

Explicating the Situated Nature of Teachers' Attitudes Toward Technology-Assisted Language Teaching

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Abstract

The use of computer-based technologies has been dominating the shape of the latest reforms in the field of education as well as other fields. To comply with the changes in this transformation, teachers need to develop and/or adopt new teaching approaches, methodologies, and strategies. One of the factors influencing the success of implementing technology assisted teaching is teachers' attitudes. In this respect, this study aims to determine the stages that English Language teachers experience in such transformation and the factors influencing their attitudes towards technology-assisted teaching during this process. The data for the study were collected from 36 teachers at School of Foreign Languages at Cukurova University via "Attitudes Towards Computer Technology" Questionnaire adapted from Albirini (2006) and analyzed using Statistical Package for Social Sciences (SPSS). The results indicate significant correlations between teachers' attitudes and their computer perceptions. The overall findings implicate that an implementation of a technology-assisted teaching requires taking into account the factors specific to the application situation.

Key Words: Teacher Attitudes, Situated Learning, Blended Language Teaching, Technology-assisted Teaching.

1. Introduction

The past few decades have witnessed a sharp increase in efforts to adapt technology enhanced teaching and learning by curriculum planners, educators, teachers, and students. This adaptation process has been comprehensively supported and guided by research conducted in various fields. Foreign language teaching is one of the fields which is claimed to be more efficient when conducted creating technology supported environments (e.g. Blasszauer, 2001; Brandl, 2002; Weininger & Shield, 2003). Many aspects of teaching English as a foreign language, in particular, has been found to be more fruitful if supported by blended approach, where technology based tools such as the internet or CD-ROMs are integrated to face-to-face classroom teaching (e.g. Abrams, 2002; Al-Jarf, 2004). The studies show that the use of technology in foreign language teaching and learning contexts leads to improved reading comprehension (Lunde, 1990), affects writing skills positively (Knight, 1994; LeLoup, 1997; Hertel, 2003; Yang & Chen, 2007), increases confidence in speaking (Sanaoui & Lapkin, 1992; Beauvois, 1994), provides equal opportunity to all learners (Everett & Ahern, 1994; Pratt & Sullivan, 1994; Ortega, 1997; Warschauer, 2000),

suits individual differences (Chun and Payne, 2004), and provides effective feedback to individual learners (Chapelle, 2004).

However, many researchers have pointed out to the fact that the implementation of a technology should be viewed at the institutional level as a phenomenon in interaction with various factors, and thus, is a situated process (Orlikowski, 2000, Hogarty, Lang, Kromrey, 2003). As Orlikowski (2000) puts it, “people enact different technologies in-practice with the same type of technology across various contexts and practices. Their responses were influenced by various technological visions, skills, fears, opportunities, particular institutional contexts, shaped by a diversity of intentions and practices to collaborate, solve problems, preserve status, improve efficiency, support work processes, learn and improvise” (p. 420). These responses are not readily given within the technological instrument, but derive from situated interactions with it. To be able to determine the institutional, interpretive, and technological conditions influencing such a situated process, Orlikowski (2000) has proposed to enact a “practice lens”. He explains it as:

A practice lens assumes that people are purposive, knowledgeable, adaptive, and inventive agents who engage with technology in a multiplicity of ways to accomplish various and dynamic ends. When the technology doesn't help them achieve those ends, they abandon it or work around it, or change it, or think about changing their ends. A practice lens thus recognizes that users may always choose to do otherwise, and any typology of enactment types and technologies-in-practice must always remain an open set, as users will continue to modify their technologies and continue to change their uses of technology over time (p.423).

