



Attitudes of Afghan EFL Lecturers Toward Instructional Technology

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Abstract

The use of technology is an integral component in the learning and teaching of languages in the twenty-first Century. Around the globe, studies have been carried out to investigate the integration of technology in language classrooms. However, there is a lack of empirical research on this subject in Afghanistan. Therefore, the purpose of this study is to explore Afghan EFL lecturers' attitudes toward instructional technology, their actual use of instructional technology, and the challenges they face in successfully using instructional technology in EFL classrooms. This study was also conducted to examine 1) the relationship between teachers' demographic profiles and attitudes toward instructional technology; 2) the relationship between teachers' attitudes of instructional technology and their actual use in the classroom; 3) the relationship between perceived challenges and the actual use of instructional technology in the classroom. This study uses a quantitative research method in which an online survey questionnaire was sent to fifty-three Afghan EFL lecturers teaching at the Afghan public universities. The collected data was analyzed using SPSS v23. The results of the study reveal high positive attitudes but a moderate use of instructional technology by the lecturers in their classrooms. The findings also reveal significant correlation between teachers' attitudes and their use of instructional technology. Demographic factors of age, computer training experience, computer competency, and challenges in using technology were found significantly correlated to teachers' attitudes toward instructional technology.

Keywords Teachers' attitudes · Instructional technology · Challenges · EFL context

Introduction

The twenty-first century is often referred to as the golden age of technology. We are all surrounded by technology, and thus, we make use of it in all aspects of our lives, whether if it be social, economic, or education. In the educational sector, the use of technology has become fundamental. Today, one can observe different types of technologies in classrooms. These technologies include, but are not limited to, the use of computers, internet, smartphones, e-books, electronic boards, televisions, games, and others. Traditional ways of teaching and learning seem to be losing their effectiveness as teachers are faced with teaching Millennials, digital natives, who have grown up around computers, smartphones, laptops, and internet functioning as a fundamental part of their lives (Goldman and Martin 2016). The term technology itself is a general term

and has a broader scope. Therefore, this paper is only concerned with 'instructional technology' also referred to as 'educational technology' (White 2014).

Instructional technology, mainly, the World Wide Web has presented the English language teachers and students numerous advantages, possibilities, and massive amounts of materials to improve language teaching and learning. Educational or instructional technology, according to the Association for Educational Communications and Technology, AECT (2004) is 'the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological process and resources.'

In regard to the use of instructional technology in teaching and learning English language, studies suggest that teachers are the primary entities in the process, and the way they look at the utilization of instructional technology is of utmost importance. Albirini (2006) asserts that ultimately it is the teachers who need to decide how, when and how frequently they want to use technology. Likewise, Brown et al. (2001) argue that teachers' attitudes toward the use of technology are the decisive factor in the successful integration of technology in language classrooms. Brown et al. (2001) go on to explain

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that to reduce the existing ‘technology gap’ with the students experience in the school and also out of school, it is vital that the teachers be positive in the use of technology in their classes.

A number of studies around the world have been conducted to investigate the attitudes of EFL teachers toward the use of instructional technology in the language classroom (Albirini 2006; Al-Oteawi 2002; Mathews-Aydinli and Elaziz 2010). The results of those studies reveal that teachers’ use of technology in the classroom correlates to specific factors, for instance, attitudes (Albirini 2006), age and teaching experience (Russell et al. 2007), computer competency, computer anxiety, and computer interest (Yildirim 2000).

A study conducted by Albirini (2006) in Syria looked into the attitudes of EFL teachers toward using technology in English language classroom. The findings of this study revealed that teachers had positive attitudes toward using technology in education. Their attitudes were projected by computer attributes, cultural perceptions, and computer competence. In a similar study, Mathews-Aydinli and Elaziz (2010) investigated the attitudes of both students and teachers toward the use of interactive whiteboards. The results of the study revealed that the teachers and the students held positive attitudes toward the use of interactive whiteboards in language instruction. The study also found a significant correlation between teachers’ attitudes and the possible usages of this piece of technology. In Saudi Arabia, Al-Oteawi (2002) looked into the attitudes of administrators and teacher toward ICT. His study revealed that most of the teachers and administrators had negative attitudes toward the use of ICT in their institution. The study puts forward that the majority of the participants in the study stated that in schools, in terms of technology, there is no planning. They added that ICT could not be successfully incorporated while they lack a rich ICT plan to smoothen its application into the education.

