

2021

## Omani EFL learner perceptions and motivation toward online learning

Behnam Behforouz

*International College of Engineering and Management, Oman, behnam@icem.edu.om*

Ali Al Gaithi

*International College of Engineering and Management, Oman, alialgaithi@icem.edu.om*

Neda Fekri

*Islamic Azad University, Aliabad Katoul Branch, Iran, nedafekri@yahoo.com*

Follow this and additional works at: <https://ro.uow.edu.au/jutlp>

---

### Recommended Citation

Behforouz, Behnam; Al Gaithi, Ali; and Fekri, Neda, Omani EFL learner perceptions and motivation toward online learning, *Journal of University Teaching & Learning Practice*, 18(4), 2021.

Available at: <https://ro.uow.edu.au/jutlp/vol18/iss4/13>

---

## Omani EFL learner perceptions and motivation toward online learning

### Abstract

In early 2020, with the breakout of COVID-19, almost all the world institutions shifted to online learning and teaching. Besides the shortcomings, new learning and teaching method was introduced globally. 48 Omani participants of this study were the first batch of learners who have experienced online learning and teaching for the first time in their life. Therefore, this study tried to understand their levels of motivation and perceptions of online learning. The study also tried to find out the gender difference and the motivational level among the participants. Participants were sent two questionnaires through the Google form, and their responses were analyzed accordingly. The study revealed that Omani students were motivated to exchange learning and teaching materials through online platforms, and the female ones showed slightly more interest in online classes. In addition, the students showed positive perceptions toward and willingness to continue using online platforms for the learning process. Since they are the first group of students with online learning experiences, the study can motivate the teachers to focus on more digital contexts of their study, help them to focus on the design and preparation of materials for the digital community, and curriculum developers can introduce more practical learning and teaching techniques suitable for online education.

### Keywords

Omani learner, perception, motivation, e-learning

## Introduction

The role of technology is undeniable currently. Technology has been considered as one of the primary resources of foreign language teaching and learning. Through using technology, students are able to use online platforms to benefit. Plenty of academicians in language teaching, mainly English, have been looking for instructions that motivate the students positively for better achievements and performance in the language learning process. In this case, teachers probably, implement and use various online platforms to facilitate the learning goals. Among those, media, webpages, blogs, wikis, etc., can be mentioned practical. In educational exposures, the use of technology is growing daily (Suppasetsee & Dennis, 2010). Computers and the Internet are functional instruments to improve and facilitate the learning and teaching processes. It is stated that the multimedia competencies and the hypertext navigational equipment of the World Wide Web not only offer entry to multiple views on a positive issue matter but also offer some degree of control to beginners as they try to make sense of the content (Gunawardena, 1999). For instance, teachers can play some videos and background music as facilitator options to assist the English as a Second Language (ESL) or English as Foreign Language (EFL) learners in producing visual imagery and sound to facilitate the recitation of useful information. Computers can be considered valuable and practical tools for drills practices, either in grammar, vocabulary, pronunciation, or listening skills, because they do not feel tired (Celce-Murcia, 2001). So, learning at their own pace, selecting the favorite topic, and reducing the sense of harmful competition in the class are lively parts of implementing computers in the foreign language learning context. For E-learning to be useful, the learner should have the ability to engage in joint attention with the other team members; thus, cooperation and communication with others will improve their learning abilities. Therefore, it is necessary to have a network for the interaction between the students and the teachers (Suppasetsee & Dennis, 2010).

Henderson (2011) stated that since technology has been integrated with daily life, then a type of multiliterate world has been created; due to this reason, teachers attempt to locate them in the classroom context. Nowadays, the old-fashioned teaching methods, like those in which the teacher is in front of the board to give a long lecture, is not practical anymore, and it will not be functional with the future generation of learners. Applying the Information and Communication Technologies (ICT) in the educational context, the teacher's role has been transferred from the traditional model of the profession to an intermediate supporter to assist the learners for better learning (Kalogiannakis, 2010). King (1993) confirms the students' role to be more active rather than being a passive receiver of knowledge. He suggests some active learning techniques that the teachers can employ to facilitate the construction of the knowledge by students.

Today, the role of ICT cannot be denied in the learning and teaching processes. The presence of ICTs can be touchable in every aspect of the process, such as data collection, information processing, and knowledge creation. The learning and teaching processes can be observed to have all these features (Costa et al., 2012). During the past few years, the usage of modern technology has been increasing dramatically worldwide. After developing the World Wide Web, language teachers were able to use the instructional materials effectively, particularly in the language teaching area. Computer-Assisted Language Learning (CALL) creates a multimedia environment where the videos, graphics, sounds, and texts enable the students to be engaged in the target language and its culture. The Internet is useful for teachers to access lots of information for their learners (Moore et al., 1998). Internet-based language learning and teaching is a sort of technology that helps the facilitation of these processes. The computer has a significant effect on language learning and teaching processes. So, the use of these two tools, the computer, and the Internet, is well-known in an EFL environment. Warschauer (1996) stated the various reasons for computer incorporation with EFL/ESL contexts. First of all, it can be considered a motivating factor for the students to communicate more in the target language. Next, the less terrifying environment of e-learning makes students independent in dealing with online assignments. Thirdly, it is believed that the learners' thinking abilities will be increasing, and they will experience less stressful exposure. And finally, the online learning environment helps the learners to communicate and interact with the other speakers of the target language. He continues that online interaction at the cognitive level will facilitate and motivate reflection and communication. Almost all educational institutions worldwide are trying to find some practical solutions for the learning and teaching processes, so e-learning has been considered one of the effective solutions for such institutions. Suppasetsee and Dennis (2010) believed that e-learning is highly essential for students living in remote areas. There is a limitation or no access to authentic materials and real interaction in the target language culture.

