

November – 2023

Discrepancies and Similarities Between Online and Face-to-Face Teachers' Use of Open Educational Resources (OER) for Teaching Purposes

Reza Dashtestani and Ahmad Mohamadi Suhrawardi

English Department, Faculty of Foreign Languages and Literature, University of Tehran, Iran

Abstract

The integration of open educational resources (OER) in the educational curricula of universities and educational organizations has gained tremendous popularity. However, there is a gap in research on teachers' attitudes toward OER in many developing countries. Using a mixed-methods approach, this study explored the use of OER by online and face-to-face teachers of English as a foreign language (EFL) in Iran. A total of 62 teachers (31 online teachers and 31 face-to-face teachers) participated in the study. Survey and interview results indicated that there were significant differences between online and face-to-face teachers' attitudes toward OER. Online teachers had a more positive attitude toward OER than face-to-face teachers. The perceived benefits of OER included developing the flexibility of curricula, encouraging personalized learning, and offering pedagogical options for teachers. There were several perceived OER-based challenges in the educational context of Iran as well. The challenges included teachers' uncertainty about copyright issues, the low quality of OER, teachers' low levels of digital literacy, teachers' unawareness of the existence of OER, the lack of quality control over OER, the lack of credibility of OER content, and the lack of up-to-dateness of OER. There were also significant differences between participants' perspectives on the types and frequency of using OER. More specifically, online teachers used OER for teaching practices more frequently than face-to-face teachers. Participants perceived that they needed various types of training for the appropriate use of OER. This study proposes several implications for renewing and improving teacher training/education programs and material development projects.

Keywords: open educational resources (OER), online teachers, face-to-face teachers, English as a foreign language, attitudes

Discrepancies and Similarities Between Online and Face-to-Face Teachers' Use of Open Educational Resources (OER) for Teaching Purposes

The application of open educational resources (OER) has become an integral element of many educational courses and programs. Every day, more teachers and students take an interest in the use of OER due to the benefits they offer for enhancing the quality of pedagogical and learning practices in educational settings (Dixon & Hondo, 2014; Fadehan & Okiki, 2023; Kelly, 2014; Luo et al., 2020; Pérez-Paredes et al., 2018; Rolfe, 2012; Whyte et al., 2014; Wiley et al., 2014). OER can have considerable merits for education, including convenient access to high-quality and pertinent learning resources, enhancement of students' and teachers' educational activities, efficient cost and time management, and appropriate adaptation of instructional materials and resources (Butcher, 2015). Using OER can also provide a yardstick for teachers to compare their own teaching resources with those that are available for free. Moreover, the use of OER enables teachers to bring about innovation and creativity in their practice and production/adaptation of teaching resources and materials. One important benefit of OER use can be adapting teaching to students' learning styles, preferences, and strategies (Krelja Kurelovic, 2016; McGreal et al., 2013).

Regarding the use of OER in the educational context of Iran, Moradi and Abdi (2021) argue one important measure to help teachers and students use OER is to enhance their knowledge about OER and encourage them to produce and use OER professionally and appropriately. They argue that attitudes need to change, and teachers and students should be trained and guided on how to make use of OER more efficiently. They also point out that there are some institutional, cultural, professional, and financial barriers to the use of OER in the educational context of Iran. Moreover, the use of OER has also been believed to cause some limitations and challenges for students and teachers. Some challenges, such as concerns about copyright ownership, the cost of adapting, revising, or accessing OER, teachers' and students' low digital literacy levels to use OER properly, and concerns about the quality of OER for teaching and learning purposes, have been echoed in previous literature (Krelja Kurelovic, 2016). Taking into account that online teachers need to use online resources and materials frequently, it is essential that face-to-face and online teachers' use of OER be investigated. Research has predominately focused on either online teachers' or face-to-face teachers' use of OER, while there may be differences between the attitude, level of use, or training needs of these two groups of educational stakeholders. Therefore, the current study set out to consider this research gap and explore online and face-to-face teachers' practices and attitudes regarding the use of OER for their educational practices.

