Self-Efficacy and Conceptions of Effective Online Teaching: Voices of Pre-Service EFL Teachers and Their Instructors

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Abstract

The purpose of this study was twofold: (a) to explore pre-service EFL teachers' conceptions and self-efficacy for effective online teaching and (b) to determine their instructors' conceptions of online teaching effectiveness and their approaches to preparing them for effective online teaching. The participants were 100 MA students of TEFL and 6 teacher educators at Iran University of Science and Technology (IUST). The data collection instrument was a questionnaire with 40 principles of effective online teaching classified into 7 categories of facilitating learning, interaction, deep learning, relationship, resources, engagement, and organization followed by two open-ended questions. A semi-structured interview was also conducted to examine teacher educators' conceptions of online teaching effectiveness. The results revealed that pre-service teachers considered themselves more self-efficacious in fostering relationship while less in maintaining organization in online English language classes. To be an effective online teacher, they also held the view that teachers need to establish a friendly atmosphere and relationship, provide useful materials, have adequate technological knowledge, give prompt feedback, and engage learners in their learning process. For teacher educators, effective online teaching was having adequate technological knowledge, providing appropriate content, establishing an online presence, successful classroom management, and having positive perceptions of online teaching.

Keywords: conceptions, effective online teaching, pre-service teachers, self-efficacy, teacher educators

1. Introduction

Online education is emerging rapidly as a popular replacement for face-to-face (F2F) education (Crawford-Ferre & Weist, 2010) and is a good opportunity for individuals for whom participation in F2F classrooms is difficult or impossible. It has also been argued that online education is a valuable method to provide suitable instruction at a minimum cost (Garbett, 2011). Some researchers (Angiello, 2010; Angiello & Natvig, 2010) have found that online instruction is more successful than traditional one. Hence, instructors and policy-makers need to think of offering effective instruction to online learners, leading to their success and higher achievement. Effective online teaching, according to Young (2006), is teaching in an online environment, which adapts to learners' preferences and needs, motivates them to do their best, gives meaningful examples, offers a valuable course, and facilitates the learning process effectively. As stated by Croxton (2014), effective online teaching can enhance students' learning, satisfaction, and achievement of outcomes. Chickering and Gamson (1987) argue that effective online teaching can encourage contacts between faculty and students in and out of online classes, provide various delivery systems, encourage active learning, and provide timely feedback on their performance.

According to Hacker and Niederhauser (2000), there are a number of learning principles for the development of effective online teaching, namely using collaborative problem-solving tasks, grounding learning by using examples, requiring learners to be actively engaged in their own learning process, motivating students, enhancing their self-efficacy, and giving prompt feedback. Young (2006) states that effective online teachers try not only to establish relationships but also to do whatever is needed to make online classrooms an effective learning environment. As stated by Abdelraheem (2003), effective online teaching encourages deep learning through question design, active engagement in knowledge construction, fostering student autonomy, and providing well-designed activities. Furthermore, effective online teaching not only promotes self-learning, but also provides an understanding of students' learning styles (Dawley, 2007). Dawley (2007) further notes that effective online teaching can enhance an open curriculum in which learners are not limited to the course and can learn from various courses, resulting in fostering autonomy.

A number of studies (e.g., Bialy & Card, 2009; Lewis & Abdul-Hamid, 2006; Salehizadeh et al., 2020; Sun & Chen, 2016; Treacy, 2007) have been conducted on principles and practices of enhancing effective online teaching, learners' viewpoints of online teaching effectiveness in higher education (Young, 2006), general categories of what successful online teachers should do to teach online effectively (Brinthaupt et al., 2011), approaches to effective online teaching (Crawford-Ferre & Wiest, 2012), and faculty perceptions of online teaching effectiveness (Frazer et al., 2017). It has been argued that despite several studies on online teaching and learning, there seems to be a lack of research on how to prepare language teachers for effective online teaching and the strategies and skills required for effective online teaching (Compton, 2009). For instance, it seems there is no study investigating pre-service EFL teachers' and teacher educators' conceptions of effective online

teaching. Accordingly, this study aimed to explore pre-service EFL teachers' self-efficacy and conceptions of effective online teaching and to investigate their instructors' conceptions and approaches to preparing them for effective online teaching. The following research questions were formulated for this research:

1. To what extent are pre-service teachers self-efficacious for effective online teaching?

2. What are pre-service EFL teachers' conceptions of effective online teaching?

3. What are EFL teacher educators' conceptions of effective online teaching?

4. What are EFL teacher educators' approaches to preparing student teachers for effective online teaching?

2. Review of the Literature

While the use of online courses is growing rapidly all around the world, the need for trained and professional online instructors is undeniable, and despite numerous similarities between online and F2F teaching, online teachers need to acquire a set of unique skills and strategies to teach well online (Treacy, 2007). The belief that a teacher good at teaching in a F2F class can teach in an online class without any difficulties is a tale (Davis & Rose, 2007; Wood, 2005). As stated by Easton (2003), online teachers need to change their perception of the time and space of the class, online organizational methods, and ways of drawing learners' attention to online communications. Moreover, Hampel and Stickler (2005) note that the skills used by online language teachers should be different from those used by traditional language teachers and even online teachers of other disciplines. According to Bailey and Card (2009), the role of an effective teacher has been changed from a teacher to a facilitator, influencing both F2F and online classes. Accordingly, a teacher as a learning facilitator is expected to establish distinct types of pedagogical skills in which the focus is on assisting learners to cooperate with each other to encourage their initiative, create personal comprehension of course content, and relate them to learning resources (Knowlton, 2000). Having studied the key skills of an effective online language teacher, Hampel and Stickler (2005) identify a pyramid of skills, ranging from lower-level ones (e.g., basic ICT skills, specific software and technical competence, and awareness of possibilities and challenges) to higher level (e.g., choice and selection, enhancing communicative competence and creativity, and online socialization). According to Berg (2002), an effective teacher should give corrective responses and inspiration, encourage students to continue the task and achieve the learning objectives. It has also been stated that effective online instructors need to provide not only learning resources, but also instructional activities (Carr-Chellman & Ducastel, 2001; Palloff & Pratt, 2003).

Numerous studies have been conducted to identify the principles for effective online teaching. It has been argued that effective online teaching includes cooperation, feedback, content, self-learning, and comprehension of learning methods, which can promote an open syllabus in which learners have the opportunity to learn from various sources and tools, such as web-based

resources, online chat, electronic presentation tools, e-mail, and whiteboard conferencing (Dawley, 2007). Dawley further notes that a successful teacher needs to enhance interactive learning and find the instrument, which is effective for each group of learners in a given course. According to Sun and Chen (2016), promoting social presence and collaboration in the online learning community are the two principles for effective online teaching. Hacker and Niederhauser (2000) suggest five learning principles for improving effective online teaching: grounding learning by using examples, using collaborative problem-solving, requiring learners to be actively engaged in their own learning process, giving appropriate feedback, and fostering motivation to enhance their self-efficacy. Lewis and Abdul-Hamid (2006) also considered four broad categories of providing feedback, fostering interaction, maintaining organization and enthusiasm, and facilitating learning as the main principles of effective online teaching. Having conducted interviews with experienced online instructors, Bailey and Card (2009) reported eight effective pedagogical principles for effective online teaching: fostering relationships, communication, engagement, technology, organization, timeliness, flexibility, and high expectations. Investigating faculties' perceptions of online teaching effectiveness, Frazer et al. (2017) found that an effective teacher is a person who aims to be connected with learners in the classroom, is approachable, is responsive to their needs, and facilitates their learning.

Online teachers need access to and training about appropriate technologies to promote effective student participation and collaboration (Gabriel & Kaulfield, 2008). Schrumm et al. (2005) note that to have an effective online course, learners' access to online environment is required to familiarize themselves with features of online courses, including learning documents and discussion forms. To address technological challenges of the course design, schrumm et al. recommend a section providing answers to the most frequent questions and developing a page on useful resources. To improve the quality of online teaching, Keengwe and Kidd (2010) argue that online teachers are required to have appropriate strategies for charting the sequence of activities, obtaining and utilizing required resources, establishing and managing, and structuring timelines.

Treacy (2007) suggests some strategies for effective online teaching: modeling good online behavior and encouraging student reflection, being flexible to meet the goals and individual learning needs of students, paying attention to online voice, guiding participants through projects and activities, providing regular and timely feedback, establishing clear expectations and deadlines from the start, listening to and learn from students, and being in regular communication with students. According to Bain (2004), another important factor for effective online teaching is stimulating intellectual development or challenging actual tasks that demand learners to struggle with new ideas and important problems, rethink beliefs, and examine intellectual models of reality.

According to Bain (2004), fostering students' engagement or establishing their effective interactions with school, content, and peers is one of the major factors of effective online teaching. Bain further states that bu; building rapport with students is related to behaviors, such as flexibility, self-directed learning, transferring practical goals and expectations, encouraging trust in students,

and communicating learning and success goals to them. Pelz (2008) itemizes what effective teachers should add to have suitable online discussions through confirming understanding, presenting contents and questions, diagnosing misperceptions, focusing the discussion, responding to technical concerns, and summarizing the discussion. Creating a community of learners to motivate them for socialization, active involvement, and cooperation are equally essential for effective online language teaching (Jones & Youngs, 2006; McLoughlin & Oliver, 1999).

Zou et al. (2021) examined university teachers' perceptions of effective EFL online teaching through questionnaires and interviews in China. The results showed that participants were satisfied with their online teaching. The findings also revealed that when teachers have more confidence, more skills and more training, they can deliver more effective online teaching and learning. In another recent study, Dolighan and Owen (2021) investigated the relationship between professional development experience, teaching experience, and teaching support with self-efficacy perceptions of teachers during the COVID-19 pandemic. They also examined teachers' self-efficacy perceptions of instructional strategies, classroom management, student engagement, and computer skills. To identify teachers' efficacy for online teaching, they administered a web-based survey to Ontario secondary teachers. The results showed that higher online teaching efficacy scores correlated with having taken online professional development sessions and online additional qualification courses. Online teaching efficacy also correlated with having previously used LMS and virtual technology supports.