While it can be observed that online learning has been implemented in some of the universities (Ali, 2020; Daniel, 2020; Hodges et al., 2020; Murphy, 2020) and institutions fully-completely, but most of the institutions in the world prefer face to face and in-campus training. Factors like IT knowledge of students and teachers, access to online platforms and technical issues (Hoq, 2020; Favale et al., 2020), socio-cultural factors, and the reduction of face-to-face communication between teachers and their students (Alshwiah, 2020) can be among the barriers of implementing online learning. The pandemic issue that has emerged a few months ago, COVID19, which infected a considerable number of populations globally, urged the universities, institutions, and many other companies to transfer their teaching and learning to online platforms obligatorily. Some of them were ready for a quick and fast move with pre-planned strategies, so they achieved it successfully, but for the rest, such a change was sudden and shocking, in which there was no preparation, no plan, and no curriculum (Dhawan, 2020). In fact, during the COVID19 breakout, the educators were not that much worried about the quality of education; instead, adopting the new technological techniques for the online program made them busy (Martin, 2020; Mhlanga & Moloi, 2020). Lots of issues have emerged because of this movement. Institutions were desperately looking for cost-friendly online platforms, teachers were preparing digital content for their modules, and students who were weak in technology have started to be technophobic (Affouneh et al., 2020). Exams have been canceled and moved online, and most importantly, academic integrity has been dismissed from assessment and testing.

In all institutions, the business depends on the students, especially those who pay the regular tuition fee. Lack of enough knowledge made students ask for a refund of their tuition since they cannot participate in physical classes. No real attendance measurements anymore and the learning pace depends on the students, except for those assignments with deadlines. Some students try to contact their teachers anytime they feel at ease without considering the working and teaching hours. It has been observed that students sent emails by midnight and asked the teachers to correct their mistakes, and in case of late reply from the busy teacher, complaints had started, and this put the teacher's future career at risk. Such movements, can be believed that, need specialized training for students and their parents before being implemented. There must be restrictions upon the students to stop them from messaging, emailing, or contacting the teacher at the desired time and place.

## **Literature review**

### ***The use of E-Learning in teaching***

Technology has played a significant role in teaching the English language since it creates and uses E-learning resources a much easier task (Suppasetsee & Dennis, 2010). According to Morrison (2003), E-learning uses the Internet to teach and learn, where the teacher and the student interact with each other. The learning content is enriched as students can use the online resources to research, submit, and publish their tasks and assignments. Felix (2003) provided another definition for E-learning: the learning process using the Internet and computers, where there is a geographical distance between the teacher and the students, there is two-way communication between both parties, and technology is used to facilitate students' learning process. Bach et al. (2007) added that E-learning deals with web- /computer-based learning and virtual classrooms. E-learning is also seen to provide the value of planned learning and unplanned learning, which lead to learning achievement. Therefore, E-learning is a means to bridge the gap between the student and the global education system (Harris, 1996).

E-learning can be considered complementary and even a substitute for traditional education. It can be used anywhere and anytime, and it supports all types of content from texts to audio and video resources, which enriches the learning experience and reaches student satisfaction (Gorska, 2016). E-learning is similar to on-campus learning because its main concerns are learners' performance in an academic context (Magagula & Ngwenya, 2004; McPhee & Söderström, 2012) and the learners' satisfaction (Palmer, 2012). Despite this, there are still differences between the two modes of learning. E-learning is more flexible and accessible, where students can find the course materials at any place and without worrying about geographical or worktime barriers (Brown, 1997; Brown, 2011; Bates, 2005). Besides, to make up for the absence of physical infrastructure, e-learning depends on asynchronous communication. What is more, although developing online courses requires more careful planning and design, once this is done, e-learning can better meet the diversity among the individuals and learning styles, student schedules and liabilities, and the methods of assessment (e.g., Rovai, 2003; Saeed Al-Marouf et al., 2021; Grant & Thornton, 2007; Rovai & Downey, 2010). The use of e-learning is able to change educational conditions from the traditional face-to-face teaching context to a flexible and sharable kind of education (Saeed Al-Marouf et al., 2021). E-learning can facilitate

things for teachers as well. Through its various ways of delivering instruction and feedback, teachers can maximize the benefits of the courses taught (Alvarez et al., 2009). The almost universal application of e-learning in higher education today requires that learners and teachers become better equipped with the requisite digital literacy skills (Dhillon & Murray, 2021). Therefore, online education providers should have more research and application to the best practices of online learning.

### ***Motivation and perception of E-Learning***

Motivation is required for successful learning. In e-learning, motivation is crucial because e-learning highly depends on independent learning, which needs self-direction, maturity, and self-control. This is further stressed by Merisotis and Phipps (1999), who put student motivation at the lead of the most critical factors influencing distance learning. Therefore, there is a need to investigate further what motivates students to learn. This is addressed in the current study, which aims to pinpoint students' motivational characteristics concerning e-learning.

As defined by Brophy (2010), motivation is a term that explains "the initiation, direction, intensity, persistence, and quality of behavior, especially goal-directed behaviour" (p. 3). Motivation influences what we learn and how we learn it. Motivated students show more active engagement and interaction and have higher performance and better results (Schunk et al., 2008). Motivation can be connected to the cognitive and affective abilities of individuals. It can also bring both the teacher and the student closer and helps to build a better learning environment (Brophy, 2010). Contemporary research has shown that motivation depends on the learner's traits (Wighting et al., 2008). Several studies have explored the effect of motivation on learning (e.g., Bures et al., 2002; Rovai & Barnum, 2003; Martens et al., 2004; Shroff et al., 2008; Gerber et al., 2008; Dawson et al., 2009; Hartnett, 2010). For those teachers who are looking for an increase in the motivational level of their students, open pedagogy can be considered as the key to success. Teachers who are using open pedagogy try to increase the amount of self-directed learning and employing open educational resources (Hilton et al., 2021).

Some studies investigated the learners' perceptions of e-learning. Petrides (2002) studied a blended university online class for a semester. Participants were students at this program. When they were interviewed, it was found that they would think more thoroughly when it comes to writing tasks as compared to verbal tasks. Online learning also allowed them to comment on each other and have their comments seen by all for as long the program continues. Also, the students reported that online learning provided greater flexibility, making collaborative work more manageable. This was the same finding of a study by Chizmar and Walber (1999) on a web-based learning environment. Their participants highlighted the freedom to choose the tasks and information they want to align with their learning style and progress. In another study, Vonderwell (2003) conducted interviews with 22 students to know their asynchronous online learning perceptions. Several students stated that asynchronous online learning helped them write carefully and express their ideas, which agrees with Petrides' study.