Literature Review

In Pakistan, Hussain et al. (2013) explored university instructors' attitudes toward the use of OER. The instructors had positive views about using OER in that educational context. The perceived benefits of using OER comprised increased access to teaching materials, easier access to previous research in order to carry out further research, and free access to teaching materials. Some perceived challenges, including problems with Internet connections and speed, the possibility of computer viruses and problems, and eye strain, were reported. In a cross-national study, Garrote Jurado and Pettersson (2015) investigated the attitudes of

university lecturers from four geographical locations (Cuba, Guatemala, Peru, and Brazil) toward the use of OER. The results of the survey indicated that the lecturers who were more positive about using OER encouraged their students to use OER more frequently. The lecturers perceived the workload caused by searching for and using OER as a challenge. The study concluded that supporting and encouraging teachers plays an important role in lecturers' acceptance of OER.

In Greece, Georgiadou and Kolaxizis (2019) assessed film students' perspectives on OER. They reported that students had positive attitudes toward using OER, while they were not fully aware of the existence of these resources. It was suggested that university instructors should make students familiar with OER and their possible benefits for students' learning processes.

Likewise, Reed (2012) examined educational stakeholders' attitudes toward the open-content movement in the UK. The staff seemed to be aware of the open-content movement. Participants were willing to share and reuse content. Copyright and licensing were issues that could be challenging.

In India, Mishra and Singh (2017) carried out a study on faculty members' perceptions regarding barriers to the use of and the quality of OER. The findings revealed positive perspectives, but the participants had limited use of OER. The study also showed faculty members' low knowledge of and familiarity with Creative Commons and OER.

Zagdragchaa and Trotter (2017) focused on the practices and activities educators used regarding OER in Mongolia. The results demonstrated that despite some measures being taken to facilitate OER inclusion, instructors and educators had limited awareness of OER and its use in their educational practices. It was also argued that the culture of OER adoption had not been established yet and that the relevance of OER was the most important quality educators took into account.

In South Africa, Wolfenden et al. (2017) sought educators' attitudes toward using OER. The analysis of the context showed that OER use was limited due to several challenges. "Demands of curriculum and assessment, professional identity, digital skills, provision of equipment and connectivity, values and weak cultures of collaboration" (p. 252) were reported as the main challenges of the use of OER. The study suggested that the issue of access was an important factor and that easy access to OER could facilitate its use in educational courses.

Oates et al. (2017) used a mixed-methods study to delve into educators' use of OER in Afghanistan. It was found that teachers were positive about using OER for preparing lessons and assessment activities. There were also some teachers who did not use OER and preferred to use traditional teaching materials for their educational practices. Additionally, teachers were not fully aware of the meaning of openness in the concept of OER and believed all materials accessed from the Internet could be OER.

While previous literature on teachers' attitudes toward OER has focused on face-to-face teachers in general, there is a dearth of research on the comparison of online and face-to-face teachers' attitudes toward using OER in literature on educational technology. Using mixed methods, this study examined the attitudes of both online and face-to-face teachers of English as a foreign language (EFL) toward using OER. One major aim of the study was to compare the views of these two groups of teachers toward OER.

Methodology

Research Questions

The following research questions were considered for this study:

1. What are the attitudes of Iranian online and face-to-face teachers toward using OER for their teaching practice? Are there significant differences in these attitudes between Iranian online and face-to-face teachers?
2. What are the perspectives of Iranian online and face-to-face teachers on the challenges of using OER for their teaching practice? Are there significant differences in these perspectives between Iranian online and face-to-face teachers?
3. What types of OER are used, and how frequently are they used by Iranian online and face-to-face teachers? Are there significant differences in the types of OER used and the frequency of OER use between Iranian online and face-to-face teachers?
4. What are the perspectives of Iranian online and face-to-face teachers on the OER-based training they should receive? Are there significant differences in these perspectives between Iranian online and face-to-face teachers?

Participants

Two groups of EFL teachers (face-to-face and online) participated in the study. The teachers worked at eight well-known language-teaching institutions in Alborz and Tehran, two major provinces of Iran. The two regions are close to each other, and the participants were chosen from two neighboring regions in Iran. The sample comprised 31 online teachers (17 male and 14 female teachers) and 31 face-to-face teachers (19 males and 12 females). The online teachers had an average six years' experience of online EFL teaching, and the face-to-face teachers had an average of eight years' experience of teaching face-to-face EFL courses. The age range of the online teachers was 22–41 years and the age range of the face-to-face teachers was 21–45.

To select the participants, the researchers included those participants who were users of OER and knew the concept of OER. Before participating in the study, some questions were asked regarding participants' familiarity with and use of OER. Those participants who did not know the concept of OER or were not users of OER were excluded from the study. All of the participants of the study had been using OER for at least two years. The participants were invited to take part in the interviews, with a total of 23 online teachers and 21 face-to-face teachers accepting the invitation and taking part. Participation in the study was on a voluntary basis.