Studies conducted to look into the attitudes of EFL teachers toward the use of technology also reveal specific challenges that affect teachers’ use of technology in the classrooms. For instance, Eichenold (2008) found that most teachers in the study were positive about using technology; however, there were some teachers with negative attitudes mainly due to particular challenges such as time constraints or the absence and undependability of technology, for instance, the internet. Jackson et al. (2001) in their study concluded that despite the fact that the teachers were positive about technology, they avoided the use of computers due to computer anxiety, disregard, and inaccessibility to computers. Another challenge that is often significantly correlated with the use of technology is the teachers’ competency in using computers. Albirini (2006) asserts that one of the chief barriers to efficient incorporation of technology in the language classroom is the lack of teacher training programs. The author adds that teachers need to be provided with sufficient amount of time and training to learn how to use technology in their language classrooms successfully.

To sum up, the body of research discussed above indicates that the demographic factors and potential challenges in using technology in classrooms are key factors that play an essential role in determining teachers’ attitudes of using technology. Accordingly, the current study also aims to investigate the attitudes of Afghan EFL teachers toward the use of technology, and the relationship among teachers’ demographic profiles, attitudes toward instructional technology, and challenges encountered in using technology in the classrooms.

Background of the Study

The advancements in technology have brought wonders to the people around the world. Afghanistan is one of those countries that is witnessing the beautiful innovations technology has brought. Because of poverty, insecurity, illiteracy, and lack of political stability, Afghanistan has always been an unstable country. It is a war-torn country, and according to UNESCO (2012), Afghanistan is among the least educated and most impoverished countries in the world. Throughout the years, the educational sector of the country has faced numerous challenges; however, after 2001, with the establishment of a new democracy, the country and its education sector have witnessed remarkable advancement (Noori et al. 2017; and Qasemi 2015).

In terms of integrating technology into the mainstream education system, the Afghan government has not yet shown any significant determination (Qasemi 2015). As a result, the schools and public higher education institutions are not well equipped with the essential learning and technological facilities. Though, the Ministry of Higher Education (MoHE) of Afghanistan promotes and encourages the teachers to use technology in their teachings, yet necessary efforts have not been made to provide the teachers with opportunities to develop their skills and knowledge in using technology. Therefore, due to their low competency in utilizing technology, the teachers tend not to utilize technology in their classes.

As indicated in the introduction section of this article, several studies have been conducted to investigate teachers’ attitudes toward instructional technology in English language classrooms (Albirini 2006; Al-Oteawi 2002; Mathews-Aydinli and Elaziz 2010). However, there is a lack of empirical research on the subject in the Afghan context. Therefore, this study is a small attempt to contribute to the current body of research and fill out this research gap in the Afghan context.

Purpose of the Study

The purposes of this study are: 1) to investigate the attitudes of Afghan EFL lecturers toward the use of instructional technology; 2) to explore their use of technology in teaching; 3) to examine if there is any significant correlation between the teachers’ attitudes toward technology and their demographic factors; 4) to examine if there are any significant correlations

between teachers' use of technology and the perceived challenges in using technology in classrooms.

To be more precise, this study aims to answer the following research question:

1. What are the attitudes of Afghan EFL lecturers toward instructional technology?
2. To what extent do Afghan EFL lecturers use instructional technology in their classrooms?
3. What are some of the challenges that influence Afghan EFL lecturers use of instructional technology in their classrooms?
4. Is there any significant relationship between the attitudes of Afghan EFL lecturers toward instructional technology and their demographic profiles (gender, age, educational qualifications, teaching experience, access to technology)?
5. Is there any significant relationship between teachers' competency level in using technology and their use of instructional technology in their classrooms?
6. Is there any significant relationship between teachers' attitudes and their use of instructional technology in the classrooms?
7. Is there any significant relationship between the perceived challenges and EFL lecturers' use of instructional technology?

