



# Teachers' Teaching Styles and their Beliefs about Incorporating Technology into L2 Instruction: The Case of Iranian EFL Context



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## ABSTRACT

Integration of educational technologies in second language (L2) learning and teaching has now become widespread and many researchers have attempted to investigate the different perspectives on the topic. Despite the extensive research efforts, important issues such as the relationship between teachers' teaching styles and their beliefs toward the technological use in L2 pedagogy have been overlooked. This study examines 90 Iranian EFL teachers' teaching styles and their beliefs about technology-supported L2 instruction. A mixed-methods approach, integrating two questionnaires and an interview, was employed. Results from the questionnaires suggested that Iranian EFL teachers prefer teacher-centered styles of instruction and that they hold positive attitudes toward application of technology in EFL instruction. The Pearson-Product Moment Correlation tests also revealed that there was a significant relationship between the teachers' teaching styles and their beliefs about technology integration in EFL instruction. Based on the interviews, it was concluded that most of the interviewees had positive beliefs with respect to technology integration, thus confirming the results obtained from the earlier phase of the study. The findings highlights association between teachers' teaching styles and their beliefs about technology integration in EFL education.

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## 1. Introduction

The rapid development of information and communication technology (ICT) has affected different aspects of our lives in recent years, and second language (L2) education is not an exception. As time goes on, conventional approaches to L2 instruction are challenged by innovations in technology (Nushi & Eqbali, 2017, 2018). The general findings of technology integration research support the fact that technology can provide opportunities for a powerful teaching and learning environment (Arabloo, et al., 2021; Ahmed, 2019; Ali & Bin-Hady, 2019; Enayati & Gilakjani, 2020), motivation (Kalanzadeh, et al., 2014; Stockwell, 2013; Sydorenko, et al., 2017), willingness to communicate (Moradian, 2021) and autonomy (Mutlu & Eroztugay, 2013; Rosell-Aguilar, 2018; Zarei & Hashemipour, 2015). Whitehead, et al. (2003) also pointed out that technology shows enormous potential to facilitate basic changes in teaching and learning. They argued that the use of technology improves cooperative learning, curriculum integration, and teacher communication.

While the advantages of computer technology are manifold, some barriers prevent teachers from utilizing it in their classrooms. One of the key variables affecting the integration of technology is teachers' attitudes toward technology. Several researchers have reported that the possibility of achieving technology integration is higher among teachers with positive attitudes (Chikasha, et al., 2014; Gilakjani & Leong, 2012). Gilakjani and Leong (2012) note, however, that despite their positive attitudes, the level of in-class technology use by

teachers may be little. Inan and Lowther (2010) contend that inadequate technical support is a major obstacle to technology integration in educational contexts.

Reviewing the literature in the area of teacher education reveals that teachers' teaching styles and their beliefs about technology integration have been individually explored in diverse studies (e.g., Gilakjani & Leong, 2012), particularly in mainstream education (e.g., Ngware et al., 2014). However, very rarely have there been studies to explore the relationship between these two factors. Undoubtedly, the paucity of research in this domain provides an adequate logic to consider seeking the relationship between teachers' teaching styles and their beliefs about technology. To fill this gap, this study aims at examining the relationship between Iranian English as a foreign language (EFL) teachers' teaching styles and their beliefs about technology integration in their classroom instruction.

## 2. Review of the Literature

### 2.1. Effects of Technology on Language Learning

Not so many years ago, the English teacher was the only provider of authentic English materials and the text was the only resource in an EFL environment, but with the advancement in the computer and Internet technologies, traditional approaches to language teaching and learning have been challenged or replaced by new and innovative approaches. Through using technology in EFL classrooms, the instructor can save time and transfer knowledge to the learners more easily and more effectively (Baek, et al., 2008; McClanahan, 2014).

Gilakjani and Leong (2012) asserted that the use of technologies has great potential to change existing language teaching methods. They emphasized that through using technology, learners can take control of their learning processes and have access to a vast amount of knowledge over which teachers cannot control. Guan, et al. (2018) have reviewed the advantages of computer multimedia in ELT and have shown that making use of multimedia in the classrooms make them look more interesting. They add that multimedia-assisted English teaching can motivate students to learn, optimize their class environment, improve their proficiency in listening and speaking skills, develop their ideas in the target language, and arouse their enthusiasm for communication.

Technology also assists the social aspect of using language with real speakers, which normally does not occur in the class, offering more exposure to learners and increasing the chance to exercise their responsibility to shape their own language learning (Holmes & Gardner, 2006; Lee, 2000). Given that background, it can be concluded that technology can support language acquisition and learning and, if used appropriately, contributes to more engaging and attractive classes for students (see Ahmed, 2019; Golonka, et al., 2014; Lai, Yeung & Hu, 2016).

## 2.2. Teachers' Beliefs

A previously discussed in section 1.1, several studies have given some indication as to the prominent role of technology in developing students' language proficiency, autonomy and motivation. It is not only helpful in classroom

teaching and learning, but it also provides L2 learners with opportunities for self-learning outside the classroom (Lee, Yeung & Ip, 2017; Rashid & Asghar, 2016). However, a few studies (e.g., Atai & Dashtestani, 2013; Hutchison & Reinking, 2011; Tour, 2015) have reported that language teachers have not fully integrated technology to support language instruction and curriculum; rather, their use of technology has often been shallow and limited. For instance, Fathi and Ebadi's (2020) study demonstrated that pre-service EFL teachers who took the CALL-integrated teacher training course did not feel fully prepared to implement technology confidently in their own EFL classes. In other words, what pre-service teachers learned in their CALL teacher training course did not translate into their actual implementation of technology in the classroom. One potential factor associating with teachers' limited technology use is their pedagogical beliefs. Ertmer (2005) suggested that teachers' beliefs are the most crucial factor in how the teacher use the technology.

Based on the results of previous research (e.g., Ertmer & Ottenbreit-Leftwich, 2013; Ertmer, Ottenbreit-Leftwich & Tondeur, 2015; Lin, Wang & Lin, 2012; Ravitz & Becker, 2000), teachers select applications of technology that align both with their selection of other curricular variables and methods (e.g., teaching strategies) and their existing beliefs about 'good' education. Technological devices such as computers, tablets, or interactive whiteboards do not dictate ones' pedagogical approach; rather, each device enables the implementation of a range of approaches to teaching and learning. differently put, the role technology plays in teachers' classrooms relates to their beliefs

about the nature of teaching and learning. Gilakjani and Leong (2012) also state that if any success is to be expected from integrating technology into the classroom, it is a must that negative teachers' beliefs are identified and refined as well as positive beliefs are fostered.