Instruments and Data Collection

As attitudes are complex, mixed-methods studies are recommended for gaining a deeper understanding of the phenomena (Johnson et al., 2007). Accordingly, this study incorporated a mixed-methods design comprising both surveys and interviews.

First, a survey was used in this study. The items of the survey were developed after reviewing and analyzing previous literature and theoretical issues and principles pertinent to OER use in educational contexts (e.g., Krelja Kurelovic, 2016; Oates et al., 2017; Wolfenden et al., 2017; Zagdragchaa & Trotter, 2017). Moreover, three experts in educational technology were invited to provide feedback on the relevance and significance of the survey items. A checklist was designed, and several versions of the survey were submitted to the experts in order to prepare the final version. In addition, some pre-study interviews were conducted to gain an understanding of the context of OER use and improve the survey items. The participants at this stage were 10 online and face-to-face teachers from the same regions the study was conducted in. The survey was then administered to 10 face-to-face and online teachers, and their comments on the clarity of the items were sought to establish the face validity of the survey.

The survey comprised 56 items. The first part of the survey focused on the attitudes of Iranian online and face-to-face teachers toward using OER for their teaching practice. A total of 19 items were included in this section. The section comprised five-point Likert scale items ranging from “strongly disagree” to “strongly agree.” The Cronbach’s alpha of this survey section was 0.846.

The next section explored the perspectives of Iranian online and face-to-face teachers on the challenges of using OER for their teaching practice. This section comprised 13 five-point Likert scale items (ranging from “strongly disagree” to “strongly agree”), and its Cronbach’s alpha was 0.797.

The third and fourth parts of the survey investigated the types of OER used and the frequency of OER use by Iranian online and face-to-face teachers. Section 3, which investigated the frequency of using different kinds of OER, contained 10 Likert scale items ranging from “never used” to “always using.” The section’s Cronbach’s alpha was 0.860. The fourth section of the survey, which investigated the frequency of the use of different modalities of OER, consisted of six items Likert scale items, ranging from “never used” to “always using.” The Cronbach’s alpha of section 4 was 0.600.

The last section examined the perspectives of Iranian online and face-to-face teachers on the OER-based training they should receive. The section comprised 7 Likert scale items ranging from “strongly disagree” to “strongly agree,” and its Cronbach’s alpha was 0.749.

The Cronbach’s alpha indices showed acceptable levels of reliability for different sections of the survey. The survey’s overall Cronbach’s alpha index (0.897) also revealed a high level of reliability.

Semi-structured interviews with teachers were also used in the study. Interview questions were developed based on previous literature and consultation with the three educational technology experts. To implement methodological triangulation, interview questions were designed based on the survey’s aims and objectives. The questions were as follows:

1. How do you evaluate the use of OER for teaching English as a foreign language? What are some benefits of the use of OER for EFL teachers in your view? Why do you think so?
2. What do you think are the challenges of the use of OER for your teaching practice? Would you mind explaining each challenge?

3. What types of OER do you usually use for your teaching practice? Do you use them frequently? How often do you use them?
4. Have you received any training regarding your use of OER? What aspects of using OER do you need training for? Would you mind explaining more?

Data Analysis

The data from the surveys were analyzed using SPSS 16. The mean and standard deviation were used to show the results of each item of the survey. A non-parametric Mann-Whitney U test was used to identify the differences between the two participant cohorts' perspectives. Content analysis and thematic analysis were used to analyze the qualitative data of the interviews.

Findings

Attitudes Toward OER

Surveys

Table 1 indicates the attitudes of online and face-to-face teachers toward OER. The Mann-Whitney U test showed significant differences between these attitudes. While online teachers agreed or strongly agreed with the merits of OER, face-to-face teachers were less positive about the use of OER for their educational practices. The groups agreed on some benefits of OER, such as the flexibility of curricula due to OER use, encouragement of personalized learning, and provision of pedagogical options for teachers.