Data Collection

The present study uses a quantitative, descriptive survey method. The questionnaire was sent to the respondents online via 'Google Forms'. Once all survey questionnaires were collected, the data was coded and using SPSS v.23 the results were analyzed using descriptive and inferential statistics. The data were analyzed in terms of mean scores and standard deviation in which the highest mean score that could be obtained is 5, indicating high positive attitudes, and the lowest mean score that could be obtained is 1, indicating high negative attitudes of the respondents.

Instrument

The study uses an adapted version of Albirini's (2006) questionnaire. The questionnaire uses a five-point Likert scale (1 = Strongly Disagree – 5 = Strongly Agree) to examine teachers' attitudes and use of technology in classrooms. Few changes were made to the questionnaire to adapt to the current objectives and context of this study. Before the questionnaire was given for data collection, to establish the validity of the instrument, the researcher consulted colleagues for constructive feedback and comments in terms of context, content, structure, and to ensure that all features of the research and its objectives were covered (Collis and Hussey 2009). Based on the data gathered, the reliability of the instrument was

computed utilizing Cronbach Alpha method and was calculated .891 which is considered satisfactory. The questionnaire encompasses four main parts: (1) Part one explores the demographic information. (2) Part two explores the attitudes of the teachers toward instructional technology. (3) Part three asks about teachers' actual use of technology in teaching. (4) Part four looks into some of the challenges encountered in using technology in the classroom.

Participants

The sample for the study is 53 Afghan EFL lecturers, currently teaching in the English departments of five different public universities. The participants were randomly selected and participated voluntarily in this study.

Data Analysis

Demographic

Table 1 below illustrates the demographic information of the respondents in this study. The table also indicates that the majority of the participants, 38 (71.7%) stated that they had had some previous computer training, while the other 15 (28.3%) stated otherwise.

Access to Computers and the Internet

The next section of the questionnaire asked the respondents to reveal their access to computers and internet at home,

Table 1 Distribution of respondents by demographic information

	Characteristics	No. of respondents	Percentage %
Gender	Male	27	50.9
	Female	26	49.1
Age	21–25	4	7.5
	26–30	29	54.7
	31–35	15	28.3
	36–40	2	3.8
	40–45 & above	3	5.7
Level of education	Bachelor	21	39.6
	Masters	32	60.4
Years of teaching experience	1–3	13	24.1
	4–8	24	45.3
	9–14	13	24.5
	15–20 & Above	3	5.7
Have you ever had any previous computer training?	Yes	38	71.7
	No	15	28.3

university office, university library, classroom, and internet cafes. The respondents were asked to choose on a five-point Likert scale in which 1 = Never and 5 = Always.

Table 2 below illustrates the respondents' access to computers and internet.

Teachers Expertise in Using Instructional Technological Tools

Table 3 presents the expertise of the respondents in utilizing some basic technological tools beneficial in language teaching. The results indicate that majority of the lectures are knowledgeable in terms of the basic technological tools listed in Table 3.

Analysis Research Question 1: Respondents' Attitudes toward Instructional Technology

Research Question 1 investigates EFL lecturers' attitudes of the instructional technology. The summary of the results are indicated in Table 4 below.

The overall mean score on a scale of 1–5 (1 = Strongly Disagree to 5 = Strongly Agree) was calculated ($M = 3.90$ & $SD = .53$). The obtained overall mean score signifies positive attitudes of the respondents toward the importance of instructional technology in learning and teaching.

Analysis Research Question 2: Respondents' Attitudes of Using Instructional Technology

Table 5 below presents respondents' attitudes of using of instructional technology in their classroom.

On a scale of (1 = Strongly Disagree to 5 = Strongly Agree), an overall mean score of $M = 3.23$ ($SD = .75$) was found signifying respondents moderate use of instructional technology in language classrooms.

