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Effectiveness of Electronic Language Learning in USA Community Colleges: A Critical Review

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Abstract

This study explores the current literature on ‘the effectiveness of electronic-learning (e-learning)’ in teaching/learning language skills. Through providing a comprehensive synthesis of amassed related empirical and conceptual articles, drawing on students’ and instructors’ experiences, a mapping review is conducted to look at the impact of e-learning within US community colleges. This research aims to examine the most recent literature about the efficiency of implementing e-learning alone to deliver language skills in US community colleges, and to investigate if e-learning leads to an increase or decrease in students’ dropout and success rates from community colleges. After examining the available literature, it is concluded that first, using e-learning alone can be accepted as a delivery mode for language skills, however, it still needs several improvements related to infrastructure, and easy to access virtual applications to provide a quixotic experience for students to learn various language skills. Second, although e-learning positively affected domestic students, it has negatively impacted international students who unfortunately either failed in their e-courses or withdrew from the whole program. Moreover, drawing on the syntheses of the low success rates and high dropout rates of students who registered in e-learning courses, the researcher concludes that the results of this study can be used as an evaluative phase for US Community College administrators to prepare colleges with the needed student free services to present innovative e-learning design and experience, and for faculty and to design ideal e-learning courses that are based on motivation and engagement models.

Keywords: e-learning, community colleges, language skills, advantages and disadvantages, success, and dropout rates.

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1. Introduction

Even though appeared over a century ago, community colleges spread out and became the main pathway that provides the higher education system for students in the United States. According to the American Association of Community Colleges (AACC) (2021), community colleges avail nearly half of the US undergraduate students, providing students with higher education, getting students ready to transfer easily, and equipping the workforce with necessary training and skills. Among those skills are those of English language that international and domestic students can utilize in their future positions. There are three modes for curriculum delivery used in community colleges, traditional (face to face, on- campus), mixed- mode, and electronic mode (e-learning). The current study focuses only on the electronic mode due to the prevalence of e-learning programs and courses in the US community colleges impacting, thus, college students in various ways as many studies advocate its use while many others criticize it for various reasons.

E-learning is defined as a self-dependent or collaborative learning mode that relies on technology, specifically virtual educational platforms (Bleimann, 2004; Pacansky-Brock, 2012). This means that e-learning occurs when there is a detachment between the lecturer and students due to various reasons that prevent students from being present in face-to-face courses. E- learning gives students, who are unable to spend money and time on face-to-face classes or who live far away from colleges, the opportunity to complete their degrees successfully (Hannay & Newvine, 2006; Vlasenko and Bozhok, 2014). Although many studies addressed e-learning in relation to students' age, and its distinction from traditional mode, little research has been conducted to reveal the efficiency of using this mode alone in learning language skills and the impact of e-learning on students' dropout rates in the US community colleges. For this reason, this study is set to investigate those facets of e- learning in relation to community college students in particular. To achieve these purposes, this research is designed to answer the following two leading research questions:

1. Is e-learning alone a sufficient mode of delivery for language learning in community colleges?
2. Does e-learning increase or decrease students' dropout rates from community colleges?

E-learning has variously been depicted in the literature in relation to students and instructors' attitudes, its use versus using the traditional mode (face-to face), and its advantages and disadvantages. Researchers also considered aspects of e-learning and its relation to students' performance and the success rates. Since e-learning has different facets in relation to important other concepts in education, each of the aforementioned themes will be briefly considered in this critical literature review.

1.1. Traditional mode versus e-learning mode

When we talk about this aspect, the first thing that comes to our mind is the advantages/ disadvantages of e-learning and traditional learning for both students and instructors in terms of time flexibility, access to virtual applications, availability of internet, cost, and infrastructure. Traditional education has witnessed major changes during the last decade, especially in community colleges. These modifications are attributed to the rapid adoption and use of technology in the educational setting. Nowadays technology has provided colleges with the chance to supply learners with off- campus education that is both affordable and suitable to their circumstances via e- learning courses (Reeves & Osho, 2010). But what are the distinctions between this mode and the traditional mode? The main difference between the two is that students and the instructor can collaborate with neither place nor time limitations (Coşar, 2015). In addition, traditional courses require the physical attendance of students while online classes made it possible to gain different degrees for students who cannot be on campus due to employment responsibilities and social life commitments. (Smart & Saxon, 2016). Therefore, a review of most recent research indicates equivocal findings about this topic as students and instructors varied in their perspectives about which mode is more suitable for them according to their personal circumstances.