As the agents to implement the new and fast changing technology-assisted teaching approach, teachers are strongly encouraged to adopt it by the administrators and educators across the world. Since any change within classrooms is mainly determined by teachers, they have to become efficient agents in the implementation of any innovation (Albirini, 2006). The main motive in developing theories and approaches to teacher training has been to achieve some type of change in teachers' teaching applications. Whichever the approach is, this change is very complex and multifaceted (Lasley, 1980; Freeman, 1989; Vonk, 1991; Pajares, 1992; Hall, 2005); and it comprises many things including knowledge, beliefs, attitudes, understanding, self-awareness, and teaching practices (Richards, Gallo, and Renadya, 1999). In line with the situated approach that Hogarty et al (2003) maintain, Hashweh (2003) explains teacher change using components from cognitive psychology and social constructivist approach to learning. Accordingly, in order to carry out reforms in education, teachers may undergo three possible changes. He refers to the first one as '*accommodative change*' which occurs when teachers become aware of implicit ideas and subsequently examine them, which eventually leads to constructing alternative knowledge, beliefs, and practices in any attempt to resolve the conflicts between the already known set of ideas and/or beliefs and the new.

In case one or more of these conditions are not met, teachers may come up with the second type of change, namely '*transitional*' where they may still have unresolved conflicts between their previous and the new ideas. The final type of change is '*conservative*', the case in which teachers may change only some ideas or act to preserve prior ideas and practices. For him, these three types of change can be

experienced by the same teacher at different times because the change is determined by the interaction between the individual and the conditions of any specific situation rather than by the factors outside the individual. In his study, Hashweh (2003) focuses on the importance of accommodative learning and describes such learning as a conceptual change process where cognitive reorganization is needed “to resolve conflict or dissonance between a prior ‘conceptual ecology’ and practices on one hand; and new concepts, beliefs, dispositions, and practices on the other hand” (p.423).

Determining the stages that teachers experience in such transformation and finding effective ways to assist and encourage teachers for any desired change to occur have been crucial for institutions. In any given academic setting, one of the factors influencing the success of implementing technology assisted teaching is teachers’ attitudes (Lawton and Gerschner, 1982). Rogers’ Innovation Decision Process theory, for instance, emphasizes the importance of teachers’ attitudes in explaining the stages in the adaptation of an innovation process. According to him, there are five stages: knowledge, persuasion, decision, implementation, and confirmation. As Rogers (1995) puts it, “the innovation-decision process is the process through which an individual (or other decision-making unit) passes (1) from first knowledge of an innovation, (2) to forming an attitude toward the innovation, (3) to a decision to adopt or reject, (4) to implementation of the new idea, and (5) to confirmation of this decision” (p.161).

The term attitude is referred to as “a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object” (Sooknanan, Melkote, and Skinner, 2002, p.561). It is a set of beliefs, feelings, thoughts, or behaviors towards an object or a situation (Brown, 1994). They relate to how individual feels (affective), believes (cognitive), and does (behavioral). The study refers to each of these three domains separately when considering attitudes.

The studies conducted to find out the correlation between teachers’ attitudes toward computer use and the classroom outcome have shown strong relationships between the two variables (e.g. Kersaint, Lewis, Potter, and Meisels, 2003; Bullock, 2004). As a result of the study conducted by Okan and Şeker (2010) to determine teachers’ attitudes toward using technology in language classes showed that teachers’ attitudes previous to using technology in their teaching were highly positive. However, a deeper look into their beliefs indicated that their initial perspective regarding the use of technology in language classes was limited. Although at the end of the term, after one-year of blended teaching experience, they gained new insights in terms of technology usage in their classes at knowledge level, the factors playing role in this transformation have not been investigated. In this respect, this study aims to identify the factors playing role in the formation and the transformation of teachers’ attitudes toward technology-assisted language teaching approach from a situated point of view at the same institution, namely School of Foreign Languages Collage at Çukurova University.

2. Method

2.1. Setting

At School of Foreign Languages, graduate and undergraduate students study English before they start at the faculties and vocational training schools. The English

Language Preparatory Program aims at bringing students' level up to the basic minimum required for study in their chosen faculties and schools.

