Teachers' perceptions of the use of technology in teaching languages in United Arab Emirates' schools

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Abstract: The purpose of this study was to investigate the perceptions of both teachers of Arabic and teachers of English about the use of technology in their classes in United Arab Emirates' (UAE) schools. The success of integrating instructional technology in teaching and learning languages depends heavily on the attitude and support of the teachers involved, so a questionnaire and a focus group-interview technique were used to collect the data from teachers. Descriptive statistics and t-tests were used to analyze the questionnaire data, while focus group data were thematically analyzed. Results obtained from both the quantitative and qualitative data revealed teachers' perceptions about integrating technology in their classes, barriers to technology use, incentives for teachers who use technology, types of technology used, and their own and students' use of technology. This paper concludes with recommendations to facilitate the use of technology in teaching languages in the UAE.
Keywords: Integration, technology, incentive, English, Arabic, perception, language.

Introduction

The impact of the use of technology on education has been investigated by a number of researchers in different settings and contexts. Most of those studies shared a common finding that is related to the effectiveness of the use of technology in education and how it assists in developing teaching methods and students' knowledge (Frigaard, 2002; Schofield & Davidson, 2003; Miner, 2004; Timucin, 2006). Technology-enhanced education is becoming an increasingly important part of higher and professional education (Wernet, Olliges & Delicath, 2000). Technology not only gives learners the opportunity to control their own learning process, but also provides them with ready access to a vast amount of information over which the teacher has no power or control (Lam & Lawrence, 2002). However, in schools, teachers are seen to be active agents in the process of changes and implementation of new ideas as their beliefs and attitudes may support or impede the success of any educational reform such as the utilization of an innovative technology program (Woodrow, 1991; Levin & Wadmany, 2006a).

Crystal (2001) indicates that technology offers all students opportunities to learn in ways not previously possible. Its innovations have gone hand-in-hand with the growth of English and are changing the way in which we learn. The internet is changing languages partly because it gives rise to new vocabulary

and more importantly because the users of this tool drive the language in certain directions.

The potentially positive outcomes of integrating technology into education have convinced a number of countries (including the UAE) to embark on the use of the internet and information technology in their educational systems in order to produce workforces that are educated, skilled in new technologies and able to face global challenges (Miner, 2004; Almekhlafi, 2006; Lavin & Wadmany, 2006).

The technical advances of information technology have had a great impact on English language learning and they boost students' motivation, according to Mansor (2007). However, instructional technologies have been barely used in Arabic classes and little attention has been made to integrate technology in teaching and learning the Arabic language. This study sought to investigate language teachers' perceptions of technology utilization in UAE's K-12 schools. It employed both quantitative and qualitative instruments in order to gain a better understanding of the teaching and learning situation. The following research questions were addressed:

- How do teachers perceive their competencies in integrating technology in teaching languages?
- What kinds of barriers do language teachers perceive when integrating technology in their teaching?
- What kinds of incentives do teachers anticipate to receive as a result of integrating technology in language teaching?
- How do teachers view their students' use of technology in the classroom to enhance language learning?
- What types of technology do teachers prefer to use in teaching languages?
- How do teachers view the use of technology in enhancing language teaching and learning?

Literature Review

The utilization of technology in K-12 classrooms has increased rapidly since the launch of school computer in the 1970s (Eugene, 2006; Puma, Chaplin & Pape, 2000). Consequently, teachers today frequently explore and employ technology to facilitate teaching and learning. A number of studies have been conducted to investigate how the integration of technology into the curriculum may enhance language teaching and learning (Wong 2004; Miner, 2004; Brodskaya & Thiele, 2004; Timucin 2006; Eugene, 2006; Hixon, 2008).

Teachers are seen to be active agents in the process of changes and implementation of new ideas as their beliefs and attitudes may support or impede the success of any educational reform (Woodrow, 1991). Recent

research has focused on the role of teachers in supporting reform such as the utilization of technology in classrooms. Some researchers studied the relationship between teachers' perceptions of the use of technology and their actual integration of technology in their classes. Eugene (2006) investigated how teachers' attitudes and beliefs may make an impact on the integration of technology in their classes. Thirty-two teachers responded to the questionnaire to measure their attitudes and beliefs about teaching and technology integration. A classroom observation technique was also used to find out how teachers' beliefs and attitudes may correlate with their teaching practices and the implementation of technology. It was found that there was a discrepancy between teachers' beliefs and their actual instructional practices of integrating technology. Teachers' teaching practices and the use of technology were found not to match their beliefs.

In a similar study, Simonsson (2004) used a questionnaire to investigate the beliefs of 103 bilingual elementary school teachers toward the utilization of technology when incorporating cultural components of the curriculum. The findings of this study indicated that the utilization of technology is related to teachers' beliefs, attitudes about the use of this tool and the extent to which other instructors employed technology in their teaching. A marginal result demonstrated that many bilingual teachers believed that technology might assist them to incorporate cultural issues to clarify important points.

