

۱۸ و ۱۹ اردیبهشت ماه ۱۴۰۳



چهارمین همایش ملی فناوری آموزشی:

«آموزش هوشمند؛ فرصت‌ها،

چالش‌ها و دستاوردها»



Effect of Artificial Intelligence on Learning English Language Through the Creation of a Virtual Learning Environment

¹Areoo Shafiei, ²Melor Md Yunus, ¹Hadi Salehi, ¹Omid Tabatabaei

¹English Department, Najafabad Branch, Islamic Azad University, Najafabad, Iran

²Faculty of Education, Universiti Kebangsaan Malaysia, Bangi, Malaysia

Corresponding Author: Hadi Salehi (hadisalehi1358@yahoo.com)

Abstract

The present study aims to investigate Iranian students' views on the influence of artificial intelligence on English learning. The participants in this survey were a sample of 100 Iranian students from different universities. They were selected by convenience sampling. In this study, the focus was on the impact of artificial intelligence on English learning. Data were collected using an online questionnaire. The collected data were analyzed using descriptive statistics. In fact, the quantitative data were obtained using a survey questionnaire. The data obtained from the questionnaire were presented in the form of tables and graphs to show Iranian students' viewpoints on learning English in online classes and its effects. The results of the data analysis revealed that most of Iranian students agree with online learning, they have positive viewpoints about online learning, and it has a positive influence on their learning. Data analysis showed that the majority of students support online learning. It was found that progressing technology has influence on the learning of learners, especially learning English. This study has both theoretical and practical implications for government officials, EFL teachers, learners.

Keywords: Artificial Intelligence, Online Learning, Virtual Learning Environment

I. INTRODUCTION

Artificial intelligence is a phenomenon that has the ability to change and develop processes and, therefore, it has influenced many aspects of our lives. One of the sectors heavily affected by artificial intelligence is the education sector. Of course, it should be mentioned that this technology, like other scientific developments, has positive and negative characteristics. Technology is advancing rapidly, and we can see its impact in every field. It can be clearly and unequivocally stated that artificial intelligence is one of the most important and useful types of technology today, and there are many reasons why this type of technology is attractive. In recent years, some innovations were just imaginary in the field of science and education and did not come true, but artificial intelligence has proven that it is not imaginary and can eventually replace teachers in the future.

In 2019, with the emergence of Covid-19 and its impact on education systems worldwide, leading to the closure of educational institutions and changing the educational process, artificial intelligence demonstrated and proved its effectiveness and practical application when starting online education and showed that it is not imaginary. Although online education as one of the applications of artificial intelligence was used before the corona era, not in all countries and in all fields of education with the same level of seriousness. So, all in all, it can be safely said that the Coronavirus has increased awareness of the concept of artificial intelligence, especially online education.

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II. LITERATURE REVIEW

By integrating new technologies in education, the process of learning will be supported in many fields, such as English Learning Management Systems (LMSs) (Adnan et al., 2019). Online learning is the use of Internet-based technology features that rely heavily on the availability of information technology (Efriana, 2021). Online learning refers to “the use of a wide variety of electronic media as well as information and communication technologies to achieve educational purposes” (Muljana & Luo, 2019, p. 20). Many students think that online class is a good substitute to face-to-face class (McCready, 2020). Technology is commonly used in general education classrooms, but it can also help students with special needs. For example, assistive technology includes tools and services that help students with disabilities in their learning. So, technology can make education better for all students, including those with a variety of exceptionalities (Lara et al., 2020). Online learning refers to the use of digital technologies to facilitate teaching and learning, including the use of online platforms, video conferencing software, and digital resources. Bates (2016, p.2) claimed that “online learning is a form of distance education in which a course or program is intentionally designed in advance to be delivered fully online”. Online learning engages learners in the learning process via the Internet and digital media (Stephenson, 2018).