Adopting blended language learning in 2008, the School of Foreign Languages introduced online individual courses, which are provided by Longman-Pearson Education as a supplementary course to textbooks at A1, A2, B1, and B2 levels in addition to 24-hour weekly face-to-face language learning. The online class, which was assigned in addition to the main course book studies in classrooms, aimed to help students to study autonomously by providing further English language practice in all skills. Since it was fully integrated to the syllabus, teachers were required to give assignments after covering specific items. Students were expected to do their online assignments outside the class. Teachers were required to check their students' progress and to give feedback. The online work was compulsory for students and it comprised 5 % of the achievement grade at the end of each term.

All the teachers at the school were given two-week workshops to explain the online program and to assist them on how to use it technically such as communicating via the net, giving assignments and feedback, evaluating, and grading. Following the two-week training, the online course was integrated to the curriculum.

2.2. Participants

36 teachers working at the School of Foreign Languages participated in this study. Table 1 displays the participant teachers' demographic information.

Table 1. Demographic Information of the Participants

Age			Teaching Experience			Completed Degree			Training on Computer		Monthly Income (TL)		
20-29 f	30-39 f	40-49 f	6-10 f	11-15 f	16-20 f	BA f	MA f	PhD f	Yes f	No f	1500- 2000	2000- 3000	Over 3000
3	28	5	9	15	12	22	9	5	12	24	27	3	6

As Table 1 displays, 35 of the participants are female and one is male. The teachers' ages varied from 27 to 49 with a teaching experience between 7 and 21. All the teachers were trained in ELT and most of them, (F=22) had only bachelor degree. Of the 36 teachers, 12 had up to few days of training on the use computers in language classes previous to this study. Their income differed between 1500 and 3000 Turkish Lira, which corresponds to middle-class.

2.3. Instruments

The participants were asked to respond to "Attitudes Towards Computer Technology" (ATCT) questionnaire adapted from Albirini (2006). ATCT consists of Likert type statements in five sections. Each section is directed to measure a different domain, namely, attitudes toward computer technology (20 statements), computer attributes (18 statements), cultural perceptions (16 statements), computer competence (15 statements), and computer access (3 statements) respectively. The instrument was evaluated for content and face validity. The Cronbach's reliability coefficient for the four scales were: computer attitude = 0.90, computer attributes = 0.86, cultural perceptions = 0.76, and computer competence = 0.94 (Albirini, 2006).

2.4. Findings

The questionnaire comprises four main scales, namely, attitudes toward computers, perceptions about the complexity of computers, cultural perceptions about computers, and current computer competence. The attitude scale of the questionnaire has three domains geared towards affective attitudes (items 1-6), cognitive attitudes (items 7-15), and behavioral attitudes (items 16-20). First, the data from attitude scale were analyzed descriptively in separation from the other scales. Secondly, the analysis of the data was done in groups in accordance with the subscales in the questionnaire. The findings from ATCT Questionnaire (Albirini, 2006) analysis are outlined in three main categories to look into the relationships between the independent variables of teachers’ attitudes toward the use of computers in their teachings and their perceptions of computers, current computer competences and practices, as well as cultural perceptions to find the correlations among different variables.

In order to be able to examine the possible relationships of these three types of teacher attitudes with other variables, the data from the participants’ responds were analyzed utilizing descriptive statistics in SPSS package to describe and summarize the properties of the data collected from the participants.

The analysis of the data was done in groups in accordance with the subscales in the questionnaire. First, the data from attitude scale was analyzed descriptively in separation from the other scales. Then, each domain was evaluated together with other scales using crosstab analysis in order to find the correlations among different variables.

The following sections present the results.

2.4.1. The Correlations with Affective Attitudes

Participants were asked to respond to the items related to affective domain of computer attitude in the questionnaire (items 1-6).

