

## The Interplay of EFL Teachers' Computer Literacy, Use, and Attitudes towards the Integration of ICT in EFL Classes

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### ABSTRACT

*It has not been a long time since Information and Communication Technology (ICT) and blended learning have come to their own in second/foreign language (L2) education. In recent years, the role of ICT in educational systems has changed quickly. Many countries around the world have increasingly integrated new technological tools into their educational programs to improve the quality of education, students' learning and teachers' instruction. Nonetheless, what has been more or less left out by researchers and practitioners especially those involved in L2 education is teachers' mentality, that is, how teachers tend to react to such an accelerating technological movement. Having considered the importance of ICT, this study was an attempt to investigate teachers' knowledge and use of ICT along with their attitudes towards the integration of ICT in English language classrooms. More specifically, this study probed into the relationship among EFL teachers' knowledge of, attitudes towards and use of ICT in their intra-classroom activities. To that end, 50 EFL teachers were selected to participate in the study. The instruments utilized to collect the data included a personal information form, computer attitude questionnaire, and computer literacy questionnaire. The descriptive and inferential analyses of the raw data revealed that most of the teachers have positive attitudes towards ICT. However, the results of inferential statistics showed no significant relationship between EFL teachers' knowledge and use of, and attitudes towards computer. The obtained findings are then discussed in the light of the contextual factors germane to this study. It will finally be argued that the results of this small scale study appear to be of some important pedagogical implications.*

**KEYWORDS:** Computer Literacy, ICT, teacher attitude

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### INTRODUCTION

It is argued that education has moved beyond its traditional model whose objective is to transfer knowledge to students. Instead, education has turned out to be an essential tool to face poverty and to establish a modern country (Al-Zaidiyeen, Mei & Fook, 2010) which per se testifies to the importance of educational development as a prerequisite for a country's development. As to different strategies which have come into operation for increasing the quality of education is the integration of Information and Communication Technology (ICT) in education. In recent years, the role of ICT in educational systems and more particularly in L2 education has changed quickly. Computer literacy is one of the most important variables which may change teachers' attitudes towards use and integration of ICT in education.

Nowadays, developing countries make every attempt to incorporate the most recent technological advancements into their educational systems, yet, the main problem is that they do not pay attention to teachers' attitudes towards ICT (Cavas & Karaoglan, 2009). Some teachers are not inclined to use computer which may emanate from their lack of computer literacy, competence, etc. which may lead to negative attitudes among teachers which in turn may exert negative influence on the students' learning outcomes. This per se can potentially reduce their confidence as well as the quality of education. Due to the quantity and quality of technology available in classrooms, teacher is the key to how ICTs are used. Therefore it is important that teachers are knowledgeable and have the positive attitude towards technology (Kadel, 2005). A school could have high-tech appliances, but the appropriate use of ICT will depend on the teachers themselves. It will depend on the teachers' attitudes and experiences, levels of knowledge, and the styles of teaching and learning (Thomas & Stratton, 2006). It is thus important that teachers are prepared with the knowledge that they need in order to successfully convey knowledge to students. Depending on the acceptance of ICT learning, teachers' role is the most important features in this change. According to Albirini, (2006), teachers' ability in using the technology exerts effects on teachers' attitudes toward computer technologies. Given the importance of ICT in mainstream and L2 education, this study is to

investigate the relationship between EFL teachers' computer literacy and their attitudes towards the integration of ICT in English language institutes in Iran in which, as it will be argues shortly, scant attention has been paid to ICT in education.

### RESEARCH QUESTIONS

This study aims at finding the answers to the following research questions:

- Is there any relationship between EFL teachers' computer literacy and their attitudes towards the integration of ICT?
- Is there any relationship between EFL teachers' computer literacy and their use of ICT in teaching English?
- Is there any relationship between EFL teachers' attitude towards and use of ICT in teaching English?
- From teachers' point of view, which factors are most influential in their use of computer in the classroom?

### METHODOLOGY

#### PARTICIPANTS

The study was conducted at four English language institutes in Gorgan, Iran, namely Iran National Language Institute, Fardaye Roshan, Helma and Seif). The participants of the study were 50 Iranian English teachers (47 female and 3 male). Whereas 30 teachers had BA degrees in teaching English as a foreign language (TEFL), 20 teachers had MA degrees in TEFL. Their academic majors were English language translation, English language literature and English language teaching. The participants ranged in age from 23 to 35.