1.2. Students and Instructors' Attitudes toward e-learning

In terms of students' attitudes toward e-learning, current literature provides variant results since in some studies students seem very contented and do not care about face-to-face interaction with instructors as they use technology in their everyday life, while others are unsatisfied with online courses due to various reasons (Hermawan, 2021; Hannay & Newvine, 2006). Students who criticize e-learning argue that the technology needed to deliver the e-learning course is complex and complained about the high cost of internet services (Elayan, 2021; Drennan, Kennedy, and Pisarski, 2005). Therefore, college students may respond differently to e-learning relying on their technological skills and other infrastructure issues. Some scholars, like Reeves and Osho (2010), maintain that electronic courses may appear less challenging and easier in many terms for some students compared to face-to-face instruction. This might be attributed to those students' perception that electronic courses are less demanding than traditional instruction. College students often presume that electronic courses do not require a lot of class participation or interaction. However, unfortunately, this is not always the case since sometimes some students who lack the necessary technological skills, vital to be successful in an e-course, find it very difficult to continue their course and often withdraw from that course (Al Rawashdeh, Mohammed, Al Arab, Rebhi, Alara, and Al-Rawashdeh, 2021).

As for college instructors, prior research showed also inconsistent opinions about e-learning and instruction. Some instructors, especially those who teach English as a foreign language, advocate for the use of e-learning since it provides easy access to electronic platforms, facilitates explaining materials in an interesting

way using various technological tools, instructor's acquaintance with instructional technology designs, and its availability for more population who cannot attend colleges (Elayan, 2021; Hannay & Newvine, 2006; Clark, 1993). However, the other strand of instructors prefers the traditional mode of instruction as it has the significant factors of interaction and engagement between students and the instructor, and a higher credibility rate of traditional exams compared to the electronic ones.

To sum up, students and instructors listed several strengths and weaknesses for e-learning. Strength points included the flexible schedule for students and the instructor, creative teaching/learning methods by the instructor and more enjoyable lectures for the students, access to more students. Weakness aspects include time-consuming preparation of e-courses, lack of interaction and engagement available in the traditional mode, possible technical problems for both students and instructors, less enrollment for on campus classes, and issues pertaining illiterate students in internet and computer use.

1.3. Advantages of e-learning

Much research has addressed the advantages of e-learning for students and instructors in relation to different concepts, such as its availability at any time, the ability to record and share the materials with students, obtaining degrees without being physically attendant on campus due to various economic and social responsibilities, and the interesting virtual methods used to deliver the curriculum. For example, Hannay & Newvine (2006), maintained that there are several benefits of e-learning for college students and instructors, such as saving time and effort since students are not required to go to campus to attend classes, and the remote teaching that instructors can perform as electronic courses require only the presence of the internet and a virtual application. Hurt's (2008) qualitative study has also concluded that e-learning's benefits are greater than its cons. This study was conducted on community college instructors and students seeking their perceptions about online education in rural areas. The results of her study indicated e-learning is the preferable learning mode for both students and instructors as they live far away from campus and have family commitments and employee work schedules that cannot be modified.

Mayfield-Johnson, Mohn, Mitra, Young & McCullers (2014) conducted a study on electronic-courses taken by community college health professionals who live in underserved and geographically isolated areas. The findings of their study showed that students were comfortable with e-courses due to their low cost and saving valuable time. A more recent study by Elayan (2021) found similar results to those of Mayfield-Johnson et al.. Elayan conducted a thesis study about the cons and pros of university online learning to teach the English language based on instructors' and EFL students' opinions. The sample included 29 instructors and 86 EFL students from the English Department in a large public university in Jordan. The results indicated that students were divided into two groups; those who advocate for e-learning, and others who opposed it. E-learning courses were

advantageous for students in learning English language skills since, according to them, learning any skill using an online mode is more interesting than the traditional mode. In addition, it is easier for students to receive and send their assignments electronically. However, other students opposed using e-learning due to its high internet services cost, unsuitability for some English topics, and the large number of tasks required to be submitted. As for instructors, the findings of the questionnaire showed that there are also advantages and disadvantages to use e-learning. In terms of advantages, instructors reported that e-learning has easy access platforms, the ability to record, achieve and share, and the correspondence between the exams and the materials given in online lectures. Yet, they also shared several disadvantages that include the instructor's lack of using basic technological tools and the incredibility of online tests since students may cheat easily due to the absence of instructor's direct observation.