Table 1

Online and Face-to-Face Teachers' Attitudes Toward OER

Survey items	Participants	M	SD	Mann-Whitney U	Sig.
1. Using OER enhances students'/teachers' access to learning materials	Online teachers	4.22	0.56	300.500	.005*
	Face-to-face- teachers	3.64	0.87		
2. The content of OER can be improved and edited	Online teachers	3.87	0.61	308.000	.009*
	Face-to-face- teachers	3.22	1.11		

3. Using OER is cost-effective for learners	Online teachers	4.35	0.48	307.500	.005*
	Face-to-face-teachers	3.90	0.65		
4. Using OER is time-efficient	Online teachers	4.16	0.77	330.000	.018*
	Face-to-face-teachers	3.74	0.77		
5. Using OER fosters students' and teachers' digital literacy levels	Online teachers	4.19	0.74	330.500	.020*
	Face-to-face-teachers	3.67	0.90		
6. Students can participate in co-creating OER	Online teachers	4.32	0.54	263.500	.001*
	Face-to-face-teachers	3.61	0.88		
7. Using OER promotes student-centered learning	Online teachers	4.06	1.31	344.000	.041*
	Face-to-face-teachers	3.70	1.03		
8. OER facilitates equal access to learning materials	Online teachers	4.25	0.57	320.500	.016*
	Face-to-face-teachers	3.58	1.17		
9. Using OER enhances the flexibility of the curriculum	Online teachers	4.09	0.78	320.500	.057
	Face-to-face-teachers	3.67	0.90		
10. Using OER promotes learners' retention	Online teachers	4.19	0.65	293.000	.004*
		3.51	0.96		

	Face-to-face- teachers				
11. Using OER provides teachers with more pedagogical options	Online teachers	4.25	0.44	369.500	.083
	Face-to-face- teachers	3.67	1.27		
12. OER expedites the dissemination of learning information/content	Online teachers	4.51	0.50	296.500	.004*
	Face-to-face- teachers	3.96	0.79		
13. Using OER increases diversity in the curriculum	Online teachers	4.09	0.78	276.000	.002*
	Face-to-face- teachers	3.29	1.18		
14. Using OER facilitates the process of ubiquitous learning	Online teachers	4.16	0.68	239.000	.000*
	Face-to-face- teachers	3.29	0.97		
15. Using OER encourages personalized learning	Online teachers	4.22	0.61	366.000	.072
	Face-to-face- teachers	3.77	0.99		
16. Using OER fosters equity in education	Online teachers	4.54	0.67	230.500	.000*
	Face-to-face- teachers	3.22	1.49		
17. Using OER facilitates teaching based on different learning styles	Online teachers	4.38	0.55	266.500	.001*
	Face-to-face- teachers	3.15	1.20		
18. Using OER encourages	Online teachers	4.35	0.60	285.000	.004*

pedagogical innovation for teachers	Face-to-face- teachers	3.51	1.20		
19. Using OER facilitates collaboration with online communities of practice	Online teachers	4.09	0.74	269.500	.001*
	Face-to-face- teachers	3.35	0.91		

Note. Likert scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree; * $p \leq .05$

Interviews

The interview findings confirm the survey results in general. Online teachers were more aware and positive about the existence and use of OER for their teaching practices. They believed that the use of OER could promote their access to teaching materials and that this would save them preparation time. Online teachers were also of the opinion that using OER could reduce the costs of accessing materials, and that using OER could increase collaboration between teachers inside and outside the country. In contrast, the majority of face-to-face teachers did not have high awareness of the benefits of OER. Few of them asserted that OER was a suitable tool for improving their teaching practice.

Challenges of Using OER

Surveys

As Table 2 depicts, there were both discrepancies and similarities between the perspectives of online and face-to-face teachers on the challenges of using OER. The teacher groups agreed that the main challenges of using OER were uncertainty about copyright issues, the low quality of OER, low levels of teachers' digital literacy, teachers' unawareness of the existence of OER, the lack of quality control in OER, the lack of credibility of OER content, and OER's lack of up-to-dateness. The results of the Mann-Whitney U test did not show significant differences among the participants' perspectives for the other survey items.