Table 2. Correlations between Affective Attitude and Computer Perception Items

<i>Affective Attitude Items</i>				<i>Computer Perception Items</i>			
	<i>A %</i>	<i>N %</i>	<i>D %</i>	<i>A %</i>	<i>N %</i>	<i>D %</i>	
1. Computers don't scare me at all.	94.7	-	5.3	100	-	-	12. I have no difficulty in understanding the basic functions of computers
2. Computers make me feel uncomfortable.	2.7	16.7	80.5	93.1	2.4	4.5	
6. I dislike using computers in teaching.	11.1	13.8	75	2.8	47.2	50	13. Computers complicate my task in the classroom.

The analysis indicates that the participants mostly disagreed to item 2 “Computers make me feel uncomfortable” (Disagree=80.5 %). Of these, 93.1 per cent agreed to the computer perceptions item 12 “I have no difficulty in understanding the basic functions of computers”. Another similar result emerged from item 1 “Computers do not scare me at all”. All of the participants (Agree=94.7 %) who stated that they agreed with the statement also agreed that they don’t find the basic functions of computers difficult (item 12). These results show that viewing computers as noncomplex to use makes most of the teachers feel comfortable using them. Item 6 “I

dislike using computers in teaching” had mostly disagreement responses (Disagree=75 %). 50 % of these teachers also disagreed to computer perception item 13 “*Computers complicate my task in the classroom*” while 47.2 % of them remained neutral. The relatively high percentages indicate associations between the variables. Therefore, it can be implied that the more positively teachers perceive computers to use, the more positive attitudes they hold toward computer usage in their teaching.

Table 3. Correlations between Affective Attitude and Cultural Perception Items

<i>Affective Attitude Items</i>				<i>Cultural Perception Items</i>			
	<i>A</i> %	<i>N</i> %	<i>D</i> %	<i>A</i> %	<i>N</i> %	<i>D</i> %	
2. Computers make me feel uncomfortable.	2.7	16.7	80.5	11.1	2.8	86.1	1. Computers will not make any difference in our classrooms, schools, or lives.
3. I am glad there are more computers these days.	91.6	8.4	-	97.2	-	2.8	2. Students need to know how to use computers for their future jobs.
4. I don't like talking with others about computers.	8.3	22.2	69.4	72.2	25	2.8	4. Knowing about computers earns one the respect from others.

Another relationship with affective attitude domain was found with cultural perceptions of teachers (Table 3). 86.1 % of the participants who disagreed to “*Computers make me feel uncomfortable*” (Disagree=80.5 %) were also mostly against the cultural perception item 1 “*Computers will not make any difference in our classrooms, schools, and lives*”. Similarly, most of the participants who agreed to affective attitude item 3 “*I am glad there are more computers these days*” (Agree=91.6 %) were of the opinion that “*Students need to know how to use computers for their future jobs*” (Agree=97.2 %). Teachers disagreed to item 4 “*I don't like talking with others about computers*” (Disagree=69.4 %). Among these, 72.2 % agreed to the cultural perception item 4 “*Knowing about computers earns one the respect from others*”. The relationship levels among these items may imply that teachers’ feeling positive toward using computers is in line with their positive cultural perceptions.

Table 4. Correlations between Affective Attitude and Computer Competence Items

<i>Affective Attitude Items</i>				<i>Computer Competence</i>		
	<i>A</i> %	<i>N</i> %	<i>D</i> %	<i>No</i> %	<i>Much</i> %	
5. Using computers is enjoyable.	91.7	-	8.3	-	100	9. Use the World Wide Web (www) to access different types of information.
	91.7	-	8.3	-	100	10. Solve simple problems in operating computers.

The relationship between affective domain items and computer competence statements was also evident (Table 4). 91.7 % of the teachers responded that they find using computers enjoyable and all of them claimed high competence in using world wide web to access different types of information and in solving simple problems in

operating computers. This finding indicates that when teachers have enough competence in operating simple functions of the computer and in accessing the internet, they enjoy using it. This result is in line with the study conducted by Hogarty et al (2003). As a result of their study, they found positive relationships between teachers' reported confidence and comfort and their perceptions of computers and technology.