Ma et al. (2021) investigated online teaching self-efficacy and its associated factors and moderators. The participants included 351 Chinese school teachers who reported their online teaching self-efficacy at the beginning and end of the COVID-19 pandemic. The results indicated that self-efficacy for online instruction did not significantly increase, while that for technology use increased significantly. The results also showed that separation of teachers from students, lack of experience in online teaching, and unsatisfactory student academic performance were found as the major associated factors. Passion burnout was also the only significant moderator for the change in online teaching self-efficacy. In another EFL context, Caner and Aydin (2021) explored the self-efficacy beliefs of 439 pre-service teachers in Turkey. The results showed that pre-service teachers had high self-efficacy in technology integration. The results also showed no difference between male and female pre-service teachers in technology integration self-efficacy.

3. Method

3.1. Participants

This study was conducted with 100 male (23%) and female (77%) MA students of TEFL at IUST. The participants ranged in age from 24 to 40, and all were native speakers of Persian, who were chosen based on convenience or opportunity sampling. Before the COVID-19 pandemic, they were studying in both F2F and online classes; however, after the pandemic, those in the F2F classes

received online instruction through Adobe Connect and LMS. In other words, all participants had the experience of online instruction for their MA courses of TEFL. They were also considered pre-service teachers because they did not have any experience with online teaching. In addition, six faculty members of IUST who were teaching MA courses of TEFL both in the traditional and online classes participated in this study. They ranged in age from 30 to 48 and were PhD holders of TEFL. It is worth noting that their experience with online teaching was more than five years, and the research area of three instructors was CALL. These three instructors already included materials on online teaching and learning in their syllabus for MA students of TEFL.

3.2. Instruments

Having reviewed the literature on online teaching effectiveness, a questionnaire on self-efficacy for effective online teaching with 40 items was developed by the researchers. The questionnaire was classified into seven dimensions of facilitating learning (10 items), fostering interaction (5 items), encouraging deep learning (3 items), fostering relationship (7 items), providing instructional resources and activities (4 items), fostering engagement and participation (8 items), and maintaining organization (3 items). The purpose of the questionnaire was to explore principles EFL student teachers considered for effective online teaching. The questionnaire was also followed by two open-ended questions on the definition and the criteria contributing to online teaching effectiveness. To familiarize with instructors' conceptions of effective online teaching, a semi-structured interview with two questions on the principles of effective online English language teaching and the methods and techniques of preparing student teachers for effective online teaching was also conducted.

3.3. Procedure

This study was conducted in the second semester of the 2020 academic year with 100 MA students of TEFL and 6 teacher educators at IUST. The researchers developed the questionnaire on self-efficacy for effective online teaching. The In the first step, having reviewed both theoretical and empirical literature on effective online teaching, the researchers identified numerous principles. However, after careful analysis and revision, 40 principles applicable to online English language classes were finalized and classified into seven dimensions. In addition, the items were scrutinized by the researchers to ensure the accuracy of the content and to avoid participants' misconceptions. After that, two open-ended questions were developed by the researchers based on the literature to further explore participants' viewpoints of effective online teaching. The questionnaire and open-ended questions were also piloted to assess their quality before using them with actual participants. Twelve MA students of TEFL completed the instruments and were asked to check them for possible problems and ambiguities. Based on the feedback received, some changes were made.

The final version of the questionnaire was designed on Google Forms, and its link was sent to the groups of TEFL students of IUST on WhatsApp. They were asked to indicate their self-efficacy for online teaching by choosing one option of 5=very much, 4=much, 3=moderate, 2=little, and 1=very little. Participants were also asked to provide comprehensive responses to the open-ended questions. The objectives of the study and how to answer the questions were explained to the participants and were assured that their responses would be kept confidential and only be used for research purposes. The main principles for ethical procedures included respecting participants' autonomy through informed consent, minimization of harm, and protecting their privacy through addressing confidentiality and anonymity. Cronbach's Alpha was computed to measure the internal consistency of pre-service teachers' responses to the questionnaire, and the reliability coefficient for the categories was estimated as facilitating learning (.836), fostering interaction (.57), encouraging deep learning (.6), fostering relationship (.70), providing instructional resources and activities (.76), fostering engagement and participation (.82), and maintaining organization (.5). The results of construct validity of the questionnaire also indicated that the Kaiser–Meyer–Olkin (KMO) coefficient of concordance was 0.790, exceeding the suggested value of 0.6 by Kaiser (1970). Additionally, the attained value of X2 in Bartlett's test of sphericity (p=.000) reached statistical significance. Principal components analysis indicated 10 components with the eigenvalues passing 1, explaining 70% of the variance. In addition, given the scree plot, seven dimensions appeared.