In the area of Computer Assisted Language Learning (CALL) researchers examined the impact of technology integration on the teaching and learning of English as a second language (ESL) and/or English as a foreign language (EFL) (Frigaard, 2002; Al-Mekhlafi, 2006; Timucin, 2006). Timucin, (2006) looked closely at the process of implementing an EFL innovation in the form of CALL in a Turkish state university's preparatory program. Timucin's study investigated the effectiveness of the use of multimedia (used with a textbook) to teach EFL students, and the impact of this on teachers' teaching practices. The focal point of the project was to promote students' communicative competence and autonomy via the implementation of technological tools. The researcher used two instruments for collecting data: questionnaires and semi-structured interviews. One of the findings was that teachers became more involved in preparing supplementary materials by exploiting the new technological facilities that the new project made available for their use. Another finding showed that teachers became more interested and involved in meetings and discussion with colleagues and administrators. Those meetings and discussion sessions brought teachers and administrators together to share ideas and reflect on their own practices.

Frigaard (2002) examined the performance of high school students who participated in a computer lab on vocabulary, grammar, and listening

comprehension in Spanish. Analyses of students' surveys indicated that the computer lab benefited some students more than others. Some students favored lab-based activities while others favored flashcards and games. Most of the students believed that the computer lab improved their listening skills and made class more interesting.

Online learning indisputably provides convenience, flexibility and economic advantages that make it a well-liked learning mode in the information era (Debela, 2008). Researchers investigating online learning examined the impact of technology on teachers' teaching practices and students' learning (Miner, 2004; Mansor, 2007; Prapinwong & Puthikanon, 2008). Miner's study (2004) focused on whether online teaching has the power to enhance motivation and assist language learning, namely writing skills. The researcher also determined whether student moderated discussion boards were more effective than instructor moderated discussion boards. The results showed that the student moderated discussion boards were more effective at increasing the number, length, and quality of the posts. At the end of the semester, none of the students in the student moderated discussion boards was found to write less and at a lower quality than those in the instructor moderated group. In terms of their comfort level while participating in the discussion boards, student moderated discussion boards resulted in students feeling significantly more comfortable.

The field of ESL education has also witnessed some innovative changes in the form of technology-applications which were introduced to assist the process of teaching and learning (Wong, 2004; Prapinwong & Puthikanon, 2008). In their study, Prapinwong & Puthikanon researched the usefulness of WebQuests (internet based activities) in EFL contexts and investigated whether these tools are really applicable for EFL learners. Essentially, researchers explored characteristics of WebQuests and created a working rubric to critically evaluate WebQuests based on five factors: level of vocabulary and grammar; content/prior knowledge; interestingness; assistance/scaffolding and task demand. Based on a rubric, they assessed fifteen of the most popular WebQuests and found a 100% inter-rater agreement. The results indicated that only 26% of the selected WebQuests could easily be adopted for EFL instruction while most of them needed to be modified. A number of WebQuests were found to be culturally or socially irrelevant to EFL learners.

In a study of writing, Wong (2004) investigated whether the utilization of technology would improve student-writing performance in a low to advanced writing class. A "Calibrated Peer Review" and "ProBoards", which are Internet-based instructional software tools, were used to help students to learn about writing by writing on important topics. The students reported that they found both tools to be meaningful and effective when learning to write academic

texts. Almost 80% of ESL students who used these tools reported greater comfort with technology and greater understanding of key writing skills. However, the learners found that "ProBoards" was more user-friendly and allowed them more room for creativity when writing their paragraphs. With the "Calibrated Peer Review", the learners felt that they had less room to be original in their writing though they were offered better feedback.

However, in the context of the UAE, studies involving technology integration in language teaching and learning are minimal. Al-Mekhlafi (2004) investigated the effect of an Interactive Multimedia (IMM) CD-ROM on the language achievement of sixth grade students in relation to their learning styles. Results showed no significant differences between the control group and the experimental group in overall achievement. One of the recommendations stated in the study was that IMM should be investigated as an individualzed learning tool. Hence, in a subsequent study, Al-Mekhlafi (2006) investigated the effectiveness of CALL on learning English as a foreign language by elementary school students in the United Arab Emirates. Results of analysis of variance (ANOVA) showed a significant difference between CALL users and non-users in favor of the experimental group.

A review of the literature reveals that the issue of integrating technology into English language classes has been thoroughly investigated in different contexts and at different levels. However, there are few studies in the area of integrating technology in Arabic language classes.

In the teaching of Arabic as a foreign language (AFL), Salem (1993) investigated the effects of computer mediated support on the reading comprehension and reading behavior of beginning American readers of AFL during independent reading of relatively short expository and narrative texts. Twenty-four first year students of AFL at a college level participated in this study. The subjects of the study were offered computer-assisted reading at four levels of treatment: control (use of text only), access to glossary, access to conjugation of selected verbs in the text, and access to background information. 'Immediate Recall Protocol' was used as an assessment tool to measure reading comprehension. The analysis of data revealed significant differences between the control condition and the treatment conditions. Readers with access to computer-mediated reading support scored higher on the recall protocol measure. The overall findings suggested that vocabulary knowledge was the primary contributor to reading comprehension while background information played an insignificant role in enhancing comprehension. Verb conjugation was found to be an irrelevant factor in promoting comprehension.

