

A Survey Study on EFL Teachers' and Learners' Perceptions of the Use of Learning Management Systems (LMSs) in Teaching EFL in the Post-COVID-19 Era

Hamed Babaie Shalmani¹ , and Saeed Mashhadi² 

1. Corresponding author, Department of English language and Linguistics, Ra.C., Islamic Azad University, Rasht, Iran. Email: babaie@iau.ac.ir
2. Department of English language and Linguistics, Ra.C., Islamic Azad University, Rasht, Iran. Email: saeed.mashhadi2012@gmail.com

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ABSTRACT

Objective: Today, technology across all fields helps humans do things better. With the onset of the COVID-19 pandemic and the implementation of social distancing policies, many countries sought to capitalize on the affordances of online education. Inspired by this, the present study aimed to survey the opinions of EFL teachers and students regarding the use of learning management systems (LMSs) for English instruction in the post-COVID-19 era.

Methods: In this research, using a questionnaire, the opinions of 70 EFL teachers and students who had experience with online education through LMSs regarding the potential utility of these systems were surveyed across three aspects: "user-friendliness", "cognitive benefits", and "affective benefits". Data were collected through availability sampling and from the participants of three institutions (Azad University and two non-profit universities). Participants' opinions were analyzed in SPSS to identify specific perceptions and potential perceptual mismatches.

Results: Students held overall positive attitudes toward these systems, which increased the likelihood of communicating with teachers and solving problems outside the classroom. In contrast, they expressed their most negative views concerning the disconnection or slowness of the systems. The results also showed that there was no statistically significant difference in perceptions between teachers and students regarding the pros and cons of using LMSs.

Conclusion: The results show that participants generally believe that online education through LMSs is beneficial for them across three perspectives: user-friendliness, cognitive benefits, and affective benefits. The majority of participants believed that LMSs are beneficial to them because they create communication conditions outside class time between teachers and students, as well as the ability to save and replay classes, while both groups also have concerns. In return, technical problems such as internet slowness and disconnections were reported by almost all participants.

Keywords: EFL teachers' perceptions; EFL learners' perceptions; LMS; perceptual mismatch; post-COVID-19 era

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1. Introduction

With advances in science, significant changes across many fields, including education, have improved the learning process for many students. In many countries, in addition to the traditional, face-to-face method of education, distance education has also been used as a complement to the learning process (Monterde et al., 2022). Today, learning management systems (LMSs) are used worldwide to ensure the quality of learning among students and teachers. This technology was also felt in the Iranian education system, but no significant action had been taken to develop and apply distance education through LMSs.

With the onset of the COVID-19 epidemic, the Iranian educational system was motivated to use LMSs, as policies of social distancing had to be implemented to control the COVID-19 epidemic. Now that COVID-19 has been controlled to a great extent, many institutions continue to exploit the potential of LMSs for teaching academic subjects across different areas of expertise, or for engaging students in extracurricular activities outside the classroom (Safdari, 2022).

The question now is whether and to what extent LMSs can be beneficial in the classical Iranian education system. Given the limited comprehensive research on the quality of education through LMSs in Iran, the researchers conducted a study to gauge the perceptions of EFL students and teachers regarding the quality of education through LMSs, their advantages and disadvantages, and the challenges of using them. LMSs require the realization of some factors to achieve predetermined objectives, so in the present study, the researchers focused on three factors: (a) user friendliness (usability), (b) cognitive benefits, and (c) affective benefits, if any.

According to Nielsen (2012), *usability* is a quality attribute that assesses how easily a user interface can be accessed and used. It is one of the most important requirements of LMSs. Learning is a complex activity with several intertwined and interwoven aspects (Septiani, Suwawi, & Herdiani, 2017). For an LMS to meet cognitive learning needs, it must be flexible enough to be tailored to or adapted to the holistic yet individual learning needs of each user-learner for enhancing cognition (Lima, Brito, & Caldeira, 2019). Lack of engagement in asynchronous environments, a lack of connection between students and instructors, and the challenges of collaborative projects in online environments are certain disadvantages of online learning (Culbreth & Martin, 2025). On the other hand, online education has numerous positive traits, such as the ability to maintain a higher level of communication with students, flexibility in the learning process, the ability for instructors to act as coaches and mentors rather than simply as directors, and an enhanced sense of community (Yasmin, 2023).

Green, Inan, and Denton (2012) conducted a study to identify the factors influencing students' satisfaction with their new LMS and to determine which were the most vital to improving LMS induction courses for new students. The study found that user-friendliness is key to achieving student satisfaction. Likewise, a study by Simelane-Mnisi (2023) showed that LMSs are more effective when advanced collaborative tools are available, as these tools enhance online learning

effectiveness compared to those in most universities' existing LMSs. Some studies have also shown a positive relationship between student motivation in LMS-based pedagogy and their learning performance (Mokhtarzadeh, 2021). Bansal and Pagidas (2025), for example, stated that students with high academic achievement are highly motivated and tend to put extra effort into achieving their goals via collaboration in LMSs.

However, specific challenges related to LMS use may affect the effectiveness of education delivered through them. Since LMSs rely on the Internet, users may experience slow or intermittent connections due to infrastructure issues. Additionally, some users may not be familiar with LMS features or how to operate them. Another concern is the potential difficulty in establishing a strong emotional connection between users and the platform. Inspired by these possible challenges, the researchers of this study anticipated that they could identify the advantages and disadvantages, as well as any usability features, of these systems by exploring the experiences of LMS users. The hope is that the findings will help improve learning quality and address potential problems associated with this type of education.

More specifically, the present study aimed to (a) thoroughly examine the experiences of LMS users, specifically EFL students and teachers, (b) provide an overview of the potential benefits and limitations of these systems for LMS developers, teachers who use the systems, and students, and (c) determine whether online education through LMS can improve the quality of learning. In line with these objectives, the following questions were formulated:

RQ1: What are EFL teachers' and learners' perceptions about the use of learning management systems in Iranian English language teaching contexts?

RQ2: Are there any perceptual mismatches, believed to be statistically significant, between teachers and students concerning their views on the utility of LMSs for English language teaching?

2. Materials and Methods

The participants in this study included 44 students majoring in English Translation and Teaching English as a Foreign Language (TEFL) at three universities (Azad University and two non-profit universities) in Iran. They had been studying English for at least one semester through various LMSs at three levels: bachelor's, master's, and Ph.D. The second group consisted of 26 teachers in related fields, such as TEFL and English Literature, who had taught for at least one semester using LMSs. They held bachelor's, master's, or Ph.D. degrees and were of both genders. The participants had hands-on experience with Vadana, BigBlueButton, and Skyroom, three well-known LMSs still used in Iran's educational system. Participation in the study was voluntary, and participants were recruited through availability sampling. At the start of the experiment, the researchers briefed the participants on the study's goals and scope. They reassured them that their participation would not involve any physical or mental harm.

To collect data on the experiences of the target community regarding the overall and potential affordances of using LMSs in pedagogy, the researchers developed a questionnaire. In the first phase, EFL students from the target universities were given a 30-item multiple-choice questionnaire. Each questionnaire subset comprised 10 items that gauged participants' opinions on one of the three key aspects of the overall utility of the systems: 10 on user-friendliness, 10 on cognitive benefits, and 10 on affective benefits of LMS. To avoid limiting participants' responses, three open-ended questions were also included at the end of the questionnaire to elicit more detailed responses. In the second phase, the TEFL teachers were given a copy of the same questionnaire to express their views on three aspects of the overall utility of the systems.