Table 2

Online and Face-to-Face Teachers' Perspectives on the Challenges of Using OER

Survey items	Participants	M	SD	Mann-Whitney U	Sig.
1. Uncertainty about copyright/intellectual property concerns of OER	Online teachers	4.12	0.67	437.500	.499
	Face-to-face- teachers	4.12	0.99		

2. The low quality of OER	Online teachers	3.87	0.76	402.000	.241
	Face-to-face- teachers	3.54	1.05		
3. The inadequate digital literacy of teachers to use OER	Online teachers	4.09	0.70	455.000	.689
	Face-to-face- teachers	4.09	0.90		
4. The complicated process of developing OER	Online teachers	3.29	1.03	255.000	.001*
	Face-to-face- teachers	4.09	1.16		
5. Unawareness of teachers about the existence of OER	Online teachers	4.38	0.71	418.500	.343
	Face-to-face- teachers	4.06	1.09		
6. The lack of quality control over OER	Online teachers	4.32	0.74	415.500	.323
	Face-to-face- teachers	4.03	1.04		
7. The lack of access to OER	Online teachers	3.87	0.80	124.500	.000*
	Face-to-face- teachers	2.29	1.10		
8. The lack of access to quality Internet connection	Online teachers	3.83	0.82	113.500	.000*
	Face-to-face- teachers	2.25	0.92		
9. Lack of credibility of the content of OER	Online teachers	3.93	0.92	398.000	.218
	Face-to-face- teachers	4.06	1.31		

10. The lack of access to digital devices (tablets, laptops, smartphones) to access OER	Online teachers	3.77	0.71	192.000	.000*
	Face-to-face- teachers	2.41	1.25		
11. The high costs of maintenance relevant to OER	Online teachers	3.67	1.04	143.500	.000*
	Face-to-face- teachers	2.06	1.03		
12. The lack of interaction between teachers and students due to OER use	Online teachers	3.77	0.71	297.000	.006*
	Face-to-face- teachers	3.16	0.86		
13. The lack of currentness (up-to-dateness) of OER	Online teachers	4.25	0.44	454.000	.662
	Face-to-face- teachers	4.00	1.03		

Note. Likert scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree; * $p \leq .05$

Interviews

The findings of the interviews showed that both groups had a high level of awareness of the challenges of using OER. One important challenge reported by both online and face-to-face teachers was the issue of copyright and its ownership. Participants reported that they did not know about all the regulations regarding OER copyright. They also believed that the majority of teachers, especially older ones, did not know about the importance of OER nor use it for their teaching. Some teachers also pointed out that OER usually comprises localized materials with a very specific focus and scope that cannot be used for other contexts, and that it was too time consuming to adapt or revise these materials for a context's specific teaching objectives.

OER Kinds Used and Frequency of Using Different Modalities of OER

Surveys

Table 3 illustrates online and face-to-face teachers' use of OER types and frequency of their usage. The findings of the Mann-Whitney U test demonstrate significant differences between the two participant groups' perspectives. While online teachers usually used OER, face-to-face teachers rarely or sometimes used OER.

Table 3

Online and Face-to-Face Teachers' Type and Frequency of Using OER

Survey items	Participants	M	SD	Mann-Whitney U	Sig.
1. Massive open online courses (MOOCs)	Online teachers	4.12	0.71	129.000	.000*
	Face-to-face-teachers	2.54	1.12		
2. Open textbooks	Online teachers	4.32	0.74	205.000	.000*
	Face-to-face-teachers	3.09	1.22		
3. Openly licensed multimedia	Online teachers	4.32	0.70	244.500	.000*
	Face-to-face-teachers	3.22	1.30		
4. Open digital educational games	Online teachers	3.93	0.72	107.000	.000*
	Face-to-face-teachers	2.35	0.98		
5. Open lesson plans	Online teachers	3.77	0.80	224.500	.000*
	Face-to-face-teachers	2.28	1.48		
6. Open lectures	Online teachers	4.12	0.49	183.500	.000*
	Face-to-face-teachers	2.70	1.29		
7. Open tests/ assessment tools	Online teachers	4.03	0.79	197.500	.000*
	Face-to-face-teachers	2.83	1.09		

	Face-to-face- teachers				
8. Open podcasts	Online	4.13	0.61	216.500	.000*
	Face-to-face- teachers	2.96	1.13		
9. Open syllabi	Online	3.80	0.70	325.500	.021*
	Face-to-face- teachers	3.03	1.35		
10. Open course lessons/units	Online	4.03	0.75	203.000	.000*
	Face-to-face- teachers	2.64	1.35		

Note. Likert scale: 1 = Never using, 2 = Rarely using, 3 = Sometimes using, 4 = Usually using, 5 = Always using; * $p \leq .05$

Online and face-to-face teachers also reported that they usually used text-, video-, and multimedia-based OER. However, there were significant differences between the groups' frequency of using audio-, animation-, and image-based OER (Table 4).