Poole (2000) conducted a study of student participation in an online discussion-led course. The study showed how convenience is an essential aspect of online learning. Students would access the course from the place convenient to them and then take part in discussions at times convenient to them. Similar results were shown by Murphy and Collins (1997), where online learners would read and respond to the teacher's comments at times most convenient to them. Dhillon and Murray (2021) carried out a study to investigate the EAP teachers' point of view and their experiences of e-learning technology. Their findings showed that e-learning increased learner engagement and motivation. In another study, Halim et. al. (2020) attempted to find out pupils' motivation and perceptions on ESL lessons through online quiz-games. 60 primary school learners took part in their study. A survey questionnaire was used to collect the required data. The findings showed the students' positive motivation, perceptions, and acceptance towards learning English through the integration of online quiz-games.

One of the main weaknesses of online learning is the delay in response. For instance, Howland and Moore (2002) stated that some negative perceptions (e.g., loss of confidence) arose due to the lack of face-to-face teacher-student interaction. Also, several students found it challenging to clarify assignments or get clear feedback, which added to their negative perception of online learning. They preferred face-to-face communication for feedback and information rather than the online message board, which they found inefficient. Petride (2002) maximized this, reporting that some of the students participating in the study were disappointed that there was no immediate response to their comments

or inquiries in many cases. This thing is readily available in face-to-face interaction. Delayed feedback was also one of the disadvantages of online learning, as per Vonderwell (2003).

Other weaknesses to online learning are the absence of a sense of a dedicated community and the feeling of loneliness. Woods (2002) found that the online students felt isolated from the teacher, the other students, or the whole institution. Vonderwell (2003) agreed with this, finding a lack of connection between the online students and the teacher, particularly the one-to-one communication.

### ***E-Learning during the COVID-19 pandemic***

It is expected that the success factors during the COVID-19 pandemic are different than those factors during usual times for many reasons. First of all, during COVID-19, the shift to e-learning happened for all educational institutions, which was unplanned. Not all institutions and educational context were able to switch smoothly as not all of them were previously applied e-learning, except institutions that already offered e-learning and were planning for and funding in the e-learning process. Secondly, during COVID-19, various factors, such as political and health factors affect the process, which makes it an abnormal condition. Thirdly, the course materials that were taught through e-learning pre-COVID-19 were well-prepared; while during COVID-19, the courses were not planned to be taught through e-learning (Alqahtani & Rajkhan, 2020).

Abushammala et. al. (2021) carried out a study to explore the impact of COVID-19 on the private higher education system and students in Oman, and to find out different approaches used by academic institutions to deliver education during the COVID-19 limitations, and the outcomes of these limitations on academic activities and educational quality. The personal and financial conditions, which have created challenges for learners to continue their education, were also analyzed. About 50 percent of the students were satisfied with arrangement and delivery of the e-learning. In most cases, the cancelled exams were replaced by extra coursework, and in some cases learners were assessed based on only the existing coursework. The major concern for many learners was the inability to pay tuition fees due to the financial outcomes caused by the COVID-19 pandemic.

To decrease the level of psychological barriers in the COVID19 era, Saidy and Sura (2020) have suggested that universities around the world should implement some online academic advising and psychological counseling sessions. In addition, Moawad (2020) and Elfaki et al. (2019) recommended measuring learner's perceptions and attitudes toward online learning since these elements are effective in the performance of learners during online learning. Aguilera-Hermida (2020) stated that the understanding of the challenges that students face and attitudes that they have in the higher education system could help the better preparation of learners for circumstances similar to COVID19 in the future. Hadiyanto et. al. (2021) asserted that the application of 21<sup>st</sup> century skills into practice might be intricate since the Covid-19 pandemics requires instructors to fully adopt the delivery of courses to learners online.

By the same token, Omani students were not left untouched by the COVID-19. To protect public health swiftly, the government implemented a country-wide closure of educational institutes, and encouraged distance learning initiatives (UNESCO, 2020). However, the sudden and rapid transition to online learning did not allow academic institutions to carry out a normal policy-making process before adopting the online delivery system; therefore, the implementation circumstances and process, and the effects of the policy remain uncertain. Therefore, the current study would like to find answers to the following questions and practical actions to strengthen the positive points and improve the negative ones.

**RQ1:** Are the students motivated to receive training and feedback through e-learning platforms?

**RQ2:** Is there any statistically significant difference between male or female participants in motivational levels of e-learning services?

**RQ3:** What are the learners' perceptions of online learning and teaching processes?

Considering the posited research questions, these null hypotheses are formulated:

**H<sub>0</sub>1:** The Omani students are not motivated to receive the training and feedback through e-learning platforms.

**H<sub>0</sub>2:** There is no statistically significant difference between male and female participants in motivational levels of e-learning services.

## **Method**

### ***Participants***

In this study, 48 Omani college students (24 males and 24 females) aging from 18 to 21 years old were selected through convenience sampling. They were all native Arabic speakers and had learned English as a foreign language through Foundation Department in which students should pass 3 progressive semesters on basic skills such as IT, Science, English, Mathematics, Research and Study Skills modules to be prepared for higher education specialization. Their ages range were from 18 to 40.

### ***Instruments***

For this study, 3 educational tools were selected and used. Since participants were at the intermediate level, the English version of the instruments was administered. In continue there will be comprehensive explanations of each:

### ***Online platforms***

Since the beginning of the Covid-19 pandemic and according to the Ministry of Higher Education's instructions, the colleges have temporarily closed and all in-campus activities transferred to the online platforms. The universities and the institutions have selected applications such as Microsoft Teams, Blackboard, and Moodle as the educational teaching and learning tools. All of the platforms were equipped with audio as well as video features. Teachers and students could share the files, quizzes, and assignments online.

Microsoft Teams was suggested by the IT team of the college among all other online learning applications that enabled the teachers to create their classes or groups and share the learning materials there. One of the practical features of this platform was recording the sessions. Teachers needed to record their teaching sessions for the absent students to follow the course later. Students could be able to prepare their PowerPoints and present them for verbal assignments. Moodle and Blackboard are equipped with lots of features to be considered as functional platforms of teaching and learning. Besides all these platforms' features, Moodle and Blackboard were using for the following purposes: 1. For uploading materials by teachers for the students who missed the online sessions, then design midterm, final exam, and in between- quizzes. 2. For the purpose of doing placement test, and 3. To do some exams or quizzes for modules such as Science, Mathematics, and IT. The email was used to communicate the course's updates, send documents, receive assignments, and reply to students' doubts and questions; among the available hosts, Outlook Email and College Gmail were functional during the study.