It is noteworthy that the questionnaire had already undergone standardization through a pilot study involving 30 participants. The reliability coefficient for the question was computed using Cronbach's alpha, which yielded 0.82. Two Ph.D. holders in TEFL assessed the questionnaire's face validity. Likewise, a confirmatory factor analysis (CFA) was employed to determine the number of factors accounting for the variance in participants' responses to the questionnaire items. A scree plot of eigenvalues was also drawn to show the number of screens (factors) on the steep slope. Figure 1 below shows that only three factors lie on the steep slope, suggesting that any variation in participants' responses was accounted for by these three factors, representing the three aspects of the LMSs' overall utility.

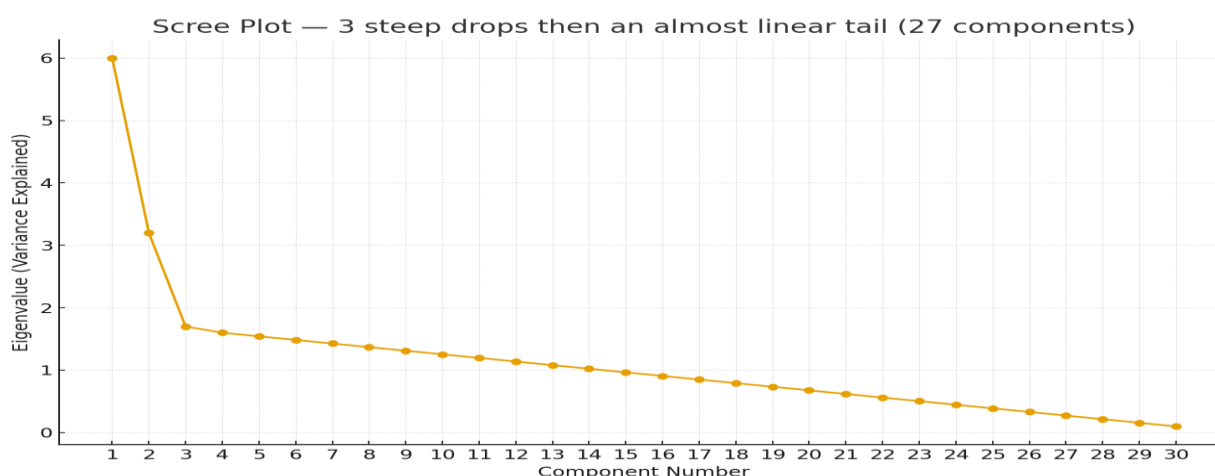


Figure 1. The scree plot of eigenvalues

The results of a confirmatory factor analysis revealed that only three factors accounted for participants' responses to the questionnaire items.

Since this study aimed to explore participants' general characteristics and opinions on the overall usefulness of LMSs in Iranian EFL settings, the researchers distributed a questionnaire. To gather quantitative data, 30 multiple-choice questions were presented to the target group, along

with three descriptive questions to collect qualitative insights. The questions focused on participants' perceptions of the user-friendliness and, if any, the cognitive and emotional benefits of e-learning through LMSs during the COVID-19 pandemic in Iran. The online survey was sent to 70 participants, and over two weeks, responses from 44 EFL students and 26 EFL teachers regarding their practical experience with LMSs were collected. The quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS v27), with the results summarized in the tables in the findings section.

3. Results

3.1 Descriptive statistics for the user-friendliness subscale

The first subscale assessed respondents' perceptions of the LMS's user-friendliness. The convenience of the LMS was evaluated across ten diverse aspects, including respondents' experiences using LMSs as an alternative to face-to-face education, the internal environment of the LMS, issues with slowness or disconnection during use, the ability to utilize LMS features, the role of LMS in fostering two-way communication between teachers and students, preferences for using the mobile version versus the PC version of the LMS, its rhetorical performance, opportunities for reviewing and retrieving recorded classes, interaction with others while using LMS, and testing within the LMS. The results are presented in Tables 1-10, covering items 1-10 of the questionnaire.

Table 1. Respondents' experience using LMSs as an alternative to face-to-face education

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Education through LMS was better	4	15.4	8	18.2
Education through face-to-face was better	16	61.5	21	47.7
Education through LMS was better if the problems were solved	5	19.2	14	31.8
There was no difference between face-to-face and LMS education	1	3.8	1	2.3
Total	26	100.0	44	100.0

The first item of the questionnaire explored the respondents' experience using LMS as an alternative to face-to-face education during the COVID-19 pandemic. The results indicated the students' and teachers' willingness to use face-to-face education over LMS ($f_{\text{Teachers}} = 16$, $p_{\text{Teachers}} = 61.5\%$; $f_{\text{Students}} = 21$, $p_{\text{Students}} = 47.7\%$). However, acceptance of LMS was higher among students

than among teachers (Teachers = 4, $p_{\text{Teachers}} = 15.4\%$; Students = 8, $p_{\text{Students}} = 18.2\%$). Hence, almost one-fifth of the teachers and one-third of the students reported that they would accept the LMS technology for education if the problems were solved ($f_{\text{Teachers}} = 5$, $p_{\text{Teachers}} = 19.2\%$; $f_{\text{Students}} = 14$, $p_{\text{Students}} = 31.8\%$). It could be inferred that both teachers and learners perceived face-to-face teaching as more effective and preferred face-to-face education over LMSs.

Table 2. Respondents' perceptions of the internal environment of the LMS

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Customizing the internal environment was easy	11	42.3	18	40.9
Customizing the internal environment was not so easy	7	26.9	9	20.5
It was catastrophic and unbearable	3	11.5	1	2.3
It did not meet my expectations	5	19.2	16	36.4
Total	26	100.0	44	100.0

The second item of the questionnaire examined respondents' perspectives on the extent to which the LMSs' internal environment could be personalized. The statistics showed that close to half of the teachers and the students perceived that personalizing the internal environment was easy in the implementation of the LMS system ($f_{\text{Teachers}} = 11$, $p_{\text{Teachers}} = 42.3\%$; $f_{\text{Students}} = 18$, $p_{\text{Students}} = 40.9\%$). It could be assumed that, although the adaptation of the LMSs' personal settings was undemanding for many teachers and students, they reported that the LMSs did not meet their expectations ($f_{\text{Teachers}} = 5$, $p_{\text{Teachers}} = 19.2\%$; $f_{\text{Students}} = 16$, $p_{\text{Students}} = 36.4\%$).

Table 3. Respondents' perceptions of the problems faced with slowness or disconnection when using the LMS

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
There was no particular problem	1	3.8	1	2.3
Sometimes there was a problem	14	53.8	24	54.5
Most of the time, there was a problem	8	30.8	14	31.8
Frequent connection problems bothered me	3	11.5	5	11.4
Total	26	100.0	44	100.0

The third item on the questionnaire aimed to examine respondents' views on the difficulties they encounter with the LMSs, specifically regarding slowness or disconnection. The evidence showed that nearly half of the teachers and students reported that the system sometimes ran slowly or they experienced disconnection issues while using it for teaching and learning (f Teachers = 14, p Teachers = 53.8%; f Students = 24, p Students = 54.5%). Additionally, about one-third of both teachers and students stated that they most of the time faced problems with the LMS being awkward to use (f Teachers = 8, p Teachers = 30.8%; f Students = 24, p Students = 54.5%). Overall, most respondents experienced challenges due to LMS disconnection.

Table 4. Respondents' perceptions of their ability to use the LMS features

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
It was easy for me to use the software's internal capabilities	19	73.1	37	84.1
It was not easy for me to use the software's internal capabilities	3	11.5	4	9.1
The internal capabilities of the software were not practical and useful	3	11.5	2	4.5
Using the software's internal capabilities was frustrating for me due to its complexity	1	3.8	1	2.3
Total	26	100.0	44	100.0

The fourth item on the questionnaire assessed respondents' perceptions of their ability to use the LMS facilities. The results indicated that most respondents were able to utilize LMS services and features (f Teachers = 19, p Teachers = 73.1%; f Students = 37, p Students = 84.1%). Overall, both teachers and students had positive views of the ease of use of LMS facilities.