#### INSTRUMENTS AND MATERIAL

To collect the data, two instruments were utilized by the researcher in this study. These instruments included Computer Literacy Questionnaire and Computer Attitude Questionnaire the details of which are as follows:

#### QUESTIONNAIRES

To assess teachers' perceived ICT literacy, computer literacy questionnaire (CLQ) (Son & Robb, & Charismiadji, 2011) was used. EFL teachers were asked to fill section one about their gender, age, job, and experiences. After that, they answered section two. Participants were requested to put a tick in the box to indicate their level of frequency of using each part and rate their computer skills. In section three, they answered to all questions about their computer knowledge. At the end, they answered section four choosing the factors that affecting their use of computer in the classroom.

To assess participants' computer attitude, computer attitude questionnaire (CAQ) for language teachers was used (Christensen & Knezek, 1996). CAQ is a Likert type questionnaire that measures teacher's attitude towards computer integration into teaching English language. Respondents were requested to circle a number to indicate whether they 1) strongly disagree, 2) disagree, 3) undecided, 4) agree or 5) strongly agree with the statement in each item.

#### FINDINGS

As mentioned, the relationship between EFL teachers' knowledge of and attitudes towards computer rests at the heart of this small scale study. Upon the conduct of the statistical analyses germane to the above-mentioned research question, the researcher came up with the idea that these two variables were not significantly correlated. The results of reported in Table 1 as follows:

**Table 1.** *Correlations between Literacy of and Attitude towards Computer*

		Total literacy	Total attitude
Spearman's rho	Total literacy	Correlation	1.000
		Coefficient	
		Sig. (2-tailed)	.0701
	Total attitude	Correlation	.056
		Coefficient	
		Sig. (2-tailed)	.0701
		N	50

As Table 1 indicates, the significance levels for both nonparametric correlation, i.e., Spearman correlation coefficient is above the cut off .05 which give evidence to the fact that these two variables are not significantly correlated and hence the null hypothesis proposed by the researcher was firmly approved.

### RELATIONSHIP BETWEEN TEACHERS' COMPUTER LITERACY AND COMPUTER USE

The second research question posed by the researcher by the outset of this study was germane to the relationship between EFL teachers' literacy and their Computer use. As Table 2 indicated both non-parametric test showed no significant relationship between the two instruments given that the coefficient value was more than .05.

**Table 2.** *Correlation between Computer Literacy and Computer Use*

		Total literacy	Total use
Spearman's rho	Total literacy	Correlation Coefficient	1.000
		Sig. (2-tailed)	.195
		N	50
	Total use	Correlation Coefficient	.195
		Sig. (2-tailed)	.174
		N	50

### RELATIONSHIP BETWEEN TEACHERS' COMPUTER ATTITUDE AND COMPUTER USE

The third research question was purported to address the relationship between EFL teachers' attitude towards computer and their use of computer. As Table 3 suggests, the result of Spearman coefficient showed no significant relationship between teachers' attitudes towards and use of computer and hence the null hypothesis was retained.

**Table 3.** *Correlation between Computer Attitude and Computer Use*

		Total use	Total attitude
Total use	Pearson Correlation	1	.010
	Sig. (2-tailed)		.948
	N	50	50
Total attitude	Pearson Correlation	.010	1
	Sig. (2-tailed)	.948	
	N	50	50

### FACTORS AFFECTING THE USE OF COMPUTER

Using Son, Rob, and Charismiadji (2002) computer literacy questionnaire (Section V), the researcher tried to investigate the factors which tend to affect teachers use of computer. Table 4 shows that the most common factors affecting their use of computers in the classroom include limited facilities (36 %), Lack of school support (26 %), Inflexible teaching methods (22 %), limited access to the Internet and limited time (18 %) (Total mean (12.6), total std. deviation (4.0759)) and least factors included lack of interest of teachers (4 %), curricular restriction (6 %), lack of computer skills of teachers (8 %).