There are many studies that indicate teachers have positive beliefs about using Computer Assisted Language Learning (CALL) in the language classroom (e.g., Baz, 2016; Soylemez & Akayoglu, 2019). Dashtestani (2012) found that most Iranian EFL teachers perceived the use of CALL as a beneficial tool for enhancing students' motivation, autonomy, self-confidence, and learning multicultural competence. In addition, the teachers believed that technology can prove as an important, facilitative, and interactive tool in teaching EFL by maintaining that CALL facilitates access to information, professional development, use of different instructional approaches, and EFL assessment and evaluation. However, not all teachers had positive beliefs about integrating technology into their language classrooms. Some did not endorse using technology in classrooms, while others actually resist its use. Such reluctance or even resistance to using technology in classrooms might be due to doubts and low confidence. Teachers feel more secured and confident when they practice traditional instruction (Gilakjani & Leong, 2012). Nevertheless, studies that report negative beliefs are rather few, compared with those indicating positive teachers' beliefs about technology integration in language classrooms.

### 2.3. Teaching Styles

Style refers to an individual's preferred way of using his/her abilities and in this way differs from the ability. It is a very important factor in trying to account for the marked individual differences in performance shown by people as they think, learn, teach, or carry out various tasks (Fan & Ye, 2007). In Grasha's (1994) view, teaching styles represent those enduring personal qualities and behaviors that appear in the way we conduct our classes. It is both something that defines us, guides our instructional processes, and affects students and their abilities to learn. Similarly, Kazemi and Soleimani (2013) defined teaching styles as "reflections of amalgamation of teachers' theoretical assumptions and actual teaching practice" (p.194).

Grasha identified five categorizations for teaching styles that represent typical orientations and strategies teachers use in their classes:

#### **Expert**

The teacher with Expert style possesses the knowledge and expertise that students need. S/he strives to maintain status as an expert among students by displaying detailed knowledge and by challenging students to enhance their competence. The teacher is concerned with transmitting information and ensuring that students are well-prepared.

#### **Formal authority**

This teaching style is an instructor-centered approach in which teachers are responsible for providing and managing the flow of content. The 'Formal Authority' type possesses status among some students because of knowledge and role as a faculty member. The teacher is

concerned with providing positive and negative feedback, setting learning goals, expectations, and codes of conduct for students.

### **Personal Model**

This style is also an instructor-centered approach in which the instructor illustrates the skills to be learned by the students. This approach encourages the participation of students and instructors to adapt their presentations to include different learning styles. The demonstrator/personal teacher believes in teaching by personal example and establishes a prototype for how to think and behave. This teacher supervises, guides, and directs by demonstrating how to do things, motivating students to learn and then imitate the approach of instructors.

### **Facilitator**

This style is student-centered and the instructor acts as a facilitator; while the responsibility for achieving results for different activities lies with the student which will, in turn, foster both independent and collaborative learning. Usually, the teacher develops group activities that require active learning, cooperation between students and problem-solving.

### **Delegator**

It is also a student-centered approach where the instructor delegates and assigns control and responsibility for learning to students and/or groups of students. The teacher is concerned with expanding the capacity of the students to work autonomously. Students work on tasks independently or as part of autonomous teams. The Delegator style often gives students a choice in designing and implementing their

complex learning projects, while the instructor plays a consultative role.

It has been demonstrated that teaching style is an element influencing learners' achievement (Ngware, et al., 2014). The teachers' role is to facilitate communication among the learners during the set activities, to provide learners with an insight into how to become a successful and autonomous language learner by sharing his/her personal experiences of language learning and to organize resources. Therefore, the education of teachers should focus more directly on teaching styles to gain a higher level of achievement.

Teachers' teaching styles have also been shown to influence their willingness to integrate technology in their pedagogical practices (e.g., Kale & Goh, 2012; Karamustafaoğlu, Çakir & Celep, 2015). Another important factor determining the success of implementing technology in educational settings is teachers' attitudes toward technology use (Ertmer & Ottenbreit-Leftwich, 2013; see also Fives & Gill, 2015). Teachers' attitudes are considered as a major predictor of the use of new technologies in educational settings. Although teaching styles and teachers' beliefs about technology have been explored separately, very few studies have been carried out to investigate the relationship between them. The present study hopes to clarify this relationship by highlighting posing the following questions.

## **1. What are the Iranian EFL teachers' beliefs about using technology in their classroom instruction?**

2. What are the major teaching styles of Iranian English language teachers?

3. Is there a significant relationship between Iranian EFL teachers' teaching styles and their beliefs about integrating technology in their classroom instruction?

### 3. Method

#### 3.1. Design

Since the present study examined the association between teachers' teaching style and their beliefs about integrating technology, the researchers followed a correlational design in which the variables act independently. The data was collected in two phases: In the first phase, the participants took part in a survey and filled out two online questionnaires and in the second phase a random selection of the respondents were interviewed.

#### 3.2. Participants

The participants in this study were 19 male and 71 female EFL teachers working at different language institutes in Iran; they were selected through convenience sampling, which is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researchers. Table 1 presents a profile of the participants.

**Table 1.** The Participants' Demographic Information (N = 90)

Variables	Number	Percentages
<b>Gender</b>		
Male	19	21.11%
Female	71	78.88%
<b>Experience in teaching English (years)</b>		
1-4	37	41.1%
5-9	28	31.1%
10-14	12	13.3%
15-20	7	7.8%
20+	6	6.7%
<b>Learners' level of proficiency</b>		
Beginner	12	13.33%
Pre-intermediate	29	32.22%
Intermediate	30	33.33%
Upper-intermediate	14	15.55%

Advanced	5	5.5%
<b>Teachers' level of education</b>		
Bachelors' degree	50	55.55%
Masters' degree	32	35.55%
Doctorate degree	8	8.88%

### 3.3. Instruments

Three instruments were used to gather data from the participants: the first were two questionnaires comprising 64 items in total, which were administered in one Google form. The second instrument, a semi-structured interview, was used to elicit some of the participants' attitudes toward the application of CALL in EFL courses. The instruments will be discussed in more detail in the following subsections.

#### 3.3.1. Teaching Style Inventory (TSI)

The TSI is a forty-item questionnaire constructed and validated by Grasha (1996). In this questionnaire, a five-point Likert scale ranging from 1= strongly disagree to 5= strongly agree is utilized. This inventory categorizes teachers' instructional behaviors into five styles: (a) Expert, (b) Formal Authority, (c) Personal Model, (d) Facilitator and (e) Delegator. Each subsection of TSI is composed of eight questions and teachers are supposed to mark the choice that best describes their teaching

preferences (Appendix 2). The questionnaire items were found to be satisfactorily designed and suitable for the current study ( $r=0.96$ ). Furthermore, the reliability index for each section of the questionnaire was evaluated: Personal mode ( $r=0.91$ ), Formal Authority ( $r=0.86$ ), Facilitator ( $r=0.85$ ), Delegator ( $r=0.84$ ) and Expert ( $r=0.70$ ). Content validity index (e.g., simplicity, clarity, and relevance) for Expert style, Formal Authority style, Personal Model style, Facilitator style, and Delegator style was 97.1, 93.33, 97.91, 99.16 and 99.58 respectively. Content validity was calculated using content validity index (CVI) and content validity ratio (CVR) for each item, which was reported 97.4 and 68.5 respectively (Arbabisarjou, et al., 2020). The reliability estimate of the questionnaire was 0.96, revealing that this questionnaire enjoys a high level of consistency among the items.