A semi-structured interview was also conducted with six teacher educators of IUST in May 2020 to explore their conceptions of effective online teaching and how they prepare pre-service teachers for effective online English language teaching. It is worth noting that due to the pandemic, three instructors did not accept F2F interviews, and we interviewed them via phone calls. However, the other instructors were interviewed in their office. The interview included two items and lasted about ten minutes for each instructor. Prompts, such as rephrasing and repetition were also provided to each interviewee.

3.4. Data Analysis

Descriptive statistics were computed to determine pre-service teachers' responses to the categories and items of the questionnaire on effective online teaching. In addition, content analysis was performed to identify the most frequent patterns in pre-service teachers' responses to the open-ended questions, and then the patterns were reported quantitively using percentages. Finally, theme-based analysis was performed on qualitative data obtained from teacher educators' responses to the interview questions. In other words, the most frequent themes were extracted, and some examples were provided.

4. Results

4.1. Pre-Service EFL Teachers' Self-Efficacy for Effective Online Teaching

A questionnaire with 40 items was administered to determine preservice teachers' self-efficacy for effective online teaching. Descriptive statistics of the items of the seven categories of the questionnaire are provided in Tables 1-7.

Table 1

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Facilitating Learning

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you model good online behavior and encourage students' reflection?	17.2	50.5	24.2	7.1	1	4
2. To what extent can you help learners to regulate their own learning?	12.1	50.5	27.3	9.1	1	4
3. To what extent can you provide Professionally meaningful assignments?	14.1	57.6	26.3	2	---	4
4. To what extent can you facilitate learning effectively?	15.2	54.5	26.3	4	---	4
5. To what extent can you move students toward learning goals?	24.2	54.5	18.2	3	---	4
6. To what extent can you assess students' effort and make adjustment as needed?	15.2	53.5	29.3	2	---	4
7. To what extent can you create an environment that students reason together and challenge each other?	15.2	42.4	28.3	13.1	1	4
8. To what extent can you conduct meaningful small group projects?	13.1	46.5	29.3	7.1	4	4
9. To what extent can you evaluate learning outcomes?	17.2	57.6	19.2	5.1	1	4
10. To what extent can you allow online students to have the chance of working together to create meaning and knowledge?	20.2	48.5	23.2	5.1	3	4

Table 2

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Fostering Interaction

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you be in regular communication with students and use multiple methods?	17.2	50.5	25.3	5.1	2	4
2. To what extent can you be accessible outside the class?	23.2	35.4	31.3	8.1	2	4
3. To what extent can you provide frequent, prompt, and constructive feedback?	20.2	54.5	21.2	4	---	4
4. To what extent can you share experiences?	33.3	48.5	13.1	5.1	---	4
5. To what extent can you communicate through announcement, phone calls, and emails?	28.3	39.4	20.2	11.1	1	4

As indicated in Table 1, pre-service teachers were found to be more self-efficacious for moving language learners toward learning goals (24.2%), while less self-efficacious for helping learners regulate their own learning (12%) and conducting meaningful small group projects (13.1%). Table 1 also shows that all items related to the category of facilitating learning received the same median (median=4); in other words, pre-service teachers found themselves self-efficacious for facilitating students' learning in the online English language class. The results of their perceptions of self-efficacy for fostering online interaction are presented in Table 2.

As Table 2 highlights, pre-service teachers found themselves more self-efficacious in sharing their experience with online learners, whereas they found themselves less self-efficacious in being accessible outside the class and communicating through announcements, phone calls, and e-mails. Table 2 also shows that all principles related to fostering interaction obtained the same median (Median=4). The descriptive statistics of the items of the category of the encouraging deep learning are provided in Table 3.

Table 3

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Encouraging Deep Learning

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you guide participants through projects, activities, and problems?	23.2	47.5	27.3	2	---	4
2. To what extent can you use questioning techniques rather than providing all answers?	19.2	47.5	27.3	6.1	---	4
3. To what extent can you provide the opportunity for development of critical thinking skill?	11.1	47.5	31.3	10.1	---	4

Table 3 indicates that pre-service teachers' highest capability for encouraging deep learning was related to guiding learners through projects, activities, and problems, while the lowest one was concerned with developing critical thinking skills. Table 3 also shows that the items of guiding participants through their projects and using questioning techniques received the same percentage for the options of much (47.5%) and moderate (27.3%). As also highlighted in Table 3, all items of the category of encouraging deep learning received the same median (Median=4). Descriptive statistics of the items of the category of fostering relationship are provided in Table 4.