The overall evaluation of the results related to the affective attitude domain suggests that emotional perceptions of teachers toward using computers are associated with perceived complexity of computers, computer competence, and cultural perceptions. When one is in favor, it is more likely that other variables in this group are also positive.

2.4.2. The Correlations of Cognitive Attitudes

The scale consists 9 items (items 7-15) geared towards teachers' cognitive attitudes regarding computer use. The overall responses to these items were highly positive (Okan & Şeker, 2010). Considering each item separately discloses some associations with other variables such as perceptions of computer use, behavioral attitudes, their cultural perceptions, and their computer competence as well.

Table 5. Correlations between Cognitive Attitude and Computer Perception Items

	<i>Cognitive Attitude Items</i>			<i>Computer Perception Items</i>			
	<i>A</i> %	<i>N</i> %	<i>D</i> %	<i>A</i> %	<i>N</i> %	<i>D</i> %	
9. Students must use computers in all subject matters.	71.4	14.3	14.3	77.7	16.7	5.6	10. Computer use is appropriate for many language learning activities.
13. I don't think I would ever need a computer in my classroom.	3	-	97	2.8	-	97.2	6. Computers have no place in schools.

The results displayed in Table 5 indicate relationships between cognitive attitudes and perceptions of computer use. 71.4 % of the teachers agreed to item 9, "Students must use computers in all subject matters", and a high percentage of this percentage also responded in favor of computer perception item 10, "Computer use is appropriate for many learning activities" (Agree=77.7 %). Another significant result was found in the responses to item 13, "I do not think I would ever need a computer in my classroom" (Disagree=97 %). Most of these teachers also disagreed to computer perception item 6, "Computers have no place in schools" (Disagree=97.2 %). Thus, it can be inferred that having positive cognitive attitudes co-exists with positive perceptions about the usage of computers for teaching and learning purposes.

Table 6. Correlations between Cognitive Attitude and Behavioral Attitude Items

	<i>Cognitive Attitude Items</i>			<i>Behavioral Attitude Items</i>			
	<i>A</i> %	<i>N</i> %	<i>D</i> %	<i>A</i> %	<i>N</i> %	<i>D</i> %	
10. Learning about computers is a waste of time.	2.8	-	97.2	2.8	11.1	86.1	20. I have no intention to use computers in the near future.
7. Computers save time and effort.	96.6	4.4	-	94.4	5.6	-	19. I would like to learn more about computers.

As illustrated in Table 6, teachers’ cognitive attitudes displayed significant associations with their behavioral attitudes as well. For instance, teachers who disagreed that “*Learning about computers is a waste of time*” (Item 10, Disagree=97.2 %) also opposed the idea that “*I have no intention to use computers in the near future*” (Item 20, Disagree=86.1 %). Similarly, most of them agreed to both “*Computers save time and effort*” (Item 7, Agree=96.6 %) and “*I would like to learn more about computers*” (Item 19, Agree=94.4 %). From these findings, it seems that teachers’ cognitive attitudes are interrelated to their behavioral attitudes and perceptions of computer use.

Table 7. Correlations between Cognitive Attitude and Cultural Perception Items

	<i>Cognitive Attitude Items</i>			<i>Cultural Perception Items</i>			
	<i>A</i> %	<i>N</i> %	<i>D</i> %	<i>A</i> %	<i>N</i> %	<i>D</i> %	
15. Computers do more harm than good.	8.4	66.6	25	36.1	44.4	19.5	15. Computers encourage unethical practices.
9. Students must use computers in all subject matters.	71.4	14.3	14.3	26.4	47.2	26.4	