1.4. Disadvantages of e-learning

Despite the advantages mentioned above, some drawbacks have been detected about e-learning. Hannay & Newvine (2006) proposed that college students may have comprehension problems with e-courses that contain scientific, quantitative, or technical information. Furthermore, the lack of interaction between students and the instructor can complicate the resolution of math and physics problems for students. The limited engagement and interaction can also negatively affect the learning process of college students which will lead eventually to low success rates or dropping out of the program (Al Rawashdeh, 2021).

The situation is more complicated for community college international students who face more difficulties with e-courses than their domestic counterparts since they need face-to-face interaction with instructors to develop their L2 vocabularies and rules as they are unfamiliar with linguistic sequences of English language, which means wasting more time to search and use alternatives increasing their frustration and amotivation (Khudhair, 2020; Majeed, and Al-Jabbawi, 2021). This fact has manifested in several studies about ESL international students. For example, Coşar (2015) conducted a study about disadvantages of e-learning for international students, specifically Turkish college students. The findings of this study showed that those students encountered many obstacles while taking e- courses such as difficulties in comprehending course content, lack of necessary interaction with their peers and lecturers, the unavailability of corresponding content in their languages to help them understand the material. For these reasons, most of them prefer traditional or mixed mode education. Although e-learning provides flexibility for students and lecturers in terms of schedule and life obligations, it sometimes fails to offer necessary on time instructions to college students (Kaur, Mullins, and Slimp, 2015). A more recent qualitative study conducted by Apriani, Syafryadin, Inderawati, and Noermanzah, (2021) sought EFL instructors' perspectives on obstacles and solutions accompanying e-learning training courses for college instructors. Through observations, notetaking and interviews, the researchers

found out that although trainee instructors followed the directions of the trainer in delivering an e-course, several obstacles have occurred during the implementation including bad internet and electricity connections, lack of personal discipline, unprepared modules for the e-learning course, and poor skills in using technology by old participants. To conclude, even if e-learning has many advantages, it also includes flaws that cannot be avoided, especially for EFL international students who become confused when enrolling in an e-course due to first their limited technological skills, and second their inability to distinguish various linguistic features in L2 because of the interference between their L1 and the L2 they are learning (Khudhair, 2013; Khudhair, 2018; Al Jabbawi, 2019).

1.5. E-learning and Students' Achievement and Dropout Rates

Whether using electronic only or blended ways to deliver knowledge, universities and colleges across the United States are increasingly employing virtual platforms as a means for instruction and learning. A quick look at most recent publications reveals how e-learning flourished due to the COVID-19 pandemic (Wang, Li, Malik, and Anwar, 2021), its relation to EFL learners' motivation (Harandi, 2015; Dubey, Piroška, & Gautam, 2019; Berestova, Burdina, Lobuteva, & Lobuteva, 2022), or how instructors/students perceive it as a learning/teaching mode (Apriani et al. 2021). However, little is known about how e-learning is related to students' performance. More specifically, few studies assessed e-learning in US community colleges, and fewer yet have addressed dropout rates after taking e-courses. The author has located only five articles in the current literature that directly addressed the achievement and withdrawal of ESL community college students in relation to e-learning, which entails a research gap that the author is trying to fill through the findings of this article.

The first article conducted in 2009 in the United Kingdom by Anagnostopoulou, Gallacher, and Priego-Hernandez was a quantitative study and sought to assess the relationship between students' retention and withdrawal rates and e-learning. The results of the questionnaires and interviews showed that although students used technology in their everyday life e-learning, it did not seem to have a very important role in students' learning experience except for accessing resources.