Table 5. Respondents' perceptions of the extent to which the LMS can create cooperation between teachers and students

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
The use of LMS can create good two-way cooperation between students and teachers	9	34.6	24	54.5
The use of LMS cannot create good two-way cooperation	8	30.8	9	20.5
LMS cannot engage students in the education process, and their interaction is imperceptible	4	15.4	8	18.2
The use of LMS is teacher-centered, and students do not have the opportunity to interact	5	19.2	3	6.8
Total	26	100.0	44	100.0

The fifth item of the questionnaire collected information on the extent to which the use of LMSs in education could foster two-way collaboration between teachers and students. The findings indicated that half of the students and close to one-third of the teachers were satisfied with the feasibility of LMS in generating engagement among teachers and students ($f_{\text{Teachers}} = 9$, $p_{\text{Teachers}} = 34.6\%$; $f_{\text{Students}} = 24$, $p_{\text{Students}} = 54.5\%$). In other words, the students were more positive about the likelihood of generating collaborative learning and teaching situations through utilizing the LMS than teachers were. It sounded as if teachers were not highly satisfied with the system's ability to foster cooperation. One-third of the teachers and one-fifth of the students recognized that the use of LMS could not build and maintain appropriate rapport between students and teachers and handle the relationship between them ($f_{\text{Teachers}} = 8$, $p_{\text{Teachers}} = 30.8\%$; $f_{\text{Students}} = 9$, $p_{\text{Students}} = 20.5\%$). However, few respondents believed that the use of LMS was teacher-centered and students did not have the opportunity to interact and collaborate ($f_{\text{Teachers}} = 5$, $p_{\text{Teachers}} = 19.2\%$; $f_{\text{Students}} = 3$, $p_{\text{Students}} = 6.8\%$).

Table 6. Respondents' perceptions of the popularity of the mobile version of the LMS versus the pc counterpart

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
The mobile version was better	1	3.8		
The PC version was better	21	80.8	32	72.7
There was no difference between the mobile and PC versions, and it was easy for me to use both versions	1	3.8	11	25.0
Both versions had similar problems	3	11.5	1	2.3
Total	26	100.0	44	100.0

The sixth item on the questionnaire assessed the operating system used to run the LMSs. The data showed that many respondents (both teachers and students) preferred desktop LMSs over mobile versions for delivering and managing online courses (f Teachers = 21, p Teachers = 80.8%; f Students = 32, p Students = 72.7%). Therefore, only one teacher and one-fourth of the students reported no difference between the mobile and PC versions, finding both easy to use (f Teachers = 1, p Teachers = 3.8%; f Students = 11, p Students = 25%). In contrast, a few respondents indicated no difference between the mobile and PC versions, and both had similar issues (f Teachers = 3, p Teachers = 11.5%; f Students = 1, p Students = 2.3%). None of the students said the mobile version was better. Additionally, only one teacher rated the mobile operating system of the LMS as more popular than the PC version (f Teachers = 1, p Teachers = 3.8%; f Students = 0, p Students = 0%).

Table 7. Respondents' Perceptions of their Rhetorical Performance in LMSs Compared to Speaking in the Face-To-Face Class

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
It was easier to speak to others in the LMS because you did not see them	10	38.5	22	50.0
It was challenging to speak to others in the LMS because there was no eye contact	6	23.1	12	27.3
There were no differences between LMSs and face-to-face education in the field of rhetorical performance	9	34.6	8	18.2
It was difficult for me to talk in front of others, and it had nothing to do with LMS	1	3.8	2	4.5
Total	26	100.0	44	100.0

The seventh item of the questionnaire investigated respondents' general attitude toward comparing their rhetorical performance in the LMS with their speaking in face-to-face classes. The findings revealed that the use of the LMS made it easier for both teachers and learners to speak to others ($f_{\text{Teachers}} = 10$, $p_{\text{Teachers}} = 38.5\%$; $f_{\text{Students}} = 22$, $p_{\text{Students}} = 50\%$). Some other respondents perceived that the absence of adequate opportunities to make eye contact with others negatively affected communication among them ($f_{\text{Teachers}} = 6$, $p_{\text{Teachers}} = 23.1\%$; $f_{\text{Students}} = 12$, $p_{\text{Students}} = 27.3\%$). In addition, for some of them, there were no differences between LMSs and Face-to-Face education about rhetorical performance ($f_{\text{Teachers}} = 9$, $p_{\text{Teachers}} = 34.6\%$; $f_{\text{Students}} = 8$, $p_{\text{Students}} = 18.2\%$). Nevertheless, very few cases stated that their feelings of shyness to speak bear no relationship with the type of training courses ($f_{\text{Teachers}} = 1$, $p_{\text{Teachers}} = 3.8\%$; $f_{\text{Students}} = 2$, $p_{\text{Students}} = 4.5\%$).

Table 8. Respondents' Perceptions of the Easiness of Reviewing and Retrieving the Recorded Classes in LMSs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Review and retrieve recorded classes were easy to use	16	61.5	28	63.6
The user interface for playing recorded videos was somewhat difficult	7	26.9	10	22.7
The user interface for playing recorded videos was complicated	2	7.7	4	9.1
The user interface for playing recorded videos was catastrophic	1	3.8	2	4.5
Total	26	100.0	44	100.0

The eighth item of the questionnaire examined respondents' perspectives on the ease of viewing and downloading recorded classes. The results showed that more than half of the teachers and students felt comfortable accessing the recorded classes in the LMS ($f_{\text{Teachers}} = 16$, $p_{\text{Teachers}} = 61.5\%$; $f_{\text{Students}} = 28$, $p_{\text{Students}} = 63.6\%$). Almost one-fourth of the teachers and students found working with the operating system to play the recorded videos somewhat difficult ($f_{\text{Teachers}} = 7$, $p_{\text{Teachers}} = 26.9\%$; $f_{\text{Students}} = 10$, $p_{\text{Students}} = 22.7\%$).

Table 9. Respondents' perceptions of interacting with others when using LMSs compared to face-to-face education

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Interacting with others in the LMS was easy to use	10	38.5	13	29.5
Interacting with others in the LMS was somewhat difficult	3	11.5	17	38.6
In general, there was no suitable user interface to interact with others in the LMS	7	26.9	5	11.4
In e-learning, it is not possible to have a constructive relationship with others, as well as in face-to-face education	6	23.1	9	20.5
Total	26	100.0	44	100.0

The ninth item of the questionnaire was designed to capture information about the interactive nature of the LMS. The findings revealed that, while close to one-third of teachers' intercommunication in the LMS was simple, from the viewpoint of some students, collaborative interaction with others in the LMS was somewhat challenging ($f_{\text{Teachers}} = 10$, $p_{\text{Teachers}} = 38.5\%$; $f_{\text{Students}} = 17$, $p_{\text{Students}} = 38.6\%$). Some respondents perceived that the LMS did not provide prime opportunities for the users to interact ($f_{\text{Teachers}} = 7$, $p_{\text{Teachers}} = 26.9\%$; $f_{\text{Students}} = 5$, $p_{\text{Students}} = 11.4\%$). Anyway, the LMS's interactivity ratings were not very high.

Table 10. Respondents' perceptions of testing in the LMSs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Taking the LMS exam was just like the face-to-face exam and was reliable	3	11.5	9	20.5
LMS exams were not as reliable as face-to-face exams because of the possibility of cheating	14	53.8	18	40.9
Taking an exam in LMS was not as reliable as a face-to-face exam	5	19.2	10	22.7
The teachers did group activities during the semester	4	15.4	7	15.9
Total	26	100.0	44	100.0

The tenth item on the questionnaire assessed respondents' attitudes toward administering tests in LMS. The results showed that, from the respondents' perspectives, LMS exams were perceived as less reliable than face-to-face exams due to the potential for cheating (f Teachers = 14, p Teachers = 53.8%; f Students = 18, p Students = 40.9%). Conversely, a few respondents indicated that taking tests in LMS was as dependable as traditional face-to-face testing conditions (f Teachers = 3, p Teachers = 11.5%; f Students = 9, p Students = 20.5%). Overall, it is evident that most respondents did not view the trustworthiness of LMS testing and results favorably. Additionally, there were minor differences between the two groups regarding their opinions on LMS exams.