### ***Measures***

The motivation questionnaire used is adapted from Cheng (2006) cited in El-Seoud et al. (2014) and includes twelve questions on a five-point Likert scale from Strongly Agree=5, Agree=4, Neither Agree nor Disagree=3, Disagree=2, Strongly Disagree=1. The students were required to select one option of five options for each question.

The learner perception questionnaire was developed by Fieber (2019) and includes 10 statements based on a five-point Likert scale (Not at all True, Not True, Neutral, True, and Extremely True) (see Table 5) and helps the instructors to improve the way they teach and present the content. The Cronbach's Alpha reliability of the perception questionnaire with 10 items and 48 participants was .78, which shows an acceptable reliability index.

### ***Procedures***

Instructors should be online according to their timetables, which were determined and approved by the head of department (HOD), communicated with students through email, and uploaded online. Simultaneously, students should be present in the online class as well. Although online classes' attendance seems unnecessary according to the official instructions, teachers were aware of taking attendance of the available students. Teachers uploaded the materials, including webpages, PowerPoints, Word Documents, and PDFs, on the students' platforms with adequate explanations. There was enough time for students to ask their questions and receive the answers accordingly during the online session. Teachers must record the teaching sessions and upload them later on the pre-determined platforms.

At the beginning of an academic semester, teachers must make a particular folder with the course's name on Moodle or Blackboard. They must add the names of students in their classes. At the end of each session, the teacher must upload the session's video and all the materials onto Moodle and other implemented applications. This activity's logic is the accessibility of materials and teaching sessions by working students and part-time ones who are busy during the teaching sessions and would like to use the documents later. Moodle, Blackboard, Microsoft Teams were used for the measurements and testing as well. It means that all the exams of Math, Science, English, midterms, and final exams were assigned to the students through these platforms. Teachers were designed for their exams and added the students to the session. Students had access to the exams on a particular day and time, which was determined by teachers.

The usage of email, at first, was the communication of timetables to the students individually, and then it was a platform for group communication. It reduced the justifications of students who were absent most of the time and then stated that they did not receive any updates or correct information from the teachers and officials. In some courses like the Research Development Module, the submission of the assignments and giving feedback happened through email. The final step was administering the two questionnaires, motivation and learner perception questionnaires, through Google form and analyzing the collected data using Statistical Package for the Social Sciences (SPSS) program, and running the appropriate tests.

### **Ethical considerations**

Ethical considerations are significant components of any research process. No research can be conducted without ethical clearance approval. The participants of this study were asked to read the instructions clearly. It was mentioned that their participation was voluntarily and there was no force or pressure from the second or third parties. The information which they provide is kept by the researchers only and remains confidential during and after the study.

### **Data analysis and findings**

This section deals with the presentation, analysis, and interpretation of data collected for 12 weeks among Omani college students. After collecting the essential data from the research instruments, the research hypotheses were tested to answer the research questions. SPSS was mainly in use to analyze the data.

#### **Reliability analysis of the Motivation Questionnaire**

In the following Table, the reliability result of the instrument having 48 participants is shown.

**Table 1**

#### *Reliability of the Motivation Questionnaire*

Cronbach's Alpha	N of Items
0.830	12

Based on Table 1, the Cronbach's Alpha reliability of the motivation questionnaire with 12 items and 48 participants was 0.83, which shows a relatively high-reliability index. Table 2 summarizes the scores of the students regarding their motivation.

**Table 2**

#### *The students' Motivation Questionnaire*

	N	Mean	SD
1. I like using e-learning for my courses.	48	4.71	.54
2. I think the teacher's application of e-learning in teaching courses helps me improve my skills and knowledge.	48	4.50	.71
11. Using E-Learning for English courses encourages me to continue learning on the Internet by myself	48	4.44	.79

6. I hope teachers of the courses continue to use E-Learning in their teaching	48	4.40	.61
8. E-Learning makes me more interested in learning English courses	48	4.33	.73
7. Using E-Learning for the courses is more interesting than the traditional method	48	4.17	1.07
4. I think my grades will improve by using E-Learning for the courses	48	4.10	.80
5. I find English courses easier when the teacher uses E-Learning in teaching	48	3.88	1.14
10. By using E-Learning for English courses, the opportunity of interaction with my classmates is enhanced	48	3.75	1.21
9. By using E-Learning for English courses, the opportunity of interaction with the teacher is enhanced	48	3.63	1.12
12. I am unwilling to learn English modules through using E-Learning	48	2.83	1.27
3. I think the teacher's application of e-learning in teaching the courses is not useful.	48	2.19	1.12
Mean		3.91	0.73

Based on Table 2, items 1 ( $\bar{X} = 4.71$ ), 2 ( $\bar{X} = 4.50$ ), and 11 ( $\bar{X} = 4.44$ ) gained the highest mean scores, and items 12 ( $\bar{X} = 2.83$ ) and 3 ( $\bar{X} = 2.19$ ) gained the lowest mean scores. Since there were five Likert-scale options, any score above three was taken as a positive status, and any score below three was taken as negative. Consulting the above table, it can be concluded that except for items 12 and 3, the rest of the items had positive status. Hence, it can be claimed that the students were motivated to receive the training and feedback through e-learning platforms.

### Control

To select the most suitable test for the difference between the two genders, the researchers had to measure data distribution's normality. The result of the Kolmogorov-Smirnov test of normality showed that the data are not normally distributed for the male and female participants ( $p < .05$ ). Therefore, the Mann-Whitney U test should be used for the comparison.

**Table 3**

*Descriptive statistics for the motivation scores of males and females*

Gender	N	Mean	SD	Std. Error Mean
Motivation Male	24	45.20	5.74	1.17
Female	24	48.62	7.47	1.52

The descriptive statistics for the motivation scores of males and females showed that the mean and standard deviation of both are 45.2, 5.74, and 48.62, 7.47, respectively. Table 4 shows the result of the inferential test.

**Table 4**

*The Mann-Whitney U t-test for the males and females*

	Motivation
Mann-Whitney U	174.500
Wilcoxon W	474.500
Z	-2.354
Asymp. Sig. (2-tailed)	.019

Based on Table 4 above, there was a statistically significant difference between the male and the female participants regarding their motivation ( $U = 174.50, P < .05$ ). Hence, the researchers reject the null hypothesis, confirming a statistically significant difference between male and female participants in motivational levels of e-learning services – females were slightly more motivated.

### Analysis of the perception questionnaire

The following table shows the descriptive statistic related to the items of the perception questionnaire (Not at all True (1) Not True (2) Neutral (3) True (4) Extremely True (5)).