#### 3.3.2. CALL in ELT Beliefs Questionnaire

Teachers' attitudes toward the application of CALL in ELT questionnaire is a standard questionnaire developed by Dashtestani (2012) to assess teachers' beliefs about technology in EFL courses. It is a 20-item questionnaire based on a four-point Likert scale whereby "1" means strongly disagree and "4" means strongly agree (Appendix 1). For this section of the questionnaire, we also found that the items were designed satisfactorily and suitable for the study ( $r=0.90$ ). The content validity of the questionnaire was also established by a panel of four educational technology experts.

#### 3.3.3. Interview

For the second part of the research, a semi-structured interview was designed. To design the



interview, several questions were written based on what was learned from reviewing the literature and the results of the first phase of the study (Appendix 3). The questions were then reexamined by two language experts and two content teachers to ensure their appropriateness in terms of content and language. The interviews were conducted face to face in a way to obtain valid and complete responses. To that end, the interviewer (the second author) first created a non-threatening environment to put the respondents at ease. After asking teachers to talk about their experience in EFL teaching, age, and the level of proficiency of their learners, the interviewer stated the purpose of the interview but refrained from giving too much information about the nature of the study to avoid bias.

### 3.4. Data Collection Procedure

The link to the questionnaires was sent to the participants through email and also shared in three Telegram-based ELT groups. Those EFL teachers who met the requirements of the questionnaires were invited to take part in the survey. The requirements stated that the participants had to be EFL teachers of adult learners with at least one year of teaching experience.

For the interviews, the researcher (the second author) assured the interviewees that they would remain anonymous and the information they provide would be confidential. Permission for recording the interviews was sought beforehand and the objectives of the study were explained to them briefly. The questions were mainly asked in English but the participants were asked to feel free to switch to their mother tongue in case they had difficulty

understanding the questions or conveying their thoughts. Each interview lasted between 10 to 15 minutes and all of the interactions were tape-recorded for the subsequent step, that is, the data analysis.

## 4. Results

### 4.1. Descriptive Statistics and Normality Check

Descriptive statistical analyses for teachers' beliefs about technology integration revealed that the mean scores of the 20 items ranged from 2.88 to 3.74 with standard deviations ranging from 0.51 to 0.87. To evaluate the normality of the data, skewness and kurtosis statistics were run to evaluate whether the data for each variable were normally distributed. The values for skewness were between  $-0.18$  and  $-1.47$  and the values for kurtosis were between  $-0.03$  and  $2.73$ . Apart from item 6, they were far less than the cutoff values of  $\pm 2.0$  for skewness and kurtosis respectively, revealing the univariate normality of the responses (Loewen & Plonsky, 2016).

Descriptive statistical analyses for teachers' teaching styles were also calculated. The results revealed that the mean scores of the 40 items ranged from 2.82 to 3.93 with standard deviations ranging from 0.91 to 1.39. The skewness values were between  $-0.04$  and  $-1.09$ , and the kurtosis values were between  $-0.05$  and  $-1.00$ . They were much less than the cutoff values of  $\pm 2.0$  for skewness and kurtosis that shows data are normally distributed.

#### 4.2. Research Question 1

The first research question concerned the instructors' beliefs about integrating technology in their classroom instruction. The results show that the average mean of the first part of the questionnaire was 3.33, revealing that overall, the participants had positive attitudes toward the integration of computer technology in EFL instruction (Table 2).

**Table 2.** Respondents' Beliefs about Integrating Technology in their Classroom Instruction

Items	Mean	SD
B1	3.66	.519
B2	3.16	.691
B3	3.46	.603
B4	3.35	.675
B5	3.21	.771
B6	3.74	.531
B7	3.61	.593
B8	3.35	.658
B9	3.55	.672
B10	3.38	.665

B11	3.43	.600
B12	2.88	.879
B13	3.45	.689
B14	3.06	.731
B15	3.22	.715
B16	3.05	.852
B17	3.50	.674
B18	3.12	.845
B19	3.30	.741
B20	3.26	.746
<b>Total</b>	90	

According to Table 2, the most frequent statements were item 6 (*I am willing to learn how to use computers in language teaching*) and item 1 (*technology facilitates the process of language teaching*). Moreover, the least frequently reported statements were for item 12 (*It is easy to learn how to work with computers for teachers*) and item 16 (*Computers are very effective to improve students' multi-cultural competence*).

#### 4.3. Research Question 2

The second research question was an attempt to identify the dominant teaching style among Iranian EFL teachers. The descriptive data concerning the distribution of the five teaching styles are presented in Table 3. Given the fact that the mean for all the teaching styles 3.00, it can be said that the respondents used all teaching styles moderately, with Personal Model being the most frequent teaching style and Delegator as the least frequent.

**Table 3.** A Profile of Respondents' Teaching Styles

Teaching Styles	Mean	SD
Personal Model	3.61	.964
Formal Authority	3.57	.839
Facilitator	3.49	.784
Expert	3.48	.651
Delegator	3.12	.724

The next most frequently occurring teaching styles were Formal Authority, Facilitator, and Expert. Besides, the lowest mean score belonged

to the Delegator style. One reason for the fact that Delegator was the lowest style among the participants might be related to the cultural issues in Iran. Giroux (1994) defines teaching as a social experience and expresses history, politics, power, and culture as issues affecting education. In this respect, in eastern cultures, particularly in the context of this study, teachers mostly prefer to keep the distance from their students in order not to lose control of the crowded classrooms.

The finding of the present study is in congruence with that of Elkaseh, Wong, and Fung (2014) who reported Personal Model style as the dominant teaching styles and the Delegator style as the least used one in their study. The results, however, run counter to Efilti and Çoklars' (2013) study that revealed teacher candidates adopt teaching styles of Facilitator, Delegator, Personal Model, Expert, and Formal Authority respectively.

#### 4.4. Research Question 3

Pearson-Product Moment Correlation tests were employed to investigate the relationship between Iranian EFL teachers' beliefs about integrating technologies in classrooms and their teaching styles. Results showed a significant positive relationship exists between EFL teachers' dominant teaching style and their beliefs about using technologies in their classrooms ( $r = 0.309, p < 0.01$ ).