3.2 Descriptive statistics for the cognitive benefits subscale

The second subscale of the questionnaire sought the respondents' opinions on the cognitive benefits of LMS. The second subscale comprised 10 items covering aspects such as the effects of LMS on learning and the quality of learning, student involvement, engaging teaching materials, user distraction, communication enrichment, time-saving, exposure to consistent and standardized education, opportunities for hands-on experience, and teacher feedback. Descriptive statistics for the items of the second subscale (items 11 to 20) are presented in Tables 11 and 12.

Table 11. Respondents' perceptions of the effect of LMSs on learning

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Yes, it has a positive effect on the learning process	10	38.5	25	56.8
No, it does not have a positive effect	7	26.9	5	11.4
The effect is not noticeable to me	7	26.9	12	27.3
It hurts learning	2	7.7	2	4.5
Total	26	100.0	44	100.0

The eleventh item on the questionnaire evaluated respondents' perceptions of how LMSs impact learning. As shown in the table, the results indicated that, according to nearly one-third of the teachers and more than half of the students, LMS-based learning was effective (f Teachers = 10, p Teachers = 38.5%; f Students = 25, p Students = 56.8%). However, a few respondents considered that the students' engagement via LMS use during the COVID-19 pandemic hurt their learning (f Teachers = 2, p Teachers = 7.7%; f Students = 2, p Students = 4.5%). In addition, some teachers and students were not concerned about the effects of this e-learning platform on student learning and

perceived that the LMS had little impact on learning. It appeared that teachers were less confident about the positive effects of LMS on learning.

For items 12-20, the participants were required to indicate their agreement with each item on a 5-point Likert scale.

Table 12. Respondents' perceptions of the cognitive benefits of LMSs (indicate degrees of agreement)

		Teachers		Students	
		Frequency	Percent	Frequency	Percent
12. Accessibility of learning content and materials improves the quality of learning in the LMS	Strongly agree	5	19.2	15	34.1
	Almost agree	17	65.4	23	52.3
	No idea	1	3.8	3	6.8
	Disagree	3	11.5	3	6.8
	Total	26	100.0	44	100.0
13. Students in LMSs are less active than in face-to-face learning, and this reduces the quality of learning	Strongly agree	9	34.6	6	13.6
	Almost agree	14	53.8	17	38.6
	No idea	1	3.8	9	20.5
	Disagree	2	7.7	12	27.3
	Total	26	100.0	44	100.0
14. A combination of text, images, and video in the LMS provides engaging material for the students	Strongly agree	12	46.2	9	20.5
	Almost agree	9	34.6	22	50.0
	No idea	1	3.8	9	20.5
	Disagree	4	15.4	4	9.1
	Total	26	100.0	44	100.0
15. Increasing risk of being distracted, which decreases the quality of learning	Strongly agree	8	30.8	9	20.5
	Almost agree	14	53.8	20	45.5
	No idea	1	3.8	11	25.0
	Disagree	3	11.5	4	9.1
	Total	26	100.0	44	100.0
16. Communication between students and the teacher has been enriched via LMS	Strongly agree	3	11.5	16	36.4
	Almost agree	9	34.6	14	31.8
	No idea	6	23.1	9	20.5

	Disagree	8	30.8	5	11.4
	Total	26	100.0	44	100.0
17. Teaching through LMSs saves time, and students can use the saved time to study better	Strongly agree	10	38.5	15	34.1
	Almost agree	8	30.8	18	40.9
	No idea	1	3.8	8	18.2
	Disagree	7	26.9	3	6.8
	Total	26	100.0	44	100.0
18. LMS provides consistent and standardized education.	Strongly agree	5	19.2	7	15.9
	Almost agree	12	46.2	12	27.3
	No idea	7	26.9	21	47.7
	Disagree	2	7.7	4	9.1
	Total	26	100.0	44	100.0
19. There is no hands-on experience in LMS-based learning, which may decrease the quality of learning	Strongly agree	7	26.9	10	22.7
	Almost agree	10	38.5	14	31.8
	No idea	1	3.8	12	27.3
	Disagree	8	30.8	8	18.2
	Total	26	100.0	44	100.0
20. Teachers are limited to giving feedback in LMS-based learning, which may decrease the quality of learning	Strongly agree	6	23.1	10	22.7
	Almost agree	9	34.6	16	36.4
	No idea	4	15.4	9	20.5
	Disagree	7	26.9	9	20.5
	Total	26	100.0	44	100.0

The twelfth item of the questionnaire assessed respondents' perceptions of the accessibility of learning content and materials to improve the quality of learning in LMSs. The data suggested that the LMS framework was successful in presenting the course content. A significant number of teachers and learners wholly or partially agreed with the availability of learning resources in LMS ($f_{\text{Teachers}} = 22$, $p_{\text{Teachers}} = 84.6\%$; $f_{\text{Students}} = 38$, $p_{\text{Students}} = 86.4\%$). It appeared that teachers and learners held similar views in this regard.

The thirteenth item of the questionnaire was designed to elicit respondents' perceptions of learner involvement in the LMS. It appeared that, according to the opinions of both teachers and students, LMS was less engaging than face-to-face education, which might result in reduced

learning quality ($f_{\text{Teachers}} = 23$, $p_{\text{Teachers}} = 88.4\%$; $f_{\text{Students}} = 23$, $p_{\text{Students}} = 52.2\%$). This indicates that teachers were highly confident that face-to-face classes were more student-involved than LMS.

The fourteenth item of the questionnaire was designed to assess respondents' opinions of the overall appearance of the teaching materials presented via the LMS. It became apparent that most respondents acknowledged that the combination of text, images, and video in the LMS provided stimulating and appealing materials for students ($f_{\text{Teachers}} = 21$, $p_{\text{Teachers}} = 80.8\%$; $f_{\text{Students}} = 31$, $p_{\text{Students}} = 70.5\%$).

The fifteenth item of the questionnaire, intended to gather information about respondents' beliefs regarding the risk of being distracted while working in LMS, was expected to decrease learning quality. More than half of the students reported experiencing more distractions while taking online courses than in face-to-face classes. In addition, the majority of the teachers agreed that teaching in LMS required them to deal with many distractors ($f_{\text{Teachers}} = 22$, $p_{\text{Teachers}} = 84.6\%$; $f_{\text{Students}} = 29$, $p_{\text{Students}} = 66\%$). The data demonstrated that, according to respondents' views, there was a high risk of user distraction while using the e-learning platform.

The sixteenth item of the questionnaire aimed to gather information about the quality of communication in LMS. It emerged that close to half of the teachers accepted the LMS facilitated and enhanced communications. In addition, more than half of the students believed that the LMS had enriched communication among students and teachers ($f_{\text{Teachers}} = 12$, $p_{\text{Teachers}} = 46.1\%$; $f_{\text{Students}} = 30$, $p_{\text{Students}} = 68.2\%$).

The seventeenth item of the questionnaire was designed to elicit respondents' views on the cost-effectiveness of time in LMS. It turned out that the majority of the respondents believed that teaching through LMS saved time compared to classroom learning, and the students could use the saved time to study better ($f_{\text{Teachers}} = 18$, $p_{\text{Teachers}} = 69.3\%$; $f_{\text{Students}} = 33$, $p_{\text{Students}} = 75\%$).