**Table 5:**

*Descriptive statistics for the Learner Perception Questionnaire*

No.	Items		1	2	3	4	5	Mean	SD
1	I found I learned well when constructing discussion posts as a group.	count	0	8	8	18	14	3.79	1.051.
		% within Group	0	16.7%	16.7%	37.5%	29.2%		
2	I was concerned about my grade being affected by my classmates in the group activities.	count	2	0	13	13	20	4.02	1.041
		% within Group	4.2%	0	27.1%	27.1%	41.7%		
3	I enjoyed working with a group to complete discussion posts.	count	4	0	2	9	33	4.40	1.162
		% within Group	8.3%	0	4.2%	18.8%	68.8%		
4	I signed up for online coursework anticipating I would not have to work with classmates.	count	0	14	6	10	18	3.67	1.260
		% within Group	0	29.2%	12.5%	20.8%	37.5%		
5	I found it easy to communicate with my classmates to construct the group discussion posts.	count	0	0	4	23	21	4.35	.635
		% within Group	0	0	8.3%	47.9%	43.8%		
6	I prefer to work alone.	count	2	4	8	10	24	4.04	1.184
		% within Group	4.2%	8.3%	16.7%	20.8%	50.0%		
7	All of my group members contributed in a valuable way to the discussion post.	count	0	4	22	7	15	3.69	1.014
		% within Group	0	8.3%	45.8%	14.6%	31.3%		
8	GoogleDocs was a good tool for group work in an online class.	count	0	0	4	27	17	4.27	.610
		% within Group	0	0	8.3%	56.3%	35.4%		
9	Completing discussion posts as a group was more difficult than working alone.	count	0	2	15	8	23	4.08	.986
		% within Group	0	4.2%	31.3%	16.7%	47.9%		
10	I would like to have collaborative activities in other online courses.	count	4	2	4	22	16	3.92	1.164
		% within Group	8.3%	4.2%	8.3%	45.8%	33.3%		

As the above table showed, for item 1, 29.2% of the participants selected extremely true. For item 2, 41.7% of the participants selected extremely true. For item 3, 68.8% of the participants selected extremely true. For item 4, 37.5% of the participants selected extremely true. For item 5, 47.9% of the participants selected true. For item 6, 50% of the

participants selected extremely true. For item 7, 45.8% of the participants selected extremely true. For item 8, 56.3% of the participants selected extremely true. For item 9, 47.9% of the participants selected extremely true. For item 10, 45.8% of the participants selected true. It is worth noting that the items 5 and 8 have the lowest standard deviations relative to the mean. It shows that these items have lower deviation within the data set.

## Discussion

This study attempted to find out the perception and motivation of Omani EFL learners towards e-learning. Learners participated in two sessions based on the two questionnaires to indicate their perceptions and motivation to use e-learning during the college course. Moreover, the study attempted to investigate the role of gender in motivational levels for online learning. The students' motivation questionnaire showed that most of the learners liked using e-learning for their courses and found it useful to improve their skills and knowledge. They found e-learning more interesting than the traditional method. They stated that the opportunity of interacting with their teacher as well as their classmates was increased. Therefore, it can be concluded that Omani EFL learners were motivated to receive training and feedback through e-learning platforms. The findings are in line with those reported by Bures et al. (2002), Dawson et al. (2009), Fryer and Bovee (2016), Gerber et al. (2008), Hartnett (2010), Martens et al. (2004), Rovai and Barnum (2003), Shroff et al. (2008), and Wighting, Liu, and Rovai (2008) who confirmed the positive motivation toward the use of online platform and learning. On the contrary, some scholars (Albelbisi & Yusop, 2019; Aguilera-Hermida, 2020; Sun et al., 2018) stated that students lost their motivation due to the shift to online learning. They continued that lack of interaction with peers and teachers was the major demotivating factor.

The findings also showed that Omani female learners were slightly more motivated than male learners to use e-learning platforms in their courses. The results related to the second research question agree with those reported by Adamus et al. (2009), Fedynich et al. (2015), Fryer and Bovee (2016), Ramirez-Correa et al. (2015). Considering the results of the third research question, it can be concluded that most of the Omani learners had a positive perception of e-learning. Some students enjoy cooperation and engagement through online classes, while some prefer to work alone. The findings of the study are in accordance with the results reported by Fryer and Bovee (2016), Murphy and Collins (1997), Poole (2000), and Vonderwell (2003). However, the findings of a study carried out by Howland and Moore (2002), Petride (2002), and Woods (2002) do not support the results of this study.

## Conclusion

Before the fast-growing epidemic of COVID-19 all over the world, the educational environment took advantage of technology application. The use of technologies has changed traditional education methods to modern learning methods (Di Vaio et al., 2020). As a result, e-learning is covered under a more significant concept of technology-based learning through learning portals, mobile apps, websites, video conferencing, YouTube, and many types of free existing websites for blended learning instruments. Nowadays, e-learning improves learners' knowledge, even the professionals, academic staff, and industry people skills via using the Internet (Adams et al., 2018; Chopra et al., 2019). This study focused on using e-learning among Omani EFL learners and finding out their perception and motivation towards this technology-based service.

To increase learners' autonomy, a strong need for strategy training is required to create more effective learning outcomes, particularly when learners are exposed to a new education method that entails monitoring and self-regulation. Studies have shown that in e-learning situations, those learners who begin with critical deficiencies in motivation become demotivated gradually (Fryer et al., 2014). Motivation as a central element in learning should be considered to improve the incentives so that learning in any manifestation can be maximized. As Muilenburg and Berg (2005, cited in Whannell & Whannell, 2013, p. 28) argued, the absence of interaction is the most substantial barrier in the process of online learning. In this study, from the beginning of the experiment, the students were motivated to interact with each other and their teachers to gain information and provide a learning community. Gradually, they became more familiar with the course content and expectations. It can be concluded that they tried to become self-directed; however, they need to continue to interact with teachers and other students to do better.

This study's findings stated that the instructors are responsible for discussing several shortfalls of the motivational factors and emphasizing the significant role of the assignments through e-learning (Brophy, 1999, 2008; Phalet et al., 2004). Some aspects of e-learning, such as the modality of presenting the required information during the interaction,

might be influential in improving the depth of processing. Based on Smith, Alvarez-Torresb, and Zhao (2003), dual or multiple forms of the same information through several sensory channels increase the input's comprehension and retention. Given this study's findings, it can be concluded that Omani EFL learners were motivated to receive instruction and feedback through e-learning platforms.