**Table 4.** Reported Correlation between Beliefs and Teaching Styles

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		Beliefs	Teaching Styles
<b>Beliefs</b>	Pearson Correlation	1	.309**
	Sig. (2-tailed)		.003
	N	90	90
<b>Teaching Styles</b>	Pearson Correlation	.309**	1
	Sig. (2-tailed)	.003	
	N	90	90

relation is significant at the 0.01 level (2-tailed).

Table 5 shows the correlation between respondents' beliefs about using technology and different subscales of teaching styles. The results indicate that among the teaching styles, only Facilitator style ( $r = 0.37, p = 0.01$ ) was significantly associated with teachers' beliefs about technology integration. Furthermore, the

relationship between Delegator style and teachers' beliefs was considerable ( $r = 0.30, p = 0.04$ ). The results for the relationship between teaches' beliefs and the other styles are as follows: teachers' beliefs and Formal Authority style ( $r = 0.27, p = 0.009$ ), teachers' beliefs and Personal Model ( $r = 0.24, p = 0.02$ ), and teachers' beliefs and Expert style ( $r = 0.22, p = 0.03$ ).

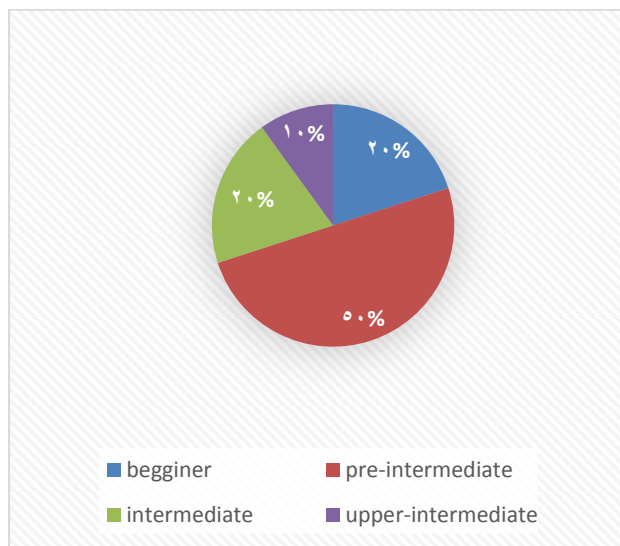
**Table 5.** Correlation between Different Teaching Styles and Beliefs

		Expert	Formal Authority	Personal Model	Facilitator	Delegator
Beliefs	Pearson Correlation	.222*	.274**	.241*	.370**	.304**
	Sig. (2-tailed)	.036	.009	.022	.000	.004

	N	90	90	90	90	90
**. Correlation is significant at the 0.01 level (2-tailed).						

#### 4.5. The Interview Analysis

Before presenting the analysis of the interview with the participants, it is worth mentioning that the interviewees were mainly TEFL teachers who were working at various English language institutes across Iran. The teachers, 2 males and 8 females, taught students of different language proficiency levels (Figure 1). They had been teaching English for a minimum of 2 years and a maximum of 6 years.



**Figure 1.** The breakdown of the proficiency levels of the learners taught by the teachers interviewed

The researchers applied Braun and Clarke's (2006) proposed Thematic Analysis Approach to analyze the data obtained through the interviews. The research started by familiarizing with the data, transcribing every interview and documenting all of the information. Then, the

data was checked again carefully to come up with the initial codes. The process involved searching for the keywords, phrases, sentences, and paragraphs that could provide a better overview of the participants' beliefs about technology integration and their teaching styles. The following themes were extracted from the interviews.

##### 4.5.1. The Role of Technology in Meeting Curricular Goals

According to the interviews, the teachers believed that technology enables them to reach their curricular goals, align with their classroom practices, and have positive experiences with technology to be more proficient and comfortable with using technology in the classroom.

Most of the interviewees had positive attitudes toward technology integration that confirms the results obtained from the questionnaire (Table 2). Those teachers who had a more positive perception of technology, a more learner-centered approach, and the belief that technology can enhance their curricular goals were more inclined to integrate in their teaching practices. To exemplify, one of the teachers said:

While teaching, to meet my curricular goals, I always take advantage of some technology devices such as mobile phones, the

Internet, ... In this way, not only do I meet my teaching goals, but also I enhance students' involvement.

There were, however, several educators who, despite having a strong belief in the importance of technology, maintained had a hard time implementing it in the classroom due to their past experiences and environmental constrictions. A female teacher explained:

I am quite a newcomer to this. It had been difficult for me to learn how to use technology in the class to meet curricular goals, but I know I have to do it.

#### 4.5.2. Factors Influencing Technology Integration

Most of the participants believed that the opportunities for using technology have to be oriented toward how to plan activities and integrate strategies that will contribute to the development of collaborative and interactive opportunities for students to use the language in a meaningful way. Some of the teachers think that institutions should work on establishing guidelines about how, when, and what to do when integrating technology-based activities. So, an important issue here is that technology or computers are not enough to keep students engaged. The type of activities, the interaction pattern, the use of language for a communicative purpose, and the authenticity of the tasks are key aspects when implementing technology-oriented classes.

The teachers were also aware of the fact that lack of familiarity (teachers' knowledge) on how to use and design (structural knowledge) more collaborative tasks using computers may prevent

them from designing activities that are more meaningful and have students use the language for real communicative purposes. They also claimed that having digital literacy is important in implementing technologies in the classroom. One of the teachers stated:

I believe that having the proper tools is very vital. It is also very essential for teachers to know how to use them and it will be very helpful if they take a course to acquire those skills that they are going to need when using technological equipment.

#### 4.5.3. Teachers' Technology Training Experience

The teachers said that although they had a course in their graduate programs that introduced basic issues regarding CALL in ELT, they did not have much hands-on experience with those technological aids. A participant explained:

As a master's student of TEFL, we had a course in CALL and we studied several articles about the role of technology in L2 teaching and how it facilitates the teaching and learning process. This course introduced some websites and applications for vocabulary learning but we did not get much of a chance to work with those tools.

Some of the teachers also complained that technology is constantly changing and the CALL training they received a few years ago was of little relevance to today's instructional context. To counter this problem, the teachers argued that they have to seek out their

opportunities for professional development through continuing education courses, professional conferences, and workshops, even though they admitted the programs and events might be rather costly. These opportunities enabled educators to collaborate with other foreign language educators. They believed discipline targeted training better-equipped teachers to integrate technology specific to their target language and culture. For example, one of them said:

Holding technology-related workshops about how to integrate technology in classrooms and talking about how technology can help us meet curricular goals and learners' needs is helpful. Although these courses may be a little costly, there are lots of teachers who are keen to learn how to use technology in their teaching but they do not have the support and opportunity to do so.