The eighteenth item of the questionnaire was intended to gather information on the consistency of the education type presented via the LMS. It was established that while for more than half of the teachers the LMS provided students with fair education and gave them equal learning opportunities, a smaller number of the students accepted that the LMS ensures an equal chance for all ($f_{\text{Teachers}} = 17$, $p_{\text{Teachers}} = 65.4\%$; $f_{\text{Students}} = 19$, $p_{\text{Students}} = 43.2\%$). Surprisingly, nearly one-third of the teachers and almost half of the students were less inclined to express their opinion in this regard and selected the "no idea" scale ($f_{\text{Teachers}} = 7$, $p_{\text{Teachers}} = 26.9\%$; $f_{\text{Students}} = 21$, $p_{\text{Students}} = 47.7\%$).

The nineteenth item was intended to elicit respondents' views on providing a hands-on experience in the program. It has emerged that the students did not gain hands-on experience during their education via LMS. More than half of the teachers and students reported that LMS-based learning is not designed to offer hands-on experience and may thus lower the quality of learning ($f_{\text{Teachers}} = 17$, $p_{\text{Teachers}} = 65.4\%$; $f_{\text{Students}} = 24$, $p_{\text{Students}} = 54.5\%$).

The twentieth item of the questionnaire was designed to gather information from respondents about the likelihood of teacher feedback. From the ratings, it became apparent that teachers were limited to giving feedback in LMS-based learning, which might decrease the quality of learning ($f_{\text{Teachers}} = 15$, $p_{\text{Teachers}} = 57.7\%$; $f_{\text{Students}} = 26$, $p_{\text{Students}} = 59.1\%$).

3.3 Descriptive statistics for the affective benefits subscale

The next part of the attitude questionnaire examined respondents' opinions on the emotional benefits of LMS. This subscale included 10 items aimed at gathering information about meeting emotional needs in LMSs, student shyness, technical problems, user motivation, student isolation, teacher supervision, troubleshooting, limitations of available educational materials, mismatches between teaching practices and learners' learning capacities, body language, facial expressions, and stress and anxiety caused by online exams. Descriptive statistics for the affective benefits subscale are summarized in Tables 13-22, which cover items 21-30 of the questionnaire.

Table 13. Respondents' perceptions of the potential of LMSs to meet the learners' emotional needs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Completely	2	7.7	10	22.7
Almost	9	34.6	13	29.5
It can motivate at times, but I am not sure it has been able to create an emotional connection	11	42.3	16	36.4
It can create motivation in me, and it cannot emotionally converge	4	15.4	5	11.4
Total	26	100.0	44	100.0

As shown in the table, the twenty-first item of the questionnaire was intended to collect data on respondents' views of the LMS's capacity to respond to learners' emotional expectations. Based on the respondents' ratings, it had been determined that LMS adoption could motivate learners at times, but the respondents expressed doubts about whether LMS was successful in building emotional connections ($f_{\text{Teachers}} = 11$, $p_{\text{Teachers}} = 42.3\%$; $f_{\text{Students}} = 16$, $p_{\text{Students}} = 36.4\%$). In addition, close to one-third of them believed that LMS was almost effective in meeting the learners' emotional needs ($f_{\text{Teachers}} = 9$, $p_{\text{Teachers}} = 34.6\%$; $f_{\text{Students}} = 13$, $p_{\text{Students}} = 29.5\%$).

Table 14. Respondents' perceptions of the student's shyness and inability to perform the tasks while working with the LMSs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
I was completely ok with the tasks, and I could give the best performance	11	42.3	30	68.2
One-sided activity and not being in the classroom environment made it impossible for me to complete my tasks	12	46.2	6	13.6
I could not do my tasks completely	2	7.7	4	9.1
It decreased my self-confidence, and I was not satisfied with myself	1	3.8	4	9.1
Total	26	100.0	44	100.0

The twenty-second item of the questionnaire was intended to collect information about the respondents' perceptions of student shyness in LMSs. The study revealed that while nearly half of the teachers believed the one-sided activity made it impossible for the learners to complete the tasks, more than half of the learners noted that they went well with the tasks and they could perform exceptionally well ($f_{\text{Teachers}} = 12$, $p_{\text{Teachers}} = 46.2\%$; $f_{\text{Students}} = 30$, $p_{\text{Students}} = 68.2\%$).

Table 15. Respondents' perceptions of technical problems faced with LMSs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
No, it was not affecting my concentration	3	11.5	1	2.3
Sometimes it distracted me, but it was temporary	18	69.2	23	52.3
Technical problems completely distracted me	4	15.4	14	31.8
I was constantly stressed and upset	1	3.8	6	13.6
Total	26	100.0	44	100.0

The twenty-third item on the questionnaire aimed to gather information about respondents' perceptions of student disruptions caused by technical issues. It was found that more than half of the teachers and students considered technical problems such as disconnections as disruptive factors that affected students' concentration during LMS learning and caused temporary

distractions (f Teachers = 18, p Teachers = 69.2%; f Students = 23, p Students = 52.3%). Overall, it appeared that technical problems with the LMS mainly impacted learners' concentration more than teachers'. While only one teacher reported feeling constantly stressed, a larger proportion of students said they were always worried about technical issues (f Teachers = 1, p Teachers = 3.8%; f Students = 6, p Students = 13.6%).

Table 16. Respondents' perceptions of the users' keeping their motivation during education in LMSs

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
This is not affecting my performance, and I am always successful	6	23.1	18	40.9
To some extent, it prevents me from being fully involved in the tasks	15	57.7	19	43.2
A sense of insipidity and one-sidedness prevents me from doing my best	5	19.2	4	9.1
In this situation, I cannot have a positive performance	0	0	3	6.8
Total	26	100.0	44	100.0

The twenty-fourth item of the questionnaire asked respondents about their conceptions of users' motivation while working in LMSs. As can be seen, working in the LMS had a moderate effect on the teachers' and students' motivation to be highly involved in performing the educational tasks (Teachers = 15, p Teachers = 57.7%; Students = 19, p Students = 43.2%).

Table 17. respondents' perceptions of the students' isolation

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
It made no difference to me, and I performed well in both situations	7	26.9	14	31.8
I performed better in face-to-face education, but my performance in LMS was also acceptable	12	46.2	19	43.2
I did better in group activities with others in the class, and education through LMS was challenging my performance	6	23.1	6	13.6
I performed better in individual activities, and LMSs made me perform better	1	3.8	5	11.4
Total	26	100.0	44	100.0

The twenty-fifth item on the questionnaire examined respondents' views on students' isolation while using the LMS. It was observed that, from both teachers' and students' perspectives, students performed better in face-to-face education, but their performance in the LMS was still acceptable (Teachers = 12, p Teachers = 46.2%; Students = 19, p Students = 43.2%). In comparison, nearly one-third of the teachers and students said it would make no difference to them, and they achieved good results in both environments (f Teachers = 7, p Teachers = 26.9%; f Students = 14, p Students = 31.8%).

Table 18. Respondents' perceptions of the teacher supervision and troubleshooting in LMS-based education

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
It made no difference to me, and I did my task perfectly	9	34.6	16	36.4
It affected my performance to some extent	9	34.6	18	40.9
Teachers did not care about fixing	5	19.2	7	15.9
Due to the one-sidedness of the education process from students and a lack of motivation, the teachers did not solve the problems	3	11.5	3	6.8
Total	26	100.0	44	100.0

The table above presents respondents' perceptions of teacher supervision and troubleshooting in LMS-based education. It reveals that nearly one-third of teachers and students reported that it did not matter to them, and they completed the tasks perfectly (f Teachers = 9, p Teachers = 34.6%; f Students = 16, p Students = 36.4%). Additionally, about one-third of teachers and less than half of students said that LMS-based instruction somewhat affected their performance when completing tasks (f Teachers = 9, p Teachers = 34.6%; f Students = 18, p Students = 40.9%). Furthermore, nearly one-fifth of teachers and students noted that teachers did try to resolve issues, and students were reluctant to ask teachers for help with complications (f Teachers = 5, p Teachers = 19.2%; f Students = 7, p Students = 15.9%).