Table 4

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Fostering Relationship

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you pay attention to online voices: be positive, personal, professional, approachable, and mindful of tone?	22.2	45.5	27.3	5.1	---	4
2. To what extent can you listen to and learn from students?	21.2	42.4	26.3	9.1	1	4
3. To what extent can you work hard to establish trusting relationships?	35.4	41.4	18.2	5.1	---	4
4. To what extent can you allow students to know their teachers?	21.2	42.4	31.3	4	1	4
5. To what extent can you describe your passion for teaching?	31.3	45.5	15.2	6.1	2	4
6. To what extent can you use emotions and informal written text to promote online friendliness?	18.2	37.4	35.4	8.1	1	4
7. To what extent can you establish mutual respect?	41.4	41.4	12.2	5.1	---	4

Given participants' self-efficacy for fostering relationships with online learners, as shown in Table 4, they found themselves more self-efficacious for establishing mutual respect and less self-

efficacious for using emotions and informal written texts to promote online friendliness. Table 4 also shows that all principles related to fostering relationship obtained the same amount of median (Median=4). The results of participants' self-efficacy for providing learning resources are given in Table 5.

Table 5

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Providing Instructional Resources and Activities

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you use chats, videos, wikis, Podcasts, and discussion forums creatively?	31.3	34.3	25.3	7.1	2	4
2. To what extent can you use technologies to create authentic and engaging content?	30.3	37.4	26.3	4	2	4
3. To what extent can you make instructional activities and learning resources available to learners?	27.3	43.4	22.2	7.1	---	4
4. To what extent can you use various technological tools to offer course materials?	17.2	52.5	25.3	5.1	---	4

Table 5 indicates that 31.3 % of the pre-service teachers chose the option of very much for using videos, chats, podcasts, wikis, and discussion forums for teaching in online English language classes, while only 17.2% of them chose this option of using various technological tools for delivering course materials. Table 5 also shows the same median (Median=4) for all items of providing online instructional resources and activities. Descriptive statistics of their self-efficacy for enhancing online learners' engagement and participation are provided in Table 6.

Table 6

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Fostering Engagement and Participation

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you increase students' interest?	31.3	43.4	20.2	3	2	4
2. To what extent can you have judicious and strategic use of humor?	27.3	33.3	31.3	8.1	---	4
3. To what extent can you promote engagement through effective student interaction with faculty, peer, and content?	14.1	47.5	31.3	7.1	---	4
4. To what extent can you see potential in every student?	24.2	46.5	21.2	5.1	3	4
5. To what extent can you encourage students to share their background and work experience?	31.3	42.4	17.2	8.1	1	4
6. To what extent can you use ice breaker tasks and activities to create a supportive atmosphere and to enhance human presence?	32.3	34.3	25.3	7.1	1	4
7. To what extent can you encourage all students, regardless of their skills and performance level?	18.2	49.5	26.3	4	2	4
8. To what extent can you respect for diverse ways of learning and talents?	20.2	48.5	22.2	8.1	1	4

Table 6 shows that with regard to pre-service teachers' self-efficacy for fostering engagement and participation, the highest level of self-efficacy was related to the use of icebreaker tasks, while the lowest level of self-efficacy was concerned with fostering engagement through effective student interaction with faculty, peer, and content. Table 6 also indicates the same amount of median for all items in this category. The descriptive statistics of participants' responses to the items of the category of self-efficacy for maintaining organization are presented in Table 7.

Table 7

Percentages (%) and Medians of Student Teachers' Self-Efficacy for Maintaining Organization

Items	Very Much	Much	Moderate	Little	Very Little	Median
1. To what extent can you establish clear expectations and deadlines from the start?	16.2	48.5	32.3	2	1	4
2. To what extent can you be flexible to meet the goals and individual learning needs of students?	20.2	42.4	32.3	5.1	---	4
3. To what extent can you be flexible with deadlines and due dates?	15.2	35.4	39.4	8.1	2	4

As highlighted in Table 7, considering the principles of maintaining organization, pre-service teachers found themselves more self-efficacious in being flexible to meet the goals and learning needs of students, while less self-efficacious in being flexible with deadlines and due dates. Table 7 also shows that all three items of this category received the same median (Median=4). The results of descriptive statistics and Pearson product-moment correlation analysis of the seven categories of the questionnaire are presented in Table 8. Before conducting the correlation analysis, the preliminary analysis was performed to explore no violation of the assumptions of linearity, normality, and homoscedasticity.

Table 8

Correlational Analysis and Descriptive Statistics of Dimensions of Self-Efficacy Survey

Categories	1	2	3	4	5	6	7	M	SD
1. Facilitating Learning	-	.553**	.705**	.636**	.565**	.736**	.697**	3.76	.52
2. Fostering Interaction		-	.384**	.548**	514**	.622**	.400**	3.85	.51
3. Encouraging Deep Learning			-	.515**	.503**	.631**	.582**	3.77	.59
4. Fostering Relationship				-	.554**	.778**	.515**	3.89	.52
5. Providing Instructional Resources and Activities					-	.695**	.411**	3.87	.69
6. Fostering Engagement and Participation						-	.597**	3.84	.60
7. Maintaining Organization							-	3.72	.44

**. $p < .01$ (2-tailed)

As indicated in Table 8, the highest mean score for pre-service teachers' self-efficacy for effective online teaching was obtained by fostering a relationship (*M*=3.89), while the lowest one was related to maintaining organization (*M*=3.72). Table 8 also shows that the participants' responses to the items of maintaining organization dimension were the most homogeneous

($SD = .44$), whereas those to the items of providing instructional resources and activities were the most heterogeneous ($SD=.69$). Table 8 also highlights strong, positive correlation between all categories of the questionnaire except for the two categories of fostering interaction and encouraging deep learning with positive, medium correlation ($r = .384$).