The study also looked into the possible correlations between participants’ cognitive attitudes and their cultural perceptions regarding computer use. More than half of the teachers (66.6 %) remained neutral to item 15 “*Computers do more harm than good*” and only 25 % disagreed with this statement. Another interesting result was that although most of the teachers were of the opinion that “*Students must use computers in all subject matters*” (Agree=71.4 %), only 26.4 per cent of them disagreed that “*Computers encourage unethical practices*” while the majority of them remained neutral (47.2 %). The overall outlook to the responses to cultural perceptions displayed a similar finding in that teachers were usually neutral about most of the statements (Okan & Şeker, 2010). In line with this, item 15 in this sub-category “*Computers encourage unethical practices*” had 44.4 % neutral and 36.1 % agreement responses. This may indicate that teachers, despite acknowledging at cognitive level that computers are useful tools for their teaching, do not possess high positive cultural perceptions about it.

Table 8. Correlations between Cognitive Attitude and Computer Competence Items

	<i>Cognitive Attitude Items</i>			<i>Computer Competence Items</i>		
	<i>A %</i>	<i>N %</i>	<i>D %</i>	<i>No %</i>	<i>Much %</i>	
7. Computers save time and effort.	80.5	19.5	-	30.6	69.4	14.Create and organize computer files and folders.
12. Computers are a fast and efficient means of getting information.	97.2	2.8	-	8.3	91.7	9. Use the World Wide Web (www) to access different types of information.
16. I would rather do things by hand than with a computer.	58	33.3	8.7	77.7	22.3	12. Use computers for grade keeping.
14. Computers can enhance students' learning	91.6	8.4	-	2.8	97.2	3.Use a computer keyboard.
	91.6	8.4	-	3.4	96.6	4. Operate a word processing program (e.g. Word)

An association was also found between cognitive attitudes and teachers' computer competence. Among the teachers who agreed to item 7 "*Computers save time and effort*" (Agree=80.5 %), 69.4 % stated that they had high competence in creating and organizing computer files and folders. Almost all teachers agreed that "*Computers are a fast and efficient means of getting information*" (item 12, Agree=97.2 %) and the majority of them claimed that they had much competence in using the World Wide Web to access different types of information (91.7 %). The study conducted by Sooknanan et. al. (2002) has revealed a similar result. In their research, teachers were found to have more positive perceptions for computers compared to traditional methods of instructions since they provide a quicker access to information, improved storage options, and an easy retrieval of students' records.

The responses to item 16 "*I would rather do things by hand than with a computer*", on the other hand, varied among them. While 58 % stated agreement, 33.3 % of them remained neutral. The majority of these teachers stated no competence in using the computer to keep grades (77.7 %). As for students' learning, teachers mostly agreed that computers enhance their learning (Agree=91.6 %). 97.2 % of them stated that they could use computer keyboard and 96.6 % indicated that they could operate a word processing program. Moving from these associations, it may be claimed that when teachers are competent in operating basic functions of computer have positive attitudes at cognitive level toward the use of technology in language teaching. However, when asked for their preference between computer or traditional hand writing, they didn't show a high level of agreement for computer use, which indicates that although they support the use of computers in teaching environments, they still prefer to do some formalities such as keeping grades by hand.

2.4.3. The Correlations of Behavioral Attitudes

One of the other correlations investigated in this study was the one between behavioral domain of the attitudes and the evaluations of the teachers related to the computer complexity perceptions, cultural perceptions and computer competences.

Table 9. Correlations between Behavioral Attitude and Computer Perception Items

	<i>Behavioral Attitude Items</i>			<i>Computer Perception Items</i>			
	<i>A %</i>	<i>N %</i>	<i>D %</i>	<i>A %</i>	<i>N %</i>	<i>D %</i>	
18. I would avoid computers as much as possible.	-	8.3	91.7	77.8	22.2	-	2. Teaching with computers offers real advantages over traditional methods of instruction.
19. I would like to learn more about computers.	94.4	5.6	-	91.7	8.3	-	4. Using computer technology in the classroom would make the subject matter more interesting.
20. I have no intention to use computers in the near future.	2.8	11.1	86.1	11.1	16.7	72.2	3. Computer technology cannot improve the quality of students' learning.