According to Carliner (2004), e-learning refers to the new format of learning delivery that allows for linking the transmission of learning materials through technological tools such as computers and the Internet. Al Zumor et al. (2013) found the use of technology tools in the classroom environment effectively improves English proficiency and increases student confidence and collaboration in language learning. Online learning is a program for setting up online learning courses to reach a huge and varied student body. Online learning that takes place over the Internet is an educational process that is a form of distance learning. This process provides a learning experience for students (both children and adults) who access their education remotely or who, for various reasons, cannot attend school, college, or university (Kim, 2020). Most students consider platforms of online learning in teaching and learning English as successful and satisfactory tools, and they agree to develop English language skills, acquire new vocabulary and enhance their understanding of the lesson contents by using the effectiveness of the online learning platforms (Cakrawati, 2017). Ahmadi and Reza (2018) have shown that using the right technology for language learning can motivate learners to learn language skills effectively.

III. METHODOLOGY

This section presents an account of the setting in which the survey was conducted, participants, data collection methods, and data analysis procedures employed to analyze the data.

3.1. Research Design

This research was carried out by using descriptive statistics, which is a methodology for conducting research that involves collecting, analyzing and integrating quantitative research. The descriptive statistics design was used to investigate the viewpoints of Iranian students about online learning. In fact, the quantitative data were obtained using survey questionnaire.

3.2. Participants

The participants in this study were 100 students from different Universities in Iran, whose age ranged from 20 to 28.

3.3. Instrument

The instrument used to gather the required data for this study was the following:

3.3.1. Questionnaire

The data collected by the researcher-made online questionnaire that has 40 statements for students (Appendix A). The validity of the questionnaire was established using a panel of experts who were experienced lecturers at the university. The questionnaire was given to 5 lecturers and asked them for their feedback. So, it was revised and rechecked under the supervision of those lecturers. This questionnaire was in English and had only one main question that this question had some statements with 5 choices, strongly disagree, disagree, not agree not disagree, strongly agree, agree, that participants should read each statement and choose their choice.

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3.4. Data Collection Procedures

This research was conducted to investigate the viewpoints of Iranian students about the influence of artificial intelligence on learning. The information and data in this survey was collected from an online questionnaire. The questionnaire was distributed among 100 students from different universities.

3.5. Data Analysis

The viewpoints of students about the influence of artificial intelligence on English language learning were shown by analyzing the data obtained from the questionnaire. All the data obtained through the questionnaire were analyzed. Descriptive statistics were used to provide general information regarding the results of the questionnaire. The data obtained from the questionnaire are presented in the form of table and figure to show the viewpoint of students about online learning. To show the viewpoints of students about online learning, all the data obtained from the questionnaire were analyzed and interpreted. There was quantitative analysis of the data gathered through the questionnaire by the SPSS program.

IV. FINDINGS

According to this design, findings of this study were obtained by quantitative findings to show the viewpoints of students about online learning English and its influence.

Quantitative Results

Considering the findings of the analyses, one overall conclusion could be that most of the students agree with learning English online. Furthermore, online learning is good regarding the viewpoints of students. According to their answers to the questionnaire, this kind of learning gives them motivation to learn, attracts them to participate in online classes and gives them courage and self-confidence to ask their questions and answer the questions and even make mistakes.

Table1. Viewpoints of Iranian EFL postgraduate students about online learning

Viewpoints of EFL lecturers about online learning	Frequency	Percentage of frequency
Strongly disagree	1	1%
Disagree	15	15%
Not agree not disagree	9	9%
Agree	72	72%
Strongly agree	3	3%
Total	100	100%

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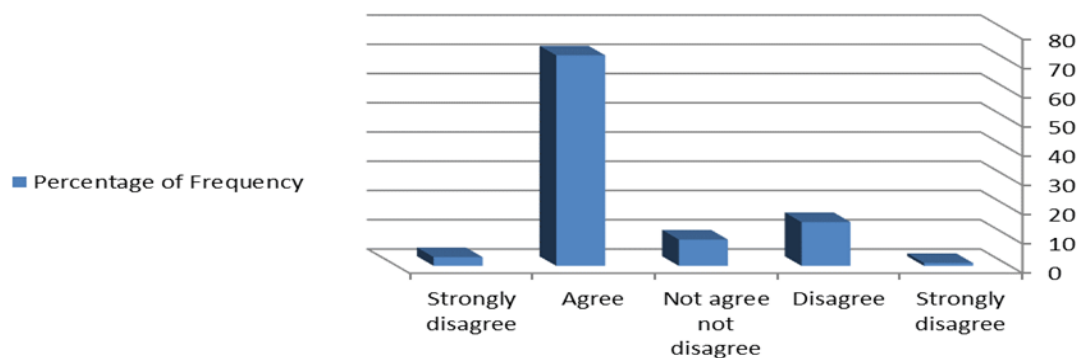
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According to the above table, we can see that 1% of students strongly disagree, 15% disagree, 9% are not agree not disagree, 72% agree and 3% strongly agree. So, based on this table, it is concluded that most of the students agree with online learning. In Figure 1. We can see the percentage frequency of students' viewpoints about online learning.