When asked about the number of workshops they have attended to acquire skills related to using technology, the majority said they had not attended any workshops. This shows that although they are aware of the significance of learning about this topic, they do not look for new opportunities to participate in courses about technology integration.

#### 4.5.4. Factors Influencing the Further Technology Integration in the Future

The participants identified several elements as essential for technology integration in their profession: a supportive school system, adequate resources, and professional development. The teachers believed school or institute administration plays a pivotal role in

establishing the educational climate for or against technology innovation within the educational systems. One of the teachers claimed:

If the school system is supportive and they provide the necessary tools for teachers or hold technology integration workshops, teachers will use more technologies in their classrooms.

School administration can take these factors into account and develop policies and take measures to promote the use of technology within their school districts, which helps them keep up-to-date with educational standards, promoting students' achievement and supporting their school personnel. In addition to the administrations' role in enabling technology usage, professional development provides training for teachers on their abilities, skills, and software for technology integration into their classrooms. Professional development enables educators to practice with technology, interact with peers, and learn new techniques. One of the teachers said:

For professional development to be successful, it needs to be continuous, ongoing, and involve follow-up and support for further learning.

#### 4.5.5. Learners' needs

Using external control over the classroom activities and learners' behavior was the recurrent theme of interview analyses. This was also among the findings of the questionnaire that showed Personal Model and Formal Authority (i.e., teacher-centered styles) were among the

most frequently adopted teaching styles (Table 3).

Most of the EFL teachers believed that they were the first and foremost agents in designing teaching activities and setting deadlines for homework and term projects. The participants also pointed out that their expectations direct teaching practices:

I guess this is the first and most important role that every teacher might play in a classroom. I try to take a controlling approach in managing my classroom and show my authority to reduce the problems.

However, two teachers stated that due to the continual development of new multimedia technology tools, the role of the teacher in the classroom has shifted and teachers have become facilitators of learning, with students taking a more active role in learning through collaboration and inquiry-based learning. One of them said:

One of the important things in the teaching process is that a teacher must be able to analyze their learners' needs and switch between teachers' point of view and students' point of view. It will be helpful to make them involved in the teaching process and make them feel that they are discovering something.

#### **4.5.6. Technologies Used by Teachers with Different Teaching Styles**

The teaching styles ranged from largely teacher-centered to largely student-centered. Teachers who had more teacher-centered pedagogical beliefs used technology more as a

reward for independent practice or learning experiences controlled by the teacher. Teachers with student-centered pedagogical beliefs used technology to support collaboration, project-based learning, critical thinking, cooperative learning, etc. Teachers with more traditional beliefs implemented technology for low-level (i.e., visual aids) use while more constructivist teachers implemented higher-level (i.e., project-based learning) uses of technology.

Most of the teachers claimed that their teaching style is a combination of student-centered and teacher-centered and is not constant. So, they used technologies that align with both types of teaching styles. The results from the questionnaire also showed that teachers used all teaching styles (i.e., Personal Model, Expert, Formal Authority, Facilitator, and Delegator) simultaneously (Table 4).

#### **4.5.7. The Relationship between Teachers' Teaching Styles and Beliefs about Technology Integration**

The results of the interview analyses showed that EFL teachers' beliefs about integrating technology were associated with their dominant teaching style. When a teacher believes that technology can improve learning, (s)he implements more technology-based activities which results in more students' participation. Therefore, the majority of classroom activities will be student-centered. This is in line with the significant correlation previously achieved between teachers' teaching styles and their beliefs about using technology in the questionnaire (Table 4).

### **5. Discussion**



Through using technology in EFL classrooms, teachers can save time and transfer knowledge to the students more easily and effectively. Gilakjani (2017) argued that using technology can create a learning atmosphere centered around the learner rather than the teacher that in turn makes positive changes. He maintains that the use of computer technology can make language classrooms an active place where true learning can be experienced and learners take responsibility for their learning.

The findings of the present study suggested that Iranian EFL teachers perceived utilization of computer technology in the EFL course as being beneficial since it facilitates the process of language learning and teaching and increases students' motivation. This finding is in line with that of Dashtestani (2012), suggesting Iranian teachers held positive attitudes toward the use of computers in EFL instruction, and identified several benefits of the use of technology in EFL instruction such as improving the quality of assessment and testing through using computers in language testing. Although Iranian EFL teachers are convinced of the usefulness of CALL, they were hindered by several obstacles in their implementation in of CALL in EFL courses (see also Dashtestani, 2012). These factors can be categorized into two groups, namely internal and external. While the former include teacher-related aspects such as teacher attitude toward computer technology and their skills and knowledge about computer technology, the latter consist of context-related influences such as technical support and computer facilities (Ertmer, 1999). Teachers should consider facilitating and inhibiting factors carefully and try to overcome the hurdles

which make them reluctant to use computer technology in the classroom.

Moreover, the results demonstrated that among teaching styles, the Personal Model and Formal Authority were the most preferred teaching styles by Iranian EFL teachers, respectively. The Facilitator, Expert, and Delegator were the subsequent styles adopted by teachers. The finding of the present study is to some extent in congruence with other research findings such as those by Elkaseh, Wong and Fung (2014) who reported Personal Model styles as the dominant teaching styles, but Delegator was the lowest used one in their study. On the other hand, the results of our study run counter to those obtained by Efilti and Çoklars' (2013) who showed that teacher candidates adopt Facilitator, Delegator, Personal Model, Expert and the Formal Authority as their teaching styles respectively.

Regarding the relationship between the ELT teachers' attitude towards technology and their related teaching styles, correlational analyses indicated that these two variables were significantly related to each other. The findings of this study also showed a significant relationship between teachers' teaching style and their beliefs about technology integration. Teachers with more teacher-centered teaching styles implemented fewer technologies to meet their curricular goals. But when a teacher believes that technology can improve learning, (s)he implements more technologies which result in more student-centered activities. This approach changes the teachers' role from the central source of authority to an informed guide as each student takes more responsibility for problem-solving and learning. In the interviews, the participants were encouraged to discuss

whether technology helped them meet curricular goals. Teachers who had a more positive attitude toward technology and the belief that technology can assist them attain their curricular goals were more willing to employ technological tools in their profession.

The results of the study are in line with those obtained by Chamorro and Rey (2013) indicating an obvious discrepancy between EFL teachers' perception of technology and the actual utilization of technology in their classes. The justification for this finding might be the existence of different types of barriers and limitations to the use of technology in EFL instruction. To remove these barriers and limitations, it is first essential EFL teachers be encouraged and motivated to make use of various types of technology in their instruction and next, EFL course designers and educational authorities should detect and overcome the barriers to technology integration into EFL courses. Moreover, to make the most benefits of technology, policymakers and course designers should pay as much attention to software as hardware. Finally, it is not enough to provide a good technological environment, but the more important issue is to train teachers to learn how to apply technology effectively in their instruction.