Table 19. Respondents' perceptions of the teachers' refusal to provide more course materials

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
I agree because the demand must be from the student for the teacher to have better teaching	8	30.8	9	20.5
I agree because a lack of motivation prevents both teachers and students from being able to perform	7	26.9	15	34.1
Disagree because LMS can create enough motivation for both teacher and student	4	15.4	6	13.6
If someone wants to do something, it will work best anyway	7	26.9	14	31.8
Total	26	100.0	44	100.0

This table shows participants' responses to the twenty-seventh questionnaire item, which gauged their perceptions of the course materials presented by the teachers. It was noticed that one-third of the teachers and one-fifth of the students believed the students must demand further course materials ($f_{\text{Teachers}} = 8$, $p_{\text{Teachers}} = 30.8\%$; $f_{\text{Students}} = 9$, $p_{\text{Students}} = 20.5\%$). Besides, some teachers and students reported that a lack of motivation prevents both teachers and students from functioning effectively in the teaching and learning process ($f_{\text{Teachers}} = 7$, $p_{\text{Teachers}} = 26.9\%$; $f_{\text{Students}} = 15$, $p_{\text{Students}} = 34.1\%$).

Table 20. Respondents' perceptions of the mismatches between teaching practices and students' learning capacity

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
I agree and believe that students' lack of motivation leads to more teachers teaching	3	11.5	13	29.5
Disagree because the teachers teach as much as the class needs	17	65.4	17	38.6
I believe that the lack of motivation of students reduces the motivation of teachers, and they teach less	5	19.2	12	27.3
Online education reduces the motivation of teachers and students	1	3.8	2	4.5
Total	26	100.0	44	100.0

The twenty-eighth item of the questionnaire assessed respondents' views on mismatches between teaching practices and students' learning abilities in LMS-based instruction. It was found that more than half of the teachers and nearly two-fifths of the students strongly rejected the idea of a gap between teaching methods and students' learning capacity (f Teachers = 17, p Teachers = 65.4%; f Students = 17, p Students = 38.6%). Conversely, only a few teachers and students recognized the mismatch between teaching and students' readiness to learn in LMS-based instruction (f Teachers = 3, p Teachers = 11.5%; f Students = 13, p Students = 29.5%).

Table 21. Respondents' perceptions of the body language, facial expressions, and motivation

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
I believe that LMS cannot raise motivation in teachers and students	7	26.9	12	27.3
I believe that the lack of body language and facial expressions makes me less stressed	6	23.1	9	20.5
I think the lack of body language and facial expressions affects the motivation	7	26.9	19	43.2
The LMS I used had this feature	6	23.1	4	9.1
Total	26	100.0	44	100.0

The twenty-ninth item of the questionnaire examined respondents' views on body language, facial expressions, and motivation in LMS-based instruction. The ratings indicated that the lack of nonverbal communication and facial gestures negatively impacted motivation (f Teachers = 7, p Teachers = 26.9%; f Students = 19, p Students = 43.2%). About one-third of both teachers and students reported that the LMS could not sustain motivation among teachers and students (f Teachers = 7, p Teachers = 26.9%; f Students = 12, p Students = 27.3%).

Table 22. Respondents' perceptions of the stress and anxiety caused by online exams

	Teachers		Students	
	Frequency	Percent	Frequency	Percent
Agreed, and believe that the LMS exam cannot measure performance accurately	7	26.9	18	40.9
Disagreed and special conditions of the exam force the teacher to design the exam	8	30.8	12	27.3
LMS-based exams can never measure learning because of the possibility of cheating	8	30.8	6	13.6
I believe that in all the above conditions, the student should be able to perform properly	3	11.5	8	18.2
Total	26	100.0	44	100.0

The last question assessed respondents' perceptions of the stress and anxiety caused by online examinations. It has been found that while some teachers and students believed that the LMS exam cannot measure performance accurately ($f_{\text{Teachers}} = 7$, $p_{\text{Teachers}} = 26.9\%$; $f_{\text{Students}} = 18$, $p_{\text{Students}} = 40.9\%$), almost one-third of the teachers and the students disagreed that stress and anxiety caused by online exams negatively affected their performance on tests. Rather, they believed that teachers developed the tests based on consideration of special conditions of the exam ($f_{\text{Teachers}} = 8$, $p_{\text{Teachers}} = 30.8\%$; $f_{\text{Students}} = 12$, $p_{\text{Students}} = 27.3\%$).

3.3 Descriptive statistics for the aggregate of responses across the three subscales of the questionnaire

Table 23 presents descriptive statistics for participants' aggregate responses to the items of the three questionnaire subscales.

Table 23. Descriptive statistics for the three subscales of the questionnaire

Participants			User-friendliness	Cognitive benefits	Affective benefits
Teachers	N	Valid	26	26	26
	Mean		2.5692	2.8192	2.7154
	Std. Deviation		.49297	.36772	.43790
Students	N	Valid	44	44	44
	Mean		2.7205	2.8136	2.6955
	Std. Deviation		.43110	.34815	.44196

As shown in the table, both teachers and students gave the highest positive ratings on the second subscale, which evaluated their perceptions of the cognitive benefits of the LMS. The respondents held more positive views about the cognitive benefits of the LMS than about the user-friendliness and the affective benefits. In addition, the students were more confident about the LMS's user-friendliness than the teachers were. In contrast, teachers were more content with the affective benefits of the LMS. Figure 2 displays the respondents' ratings for the three attitude questionnaire subscales.

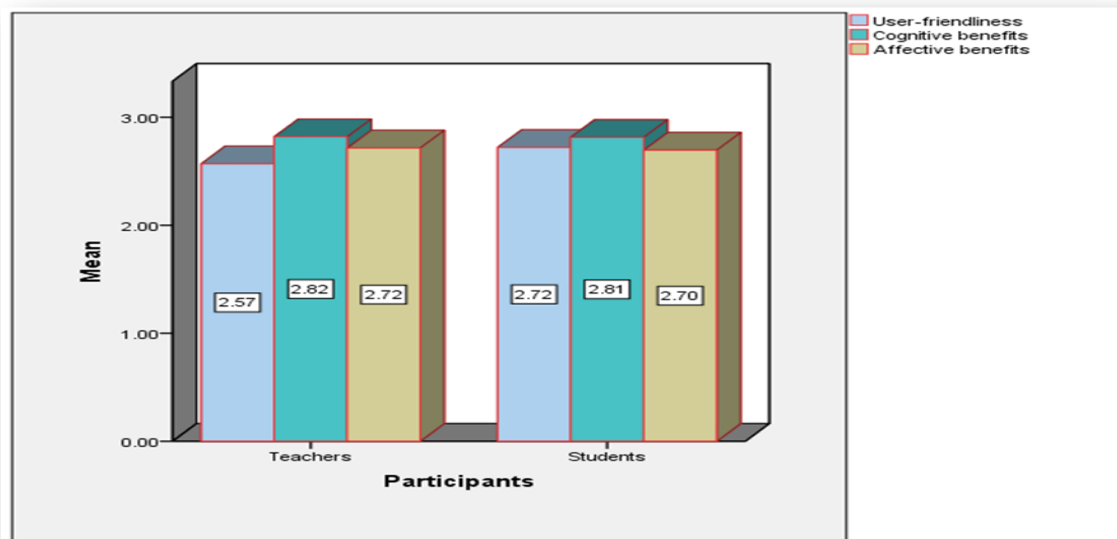


Figure 2. The respondents' ratings for the three attitude questionnaire subscales

The respondents held more positive views about the cognitive benefits of the LMS than about the user-friendliness and the affective benefits.