4.2. Pre-Service EFL Teachers' Conceptions of Effective Online Teaching

To determine student teachers' knowledge of online teaching effectiveness, two open-ended questions were used. Regarding the first question about the definition of effective online teaching, their responses were hierarchically ranked as follows: having appropriate interaction (11%), being familiar with technology (11%), engaging learners in the learning process (10%), having good relationship with learners (9%), motivating learners (7%), setting goals and expectations (7%), helping learners to enjoy learning process (6%), using interesting materials (5%), being available (4%), using group work activities (3%), giving prompt feedback (3%), boosting learners' confidence (2%), and using new online teaching methods (2%).

The second open-ended question on how to be an effective online English language teacher was asked, and participants' responses were hierarchically presented as follows: establishing a friendly atmosphere and relationship (25%), providing useful materials (19%), having adequate technological knowledge (14%), giving feedback (12%), engaging learners in their learning process (12%), setting clear goals and expectations (12%), improving instructional knowledge (11%), being available for solving learners' problems (10%), designing group work activities (9%), motivating learners (8%), being flexible (5%), and respecting learners (3%).

4.3. Teacher Educators' Conceptions of Effective Online Teaching

An interview with two questions was conducted with six teacher educators of TEFL, and the summary of their responses is provided in Table 9.

Table 9

Instructors' Conceptions of Effective Online Teaching

What are the criteria for effective online teaching?	How do you prepare pre-service teachers for effective online teaching?
Having adequate technological knowledge	Offering training sessions on online teaching
Providing appropriate online content	Teaching the art of online teaching
Establishing online presence	Preparing them to motivate learners to use online supplementary
Successful management of online class	materials and technologies
Having positive perceptions of online teaching	Teaching them techniques and strategies to engage online learners
Contextual factors	

With regard to the first interview question about the criteria for effective online teaching, teacher educators emphasized the following criteria for language teachers: having adequate technological knowledge ($n=4$), providing appropriate content for online learning $(n=3)$, establishing online presence ($n=3$), successful management of online classes ($n=2$), having positive

views of online teaching (*n*=1), and contextual factors (*n*=1). Below you can find some examples of each pattern in the instructors' responses.

Having adequate technological knowledge

"These days technology is playing a crucial role in education. Many institutions and universities tend to hold online classes. Accordingly, the need for trained online teachers is significant. In my opinion, the most important criterion for successful online teaching is having adequate technological knowledge."

"I can imagine a few features. First of all, teachers need to be tech-savvy; in other words, they should have some knowledge of technology. Some teachers are somewhat afraid of technology, and thus they would not be very successful. Additionally, online teachers need to go through continuous online professional development. Therefore, it is not that EVA stock with the particular software or particular mode of online education because these types of software emerge, and there is plenty of them around. Accordingly, mastering which one to use and when and how it is important is an ongoing professional practice that a successful online teacher needs to be geared toward."

Providing appropriate content for online learning

"Learners need appropriate content prepared for online instruction, including texts, images, videos, and community blogs where ideas can be shared. Engaging learners with adequate content is also crucial."

"An effective online teacher obviously needs to have not only knowledge of online instruction but also knowledge of the content, similar to any other form of instruction. A successful online teacher is one who is adapting his knowledge to the constraints of the mode of instruction. Additionally, there might be some flexibility and adaptation to make content more achievable to learners through online instruction, since it is a different mode of instruction."

Establishing online presence

"Obviously, for effective online teaching dynamic teachers are needed to establish an online presence other than the class or content they provide; for instance, through personal sites, Instagram pages, Telegram, and WhatsApp."

"Well, having interaction between teacher and learners is a crucial factor for effective online teaching. In F2F classes, teachers and learners have adequate interaction because they see each other. However, in online environments, the learner is alone with no interaction with peers and teachers. Therefore, the role of the teacher is very crucial to establish online interaction with learners in order to avoid their isolation."

Successful management of online class

"In online English language classes, teachers may encounter some challenging situations for which they need to use some effective strategies to manage those situations. Therefore, one aspect

of effective online teaching is familiarity with techniques and strategies for managing challenging moments of online English language classes."

Having positive views of online teaching

"The way of teaching is so crucial since online language teaching is very different from traditional one. However, the teachers' positive views about online teaching are also a very important factor."

Contextual factors

"There are some other criteria, such as contextual factors, including number of students, nature of the class, and learners' personal characteristics, which can influence the process of effective online teaching."