The findings of this study should be used to increase the awareness of both EFL teachers and policymakers at institutes to realize that many elements, encompassing teachers' teaching style and their beliefs about technology, predispose instructors to employ particular teaching styles in their English classes. Additionally, English instructors should be assisted in teacher education programs to become aware of their

teaching styles and use more student-centered activities that can generate more effective technology integration in their classrooms.

## 6. Conclusion

Given the significance of teaching styles and teachers' beliefs about using technology in a successful teaching career, this study was an attempt to examine the relationship between the two variables. Results indicated that that teachers' positive attitudes toward educational technologies makes the teachers more inclined to utilize them in language education. Gilakjani and Leong (2012) stated that for successful integration of technology into the classroom, it is essential to navigate teachers' beliefs and foster positive beliefs. Moreover, teachers' training programs should be organized to improve EFL teachers' competence, confidence, and performances in the use of computer technology in EFL instruction. Equipped with the knowledge of their dominant teaching styles and the importance of technology in language learning, teachers are expected to be in a better position to examine their practices and, thus, to make informed decisions about these important, but often neglected, areas of their teaching. This familiarity, hopefully, will assist teachers in monitoring their beliefs and adopting the most appropriate teaching style. Additionally, this knowledge allows teachers to improve students' learning processes.

The study has a number of limitations. First, the participants were selected according to convenience sampling. The study should be replicated using a larger sample size and procedures that allow a higher degree of randomization and ultimately more

generalizability. Besides, it is highly recommended that future studies confirm the findings by carrying out case studies and technology-based classroom observations that prevent researchers from relying solely on the responses of the teachers. They should also focus on other groups of EFL teachers (e.g., pre-service EFL teachers and EFL teachers working at high schools or universities) to gain deeper insights into their beliefs and teaching styles.

Finally, researchers can also investigate students' learning styles to see how they correlate with EFL teachers' teaching styles and their beliefs about using technology. This implies that the teacher needs to find ways to integrate other learning styles and be aware that taking into account the factors that affect learning is important.

## References

Ahmed, S. T. S. (2019). Chat and learn: Effectiveness of using WhatsApp as a pedagogical tool to enhance EFL learners' reading and writing skills. *International Journal of English Language and Literature Studies*, 8(2), 61-68.

Ali, J. K. M., & Bin-Hady, W. R. A. (2019). A study of EFL students' attitudes, motivation and anxiety towards WhatsApp as a language learning tool. *Arab World English Journal (AWEJ) Special Issue on CALL*, 32(5), 289-298. <https://dx.doi.org/10.24093/awej/call5.19>

Arbabisarjou, A., Akbarilakeh, M., Soroush, F., & Payandeh, A. (2020). Validation and normalization of Grasha-Riechmann teaching style inventory in faculty members of Zahedan University of Medical Sciences. *Advances*

*in Medical Education and Practice*, 11, 305-312.

<https://doi.org/10.2147/AMEP.S244313>

Arabloo, P., Hemmati, F., Rouhi, A., Khodabandeh, F. (2021). The effect of technology-aided project-based Learning on EFL learners' language proficiency and self-regulation. *Foreign Language Research Journal*, 11(2), 273-295. doi: 10.22059/jflr.2021.316780.798

Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction to research in education*. Wadsworth: Cengage Learning.

Atai, M. R., & Dashtestani, R. (2013). Iranian English for academic purposes (EAP) stakeholders' attitudes toward using the Internet in EAP courses for civil engineering students: promises and challenges. *Computer Assisted Language Learning*, 26(1), 21-38. <https://doi.org/10.1080/09588221.2011.627872>

Baek, Y., Jung, J., & Kim, B. (2008). What makes teachers use technology in the classroom? Exploring the factors affecting facilitation of technology with a Korean sample. *Computers & Education*, 50(1), 224-234. <https://doi.org/10.1016/j.compedu.2006.05.002>

Baleghizadeh, S., & Shakouri, M. (2019). Investigating the relationship between teaching styles and emotional intelligence among Iranian English instructors. *Issues in Language Teaching*, 8(1), 225-248.

Baz, E. H. (2016). Attitudes of Turkish EFL student teachers towards technology use. *Turkish Online Journal of Educational Technology*, 15(2), 1-10.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1076/call.11.2.179.5684>
- Chamorro, M. G., & Rey, L. (2013). Teachers' beliefs and the integration of technology in the EFL class. *How Journal*, 20(1), 51-72.
- Chikasha, S., Ntuli, M., Sundarjee, R., & Chikasha, J. (2014). ICT integration in teaching: An uncomfortable zone for teachers: A case of schools in Johannesburg. *Education as Change*, 18(1), 137-150. <https://doi.org/10.1080/16823206.2013.847013>
- Dashtestani, R. (2012). Barriers to the implementation of CALL in EFL courses: Iranian EFL teachers' attitudes and perspectives. *JALTCALL Journal*, 2(8), 55-70.
- Efiliti, E., & Çoklar, A. (2013). The study of the relationship between teachers' teaching styles and TPACK education competencies. *World Journal on Educational Technology*, 5(3), 348-357.
- Elkaseh, A., Wong, K. W., & Fung, C. C. (2014). The impact of teaching and learning styles on behavioral intention to use e-learning in Libyan higher education. *International Review of Contemporary Learning Research*, 3(1), 25-34. <https://doi:10.12785/IRCLR/030103>
- Enayati, F., & Gilakjani, A. P. (2020). The impact of computer assisted language learning (CALL) on improving intermediate EFL learners' vocabulary learning. *International Journal of Language Education*, 4(2), 96-112. <https://doi.org/10.26858/ijole.v4i2.10560>
- Ertmer, P. A. (1999). Addressing first-and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, 47(4), 47-61.
- Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 53(4), 25-39.
- Ertmer, P. A., & Ottenbreit-Leftwich, A. (2013). Removing obstacles to the pedagogical changes required by Jonassen's vision of authentic technology-enabled learning. *Computers & Education*, 64(1), 175-182. <https://doi.org/10.1016/j.compedu.2012.10.008>
- Ertmer, P. A., Ottenbreit-Leftwich, A., & Tondeur, J. (2015). Teacher beliefs and uses of technology to support 21st century teaching and learning. In H. R. Fives, & M. Gill (Eds.), *International handbook of research on teacher beliefs* (pp. 403-418). New York: Routledge.
- Fan, W., & Ye, S. (2007). Teaching styles among Shanghai teachers in primary and secondary schools. *Educational Psychology*, 27(2), 255-272. <https://doi:10.1080/01443410601066750>
- Fives, H., & Gill, M. G. (Eds.). (2015). *International handbook of research on teachers' beliefs*. New York: Routledge.
- Gilakjani, A. P. (2017). A review of the literature on the integration of technology into the learning and teaching of English language skills. *International Journal of English Linguistics*, 7(5), 95-106. <https://doi.org/10.5539/ijel.v7n5p95>