Analysis Research Question 3: Perceived Challenges in Using Instructional Technology

Table 6 below displays respondents' perceptions of the potential challenges encountered in using instructional technology in the language classroom. The overall mean score for this

Table 2 Descriptive statistics: Lecturers access to computers and internet

	Mean	Std. deviation
At home	3.96	1.04
At my office in the university	3.33	1.25
University library	2.56	1.27
Classroom	2.26	1.32
Internet cafe	2.25	1.27

Table 3 Afghan EFL lecturers expertise in the using instructional technological tools

	Mean	Std. deviation
Microsoft word	3.49	1.12
Microsoft excel	2.40	1.29
Microsoft powerpoint	3.62	.97
E-mail (sending & receiving)	4.38	1.04
Internet (Browsing & searching WWW)	4.13	1.00
Overall expertise	3.60	.82

section on a scale of 1 = Strongly Disagree and 5 = Strongly Agree is ($M = 4.05$ & $SD = .97$) signifies that the respondents viewed the listed challenges significant obstacles in using instructional technology.

Analysis: Research Question 4: Relationship between Teachers' Attitudes and their Demographic Profiles

Research question 4 tends to examine if there is any significant relationship between the attitudes of respondents and their demographics (gender, age, educational qualification, teaching experience, and prior computer training). To examine this research question, independent Samples t-test and One-Way ANOVA were used.

Comparison of Respondents' Attitudes in Terms of Gender, Educational Qualification, and Prior Computer Training

Table 7 illustrates the results of independent Samples t-test comparing the mean scores for respondents' attitudes of instructional technology and demographic factors (gender, educational qualification, and prior computers training).

In terms of gender, the results indicate that there is no significant difference in the mean scores between male and female respondents ($t(51) = 1.673$, $p = .100$). Similarly, no significant difference in the mean scores was found in terms of educational qualification ($t(51) = .141$, $p = .888$).

However, the results of the *Independent Samples t-test* reveal a significant difference in the mean scores between respondents who had prior computer training and those who did not ($t(51) = 1.673$, $p = .100$).

Comparison of Respondents' Attitudes in Terms of Age and Teaching Experience

To examine the difference in attitudes toward instructional technology in terms of age and teaching experience, A One-Way ANOVA was used. Table 8 presents the results of A One-Way ANOVA.

Table 4 Respondents' attitudes of the importance of instructional technology

	Mean	Std. deviation
1. Instructional technology makes me feel comfortable	3.89	1.17
2. I enjoy using Instructional technology	4.13	.98
3. Instructional technology saves time	3.99	.94
4. I think Instructional technology makes schools a better place	4.19	.94
5. *Learning about Instructional technologies and using them is a waste of time	4.26	1.24
6. Instructional technology motivates students to do more study	3.74	.86
7. Instructional technology can enhance students learning	4.09	.77
8. Instructional technology is useful for language learning	4.15	1.03
9. Instructional technologies make my teaching task easy in the classroom	4.00	1.04
10. I think students prefer learning from teachers to learning from technology	3.08	1.25
11. I think Instructional technologies should be a priority in schools	3.89	.98
12. I think social issues can limit implementing Instructional technology	2.62	1.20
13. The use of instructional technology suits my student learning preferences and knowledge	3.40	.91
14. Technology use increases the usual teacher workload	3.06	1.15
15. Using technology makes the subject matter more interesting	4.09	.90
Overall attitudes on a scale of 1–5	3.90	.53

Regarding age, the results indicate that there is a significant difference between respondents' attitudes of instructional technology and their age factor ($f(4, 48) = 5.511$ & $p = .001$).

To gauge the nature of the differences between the age groups, Fisher's LSD post-hoc test was conducted. The test results in Table 9 below indicate that there is a statistically significant difference in attitudes toward instructional technology between the group of respondents aged between 36 and 40 and the other four age groups.

Similarly, to examine the difference in attitudes of instructional technology in regard to respondents' teaching experience, A One-Way ANOVA was conducted.

The results Table 10 above reveal that there is no significant difference in respondents' attitudes of instructional

technology in regard to their teaching experience ($f(3, 48) = 1.145$ & $p = .340$) at the ($p = .05$) level.

Analysis Research Question 5: Relationship between Teachers' Competency in Using Technology and its Use in the Classrooms

Research question 5 investigate if there is any significant correlation between the respondents' competency in using instructional technology tools and their use of instructional technology in the classrooms. To examine this research question, Pearson correlation coefficient was used.

