calls as well, which makes it a good program to use. (4) Many features, such as displaying recordings or muting the sound, asking questions within this program, are easy to control. (5) Send invitations to users to participate in the conference.

FCC app Disadvantages: (1) Need to download the app. (2) Nonverbal Communication is less effective. FCC is a less effective means of corporate communication when compared to a face-to-face conference. This is due to the neglect of essential nonverbal factors such as body language and human interaction. Nonverbal cues are extremely important in overall communication.

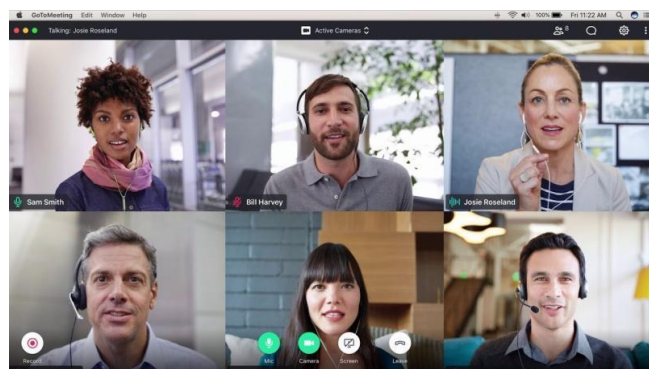


Fig. 4 FCC Application

2.2.5. Microsoft Teams is a chat-based collaboration platform that includes document sharing, online meetings, and a slew of other extremely useful features for business communications. Having a great team space is essential for making creative decisions and communicating with one another. Shared workspace software makes this much easier to achieve, especially if a team is based in a large company, has many remote employees, or has a large number of team members[15]. Microsoft Team features: (1) Teams and channels are Microsoft Team features. Teams are made up of channels, which are message boards for teammates. All team members can view and contribute to various conversations in the General channel, and they can use the @ function to invite other members to various conversations. (2) SharePoint document storage. Every Microsoft Teams team will have a site in SharePoint Online with a default document library folder. All files shared across all conversations will be saved to this folder automatically. Permissions and security options for sensitive data can also be customized. (3) Online meetings can host up to 10,000 users .

Microsoft Team Disadvantages: (1) No waiting room for participants that join early. (2) Microsoft Teams starts at \$5.

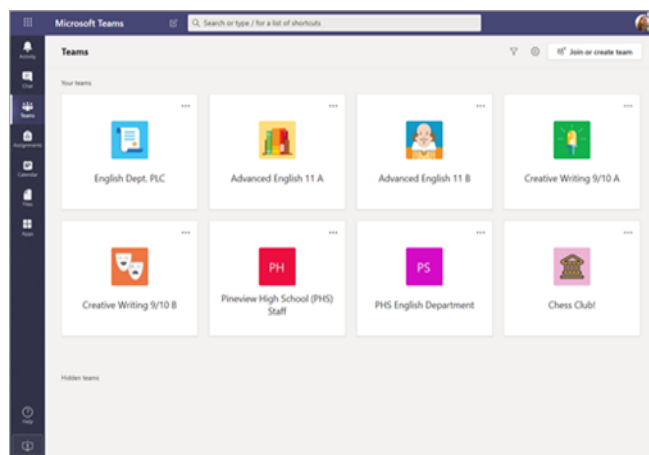


Fig. 5 Microsoft Teams Application

3. METHODOLOGY

3.1 Data Collection.

The data were collected, from different Iraqi universities during the blended learning (BL), to evaluate the performances of the E-learning applications from the point of view of students and lecturers. It was collected from a survey that made and spread in different Iraqi universities. The questionnaire was administered to 100 people, who were divided into two groups: students and lecturers. Each participant gives its opinion about the E-learning application during BL and why he/she choose that application.

3.2. Research Design

First the applications were studied and compared in terms of their flexibility and features. Then the data from the questionnaire were analyzed using SPSS version 21 [16]. This study relied on an experimental research design to collect and analyze data. Experimental design can be defined as a research design that "directly attempts to influence a particular variable" [17]. The experimental results from the questionnaire, in specific, were carried out to demonstrate the efficacy applications of E-learning and made a comparison between them taking into account the learner's and teacher's points of view.

4. FINDINGS AND DISCUSSION

After analyzing the data collected from the questionnaire and the survey results as mentioned previously, it was found that most of the lecturers and students agreed that the Google Meet program is the easiest to use and more flexible than the other programs, while Google Classroom and Zoom were the

second best application over other programs. Figure 6 shows a comparison between the applications according to the participants.

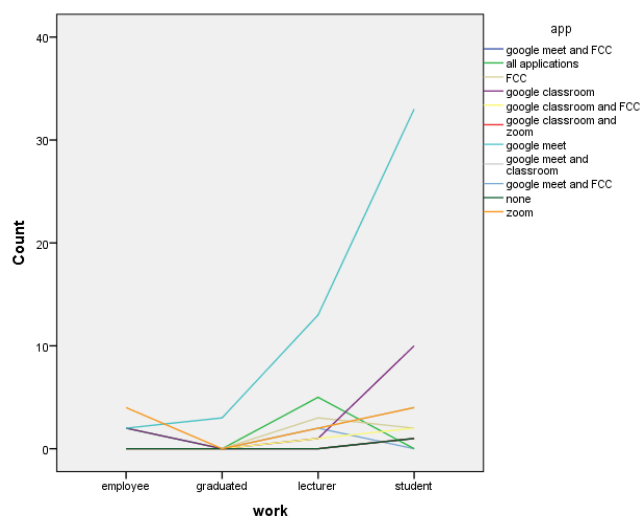


Fig. 6 Comparison Result

5. CONCLUSION

The analysis of the findings and discussions of the results indicated that E-learning applications during the blended learning are differing in many ways. It can be concluded, based on the findings of the study, that the flexibility and the easy use of Google Meet have a positive impact on the academic performance of the students. It helped in improving the teaching way of the learners. Zoom and Google Classroom were preferred secondly because it provides good features than the other applications. Interestingly, all teaching applications have their influence to improve the BL.

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