- Gilakjani, A. P., & Leong, L. M. (2012). EFL teachers' attitudes toward using computer technology in English language teaching. *Theory and Practice in Language Studies*, 2(3), 630-636.
- Giroux, H. A. (1994). Doing cultural studies: Youth and the challenge of pedagogy. *Harvard Educational Review*, 64(3), 278-308. <https://doi.org/10.17763/haer.64.3.u27566k67qq70564>
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105. <https://doi.org/10.1080/09588221.2012.700315>
- Grasha, A. (1996). *Teaching with style: A practical guide to enhancing learning by understanding teaching and learning styles*. Pittsburgh: Alliance Publishers.
- Guan, N., Song, J., & Li, D. (2018). On the advantages of computer multimedia aided English teaching. *Procedia Computer Science*, 131, 727-732.
- Han, W. (2009). Benefits and barriers of computer assisted language learning and teaching. *US-China Foreign Language*, 6(9), 40-43.
- Hanson, P., & Robson, R. (2004). Evaluating course management technology: A pilot study. Boulder, CO: EDUCAUSE Center for Applied Research, Research Bulletin, Issue 24. <http://www.educause.edu/library/ERB0424>
- Hew, K. F., & Brush, T. (2007). Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational Technology Research and Development*, 55(3), 223-252. <https://doi.org/10.1007/s11423-006-9022-5>
- Holmes, B., & Gardner, J. (2006). *E-learning: Concepts and practice*. London: SAGE.
- Hung, H.-T. (2014). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. <https://doi.org/10.1080/09588221.2014.967701>
- Hutchison, A., & Reinking, D. (2011). Teachers' perceptions of integrating information and communication technologies into literacy instruction: A national survey in the United States. *Reading Research Quarterly*, 46(4), 312-333. <https://doi.org/10.1002/RRQ.002>
- Inan, F. A., & Lowther, D. L. (2010). Factors affecting technology integration in K-12 classrooms: A path model. *Educational Technology Research and Development*, 58(2), 137-154. <https://doi.org/10.1007/s11423-009-9132-y>
- Kalanzadeh, G. A., Soleimani, H., & Bakhtiarvand, M. (2014). Exploring the influence of using technology on Iranian EFL students' motivation. *Procedia-Social and Behavioral Sciences*, 98, 814-823.
- Kale, U., & Goh, D. (2014). Teaching style, ICT experience and teachers' attitudes toward teaching with Web 2.0. *Education and Information Technologies*, 19(1), 41-60. <https://doi.org/10.1007/s10639-012-9210-3>

Karamustafaoğlu, S., Çakır, R., & Celep, A. (2015). Relationship between the attitudes of science teachers towards technology and their teaching styles. *Participatory Educational Research*, 2(3), 67-78. <https://doi.org/10.17275/per.15.03.2.3>

Kazemi, A., & Soleimani, N. (2013). On Iranian EFL teachers' dominant teaching styles in private language centers: Teacher-centered or student-centered? *International Journal of Language Learning and Applied Linguistics World*, 4(1), 193-202.

Lai, C., Yeung, Y., & Hu, J. (2016). University student and teacher perceptions of teacher roles in promoting autonomous language learning with technology outside the classroom. *Computer Assisted Language Learning*, 29(4), 703-723. <https://doi.org/10.1080/09588221.2015.1016441>

Lee, K. (2000). English teachers' barriers to the use of computer-assisted language learning. *The Internet TESL Journal*, 6(12), 1-7.

Lee, C., Yeung, A. S., & Ip, T. (2017). University English language learners' readiness to use computer technology for self-directed learning. *System*, 67(2), 99-110. <https://doi.org/10.1016/j.system.2017.05.001>

Lin, C. Y., Huang, C. K., & Chen, C. H. (2014). Barriers to the adoption of ICT in teaching Chinese as a foreign language in US universities. *ReCALL*, 26(1), 100-116. <https://doi.org/10.1017/S0958344013000268>

Lin, J. M. C., Wang, P. Y., & Lin, I. C. (2012). Pedagogy technology: A two-dimensional model for teachers' ICT integration. *British Journal of Educational Technology*, 43(1), 97-108.

<https://doi.org/10.1111/j.1467-8535.2010.01159.x>

Liu, S. H. (2011). Factors related to pedagogical beliefs of teachers and technology integration. *Computers & Education*, 56(4), 1012-1022. <https://doi.org/10.1016/j.compedu.2010.12.001>

Moradian, N. (2021). The potentiality of Synchronous video-based computer-mediated communication on EFL learners' inside and outside classroom willingness to communicate and intercultural competence. *Foreign Language Research Journal*, 10(4), 734-751. doi: 10.22059/jflr.2021.314929.781

Mutlu, A., Eroz-Tuga, B. (2013). The role of computer-assisted language learning (CALL) in promoting learner autonomy. *Eurasian Journal of Educational Research*, 51, 107-122. <https://eric.ed.gov/?id=ej1059921>

Ngware, M. W., Oketch, M., & Mutisya, M. (2014). Does teaching style explain differences in learner achievement in low and high performing schools in Kenya? *International Journal of Educational Development*, 36, 3-12. <https://doi.org/10.1016/j.ijedudev.2014.01.004>

Nushi, M., & Eqbali, M. H. (2017). Duolingo: A mobile application to assist second language learning. *Teaching English with Technology*, 17(1), 89-98.

Nushi, M., & Eqbali, M. H. (2018). 50Languages: A mobile language learning application. *Teaching English with Technology*, 18(1), 93-104.

Pirasteh, P. (2014). The effectiveness of computer-assisted language learning (CALL) on learning grammar by Iranian EFL learners.



*Procedia - Social and Behavioral Sciences*, 98, 1422-1427.