Regarding the relationship between the behavioral attitudes and the computer perceptions, the analyses revealed some correlations. To begin with, 91.7 % of the teachers disagreed to behavioral attitude statement 18 “*I would avoid computers as much as possible*”. Among these, 77.8 % agreed to item 2 “*Teaching with computers offers real advantages over traditional methods of instruction*”. In parallel with this, they highly agreed to item 19 “*I would like to learn more about computers*” (Agree=94.4 %) and among these 91.7 % also agreed that “*Using computer technology in the classroom would make the subject matter more interesting*” (item 4). Likewise, they disagreed to item 20 “*I have no intention to use computers in the near future*” (Disagree=86.1 %). Most of this group also disagreed to the statement 3 “*Computer technology cannot improve the quality of students' learning*” (Disagree=72.2 %). It seems that teachers who want to improve computer involvement in practice also are of the opinion that it is advantageous in their teaching practices. Therefore, it may be inferred from these three relations that when teachers perceive computers as useful tools for their teaching, they become more willing to be involved in the usage of computer practically. In line with other studies (e.g. Francis, Katz, and Jones, 2000; Sadık, 2006), the results related to behavioral attitudes indicate that computer experience affects teachers' attitudes. When teachers have high experience, they develop higher confidence and high perceptions of usefulness.

Table 10. Correlations between Behavioral Attitude and Cultural Perception Items

<i>Behavioral Attitude Items</i>				<i>Cultural Perception Items</i>			
	<i>A %</i>	<i>N %</i>	<i>D %</i>	<i>A %</i>	<i>N %</i>	<i>D %</i>	
18. I would avoid computers as much as possible.	-	8.3	91.7	38.9	19.4	41.7	10. Computers will increase our dependence on foreign countries.
19. I would like to learn more about computers.	94.4	5.6	-	19.4	38.9	41.7	14. Working with computers doesn't diminish people's relationships with one another.
20. I have no intention to use computers in the near future.	2.8	11.1	86.1	44.4	36.1	19.5	15. Computers encourage unethical practices.

Teachers' positive behavioral attitudes were not highly reflected in their cultural perceptions. Among the positively motivated teachers, only 41.7 % of them disagreed that “*Computers will increase our dependence on foreign countries*” (item 10). 38.9 % of them agreed that using computer will lead to dependence on other countries. Similarly, among the same group, 41.7 % of them disagreed that “*Working with computers doesn't diminish people relationships with one another*” (item 14), and only 19.4 % of them agreed with the statement while others (38.9 %) remained neutral. While most of them disagreed that “*I have no intention to use computers in the near future*” (item 20, Disagree= 86.1 %), almost half of them supported statement 15 “*Computers encourage unethical practices*” (Agree=44.4 %) and the majority of the rest remained neutral about this item (Neutral=36.1 %). According to their cultural view, as the results imply, in spite of being willing to practice computer usage in their teachings, almost half of them are culturally biased and the majority of the rest are neutral resulting from the fear that using computers will interfere with national values.

Table 11. Correlations between Behavioral Attitude and Computer Competence Items

<i>Behavioral Attitude Items</i>				<i>Computer Competence Items</i>		
	<i>A %</i>	<i>N %</i>	<i>D %</i>	<i>No %</i>	<i>Much %</i>	
18. I would avoid computers as much as possible.	-	8.3	91.7	19.4	80.6	4. Operate a word processing program (e.g. Word).
19. I would like to learn more about computers.	94.4	5.6	-	11.1	88.9	10. Solve simple problems in operating computers.

Competence in the use of different functions of computers, on the other hand, seems to have an impact on behavioral attitudes. 80.6 % of the teachers who stated disagreement to item 18 “*I would avoid computers as much as possible*” (Disagree=91.7 %), expressed high competence in operating a word processing program (e.g. Word); and 72.2 % of them claimed that they can solve simple problems in operating computers (items 10). Of 94.4 % who agreed with behavioral attitude item 19 “*I would like to learn about computers*”, 80.6 % stated high competence in

operating word processing programs and solving simple problems (88.9 %). These findings, thus, may indicate that the more competent teachers are in operating simple functions of computers, the more positive behavioral attitudes they hold toward using them.