Figure 1. Viewpoints of Iranian EFL postgraduate students about online learning



V. DISCUSSION AND CONCLUSION

Considering the findings of the analyses, one overall conclusion could be that students agree with online learning. Furthermore, online learning is good regarding the viewpoints of students. Their answers to the statements in questionnaire showed that they are satisfied with online learning, and it is very useful. They can easily check and recheck whatever they want to say by using online platforms, online sources, immediately. However, the type of activities that students are involved in is very important because it can increase or encourage their involvement in that given activity. It gives them confidence and courage to ask their questions, especially shy students and academically weak students. It encourages and gives them confidence. So the findings of this study support those of Carliner (2004), Kim (2020) showing that online learning is very useful because it can help learners to learn everywhere, in every situation and condition. This study supports the findings of a study done by Al Zumor et al., (2013) in which using technology tools in the classroom environment effectively improves English proficiency and increases student confidence and collaboration in language learning. The findings of the present study confirm those found by Cakrawati (2017) showing that most students consider platforms of online learning in teaching and learning English as successful and satisfactory tools. The findings of the present study support the findings of a survey done by Ahmadi and Reza (2018) in which they showed that using the right technology for language learning can motivate learners to learn language skills effectively.

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Appendix A

In the Name of God

Please tick the appropriate answer.

2) What's your idea about online learning?

	Statements	Strongly disagree	Disagree
1	I am satisfied with online learning.		
2	I prefer online learning to traditional learning.		
3	Online learning is better than traditional learning.		

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4	Online learning has a good quality.		
5	Online learning is not different in terms of quality than traditional learning.		
6	I agree with online learning.		
7	I agree with the continuation of online learning in the future.		
8	Learners show less interest and desire in online learning.		
9	Learners need to spend more time in online learning.		
10	Online learning is tedious for the learner.		
11	Online learning is more engaging for the learner.		
12	Learners are more active and involved in online learning.		
13	Online learning is stressful for learners.		
14	Online learning makes learners more confident in asking questions.		
15	Online learning is more difficult than traditional learning for some learners.		
16	Learners are eager to participate in online learning.		
17	Learners struggle with online learning.		
18	The learner can develop and strengthen listening and speaking skills in online learning.		
19	There is learner participation and interaction in online learning.		
20	There are variety of exercises and activities that enhance learner's motivation in online learning.		
21	In online learning, class activities encourage learners to assume responsibility for independent learning.		
22	There are sufficient communicative activities in online learning.		
23	There is balance between controlled and free language practices in online learning.		
24	Activities are engaging in online learning.		

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25	There are most engaging activities in online learning.		
26	In online learning, it is possible to establish interaction and communication between learners of the class.		
27	There is a balance between language-focused and communicative activities in online learning.		
28	It is more difficult to focus during online learning.		
29	All the learners don't have access to the technology and the Internet.		
30	Online learning is not affordable.		
31	Online learning is economically viable.		
32	Online learning has many challenges.		
33	Online learning has many disadvantages.		
34	Online learning has many advantages.		
35	The disadvantages of online learning are more than its advantages.		
36	The advantages of online learning are more than its disadvantages.		
37	The online learning environment is not an interactive teaching environment.		
38	I see no change in students' achievement levels as a result of online learning.		
39	Online struggling has no negative effects on students' performance.		
40	I recommend only using online learning in the future.		

Thank you very much for your help.