<https://doi.org/10.1016/j.sbspro.2014.03.561>

Rahimi, M., & Yadollahi, S. (2011). Computer anxiety and ICT integration in English classes among Iranian EFL teachers. *Procedia Computer Science*, 3(1), 203-209. <https://doi.org/10.1016/j.procs.2010.12.034>

Rashid, T., & Asghar, H. M. (2016). Technology use, self-directed learning, student engagement and academic performance: Examining the interrelations. *Computers in Human Behavior*, 63(4), 604-612. <https://doi.org/10.1016/j.chb.2016.05.084>

Ravitz, J., & Becker, H.J. (2000, April). *Evidence for computer use being related to more constructivist practices and to changes in practice in a more constructivist-compatible direction*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: A user evaluation of the busuu app. *Computer Assisted Language Learning*, 31(8), 854-881. <https://doi.org/10.1080/09588221.2018.1456465>

Soylemez, A., & Akayoglu, S. (2019). Prospective EFL teachers' perceptions of using CALL in the classroom. *Pre-Service and In-Service Teacher Education: Concepts, Methodologies, Tools, and Applications*, 17(3), 14-18.

Stockwell, G. (2013). Technology and motivation in English language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation*. *International* 533

*perspectives on English language teaching*. London: Palgrave Macmillan.

Sydorenko, T., Hsieh, C. N., Ahn, S., & Arnold, N. (2015). Foreign language learners' beliefs about CALL: The case of a U.S. Midwestern University. *CALICO Journal*, 34(2), 196-218. <https://doi.org/10.1558/cj.28226>

Teo, T., Chai, C. S., Hung, D., & Lee, C. B. (2008). Beliefs about teaching and uses of technology among pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 36(2), 163-174.

Teo, T. (2011). Factors influencing teachers' intention to use technology: Model development and test. *Computers & Education*, 57(4), 2432-2440.

Tour, E. (2015). Digital mindsets: Teachers' technology use in personal life and teaching. *Language Learning & Technology*, 19(3), 124-139.

Whitehead, B. M., Jensen, D. F. N., & Boschee, F. (2003). *Planning for technology: A guide for school administrators, technology coordinators, and curriculum leaders*. USA: Corwin Press.

Zarei, A. A., & Hashemipour, M. (2015). The effect of computer-assisted language instruction on improving EFL learners' autonomy and motivation. *Journal of Applied Linguistics*, 1(1), 40-58.

- I. **Appendix 1**
- II. **EFL teachers' attitudes toward the application of CALL (computer-assisted language learning) in EFL courses**

III. **Please respond to the questions below by using the following rating scale:**

1 = do not agree 2 = fairly agree 3 = agree 4 = strongly agree

1. Technology facilitates the process of language teaching.
2. CALL enhances students' motivation.
3. Computers should be important and available to students.
4. Technology can be easily combined with language teaching.
5. Computers save teachers' time and energy.
6. I am willing to learn how to use computers in language teaching.
7. EFL classes should be equipped with computers.
8. CALL can be used to teach different language skills and activities.
9. Technology brings variety to language teaching courses.
10. Technology gives EFL teachers different pedagogical options in their teaching.
11. Having technological knowledge is very important for language teachers.
12. It is easy to learn how to work with computers for teachers.
13. Teachers should be encouraged to use technology in their classes.

14. Using computers in EFL courses enhances students' autonomy and self-confidence.

15. Computers are very effective to improve students' multi-cultural competence.

16. Computers help teachers to assess students and provide students with appropriate feedback forms.

17. Using computers in EFL classes facilitates access to information.

18. CALL programs improve interactivity in EFL courses.

19. Practicing CALL promotes teachers' professional development.

20. Computers define new roles for language teachers.

## Appendix 2

### Teaching Style Inventory (TSI)

Please respond to the questions below by using the following rating scale:

1 = strongly disagree 2 = moderately disagree 3 = undecided 4 = moderately agree 5 = strongly agree

1. Facts, concepts, and principles are the most important things that students should acquire.
2. I set high standards for students in this class.
3. What I say and do models appropriate ways for students to think about issues in the content.



4. My teaching goals and methods address a variety of student learning styles.
5. Students typically work on course projects alone with little supervision from me.
6. Sharing my knowledge and expertise with students is very important to me.
7. I give students negative feedback when their performance is unsatisfactory.
8. Students are encouraged to emulate the example I provide.
9. I spend time consulting with students on how to improve their work on Individual and/or group projects.
10. Activities in this class encourage students to develop their own ideas about Content issues.
11. What I have to say about a topic is important for students to acquire a broader Perspective on the issues in that area.
12. Students would describe my standards and expectations as somewhat strict and rigid.
13. I typically show students how and what to do in order to master course content.
14. Small group discussions are employed to help students develop their ability to think critically.
15. Students design one of more self-directed learning experiences.
16. I want students to leave this course well prepared for further work in this area.

17. It is my responsibility to define what students must learn and how they Should learn it.
18. Examples from my personal experiences often are used to illustrate points about the material.
19. I guide students' work on course projects by asking questions, exploring options, and suggesting alternative ways to do things.
20. Developing the ability of students to think and work independently is an important goal.
21. Lecturing is a significant part of how I teach each of the class sessions.
22. I provide very clear guidelines for how I want tasks completed in this course.
23. I often show students how they can use various principles and concepts.
24. Course activities encourage students to take initiative and responsibility for their learning.
25. Students take responsibility for teaching part of the class sessions.
26. My expertise is typically used to resolve disagreements about content issues.
27. This course has very specific goals and objectives that I want to accomplish.
28. Students receive frequent verbal and/or written comments on their performance.
29. I solicit student advice about how and what to teach in this course.

30. Students set their own pace for completing independent and/or group projects.

31. Students might describe me as a “storehouse of knowledge” who dispenses the facts, principles, and concepts they need.

32. My expectations for what I want students to do in this class are clearly defined in the syllabus.

33. Eventually, many students begin to think like me about course content.

34. Students can make choices among activities in order to complete course requirements.

35. My approach to teaching is similar to a manager of a work group who delegates tasks and responsibilities to subordinates.

36. There is more material in this course than I have time available to cover it

37. My standards and expectations help students develop the discipline they need to learn

38. Students might describe me as a “coach” who works closely with someone to correct problems in how they think and behave.

39. I give students a lot of personal support and encouragement to do well in this course.

40. I assume the role of a resource person who is available to students whenever they need help.

## Appendix 3

### Interview Questions

1. Does technology help you meet curricular goals? If so, how? If not, why?

2. What do you think a language teacher needs (kind of tools); and needs to know in

IV. order to integrate technology into his or her language teaching?

3. How much technology training have you received through your education background, professional development, and continuing education courses? Have you had any follow-up support from the instructors, colleagues, or institution?

4. What do you feel will help you in the future to integrate more technology into your classroom?

5. To what extent do you take care of your learners' needs in your teaching career? How? Do you allow them to cooperate with you in material selection and teaching routines?

6. What types of (computer technologies) match your teaching style (you can be more specific and talk about (e.g., when teaching grammar or teaching speaking ...)?

7. Do you ever see any connection between your current style of teaching and your beliefs about technology integration? if yes, how is your teaching style informed by your beliefs about technology integration?