This study suffers from some methodological shortcomings. These pitfalls are significant while clarifying the research results and consider future implications. The study was carried out with Omani college students within the context of one e-learning platform. One of the main limitations of using this platform is that learners' identities cannot be recognized while doing the exams and the final test. In some of the digital learning context due to the socio-cultural concerns or internet access issues, students are not able to open their cameras during the whole period of the exam or assessment; thus, the academic integrity is under the questions and the identity of the person who takes the exam is not valid. Therefore, future research is required to provide sufficient and comprehensive details of the evaluation procedures. It is also recommended that future studies should investigate the delayed effect and retention of e-learning on learners' performance.

The focus of this study was the learners' perceptions of e-learning. It should be noted that the concept of e-learning is broader than what is used in the study, which is limited to the application of a particular Web platform. In literature, e-learning is mainly associated with distance learning; however, in this study, the Web platform was used to complement education performed in college. Considering this limitation of the study, further research should include the learners' perspective and other factors affecting their perceptions towards e-learning in Higher Education.

Future research is needed for other institutions in Oman and globally in various educational areas. The researchers are interested in observing more studies with extensions or duplication with similar but large populations and applying a latent and longitudinal research design. Such a type of study would be a rich source of comparison along with the findings of the current paper.

## References

- Abushammala, M., Qazi, W., & Manchiryal, R. K. (2021). The impact of COVID-19 on the private higher education system and students in Oman. *Journal of University Teaching & Learning Practice (JUTLP)*, 18(3), 013.
- Adams, D., Sumintono, B., Mohamed, A., & Mohamad Noor, N. (2018). E-Learning Readiness among Students of Diverse Backgrounds in a Leading Malaysian Higher Education Institution. *Malaysian Journal of Learning and Instruction*, 15 (2), 227-256. <https://doi.org/10.32890/mjli2018.15.2.9>
- Adamus, T., Kerres, M., Getto, B., & Engelhardt, N. (March, 2009). Gender and E-Tutoring – A Concept for Gender Sensitive E-Tutor Training Programs. *5th European Symposium on Gender & ICT Digital Cultures: Participation - Empowerment – Diversity*. University of Bremen. Available at: [http://www.informatik.uni-bremen.de/soteg/gict2009/proceedings/GICT2009\\_Adamus.pdf](http://www.informatik.uni-bremen.de/soteg/gict2009/proceedings/GICT2009_Adamus.pdf)
- Affouneh, S., Salha, S.N. and Khlaif, Z. (2020). Designing quality e-learning environments for emergency remote teaching in coronavirus crisis. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 11 (2), pp. 1-3.
- Albelbisi, N., & Yusop, F. (2019). Factors influencing learners' self-regulated learning skills in a massive open online course (MOOC) environment. *Turkish Online Journal of Distance Education*, 20, 1-16. <https://doi.org/10.17718/tojde.598191>
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education*, 10 (3). <https://doi.org/10.5539/hes.v10n3p16>
- Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-learning critical success factors during the covid-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Education Sciences*, 10(9), 216. <https://doi.org/10.3390/educsci10090216>
- Alshwiah, A. A. (2010). Effects of a blended learning strategy in teaching vocabulary on premedical students' achievement. *International Journal of Instructional Technology and Distance Learning*, Vol. 7, No. 2, pp. 37-52, available at: [http://itdl.org/Journal/Feb\\_10/article02.htm](http://itdl.org/Journal/Feb_10/article02.htm)
- Alvarez, I., Guasch, T., & Espasa, A. (2009). University teacher roles and competencies in online learning environments: a theoretical analysis of teaching and learning practices. *Eur. J. Teach. Educ.* 32, 321–336. <https://doi.org/10.1080/02619760802624104/>
- Bach, Sh., Haynes, Ph., & Smith, J.L. (2007). *Online Learning and Teaching in Higher Education*. New York, NY: Open University Press.
- Bates, A. W. (2005). *Technology, e-learning and distance education* (2nd ed.). New York, NY: Routledge Falmer.
- Brophy, J. (1999). Toward a model of the value aspects of motivation in education: Developing appreciation for. *Educational psychologist*, 34(2), 75-85. <https://doi.org/10.4324/9780203463772>
- Brophy J. (2008). Developing students' appreciation for what is taught in school. *Educational Psychologist*, 43, 132–141. <https://doi.org/10.1080/00461520701756511>
- Brophy, J. (2010). *Motivating students to learn* (3rd ed.). New York, NY: Routledge. <https://doi.org/10.1016/B978-0-08-044894-7.00613-8>
- Brown, A. (1997). Features of an effective online course. *Australian Journal of Educational Technology*, 13, 115–126. <https://doi.org/10.1016/B978-0-08-044894-7.00613-8>
- Brown, V. (2011). Changing demographics of online courses. *US-China Education Review*, 8, 460–467.
- Bures, E. M., Amundsen, C. C., & Abrami, P. C. (2002). Motivation to learn via computer conferencing: Exploring how task-specific motivation and CC expectations are related to student acceptance of learning via CC. *Journal of Educational Computing Research*, 27(3), 249. <https://doi.org/10.2190/R4WG-88TJ-C3VF-YQJ0>
- Celce-Murcia, M. (2001). *Teaching English as a Second or Foreign Language*. Boston, MA: Heinle & Heinle.
- Cheng, K. W. (2006). A research study on students' level of acceptance in applying e-learning for business courses - A case study on a Technical College in Taiwan. *The Journal of American Academy of Business*, 82, 265-270.
- Chizmar, J. F., & Walber, M. S. (1999). Web-based learning environments guided by principles of good teaching practice. *The Journal of Economic Education*, 30 (3), 248-264. <https://doi.org/10.1080/00220489909595985>
- Chopra, G., Madan, P., Jaisingh, P., & Bhaskar, P. (2019). Effectiveness of e-learning portal from students' perspective: A structural equation model (SEM) approach. *Interactive Technology and Smart Education*, 16 (2), 94–116. <https://doi.org/10.1108/ITSE-05-2018-0027>
- Costa, C., Alvelos, H., & Teixeira, L. (2012). The use of Moodle e-learning platform: a study in a Portuguese University. *Procedia Technology*, 5, 334-343. <https://doi.org/10.1016/j.protecy.2012.09.037>
- Dawson, S., Macfadyen, L., & Lockyer, L. (2009). Learning or performance: Predicting drivers of student motivation. *Proceedings of the ASCILITE Conference* (pp. 184–193). Auckland, New Zealand. Retrieved from <http://www.ascilite.org.au/conferences/auckland09/procs/dawson.pdf/>

- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49 (1), 1-18. <https://doi.org/10.1177/0047239520934018>
- Dhillon, S., & Murray, N. (2021). An investigation of EAP teachers' views and experiences of e-learning technology. *Education Sciences*, 11(2), 54. <https://doi.org/10.3390/educsci11020054>
- Di Vaio, A., Boccia, F., Landriani, L., & Palladino, R. (2020). Artificial intelligence in the agri-food system: Rethinking sustainable business models in the COVID-19 scenario. *Sustainability*, 12 (12), 4851 (2020a). <https://doi.org/10.3390/su12124851/>
- Elfaki, N., Ahmad, I., & Abdelrahim, R. (2019). Impact of e-learning vs. traditional learning on students' performance and attitude. *International Medical Journal*, 24 (3).
- El-Seoud, S. M., Taj-Eddin, A. T. F. I., Seddiek, N., El-Khouly, M. M., & Nosseir, A. (2014). E-learning and students' motivation: A research study on the effect of e-learning on higher education. *International Journal of Emerging Technologies in Learning*, 9 (4), 20-26. <https://doi.org/10.3991/ijet.v9i4.3465>
- Favale, T., Soro, F., Trevisan, M., Drago, I., & Mellia, M. (2020). Campus traffic and e-Learning during COVID-19 pandemic. *Computer Networks*, 176, p. 107290. <https://doi.org/10.1016/j.comnet.2020.107290>
- Fedynich, L., Bradley, K. S., & Bradley, J. (2015). Graduate students' perceptions of online learning. *Research in Higher Education Journal*, 27, 1.
- Felix, U. (2003). *Language Learning Online: Towards Best Practice*. The Netherlands. Swets & Zeitlinger Publishers.
- Fieber, C. (2019). *The Effect of Collaboration on Online Student Motivation in a College Biology Course*. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/5354>.
- Fryer, L. K., & Bovee, H. N. (2016). Supporting students' motivation for e-learning: Teachers matter on and offline. *The Internet and Higher Education*, 30, 21-29. <https://doi.org/10.1016/j.iheduc.2016.03.003/>
- Fryer, L. K., Bovee, H. N., & Nakao, K. (2014). E-learning: Reasons students in language learning courses don't want to. *Computers & Education*, 74, 26-36. <http://doi.org/10.1016/j.compedu.2014.01.008/>
- Gerber, M., Grundt, S., & Grote, G. (2008). Distributed collaboration activities in a blended learning scenario and the effects on learning performance. *Journal of Computer Assisted Learning*, 24(3), 232-244. <https://doi.org/10.1111/j.1365-2729.2007.00256.x>
- Gorska, D. (2016). E-learning in higher education. *The Person and the Challenges*, 6 (2), 35-43. <https://doi.org/10.15633/pch.1868>
- Grant, M. R., & Thornton, H. R. (2007). Best practices in undergraduate adult-centered online learning: mechanisms for course design and delivery. *MERLOT Journal of Online Learning and Teaching*, 3, 346-356.
- Gunawardena, C. (1999). The Challenge of Designing and Evaluating "Interaction" in Web-based Distance Education, from <http://go.editlib.org/p/7461>.
- Hadiyanto, H., Failasofah, F., Armiwati, A., Abrar, M., & Thabran, Y. (2021). Students' practices of 21st century skills between conventional learning and blended learning. *Journal of University Teaching & Learning Practice*, 18 (3), 07.
- Halim, M. S. A. A., Hashim, H., & Yunus, M. M. (2020). Pupils' Motivation and Perceptions on ESL Lessons through Online Quiz-Games. *Journal of Education and E-Learning Research*, 7 (3), 229-234. <https://doi.org/10.20448/journal.509.2020.73.229.234>
- Harris, A. (1996). The role of assessment in the rhythms of reform. Paper presented at the pre-conference session of the Annual Meeting of the Comparative and International Society, Williamsburg, Virginia.
- Hartnett, M. (2010). *Motivation to learn in online environments: An exploration of two tertiary education contexts* (Doctoral thesis). Retrieved from <http://muir.massey.ac.nz/handle/10179/2043>.
- Henderson, R. (2011). Classroom pedagogies, digital literacies and the home-school digital divide. *International Journal of Pedagogies and Learning*, 6 (2), 152-161. <https://doi.org/10.5172/ijpl.2011.152>
- Hilton, J., Hilton, B., Ikahihifo, K. T., Chafee, R., Darrow, J., Guilmett, J., & Wiley, D. (2021). Identifying student perceptions of different instantiations of open pedagogy. *International Review of Research in Open and Distributed Learning*, 21(4), 1-19. <https://doi.org/10.19173/irrodl.v21i4.4895>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *EDUCAUSE Review*.
- Hoq, M. Z. (2020). E-Learning during the period of pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study. *American Journal of Educational Research*, 8(7), 457-464. <https://doi.org/10.12691/education-8-7-2/>.
- Howland, J.L., & Moore, J.L. (2002). Student perceptions as distance learners in Internet-based courses. *Distance Education*, 23(2), 183-196. <https://doi.org/10.1080/0158791022000009196>