The Pearson correlation coefficient test results in Table 11 illustrate a positive weak but significant correlation between

Table 5 Respondents' use of instructional technology

	Mean	Std. deviation
1. I use instructional technology in my classroom	3.53	1.01
2. I assign students daily or weekly computer-related tasks that support my curriculum	3.07	1.29
3. I find instructional technology to be a necessary part of classroom instruction	3.75	1.02
4. I use the internet in my class quite frequently	2.49	1.34
5. I am proficient with basic instructional technological applications (e.g. PP; WWW) and use them in my classes	3.91	1.23
6. I seek out and use activities that promote increased problem-solving and critical thinking using the classroom instructional technology(s)	3.49	1.03
7. I plan computer-related activities in my classroom that will improve my students' basic skills (e. g., speaking, listening, reading, writing)	3.36	1.32
8. I deliver lessons using instructional technology	3.85	1.08
9. Teaching with instructional technology offers real advantages over traditional methods of instruction	2.98	1.41
10. *I never make use of instructional technology tools in my class	4.13	1.02
Overall attitudes toward using IT on a scale of 1–5	3.23	.75

Table 6 Attitudes toward the perceived challenges in using instructional technology

	Mean	Std. deviation
1. Not enough computers	4.74	1.39
2. Lack of good instructional software	3.87	1.04
3. Internet access is not easily accessible	4.72	1.29
4. Lack of technical support	3.70	1.23
5. Lack of time to use instructional technology in class	3.21	1.34
Overall score on a scale of 1–5	4.05	.97

respondents’ expertise in using instructional technology tools and their use of instructional technology $r(53) = .321, p = .019$.

Additionally, to investigate how much does respondents’ use of instructional technology was predicted based on their expertise in using computers and internet, a simple linear regression was calculated. The results indicate that there is a significant regression equation ($F(1, 51) = 5.857, p = .019$), with $R^2 = .103$. Respondents predicted use of instructional technology is equal to $2.179 + .292$ (expertise in using computers & internet) when expertise is measured on a scale.

Analysis Research Question 6: Relationship between Teachers’ Attitudes and Use of Instructional Technology in Their Classrooms

Research Question 6 evaluates if there is any significant correlation between respondents’ overall use of instructional technology in classrooms and their access to computers and internet. To examine this Pearson correlation coefficient was used.

The Pearson correlation coefficient results in Table 12 below reveal a positive moderately weak but statistically significant correlation between respondents’ overall use of instructional technology in classrooms and their access to computers and internet $r(53) = .362, p = .008$.

Moreover, to predict the range to which the respondents’ use of instructional technology is predicted based on their access to computer and internet, a simple linear regression was computed. The regression results reveal that there is a significant regression equation ($F(1, 51) = 7.682, p = .008$), with $R^2 = .384$. Respondents predicted use of instructional

Table 7 Independent Samples t-test comparing respondents’ attitudes in terms of gender, educational qualification, and prior computer training

Overall attitudes		Mean	Std. deviation	t	df	Sig.
Gender	Male	3.72	.41	1.673	51	.100
	Female	3.48	.62			
Educational qualification	Bachelor	3.62	.54	.141	51	.888
	Masters	3.60	.53			
Computer training	YES	3.98	.47	1.47	51	.045
	NO	3.11	.54			

Table 8 One-Way ANOVA comparing respondents’ attitudes in terms of AGE

		Sum of squares	df	Mean square	F	Sig.
	Between groups	4.569	4	1.142	5.511	.001
Age	Within groups	9.949	48	.207		
	Total	14.518	52			

technology is equal to $1.727 + .355$ (access to computers and internet) when access is measured on a scale.

Analysis Research Question 7: Relationship between Teachers’ Use of Instructional Technology and Perceived Challenges

The last research question examines if there is any significant correlation between the perceived challenges and respondents’ use of instructional technology. To examine this question, Pearson correlation coefficient was employed.

The Pearson correlation coefficient results in Table 13 reveal a strong positive significant correlation between respondents’ attitudes of instructional technology and their actual use in the classrooms $r(53) = .569, p < .001$.

To further look into the nature of this correlation and investigate the extent to which the respondents’ use of instructional technology was predicted based on their attitudes, a simple linear regression was calculated. The results indicate that there is a significant regression equation ($F(1, 51) = 24.469, p = .000$), with $R^2 = .324$. Respondents predicted use of instructional technology is equal to $2.306 + .403$ (attitudes) when attitudes are measured on a scale.