The second and third studies were both done in 2011 by the two researchers, Xu and Jaggars. Both studies aimed at measuring the effect of e-learning on the course achievements and withdrawal rates. The first study (2011) was applied in Virginia state community colleges. The dataset of 23 community colleges was analyzed and it focused on students' course completion. The results revealed that college students who finished electronic classes had lower success rates than those who completed traditional mode classes. In addition, students who took developmental courses failed significantly. Thus, the authors reached the conclusion that e- courses negatively impacted students' education, especially for those who were taking developmental education courses. Such negative effects were reflected by the low success rates of students who registered in more than one online developmental course (Xu and Jaggars 2011). The second 2011

study used similar data collection methods as those of the first one but on 34 community and technical colleges in Washington State DC. The authors wanted this time to explore if there is a direct connection between enrolling in e- courses and students' dropout rates. The findings indicated that withdrawal percentages were higher for college students who enrolled in e- classes in the first term of their study. In addition, course completion percentages for college students who registered in e-classes were lower than the rates of the students who enrolled in the other delivery modes. This last conclusion was similar to that of the 2010 study (Xu and Jaggars, 2011).

The fourth article by Smart and Saxon (2016) found analogous results to those of Xu and Jaggars (2011) when they conducted a study on northeast Alabama community colleges. The findings indicated that there were more rates of withdrawal or non-passing grades by college students who were enrolled in e- courses compared to their peers who took part in the traditional learning mode. The fifth and last study was carried out by Ryan, Kaufman, Greenhouse, She, and Shi in 2016. This study aimed at comparing the achievement outcomes of community college students who enrolled in e- courses to the success rates of students who received only mixed mode or face to face (traditional) instruction. The results showed that students who took e- courses performed poorer than those who enrolled either in mixed mode or traditional courses.

It can be concluded from the aforementioned studies that e-learning, represented by online or electronic courses, had decreased the success rates of students. Moreover, the high cost of the technology needed for e-learning and students' lack of knowledge to use this technology to learn led to the high rates of withdrawal and failure in e-courses.

2. Mapping Review

This study follows a critical mapping review which is defined as a research synthesis that maps out current literature on a particular topic to identify literature gaps, key concepts, and kinds and sources of evidence to inform specialized administrators, practice, in the research fields (Grant and Booth, 2009; Pedersen, Grønvad, and Hvidtfeldt, 2020). Mapping review addresses broad topics where various scientific perspectives, research designs, and kinds of evidence may exist (Arksey and O'Malley 2005; Daudt, van Mossel and Scott 2013). This review type is especially convenient for the present study since there are currently amassed equivocal results of empirical and conceptual articles on the effectiveness of e-learning in US universities and colleges. The review focused on peer- reviewed articles that were published in various academic journals during the last two decades (from 2001 to 2021) concentrating on presenting the results of these articles pointing out the strengths and weaknesses of e-learning in US community colleges and the effect of this learning mode on students' success and withdrawal rates.

As for the selection process, the researcher considered both a systematic search of academic scientific databases and a manual search where citation and reference

tracing are implemented on the obtained identified and screened documents. After consulting various academic databases to review the most recent literature review on the topic, a synthesis of the similarities and differences among the results of the reviewed articles was mentioned to shed light on the main points pertinent to the efficiency of e-learning as a delivery mode of language skills.

3. Conclusion

This study aimed at investigating the available literature about the efficiency of using e-learning alone to deliver language skills in US community colleges, and to see if e-learning caused an increase or decrease in students' performance and withdrawal rates from community colleges. After examining the available literature, it is concluded that although e-learning can be used as a separate mode of/ for education due to its various benefits for both students and instructors, it still needs to be improved to meet the needs of community college students, especially in terms of platform access, electricity availability, and required infrastructure. In addition, even though e-learning had a positive influence on some students, it negatively impacted others, especially international students who were unable to catch up with their peers due to their limited knowledge of technology or inaccessibility to computers and needed soft wares for the e-course. Therefore, those students lingered and unfortunately either failed in their e-courses or dropped out from the program which resulted in low success rates and/or high withdrawal rates of students who enrolled in e-learning courses. Other researchers, like Ryan et al. (2016), reported that achieved outcomes of college students who enrolled in e-courses were poorer than those of their peers who registered in blended courses and traditional classes.

The findings of this study have significant implications for both community college administrators and faculty who teach e-courses since, based on the examined literature, it provides important insights for students and instructors about the efficiency of using e-learning alone as a mode for knowledge delivery. Also, the results of this article can be used as an evaluative phase for instructors to optimize the design of their e-learning courses by including engagement and motivation models to maximize the benefits of the learning process in relation to language skills, and for administrators to equip colleges with the needed infrastructure and free access internet service to present an innovative and ideal e-learning experience.

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