- Kalogiannakis, M. (2010). Training with ICT for ICT from the trainer's perspective. A Greek case study. *Education and Information Technologies*, 15 (1), 3-17. <https://doi.org/10.1007/s10639-008-9079-3>
- King, A. (1993). From Sage on the Stage to Guide on the Side. *College Teaching*, 41(1), pp.30-35. <https://doi.org/10.1080/87567555.1993.9926781>
- Magagula, C. M., & Ngwenya, A. P. (2004). A comparative analysis of the academic performance of distance and on-campus learners. *Turkish Online Journal of Distance Education*, 5, 1-11.
- Martens, R. L., Gulikers, J., & Bastiaens, T. (2004). The impact of intrinsic motivation on e-learning in authentic computer tasks. *Journal of Computer Assisted Learning*, 20 (5), 368-376. <https://doi.org/10.1111/j.1365-2729.2004.00096.x>
- McPhee, I., & Söderström, T. (2012). Distance, online and campus higher education: reflections on learning outcomes. *Campus Wide Inf. Syst.*, 29, 144-155. <https://doi.org/10.1108/10650741211243166>
- Merisotis, J. P., & Phipps, R. A. (1999). What's the difference? Outcomes of distance vs. traditional classroom-based learning. *Change*, 31(3), 12-17. <https://doi.org/10.1080/00091389909602685>
- Mhlanga, D., & Moloi, T. (2020). COVID-19 and the digital transformation of education: what are we learning on 4IR in South Africa? *Education Sciences*, 10 (7), p. 180. <https://doi.org/10.3390/educsci10070180>
- Moawad, R. A. (2020). Online learning during the COVID- 19 pandemic and academic stress in university students. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12 (1), 100-107. <https://doi.org/10.18662/rrem/12.1sup2/252>
- Moore, Z., Morales, B., & Carel, S. (1998). Technology and teaching culture: Results of a state survey of foreign language teachers. *CALICO Journal*, 15 (1-3). <https://doi.org/10.1558/cj.v15i1-3.109-128>
- Morrison, D. (2003). *E-learning Strategies: How to Get Implementation and Delivery Right First Time*. England. John Wiley & Sons Ltd.
- Murphy, K.L., & Collins, M.P. (1997). Communication conventions in instructional electronic chats. *First Monday*, 2 (11). <https://doi.org/10.5210/fm.v2i11.558>
- Murphy, M. P. A. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 41 (3), 492-505. <https://doi.org/10.1080/13523260.2020.1761749/>
- Palmer, S. (2012). Understanding the context of distance students: differences in on- and off-campus engagement with an online learning environment. *Journal of Open Flexible and Distance Learning*, 16, 70–82.
- Petrides, L. A. (2002). Web-based technologies for distributed (or distance) learning: Creating learner-centered educational experiences in the higher education classroom. *International Journal of Instructional Media*, 29 (1), 69-77.
- Phalet, K., Andriessen, I., & Lens, W. (2004). How future goals enhance motivation and learning in multicultural classrooms. *Educational Psychology Review*, 16, 59–89. <http://doi.org/10.1023/B:EDPR.0000012345.71645.d4/>
- Poole, D. M. (2000). Student participation in a discussion-oriented online course: A case study. *Journal of Research on Computing in Education*, 33 (2), 162-177. <https://doi.org/10.1080/08886504.2000.10782307>
- Ramirez-Correa, P. E., Arenas-Gaitan, J., & Rondan-Cataluna, J.F. (2015). Gender and Acceptance of E-Learning: A Multi-Group Analysis Based on a Structural Equation Model among College Students in Chile and Spain. *PLoS ONE*, 10(10). <https://doi.org/10.1371/journal.pone.0140460>
- Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *The Internet and Higher Education*, 6 (1), 1–16. [https://doi.org/10.1016/S1096-7516\(02\)00158-6/](https://doi.org/10.1016/S1096-7516(02)00158-6/).
- Rovai, A. P., & Barnum, K. T. (2003). Online course effectiveness: An analysis of student interactions and perceptions of learning. *Journal of Distance Education*, 18 (1), 57-73.
- Rovai, A. P., & Downey, J. R. (2010). Why some distance education programs fail while others succeed in a global environment. *Internet Higher Education*, 13, 141-147. <https://doi.org/10.1016/j.iheduc.2009.07.001>
- Saeed Al-Marouf, R., Alhumaid, K., & Salloum, S. (2021). The continuous intention to use e-learning, from two different perspectives. *Education Sciences*, 11(1), 6. <https://doi.org/10.3390/educsci11010006>
- Saidy, C., & Sura, T. (2020). When everything changes over night: what we learned from teaching the writing practicum in the era of Covid-19. *Teaching/Writing: The Journal of Writing Teacher Education*, 9(1). Available at: [www.ccsenet.org/journal/index.php/elt/article/view/52073](http://www.ccsenet.org/journal/index.php/elt/article/view/52073)
- Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education* (3rd ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Shroff, R. H., Vogel, D. R., & Coombes, J. (2008). Assessing individual-level factors supporting student intrinsic motivation in online discussions: A qualitative study. *Journal of Information Systems Education*, 19(1), 111–125.

- Smith, B., Alvarez-Torres, M., & Zhao, Y. (2003) Features of CMC technologies and their impact on language learners' online interaction. *Computers in Human Behavior*, 19, 703-729. [https://doi.org/10.1016/S0747-5632\(03\)00011-6](https://doi.org/10.1016/S0747-5632(03)00011-6)
- Sun, J. C. Y., Lin, C. T., & Chou, C. (2018). Applying learning analytics to explore the effects of motivation on online students' reading behavioral patterns. *International Review of Research in Open and Distributed Learning*, 19(2). <https://doi.org/10.19173/irrodl.v19i2.2853>
- Suppasetsee, S., & Dennis, N. (2010). The use of Moodle for teaching and Learning English at tertiary level in Thailand. *The International Journal of the Humanities*, 8(6), 29-46. <https://doi.org/10.18848/1447-9508/CGP/v08i06/42964>
- United Nations Educational, Scientific and Cultural Organisation. (2020). *Education: From disruption to recovery*. <https://en.unesco.org/covid19/educationresponse>
- Vonderwell, S. (2003). An examination of asynchronous communication experiences and perspectives of students in an online course: A case study. *Internet and Higher Education*, 6(1), 77-90. [https://doi.org/10.1016/S1096-7516\(02\)00164-1](https://doi.org/10.1016/S1096-7516(02)00164-1)
- Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, 13, 7-26.
- Whannell, P., & Whannell, R. (2013). Reducing the attrition of tertiary bridging students studying by distance: A practice report. In *Proceedings of the 1st Foundation and Bridging Educators New Zealand Conference (FABENZ 2012)* (pp. 26–37). National Centre for Tertiary Teaching Excellence.
- Wighting, M. J., Liu, J., & Rovai, A. P. (2008). Distinguishing sense of community and motivation characteristics between online and traditional college students. *Quarterly Review of Distance Education*, 9(3), 285-295.
- Woods, R.H. (2002). How much communication is enough in online course? Exploring the relationship between frequency of instructor-initiated personal email and learners' perceptions of and participation in online learning. *International Journal of Instructional Media*, 29(4), 377-394.