Discussions and Conclusion

Educational institutions across the world have been spending great efforts to adopt blended teaching practices effectively. In order to create technology-assisted teaching atmosphere, they have introduced organizational, infrastructural, and curricular reforms along with teacher training programs. However, the results of the implementations have not always been satisfactory. It is believed by many educators that one of the main shortcomings of such innovations is not viewing this transformation process from a situated perspective where many variables interact at both individual and institutional level (e.g. Orlikowski, 2000). This study, in this respect, aimed to find the factors in correlation with teachers' attitudes toward using technology in language teaching classes during the process of blended teaching implementation. The data for the study were gathered from 36 teachers working at School of Foreign Languages at Çukurova University via ATCT Questionnaire.

The overall results for the attitudes isolated from the other variables show that teachers hold positive opinions in all three domains. The study then analyzed each domain of attitudes; namely, affective, cognitive, and behavioral, in relation to other variables –computer complexity, cultural perceptions, and computer competence. According to the results, there are very high correlations between affective domain attitudes and other three variables. If a teacher has positive affective attitudes, then he or she doesn't view computers as complex devices to use, hold culturally positive perceptions and has adequate competence in operating basic functions of computers.

However, the results for cognitive domain attitudes indicate slightly different outcomes. Although there were positive significant correlations between cognitive attitudes and computer complexity and competence, a negative or no correlation with cultural perceptions was also evident. In spite of positive cognitive attitudes they had, teachers didn't display positive cultural perceptions about computers. They had relatively high ratings for the statements expressing that computers can be culturally harmful or unethical.

The last group consisted of teachers' behavioral attitudes and perceptions on complexity, cultural perceptions, and competence. The results suggested that teachers mostly thought computers are advantageous and practical tools for their teaching and wanted to improve their practices with computers. Computer competence was another factor that seemed to interact with behavioral attitudes. The results suggested that the more competent teachers are in using computers, the more positive behavioral attitudes they have towards using computers in their teaching practices. On the other hand, there seemed to be no association between behavioral attitudes and cultural perceptions. Teachers expressed a desire to use computers while having culturally negative or neutral evaluations towards them.

The overall results suggest that there are correlations between the three types of teachers' attitudes (affective, cognitive, and behavioral) and their perceptions of computers and competence in using them. Cultural perceptions, on the other hand,

were considerably less favorable compared to other variables and seemed to have less impact on attitude variables.

In the light of the reviewed literature and the results of the present study, it is suggested that the implementation of technology-assisted teaching approach should be viewed from a situated nature where the factors playing role should be determined and changed and/or modified if necessary. In line with the variety of instruments reported in previous studies, this study indicates that integrating technology into the language teaching classroom is a complex phenomenon representing interrelation between attitudes, complexity perceptions, cultural perceptions, and competence regarding computers. However, the findings of similar studies have been inconsistent. For instance, while some results show positive correlations between affective variables and computer perceptions (Mandler and Sarason, 1952), others indicate negative associations between the two (Farnhill, 1985; Jeffreys, 1986; Harrington et al, 1990) or no relationship at all (Al-Khaldi and Al-Jabri, 1998). Therefore, when introducing an innovation, an institution should consider the implementation as a multidimensional process, and shouldn't expect teachers to accommodate easily. As activity theorists emphasize, the nature of knowing is collective situational, and tentative. Abstract knowledge is affected by circumstances and frames of situations, and is inconclusive till verified by its effectiveness in action. In this respect, work-based learning has to blend theory and action. As Raelin (1997) also points out, learning at work is acquired in action and is devoted to the task at hand; thus, learning is acquired in concert with practice.

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