4. Discussion

The attitude questionnaire was administered to both groups to assess participants' perceptions of LMS user-friendliness, cognitive benefits, and emotional benefits. The response scales chosen by participants (1-4) were treated as ranks for the items in the attitude questionnaire across the two groups. These ranks were then compared to determine if there were significant differences. Since the data were ranked, normal distribution assumptions did not apply. The nonparametric Mann-Whitney U test was employed to identify potential differences between the two independent groups in their attitudes and to determine whether teachers and students differed in their views on using LMSs. The results are summarized in Table 24.

Table 24. Mann-Whitney U test for the teachers' and the students' perceptions of LMSs

	User-friendliness	Cognitive benefits	Affective benefits
Mann-Whitney U	461.000	569.500	544.500
Z	-1.353	-.031	-.335
Asymp. Sig. (2-Tailed)	.176	.976	.737

As observed, the Z value for the user-friendliness subscale of the questionnaire was ($Z = -1.353$) with a significance level (p) of ($p = .176$). For the cognitive benefits subscale, it was ($Z = -.031$) with a significance level (p) of ($p = .976$). The affective benefits had a Z value of ($Z = -.335$) with a significance level (p) of ($p = .737$). Since the probability values were greater than .05, the results were not statistically significant. This indicates that teachers and students had similar attitudes toward the user-friendliness, cognitive benefits, and affective benefits of LMSs.

Regarding the first research question, which asked about EFL teachers' and learners' perceptions of the overall utility of LMSs in English language teaching, it can be concluded that integrating an LMS is beneficial for students in terms of user-friendliness, cognitive benefits, and affective benefits. Yet, both teachers and students were more satisfied with the cognitive benefits of LMSs than with their affective benefits and user-friendliness. The participants were highly satisfied with the opportunities provided by the LMSs for more communication between teachers and students to solve problems outside of class time. However, both groups of respondents also expressed concerns about system disconnection or slowness.

Likewise, regarding the second research question about the potential perceptual mismatches between the two groups of participants, it can be argued that the results of the Mann-Whitney U test showed that the p-value was greater than the 0.05 alpha level ($p \geq .05$), which suggests that teachers and students had similar attitudes toward the three key features of LMS's user-friendliness, cognitive benefits, and affective benefits. The statistical analyses revealed no statistically significant perceptual differences between teachers and students regarding the utility of LMSs for English language teaching. The results can be discussed in light of existing literature on online education and electronic learning.

According to a study by [Schermeier, Deiglmayr, and Rummel \(2025\)](#), students found online group activities more difficult than face-to-face group work. Students reported communication difficulties and a lack of community as the most challenging factors. The results of the current study are then inconsistent with those of [Schermeier et al. \(2025\)](#), as the majority of respondents answered that LMSs can foster good cooperation.

According to [Crook \(2010\)](#), education is more effective when students collaborate, as in computer-mediated conferencing or online communication. His main point is that for e-learning to be effective, the learner must be motivated to use it and to collaborate with peers and teachers to leverage the technology effectively. The findings of the present research are consistent with those of the above research. The majority of participants reported that the LMS they used did not provide sufficient motivation for effective use of this kind of education.

Some studies report that students are less satisfied with e-learning and prefer face-to-face courses ([Bright & Vogler, 2024](#)). Students accustomed to face-to-face learning who subsequently enrolled in an online platform have developed high levels of negative emotions, such as fear, anger, or helplessness ([Butz, Stupnisky, & Pekrun, 2015](#)). In the present study, the majority of respondents, in response to the question of whether using an LMS had provided a suitable sensory connection between users and others, answered that LMSs can motivate users but were unsure whether they can create a suitable emotional connection. Therefore, the results of this research are consistent with those of [Bright and Vogler \(2024\)](#) and [Butz et al. \(2015\)](#).

[Dashtestani \(2014\)](#) conducted a study to explore Iranian EFL teachers' perceptions of implementing online EFL instruction via LMS. His study's results indicated that, although Iranian EFL teachers held moderately positive attitudes toward online instruction, most preferred blended learning. The main perceived challenges to online EFL instruction include a lack of online facilities and resources, as well as limited interaction in online settings. Based on participants' responses, most preferred face-to-face education over LMS-based teaching, aligning with the current research's findings and those of [Dashtestani \(2014\)](#).

Usability is a crucial factor in software, affecting end users' satisfaction with the application over time. For software to be considered highly usable, users must be able to navigate the website or application using their prior experiences, which they have received, learned, and stored, without needing to learn anything new ([McNamara, Berg, Butler, & Klein, 2017](#)). Additionally, the work by [Ivanovic et al. \(2018\)](#) aimed to measure and compare several aspects of the usability and quality of a wide range of e-learning systems, focusing on their communication interfaces. The results clearly demonstrated that evaluating the usability of e-learning environments and systems is essential for achieving optimal use, ease of use, and more user-friendly interfaces and communication, from both learners' and teachers' perspectives. The findings of the current research showed that most users found it easy to personalize the LMS's internal space. Moreover, the analysis of participant responses indicated that the majority of respondents reported that using the facilities and capabilities of their LMS was easy for them. With these explanations, the results of the current study align with those of previous research.

5. Conclusion

In this study, an attempt was made to gather teachers' and students' opinions to obtain reliable findings on the effectiveness of online education delivered via LMSs in the post-COVID-19 era in Iran. The results showed that participants generally believe that online education via LMSs is beneficial for them across its three key aspects: user-friendliness, cognitive benefits, and affective benefits. The majority of participants believe that LMSs have been beneficial to them by creating communication conditions outside class time between teachers and students, as well as by allowing them to save and replay classes. In return, almost all participants experienced technical issues, including slow internet and disconnections. According to the findings, there are no significant perceptual mismatches between teachers and students in their use of LMSs, indicating that their attitudes towards user-friendliness, cognitive benefits, and affective benefits are similar.

The results of this study can benefit various groups. First, educational officials can review and update educational systems based on the research findings and adopt suitable policies to make educational content more compatible. Another group that, according to this research, can gain a better understanding of the effectiveness of online education is curriculum developers. They can then align the educational content of their institutions more closely with online education methods through LMSs. Additionally, educational institutions that have not yet adopted online education or have not chosen an appropriate model to implement this type of learning can use the research results to enhance and improve their online programs, offering higher-quality online education through LMSs. Lastly, EFL teachers and students can learn about the advantages and disadvantages of online education via LMSs, helping them improve their experience and maximize benefits by building on strengths and addressing weaknesses.

Author Contributions

All authors contributed equally to the conceptualization of the article and writing of the original and subsequent drafts.

Data Availability Statement

Not applicable.

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Ethical considerations

The study was approved by the Ethics Committee of the University of ABCD (Ethical code: FR.AMU.REC.2022.500). The authors avoided data fabrication, falsification, plagiarism, and misconduct.

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Conflict of interest

The authors declare no conflict of interest.

References

- Al-Khalifa, H. S. (2010). A first step in evaluating the usability of JUSUR learning management system. In the *3rd Annual Forum on e-Learning Excellence in the Middle East: Bringing Global Quality to a Local Context*. February 1st-3rd, Dubai, U.A.E.
- Bansal, S., & Pagidas, K. (2025). Strength of motivation and academic performance of medical students: a longitudinal study. *BMC Medical Education*, 25, Article 1154. <https://doi.org/10.1186/s12909-025-07733-3>
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during the SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1–9. <https://doi.org/10.29333/pr/7937>
- Bright, K., & Vogler, J. S. (2024). *Learning online vs. learning in person: A mixed-methods approach to understanding how student preferences and perceptions have evolved since the pandemic*. *Online Learning*, 28(4), 56-78. <https://doi.org/10.24059/olj.v28i4.4565>
- Butz, N. T., Stupnisky, R. H., & Pekrun, R. (2015). Students' emotions for achievement and technology use in synchronous hybrid graduate programs: A control-value approach. *Research in Learning Technology*, 23, Article 26097. <https://doi.org/10.3402/rlt.v23.26097>
- Chang, S.C., & Tung, F.C. (2008). An empirical investigation of students' behavioral intentions to use the online learning course websites. *British Journal of Educational Technology*, 39(1), 71–83. <https://eric.ed.gov/?id=EJ782731>
- Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M. R. Gunnar & L. A. Sroufe (Eds.), *Self-processes and development* (pp. 43–77). Lawrence Erlbaum Associates.
- Crook, C. (2010). Motivation and the ecology of collaborative learning. In R. Joiner, K. Littleton, D. Faulkner, & D. Miell (Eds.) *Rethinking collaborative learning*. 161–178. Free Association Books: London.