**Table 4.** *Factors Affecting the Use of Computer*

Factors	Percent
Limited time	18
Limited access to the Internet	18
Lack of computer skills of teachers	8
Lack of interest of teachers	4
Lack of school support	26
Curricular restriction	6
Limited facilities	36
Limited knowledge of computers	16
Lack of computer skills of students	10
Lack of interest of students	0
Lack of computer-based material	10
Inflexible teaching methods	22

### DISCUSSION

As stated earlier, the results of the inferential statistical analyses of the research questions and hypotheses posed in this research gave evidence to the null hypotheses. In other words, no significant relationships were found between EFL teachers' knowledge of, attitudes towards, and use of computer. The obtained results surely are in

sharp contrast to the literature. One possible scenario could be due to the fact that although technology has proved its merits and achieved its highly appreciated position in most countries around the world, it has failed to gain acceptance among Iranian teachers. Perhaps, teachers have not yet been well informed of the advantages of using computer in the classroom by administrators. Although most of the teachers have positive attitudes towards ICT, there were no significant relationships between their attitudes and their computer literacy, between their computer literacy and their use, and between their attitudes and their use of ICT. The findings of this study are in contrast with studies done by researchers such as Albirini (2006), Mudasiru and Modupe (2011) as well as Singh and Chan (2014). They mostly contended that there is a positive relationship between teachers' computer literacy and their attitudes towards ICT, but the result of this study showed that there is no significant relationship between EFL teachers' knowledge of and attitudes towards ICT. One other scenario for such surprising findings might be due the variables which were not controlled in the present study such as teachers' anxiety, self-confidence, self-esteem, etc., all of which, as suggested by the literature, are more or less influential in teachers' overall use of and attitudes towards computer. However, needless to say that further research is needed to verify such a scenario.

### CONCLUSION

Regarding to research question 1, 2 and 3, the findings showed that there was no significant relationship between EFL teachers' computer literacy and their attitudes, between their computer literacy and their computer use and between teachers' computer attitude and computer use. In other words, these three variables were not significantly correlated. Therefore, by this research, all of the null hypotheses were confirmed. Moreover, the results of this small scale study showed that most of the teachers responded limited facilities, lack of school support, and inflexible teaching method affect using of computer.

### IMPLICATIONS

In this study, the relationship between attitudes towards the integration of ICT, computer use, and computer literacy of Iranians EFL teachers was investigated. The results of this study showed that the variables under investigation were not statistically correlated. This might be an alarming finding which surely needs to be more investigated in the future to see if similar results will be gained. However, the descriptive analysis of the data showed some patterns germane to teachers' use of computer and more specially applications which surely can bring about some deeper insights into the status of ICT integration into education on the part of Iranian EFL teachers. Therefore it appears that administrators need to take some immediate actions to increase teachers' awareness of the advantages of using computer for educational purposes. This can be somehow reflected in both pre-service and in-service teacher education and development programs.

Conflict of interest

The authors declare no conflict of interest.

### REFERENCES

- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: the case of Syrian EFL teachers. *Computers & Education*, 47(4), 373-398.
- Al-Zaidiyeen, N., Mei, L., & Fook, F. (2010). Teachers' attitudes and the levels of technology use in classrooms: The case of Jordan classrooms. *International Education Studies*, 3 (2), 211- 218.
- Cavas, B., & Karaoglan, B. (2009). A study on science teachers' attitude toward information and communication technologies in education. *The Turkish Online Journal of Educational Technology*, 8 (2), 20-32.
- Christensen, R., & Knezek, G. (1996). *Constructing the teachers' attitudes toward computers (TAC) questionnaire*. Paper presented to the Southwest Educational Research Association Annual Conference, New Orleans, Louisiana, January, 1996.
- Kadel, R., (2005). How teacher attitudes affect technology. *Learning and Leading with Technology*, 39 (5): 34-47.
- Mudasiru, Y., & Modupe, B. (2011). Student-teachers' competence and attitude towards information and communication technology: A case study in a Nigerian University, 2 (1), 18-36.
- Singh, T., & Chan, S. (2014). Teacher readiness on integration in teaching-learning: a Malaysian study. *International Journal of Asian Social Science*, 4(7), 874-885.
- Son, J., Robb, T., & Charismiadi, I. (2011). Computer literacy and competency: A Survey of Indonesian Teachers of English as a Foreign Language. *CALL-EJ*, 12(1), 26-42.
- Thomas, A., & Stratton. G. (2006). What we are really doing with ICT in physical education: A national audit of equipment, use, teacher attitudes, support, and training. *British Journal of Educational Technology*, 37(4): 617-632.