Table 4

Online and Face-to-Face Teachers' Type and Frequency of Using OER

Survey items	Participants	M	SD	Mann- Whitney U	Sig.
1. Text-based OER	Online	4.16	0.86	469.000	.862
	Face-to-face- teachers	4.12	1.05		
2. Video-based OER	Online	3.96	0.87	439.000	.540
	Face-to-face- teachers	3.74	1.15		

3. Audio-based OER	Online teachers	4.00	0.77	241.000	.000*
	Face-to-face- teachers	2.90	1.24		
4. Animation-based OER	Online teachers	3.38	0.80	233.500	.000*
	Face-to-face- teachers	2.51	1.15		
5. Image-based OER	Online teachers	4.32	0.74	152.000	.000*
	Face-to-face- teachers	2.58	0.84		
6. Multimedia-based OER	Online teachers	4.09	0.70	403.500	.236
	Face-to-face- teachers	4.16	1.09		

Note. Likert scale: 1 = Never using, 2 = Rarely using, 3 = Sometimes using, 4 = Usually using, 5 = Always using; * $p \leq .05$

Interviews

The results of the interviews illustrated that both online and face-to-face teachers made use of OER for their teaching practices. Online teachers reported that they commonly used OER for their classes and they sometimes adapted it. However, face-to-face teachers did not use it very frequently and the majority of them reported that they did not adapt or revise OER materials and used them as they were. The participants used OER in the form of texts and videos. Some participants reported that they used images as well.

OER-Based Training Needs for Teachers

Surveys

Table 5 shows the training needs of online and face-to-face teachers. Mann-Whitney U tests show that there are no significant differences between the perspectives of online and face-to-face teachers regarding their training needs. The participants unanimously emphasized the importance of training regarding quality assessment, copyright issues, the establishment of OER repositories, integration of OER into teaching objectives, open pedagogy, enhancement of the quality of OER, and familiarization with OER relevant to language-teaching purposes.

Table 5

Online and Face-to-Face Teachers' OER-Based Training Needs

Survey items	Participants	M	SD	Mann-Whitney U	Sig.
1. Training teachers to assess the quality of OER	Online teachers	4.32	0.70	439.000	.527
	Face-to-face-teachers	4.25	0.75		
2. Training teachers about the copyright issues regarding using OER	Online teachers	4.48	0.62	437.000	.491
	Face-to-face-teachers	4.38	0.61		
3. Training teachers to establish repositories of OER	Online teachers	4.12	0.61	455.500	.700
	Face-to-face-teachers	4.00	0.89		
4. Training teachers to integrate OER into their teaching practices /objectives	Online teachers	4.03	0.91	467.500	.846
	Face-to-face-teachers	4.09	0.83		
5. Training teachers to implement open pedagogy/education	Online teachers	4.29	0.73	465.500	.818
	Face-to-face-teachers	4.31	0.79		
6. Training teachers to enhance the quality of OER	Online teachers	4.32	0.74	377.500	.107
	Face-to-face-teachers	3.96	0.94		
7. Training teachers to become familiar with OER suitable for language teaching	Online teachers	4.35	0.70	391.500	.171

Face-to-face- teachers	4.12	0.67
---------------------------	------	------

Note. Likert scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree;
* $p \leq .05$

Interviews

In the interviews, both online teachers and face-to-face teachers reported that they had not received any training for using OER. The majority of participants were aware that training could have positive effects on their use of OER. The participants' consensus was that copyright regulations related to OER use should be taught. The other important training need reported by most of the participants was ensuring the quality of the OER they used for their teaching practice. They stated that they needed to learn strategies to deal with the quality control of OER.

Discussion and Conclusion

This study examined the attitudes of online and face-to-face teachers toward using OER. The findings illustrated that online teachers were positive about OER, but face-to-face teachers were less positive. It might be concluded that online teachers spend more time in online environments and they often find their own teaching materials on the Internet, and this exposure and need might be a reason for the difference between the two groups' attitudes. The groups agreed that the benefits of OER include curricula flexibility, the encouragement of personalized learning, and the provision of pedagogical options for teachers. Face-to-face teachers' lack of Internet use might be a major impediment to their positive attitudes toward OER. The other issue is that many face-to-face teachers use mainstream textbooks in class and do not use Internet-based supplementary materials or teaching aids. These findings on teacher attitudes align with findings of previous studies (e.g., Garrote Jurado and Pettersson, 2015; Mishra and Singh, 2017; Oates et al., 2017). It is essential that face-to-face teachers become more aware of the benefits of OER and be exposed to it on a regular basis. There is a range of factors, such as burnout, job dissatisfaction, and lack of Internet access, that can undermine the importance of OER use for language teachers.