Regarding the second interview question about the ways teacher educators could help pre-service teachers to be an effective online teacher, teacher educators suggested the following methods and techniques: Offering training sessions on online teaching ($n=5$), teaching the art of online teaching ($n=2$), preparing them to motivate learners to use online supplementary materials and technologies ($n=2$), and teaching them the techniques and strategies to engage and motivate online learners ($n=1$). Some samples of the patterns in their responses are provided below:

Offering training sessions on online teaching

"I think teacher educators can play a significant role in preparing pre-service teachers to be effective online English language teachers. For example, some training sessions on how to teach the English language online should be offered to them in which they become familiar with the theoretical and practical principles of successful online teaching. In addition, during training courses pre-service teachers should be given an opportunity to practice online teaching and enhance their knowledge of the best practices of online teaching."

"Teacher educators play a crucial role. Experienced teacher educators can hold workshops, conferences, and seminars related to online teaching and get them to realize the significance, constraints, and principles of online teaching.

Teaching the art of online teaching

"Teacher educators should teach learners not only the act of teaching but also the art of teaching. Pre-service teachers are not robots that we can prescribe them everything. Teacher educators should raise student teachers' creativity and awareness of different situations as they should be able to have a suitable reaction to every oncoming situation or problem."

Preparing them to motivate learners to use online supplementary materials and technologies

"Teacher educators should teach pre-service teachers to use various sorts of supplementary means of learning along with online teaching, such as online quizzes, online tasks and activities, and using various applications and websites to improve language skills. Learning does not take place

online, as learning is a long-term process. In other words, we should create conditions in which language learners learn during the term and not just inside the class but outside the class as well." Teaching them the strategies to engage online learners

"Teacher educators should teach pre-service teachers various principles of online teaching. One of the most important strategies they should be educated well is learning how to keep learners alert, on track, and motivated. Because of the nature of online environment and learners' isolation, they cannot concentrate for one hour to learn the lesson. Pre-service teachers should use different strategies to help learners concentrate and be motivated."

5. Discussion

The results indicated that pre-service teachers were more self-efficacious in fostering relationship and less in maintaining organization. This might be related to the significance of building online relationship and establishing an effective class culture for learning developments, requiring various strategies based on respect, trust, and responsibility. In addition, online teaching requires organization; however, it might be difficult for some teachers to meet the goals and learning needs of all online learners and to be flexible with deadlines and due dates. For some novice teachers, managing discipline problems and challenging events of online classes would also be very difficult. These results lend support to previous studies (e.g., Bailey & Card, 2009; Lewis & Abdul-Hamid, 2006; Malmir & Mohammadi, 2018; Treacy, 2007; Yuan & Kim, 2014) in which establishing course goals and expectations was emphasized at the beginning and throughout the course as learning would be facilitated through introducing goals and objectives. The results however were in contrast with those of Caner and Aydin (2021) in which pre-service teachers had high self-efficacy for technology integration.

Pre-service teachers found themselves more self-efficacious for establishing mutual respect as teachers' proper treatment with online learners can help them feel safe, respected, and motivated to learn and create a classroom in which effective learning can take place. However, they found themselves less self-efficacious in being accessible for communication outside the class, which might be due to some reasons, such as difficulty handling their professional and personal life and their heavy workload. This finding is different from that of Young (2006), Treacy (2007), and Dawley (2007), who emphasized regular communication with learners and using phone calls and e-mails for out-of-class communication.

In defining effective online teaching, pre-service teachers highly emphasized having appropriate online interaction and being familiar with various technologies. This might be related to the fact that participants of an online course need to learn to communicate in a timely and effective manner, as having effective online communication can help them manage their thoughts, reflect on their understanding of the instructional materials, and find gaps in their reasoning. Additionally, for conducting an effective course, appropriate technologies are needed, and teachers

should be educated on how to work with various technologies to facilitate online learning. These findings substantiate those of Bailey and Card (2009), Gabriel and Kaufield (2008), Sun and Chen (2016), Treacy (2007), and Young (2006), emphasizing an enormous need for communication in online environments. For instance, Treacy (2007) argues that online teachers should be able to solve their basic technical problems and be comfortable using technology.

To be an effective online teacher, pre-service teachers also held the view that teachers need to establish a friendly atmosphere and relationship and provide useful materials. This may be due to the fact that by establishing friendly relationship with online learners, teachers can help them feel safe and self-confident and provide their maximum learning. Additionally, using appropriate teaching materials enhances online participation, simplifies difficult issues, makes interesting lessons, and provides learners with useful educational concepts. These findings are in line with those of previous researchers (e.g., Bailey & Card, 2009; Malmir & Vosooghi, 2023; Young, 2006), indicating that having all materials available to online learners from the first days, offering links to websites and other supplementary course materials, and utilizing course management tools can lead to effective online teaching.