- Culbreth, D., & Martin, F. (2025). Exploring the role of synchrony in asynchronous, synchronous, and quasi-synchronous online learner engagement. *Educational Technology Research & Development*, 73, 2081–2111. <https://doi.org/10.1007/s11423-025-10504-y>
- Dashtestani, R. (2014). English as a foreign language: teachers' perspectives on implementing online instruction in the Iranian EFL context. *Research in Learning Technology*, 22, Article 20142. <https://doi.org/10.3402/rlt.v22.20142>
- DeVellis, R. F. (1991). Guidelines in scale development. In R. F. DeVellis, *Scale development: Theory and applications* (pp. 51–91). Sage Publications.
- Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). *Thinking about pedagogy in an unfolding pandemic: An independent report on approaches to distance learning during COVID-19 school closures*. United Nations Educational, Scientific and Cultural Organization. https://issuu.com/educationinternational/docs/2020_researchcovid-19_eng
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Gopalan, V., Bakar, J. A. A., Zulkifli, A. N., Alwi, A., & Mat, R. C. (2017). A review of the motivation theories in learning. *AIP Conference Proceedings*, 1891, 020043. <https://doi.org/10.1063/1.5005376>
- Green, L. S., & Denton, B. (2012). Examination of factors impacting student satisfaction with a new learning management system. *Turkish Online Journal of Distance Education*, 13(3), 189–197. <https://dergipark.org.tr/en/pub/tojde/issue/16901/176183>
- Inversini, A., Botturi, L., & Triacca, L. (2006). Evaluating LMS usability for enhanced eLearning experience. In E. Pearson & P. Bohman (Eds.), *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications* (pp. 595–601). Association for the Advancement of Computing in Education (AACE). https://www.researchgate.net/publication/252615996_Evaluating_LMS_Usability_for_Enhanced_eLearning_Experience
- Ivanovic, M., Klasnja-Milicevic, A., Ganzha, M., Badica, A., Paprzycki, M., & Badica, C. (2018). Usability and quality parameters for e-learning environments and systems. In *Proceedings of the 8th Workshop on Software Quality Analysis, Monitoring, Improvement, and Applications* (pp. 1–8). CEUR Workshop Proceedings. <http://ceur-ws.org/Vol-2217/paperiva.pdf>
- Liaw, S. S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. *Computers & Education*, 51(2), 864–873. <https://doi.org/10.1016/j.compedu.2007.09.005>
- Lima, M. M., Brito, G. L., & Caldeira, E. B. (2019). Preference for moodle as a learning platform. *International Journal of Learning and Teaching*, 5(4), 301–305. <https://doi.org/10.18178/ijlt.5.4.301-307>

- Louwrens, N., & Hartnett, M. (2015). Student and teacher perceptions of online student engagement in an online middle school. *Journal of Open, Flexible and Distance Learning*, 19(1), 27-44.
- Mabed, M., & Kohler, T. (2012). The impact of learning management system usage on cognitive and affective performance. In: *Workshop Gemeinschaften in neuen Medien (GeNeMe)*, 2012.
- McNamara, L. A., Berg, L., Butler, K., & Klein, L. (2017). Does this interface make my sensor look bad? Basic principles for designing usable, useful interfaces for sensor technology operators. In *Ground/air multisensor interoperability, integration, and networking for persistent ISR VIII* (Vol. 10190, pp. 132–140). SPIE. <https://doi.org/10.1117/12.2266890>
- Mokhtarzadeh, M. (2021). Investigating the relationship between engagement and achievement in Iranian online English classes in the COVID-19 era. *International Journal of Research in English Education*, 6(4), 75–90. <https://doi.org/10.52547/ijree.6.4.75>
- Monterde, R. B. H., Ramos, D. B. E., Francisco, K. J. A., & Lim, R. A. (2022). The viability of video conferencing applications in an online classroom through the lens of Technology Acceptance Model. *International Journal of Research in English Education*, 7(3). <https://doi.org/10.52547/ijree.7.3.1>
- Nielsen, J. (1992). Finding usability problems through heuristic evaluation. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 373–380).
- Nielsen, J. (2012). *Usability 101: Introduction to usability*. Retrieved from <http://www.nngroup.com/articles/usability-101-introduction-to-usability>
- Paz, F., Paz, F. A., & Pow-Sang, J. A. (2016). Evaluation of usability heuristics for transactional websites: a comparative study. In *Information technology: New generations* (pp. 1063–1073). Springer, Cham.
- Pierotti, D. (2010). *Heuristic Evaluation - A System Checklist*. Retrieved from <http://www.stcsig.org/usability/topics/articles/hechecklist.html>
- Potter, B. N., & Johnston, C. G. (2006). The effect of interactive online learning systems on student learning outcomes in accounting. *Journal of Accounting Education*, 24(1), 16–34. <https://doi.org/10.1016/j.jaccedu.2006.04.003>
- Safdari, S. (2022). Experiencing virtual online classes during the pandemic: Foregrounding Iranian EFL teachers' and learners' voices. *International Journal of Research in English Education*, 7(3), 46–57. <https://doi.org/10.52547/ijree.7.3.46>
- Schermeier, S., Deiglmayr, A., & Rummel, N. (2025). Small group collaboration in hybrid university learning: Comparing learners' perceived socio-affective state in hybrid, face-to-face and remote collaboration. *Computers & Education*, 205, 104729. <https://doi.org/10.1016/j.compedu.2024.104729>
- Septiani, A. P., Suwawi, D. D. J., & Herdiani, A. (2017). Interactive and collaborative platform implementation on the learning management system. In *2017 5th International Conference on*

- Information and Communication Technology (ICoICT)* (pp. 1–6). IEEE. <https://doi.org/10.1109/ICoICT.2017.8074806>
- Sethy, S. S. (2012). Students' expectations about their grades versus course expectations from them: Will the mismatch ensure quality education? *International Journal of Quality Assurance in Engineering and Technology Education*, 2(4), 1-15. <https://doi.org/10.4018/ijqaete.2012100101>
- Simelane-Mnisi, S. (2023). Effectiveness of LMS digital tools used by the academics to foster students' engagement. *Education Sciences*, 13(10), 980. <https://doi.org/10.3390/educsci13100980>
- Subedi, S., Nayaju, S., Subedi, S., Shah, S. K., & Shah, J. M. (2020). Impact of e-learning during the COVID-19 pandemic among nursing students and teachers of Nepal. *International Journal of Science and Healthcare Research*, 5(3), 68–76. https://ijshr.com/IJSHR_Vol.5_Issue.3_July2020/IJSHR0012.pdf
- Tyng, C. M., Amin, H. U., Saad, M. N., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, 8, Article 1454. <https://doi.org/10.3389/fpsyg.2017.01454>
- Yasmin, F. D. (2023). Designing online English academic program at private universities in Bangladesh: Issues and challenges. *International Journal of Research in English Education*, 8(3), 31-59. <https://dor.isc.ac/dor/20.1001.1.25384015.2023.8.3.3.3>