More importantly, the participants of the two groups expressed their concerns about several challenges that impeded the use of OER in the Iranian educational context. Teachers' unfamiliarity with copyright and intellectual property regulations was perceived as an important obstacle to the use of OER. The low quality of OER, teachers' low levels of digital literacy, teachers' unawareness of the existence of OER, the lack of quality control over OER, the lack of OER content's credibility, and OER's lack of up-to-dateness were other perceived obstacles. Similar obstacles were reported in previous studies on teachers' attitudes toward the use of OER (Hussain et al., 2013).

These challenges may explain face-to-face teachers' less positive attitudes toward OER. As Garrote Jurado and Pettersson (2015) argue, teachers who hold positive attitudes toward OER can motivate their learners to use OER for learning purposes as well. When the use of OER is restricted by some challenges, some teachers may avoid using OER. The majority of the challenges the participants reported can be removed

through training or by providing hardware or software infrastructures for the use of OER. It is recommended that educational course designers and directors take practical measures to pave the way for teachers to adopt technology-enhanced approaches in their teaching practices.

The results of the study also showed that while online teachers usually use OER-based materials, face-to-face teachers do not use them frequently. There were statistically significant differences among the perspectives of the online and face-to-face teachers in this regard. The proper and consistent use of OER requires some conditions. Teachers' digital literacy can be an important factor that can encourage or discourage them to use OER for their teaching practices. The results also indicated that the majority of online and face-to-face teachers used text-, video-, and multimedia-based OER. More awareness-raising and encouraging activities should be taken into account to motivate teachers to use a wider range of OER in educational settings.

Furthermore, the participants of both groups agreed that training on a range of OER-based aspects should be provided. Teachers reported that they needed training regarding quality assessment, copyright issues, the establishment of OER repositories, integration of OER into teaching objectives, open pedagogy, enhancement of the quality of OER, and familiarization with OER relevant to language-teaching purposes. One serious challenge of using OER is the issue of training. Many educational directors may believe that teachers can learn how to use OER through inductive practice. When training is provided for teachers, however, they can be more confident in the use of technology, including OER. Further research should be implemented to identify what kind of training can lead to the effective use of OER in the EFL context of Iran. Experimental and longitudinal studies can complement the results of this study regarding the OER-based training needs of EFL teachers.

The present study offers several implications for EFL stakeholders. First, teacher trainers and educators of EFL can use the findings of this study and include some specific training for EFL teachers on how to include and use OER in their teaching practice. The study can also raise EFL teachers' awareness about the potential of OER to improve the quality and mechanisms of teaching and learning. Teachers could also identify what OER can be effective for EFL teaching, and course designers and curriculum developers could consider the inclusion of OER in Iran's EFL curriculum. Furthermore, material developers can encourage EFL teachers to use OER-based materials and include OER in their textbooks or supplementary materials developed for teachers and students. Periodic on-the-job training or workshops on the use of OER should also be considered for EFL teachers.

This study had some limitations. The first was that only teachers who knew about OER and used it were included in the study, reducing the sample size. The second limitation was that only teachers from one context (language-teaching institutions) were included in the study. Therefore, caution should be exercised in generalizing the results of the study in another educational context, such as universities or schools.