Given the criteria for effective online teaching, teacher educators mostly emphasized having adequate technological knowledge for teaching online English language classes. This may be due to the fact that teachers need to maintain and expand their skills and knowledge of educational technologies and use learning tools, which provide the greatest benefits to online learners. In other words, teachers' technological knowledge can have a significant impact on learning outcomes and can greatly improve teachers' assessment of online learners' performance. This requires teachers to be engaged with digital tools, be more responsive to their benefits, and shape a successful digital future for online learners. This finding is similar to that of Bailey and Card (2009) and Gabriel and Kaulfield (2008) who argued that having the ability to use technology could improve the effectiveness of online classes. This finding also supports that of Dolighan and Owen (2021), who found a high relationship between online teaching efficacy and computer skills.

Teacher educators also held the view that pre-service teachers should receive adequate education on various dimensions of effective online teaching. The reason may be that pre-service teachers need to know the theories, significance, and constraints of online teaching, which is different from traditional teaching. Technology is assumed to be an important tool, which can promote success in educational programs. Hence, teachers should be helped to incorporate technologies into their teaching, indicating the necessity for offering online teacher professional development programs to help teachers in the transition to digital learning and teaching. This finding is in line with that of Hampel and Stickler (2005) and Treacy (2007) who argued that online language teachers should be familiar with skills and strategies of online teaching, which are different from those of F2F classes. Zou et al. (2021) also found that when teachers have more training and more skills, they can deliver more effective online teaching. However, as Ma et al. (2021) found,

when teachers are separate from their students and lack of experience in online teaching, they cannot deliver effective online teaching.

Considering preparing pre-service teachers for effective online teaching, teacher educators emphasized education on the art of online teaching. This might be due to the fact that apart from enhancing teachers' technological knowledge and providing real-time experiences by engaging them in online teaching projects, student teachers should be helped to create the human aspect of F2F instruction in online classes to successfully teach their students. In addition, they should receive instruction on using emotional intelligence and collaborative skills to teach online learners successfully. These results support those of Hampel and Stickler (2005), who argued that after teaching basic ICT and technical competence, teacher educators should prepare pre-service teachers for socialization, creativity, and finding their own teaching style.

6. Conclusion

The study investigated pre-service EFL teachers' conceptions and self-efficacy for effective online teaching. In addition, EFL teacher educators' conceptions and approaches to preparing pre-service teachers for effective online teaching were explored. Results showed that pre-service teachers' highest level of self-efficacy was related to fostering relationship, while the lowest one was concerned with maintaining organization. Effective online teaching for pre-service teachers was having appropriate interaction, being familiar with technology, motivating language learners, and setting goals and expectations. To be an effective online teacher, they also held the view that teachers need to establish a friendly atmosphere, provide useful materials, have adequate technological knowledge, and give prompt feedback. On the other hand, effective online teaching for teacher educators was related to having adequate technological knowledge, providing appropriate online content, establishing an online presence, successful management, and having positive views of online teaching. For preparing pre-service teachers for effective online teaching, they mostly emphasized offering training sessions, teaching the art of online teaching, using supplementary materials, and engaging learners, implying the significant role of teacher educators and institutions in providing the required education and support for pre-service teachers.

As online education is growing rapidly all around the world, teacher educators need to prepare pre-service teachers for teaching both F2F and online classes. It is crucial that they prepare pre-service teachers by offering appropriate educational courses and workshop sessions to raise their awareness of effective online teaching. For example, teacher educators need to help them become organized by teaching them the strategies and skills of running effective online classes, encouraging them to keep an up-to-date schedule and instruction, and having a certain degree of flexibility. They should also learn to promote asynchronous communication outside the class through announcements, e-mails, or social network sites and enhance their creativity to have a suitable reaction to various challenging moments of online teaching. It has been argued that teacher

educators need to raise their technological knowledge through preparatory courses and enhance their real-time experiences by engaging them in online teaching projects. Observing experienced online instructors can also help them identify the effective behavior of these instructors. Pre-service teachers themselves also need to improve their awareness of elements and principles contributing to online teaching effectiveness. Policy makers should also provide the required infrastructure to help teachers practice effective online teaching.

Given the findings, future researchers can investigate in-service teachers' self-efficacy and conceptions of effective online teaching. Other methods of data collection, including group discussion and interviews can also be used to gain more insights into pre-service teachers' views of online teaching effectiveness. Moreover, they can make observations of experienced online teachers to explore strategies and techniques they use for implementing the dimensions of facilitating learning, interaction, deep learning, relationship, resources, engagement, and organization. Other researchers can also make observations of teacher educators' online classes and determine the approaches and strategies they use to prepare pre-service teachers for effective online teaching. The impact of instruction on pre-service teachers' online teaching practice can also be investigated. Further research can be conducted comparing the principles of teaching effectiveness in F2F and online English language classes.
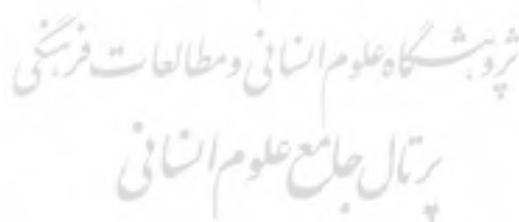
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