Results and Discussions

This study was conducted to investigate Afghan EFL lecturers’ attitudes toward instructional technology in EFL classrooms. The findings of this study reveal that the teachers in this research had high positive attitudes toward instructional technology and reported a moderate use of instructional technology in their classes. The results also reveal that the positive attitudes of the teachers were significantly correlated to their

Table 9 LSD multiple comparisons: Overall attitudes of instructional technology vs AGE

(I) AGE	(J) AGE	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
					Lower bound	Upper bound
21–25	26–30	.07414	.24282	.761	-.4141	.5624
	31–35	.12333	.25619	.632	-.3918	.6384
	36–40	1.61667*	.39427	.000	.8239	2.4094
	40–45 & Above	.12778	.34771	.715	-.5713	.8269
26–30	21–25	-.07414	.24282	.761	-.5624	.4141
	31–35	.04920	.14479	.736	-.2419	.3403
	36–40	1.54253*	.33284	.000	.8733	2.2117
	40–45 & Above	.05364	.27611	.847	-.5015	.6088
31–35	21–25	-.12333	.25619	.632	-.6384	.3918
	26–30	-.04920	.14479	.736	-.3403	.2419
	36–40	1.49333*	.34271	.000	.8043	2.1824
	40–45 & Above	.00444	.28793	.988	-.5745	.5834
36–40	21–25	-1.61667*	.39427	.000	-2.4094	-.8239
	26–30	-1.54253*	.33284	.000	-2.2117	-.8733
	31–35	-1.49333*	.34271	.000	-2.1824	-.8043
	40–45 & Above	-1.48889*	.41560	.001	-2.3245	-.6533
40–45 & Above	21–25	-.12778	.34771	.715	-.8269	.5713
	26–30	-.05364	.27611	.847	-.6088	.5015
	31–35	-.00444	.28793	.988	-.5834	.5745
	36–40	1.48889*	.41560	.001	.6533	2.3245

* The mean difference is significant at the 0.05 level

actual use of common educational, technological tools in their classrooms. These findings are in line with the findings of studies conducted by Al-Zaidiyeen et al. (2010), Eichenold (2008), Yalcin et al. (2011). Their studies reported positive attitudes of the teachers toward instructional technology, and a direct significant correlation between teachers’ attitudes and actual use of technology in classrooms.

This research also intended to examine the relationship between teachers’ demographics (gender, age, educational qualification, teaching experience, and prior computer training) and their use of instructional technology. The results revealed that gender, educational qualification, and teaching experience had no significant relationship to teachers’ attitudes toward instructional technology. These findings do not support the finding of similar past research. For instance, in terms of gender, Houtz and Gupta (2001) discovered a significant difference between males and females’ attitudes toward the use

of technology. Balka and Smith (2000) asserts that males have more experience and make more use of technology, and often because of viewing technology as a masculine thing, it puts off females to benefit from technology which ultimately leads to their negative attitudes toward using technology (Culley 1988). Moreover, in terms of educational qualification, in their studies, Albirini (2006) and Isleem (2003), found significant positive correlation between teachers’ attitudes toward using technology and their educational qualifications.

However, the results of this study found a significant relationship among age, prior computer training, and teachers’ attitudes toward instructional technology. A potential reason why age influenced teachers’ attitude might be the fact that the

Table 10 One-way ANOVA comparing respondents’ attitudes in terms of teaching experience

	Sum of squares	df	Mean square	F	Sig.
Between groups	.951	3	.317	1.145	.340
Within groups	13.567	49	.277		
Total	14.518	52			

Table 11 Correlations between respondents’ expertise in using common technological tools and their actual use in the classrooms

		Overall use	Overall expertise
Overall use	Pearson correlation	1	.321*
	Sig. (2-tailed)		.019
	N	53	53
Overall expertise	Pearson correlation	.321*	1
	Sig. (2-tailed)	.019	
	N	53	53

* Correlation is significant at the 0.05 level (2-tailed)