References

- Butcher, N. (2015). *A basic guide to open educational resources (OER)*. UNESCO and Commonwealth of Learning. <https://unesdoc.unesco.org/ark:/48223/pf0000215804>
- Dixon, E. M., & Hondo, J. (2014). Re-purposing an OER for the online language course: A case study of Deutsch Interaktiv by the Deutsche Welle. *Computer Assisted Language Learning*, 27(2), 109–121. <https://doi.org/10.1080/09588221.2013.818559>
- Fadehan, O., & Okiki, O. (2023). Awareness, attitude and ethical concerns among faculty members in Nigerian universities on open educational resources (OERs). *Open Learning: The Journal of Open, Distance and e-Learning*, 1–15. <https://doi.org/10.1080/02680513.2023.2169122>
- Garrote Jurado, R., & Pettersson, T. (2015) Attitudes and utilization of open educational resources. *Proceedings of the 8th International Conference of Education, Research and Innovation (ICERI2015), Spain*. <http://www.diva-portal.org/smash/get/diva2:878290/FULLTEXT01.pdf>
- Georgiadou, E., & Kolaxizis, I. (2019). Film students' attitude toward open educational resources (OERs) for film studies in Greece. *Education Sciences*, 9(3), 1–15. <https://doi.org/10.3390/educsci9030195>
- Hussain, I., Chandio, J. H., & Sindher, R. H. K. (2013). A study on attitude of university academia towards the use of open educational resources in higher education. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 7(2), 367–380. <https://www.econstor.eu/handle/10419/188097>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112–133. <https://doi.org/10.1177/1558689806298224>
- Kelly, H. (2014). A path analysis of educator perceptions of open educational resources using the technology acceptance model. *The International Review of Research in Open and Distributed Learning (IRRODL)*, 15(2), 26–42. <https://doi.org/10.19173/irrodl.v15i2.1715>
- Luo, T., Hostetler, K., Freeman, C., & Stefaniak, J. (2020). The power of open: Benefits, barriers, and strategies for integration of open educational resources. *Open Learning: The Journal of Open, Distance and e-Learning*, 35(2), 140–158. <https://doi.org/10.1080/02680513.2019.1677222>
- Krelja Kurelovic, E. (2016). Advantages and limitations of usage of open educational resources in small countries. *International Journal of Research in Education and Science (IJRES)*, 2(1), 136–142. <https://www.oerknowledgecloud.org/archive/5000123134-5000259500-1-PB.pdf>
- McGreal, R., Kinuthia, W., Marshall, S., & McNamara, T. (Eds.). (2013). *Open educational resources: Innovation, research and practice*. Commonwealth of Learning and Athabasca University. https://www.oerknowledgecloud.org/archive/pub_PS_OER-IRP_web.pdf

- Mishra, S., & Singh, A. (2017). Higher education faculty attitude, motivation and perception of quality and barriers towards OER in India. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 425–458). African Minds, International Development Research Centre & Research on Open Educational Resources for Development.
<http://doi.org/10.5281/zenodo.602784>
- Moradi, S., & Abdi, S. (2021). Open educational resources: A review of functional experience in the world. *Library and Information Science Research*, 11(1), 258–280.
<http://doi.org/10.22067/infosci.2021.24109.0>
- Oates, L., Goger, L. K., Hashimi, J., & Farahmand, M. (2017). An early stage impact study of localised OER in Afghanistan. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 549–573). African Minds, International Development Research Centre & Research on Open Educational Resources for Development.
<http://doi.org/10.5281/zenodo.600441>
- Pérez-Paredes, P., Ordoñana Guillamón, C., & Aguado Jiménez, P. (2018). Language teachers' perceptions on the use of OER language processing technologies in MALL. *Computer Assisted Language Learning*, 31(5-6), 522–545. <https://doi.org/10.1080/09588221.2017.1418754>
- Reed, P. (2012). Awareness, attitudes and participation of teaching staff towards the open content movement in one university. *Research in Learning Technology*, 20.
<https://doi.org/10.3402/rlt.v20i0.18520>
- Rolfe, V. (2012). Open educational resources: Staff attitudes and awareness. *Research in Learning Technology*, 20. <https://doi.org/10.3402/rlt.v20i0.14395>
- Whyte, S., Schmid, E. C., van Hazebrouck Thompson, S., & Oberhofer, M. (2014). Open educational resources for CALL teacher education: The iTILT interactive whiteboard project. *Computer Assisted Language Learning*, 27(2), 122–148. <https://doi.org/10.1080/09588221.2013.818558>
- Wiley, D., Bliss, T. J., & McEwen, M. (2014). Open educational resources: A review of the literature. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of research on educational communications and technology* (pp. 781–789). Springer.
https://link.springer.com/chapter/10.1007/978-1-4614-3185-5_63
- Wolfenden, F., Auckloo, P., Buckler, A., & Cullen, J. (2017). Teacher educators and OER in East Africa: Interrogating pedagogic change. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 251–286). African Minds, International Development Research Centre & Research on Open Educational Resources for Development.
<https://doi.org/10.5281/zenodo.600424>
- Zagdragchaa, B., & Trotter, H. (2017). Cultural-historical factors influencing OER adoption in Mongolia's higher education sector. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 389–424). African Minds, International Development Research

Centre & Research on Open Educational Resources for Development.

<https://doi.org/10.5281/zenodo.1094856>