Table 12 Pearson correlations between respondents' use of instructional technology and access to computers and internet

		Access to computers & internet	Overall use
Overall access to computers & internet	Pearson correlation	1	.362**
	Sig. (2-tailed)		.008
	N	53	53
Overall use	Pearson correlation	.362**	1
	Sig. (2-tailed)	.008	
	N	53	53

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

majority of the teacher 29 (54.7%) were individuals aged from 26 to 30. These individuals are born in the age of technology; thus, it is more likely that they would be positive about using technology in their classrooms. Similar findings are reported in Liang and Chao (2002) study as they declare that Taiwan younger teachers were the more literate in technology, and thus, more motivated in using technology in their classes. Next, the findings of this study reveal that the teachers with high level of competency in using the instructional technological tools had significantly positive attitudes towards using instructional technology comparing to those with low competencies. This is in line with the findings of Al-Oteawi (2002), Houtz and Gupta (2001), Shashaani (1997), and Woodrow (1992). According to Houtz and Gupta (2001), in general, the frequent usage of technological tools and growing different computer associated skills increases the individuals' knowledge of technology. As a result, this broadens their learning prospect which eventually leads to stimulating positive attitudes towards technology. Furthermore, Al-Oteawi (2002) found that the negative attitudes of the teachers in his study were mainly due to teachers' low competency levels in using technology.

Finally, the teachers in the study also reported specific challenges that influence their use of instructional technology in the classrooms. Challenges such as, 'Not enough computers', 'Lack of time to use instructional technology in class', and, 'Internet access is not easily accessible' were among the

Table 13 Pearson correlations between respondents' attitudes and use in the classrooms

		Attitudes	Overall use
Attitudes	Pearson correlation	1	.569**
	Sig. (2-tailed)		.000
	N	53	53
Challenges	Pearson correlation	.569**	1
	Sig. (2-tailed)	.000	
	N	53	53

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

main challenges reported by the teachers. These findings are in line with Bilbatua and Herrero de Haro (2014) study that revealed lack of time or insufficient number of academic hours and lack of computers as serious challenges hindering teachers from using technology in their instructions. They further assert that beside this the teachers also were obliged to look for suitable technology-based materials, which itself takes a lot of time. Finally, the data analysis in this study justifiably revealed a significant relationship between the perceived challenges in using technology and teachers' actual use of instructional technology in their language classrooms.

It is important to note that the current study utilizes quantitative research method and uses only a survey questionnaire to collect data. Therefore, it is recommended that for a more comprehensive study, other instruments such as interviews and class observations be conducted to get a more through picture of the use of instructional technology in Afghan EFL context.

Recommendations

This study presented an investigation of Afghan EFL teachers' attitudes of instructional technology and their actual use in the classroom. This research is a small contribution to the existing body of research regarding the use of instructional technology in language classrooms in developing countries.

Based on the findings of the current study, the following implications are proposed for a fruitful integration of technology in Afghan EFL classes.

1. The findings of the study reveal that the teachers in the study had positive attitudes toward instructional technology. However, they reported a moderate use of technology in their classes. This was mainly associated to teachers with low level competency in using technology. Therefore, it is recommended that necessary and sufficient training courses be organized, especially for low computer competency teachers.
2. Also, teachers revealed that they do not have sufficient and necessary access to computer and Internet. Therefore, it is suggested that the MoHE work on a scheme to provide teachers with sufficient access to computers in internet. As the available literature suggest that the more the teachers can access computers and internet, the more they will use them in their teachings.
3. Furthermore, it is also suggested that the teachers work on their own in order to develop their knowledge and skills in various educational technologies. Relying only on the theoretical knowledge of their major is not good enough. Therefore, they need to take part in courses and programs on educational technologies other than the rarely offered ones on campus.

Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

References

- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373–398.
- Al-Oteawi, S. M. (2002). *The perceptions of administrators and teachers in utilizing information technology in instruction, administrative work, technology planning and staff development in Saudi Arabia*. Unpublished Doctoral dissertation, Ohio University.
- Al-Zaidiyeen, N. J., Mei, L. L., & Fook, F. S. (2010). Teachers' attitudes and levels of technology use in classrooms: The case of Jordan schools. *International education studies*, 3(2), 211.
- Association for Educational Communications and Technology (AECT) (2004). *The definition of educational technology. Definition and Terminology Committee document*. Washington DC: AECT.
- Balka, E., & Smith, R. (Eds.). (2000). *Women, work and computerization: Charting a course to the future*. Boston: Kluwer Academic Publishers.
- Bilbatua, L., & Herrero de Haro, A. (2014). Teachers' attitudes towards computer-assisted language learning in Australia and Spain. *Circulo De Lingüística Aplicada a La Comunicación*, 57(57), 3–44.
- Brown, M. R., Higgins, K., & Hartley, K. (2001). Teachers and technology equity. *Teaching Exceptional Children*, 33(4), 32–39.
- Collis, J., & Hussey, R. (2009). *Business research: A practical guide for undergraduate and postgraduate students*. Basingstoke: Macmillan International Higher Education.
- Culley, L. (1988). Girls, boys and computers. *Educational Studies*, 14(1), 3–8.
- Eichenold, D. K. (2008). *Technology integration in Texas high school mathematics classes*. Doctoral dissertation, University of Houston.
- Goldman, Z. W., & Martin, M. M. (2016). Millennial students in the college classroom: Adjusting to academic entitlement. *Communication Education*, 65(3), 365–367.
- Houtz, L. E., & Gupta, U. G. (2001). Nebraska high school students' computer skills and attitudes. *Journal of Research on Computing in Education*, 33(3), 316–327.
- Isleem, M. (2003). *Relationships of selected factors and the level of computer use for instructional purposes by technology education teachers in Ohio public schools: a state wide survey*. Unpublished Doctoral dissertation, The Ohio State University.
- Jackson, L. A., Ervin, K. S., Gardner, P. D., & Schmitt, N. (2001). Gender and the internet: Women communicating and men searching. *Sex Roles*, 44(5), 363–379.
- Liang, M. T., & Chao, J. Y. (2002). Investigating into the Internet literacy of elementary and junior high school teachers in Taiwan. *World Transactions on Engineering and Technology Education*, 1(1), 129–131.
- Mathews-Aydinli, J., & Elaziz, F. (2010). Turkish students' and teachers' attitudes toward the use of interactive whiteboards in EFL classrooms. *Computer Assisted Language Learning*, 23(3), 235–252.
- Noori, A., Shafie, N. H., Mashwani, H. U., & Tareen, H. (2017). Afghan EFL lecturers' assessment practices in the classroom. *Imperial Journal of Interdisciplinary Research*, 3(10), 130–143.
- Qasemi, A. S. (2015). An investigation of English language needs of engineering undergraduates at Jawzjan University. In *Proceedings: International Conference on Language Education and Innovation*. Retrieved from <http://icsai.org/procarch/1iclei/1iclei-53.pdf>. Accessed 12 Feb 2017.
- Russell, M., O'Dwyer, L. M., Bebell, D., & Tao, W. (2007). How teachers' uses of technology vary by tenure and longevity. *Journal of Educational Computing Research*, 37(4), 393–417.
- Shashaani, L. (1997). Gender differences in computer attitudes and use among college students. *Journal of Educational Computing Research*, 16(1), 37–51.
- UNESCO (2012). From access to equality: Empowering girls and women through literacy and secondary education. *UNESCO Report*. Retrieved from <http://www.uis.unesco.org/Education/Pages/gender-education.aspx>. Accessed 24 Oct 2016.
- White, D. W. (2014). What is STEM education and why is it important. *Florida Association of Teacher Educators Journal*, 1(14), 1–9.
- Woodrow, J. E. (1992). The influence of programming training on the computer literacy and attitudes of pre-service teachers. *Journal of Research on Computing in Education*, 25(2), 200–218.
- Yalcin, S. A., Kahraman, S., & Yilmaz, Z. A. (2011). Primary school teachers of instructional technologies self-efficacy levels. *Procedia-Social and Behavioral Sciences*, 28, 499–502.
- Yildirim, S. (2000). Effects of an educational computing course on pre-service and inservice teachers: A discussion and analysis of attitudes and use. *Journal of Research on Computing in Education*, 32(4), 479–495.