Methodology

Participants

The population of this study included all teachers of Arabic and English in K-12 schools in the UAE. A stratified sample of 621teachers from 67 schools in 5 emirates (Abu-Dhabi: 25 schools; Sharjah: 15 schools; Fujairah: 12 schools RAK: 10 schools and Ajman: 5 schools) filled in the questionnaire. Fifty-eight per cent of the participating teachers were females. In relation to their subject areas, there were 342 Arabic teachers, 242 English teachers. Thirty-seven participants did not indicate which language they taught and were not included when the two groups were compared. 67% of both groups had more than 5 years of teaching experience, while the rest had less than 5 years. The focus-group interviews included 28 teachers (15 were teachers of Arabic and 13 of English).

Instruments

A combination of quantitative and qualitative approaches was used in this study. A questionnaire and a focus group interview were developed and used to collect the relevant data. The questionnaire included six main themes relevant to the instructional technology that teachers of Arabic and teachers of English employed. It was refereed by a panel of university professors and supervisors of both Arabic and English languages in order to establish its validity. The questionnaire used a five-point Likert scale extending from 5 (very high or strongly agree) to 1 (very low or strongly disagree). The Cronbach Alpha Formula was used to compute the reliability of the questionnaire and the value was found to be 0.93.

The focus group interview technique was utilized to collect data from selected teachers of Arabic and teachers of English about the integration of technology in the teaching of languages. The questions of the focus group interview were reviewed and refereed by a number of faculty members in the UAE University to check that they matched the themes of the questionnaire and whether they could produce supportive data. Later, all questions were reviewed and modified in accordance with the referees' comments and suggestions. Some questions were modified and shortened and some other questions were eliminated because they were either redundant or did not fit the themes of the questionnaire.

Data Collection

A systematic procedure was used for collecting and administering the data. During the first semester of the academic year 2008-2009, 850 questionnaires were distributed by research assistants to 67 K-12 schools. All teachers of Arabic and English who were available during the research assistants' visits were requested to complete the survey. 73% of the questionnaires were returned (n=621). The researchers and the research assistants also conducted focus group interviews with selected teachers.

Data Analysis

The SPSS program was used to obtain different types of descriptive statistics and independent sample t-tests from the quantitative data collected via the questionnaire. A framework was created to categorize teachers' responses to the focus group interview questions into themes in order to facilitate the analysis process (Holliday, 2002). Both Arabic and English teachers' responses were initially categorized separately in order to facilitate the process of comparison between the views of the two groups. Later, all those similar points were put together. Teachers' responses were then cumulatively analyzed for commonalities (Levin & Wadmany, 2006b). Similarities and differences between the two groups were highlighted where appropriate. Following Creswell (2003) the interpretation of the quantitative five scale Likert questionnaire data was supported by the qualitative data obtained during the focus group interviews.

Results and discussion

The study results will be organized and discussed in accordance with the research questions. To answer question number 1 *"How do teachers perceive their competencies in integrating technology in teaching languages?"*, results indicated that teachers had high perceptions of their technology integration competencies (see table 1). The mean scores of participants ranged from 3.7 to 4.5 on a 5-point scale ranging from strongly agree "5" to strongly disagree "1". This means that teachers regarded themselves as having the capabilities and skills to use different types of technologies in their teaching such as using different computer programs, producing technology-based projects, creating multimedia presentations, and integrating language labs to enhance teaching and learning. This result was supported by teachers of both Arabic and English during the focus group interviews.

The analysis and interpretation of the interviews' results revealed that both Arabic and English teachers almost possess the same skills in using technology in their classes. Teachers usually integrate more technology in their classes when they possess higher degrees of technology self-efficacy (Zhang & Espinoza, 1998; Lam, 2000). A similar finding was reported by a study conducted by ChanLin, Hong, Horng, Chang & Chu (2006). They stated that all teachers participated in their study showed knowledge and competency in using computer for instructional purposes.

When differences between teachers of English and teachers of Arabic are investigated, t-tests showed very few differences between the two groups. Sometimes, English language teachers had higher perception mean scores than Arabic teachers such as 'using terminology related to computers' and 'using technology for distance education' (see Table 1). In other cases, Arabic teachers had higher mean scores than English language teachers as in 'using technology for data presentations', and 'creating multimedia presentations'. A possible interpretation could be attributed to the nature of the Arabic or the English language and whether it was being taught as a first or second language. A similar finding was reported by Simonsson (2004) about bilingual teachers who reported different levels of use of technology according to their own language competence.

Teachers pointed out that they selected appropriate technological tools in accordance with their stated objectives. The descriptive findings indicated that bilingual teachers used different technological applications to match their needs, interests, beliefs and competencies. ChanLin, Hong, Horng, Chang & Chu (2006) found that the variations in the teachers' integration of technology were related to the differences in their teaching domains. In the UAE context, teachers of both Arabic and English have access to technology in almost every class in public schools. However, the small difference in competency in favor of the English teachers might be attributed to their command of English.

Table 1
Teachers' Perceptions of their Technology Integration Competencies

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Using computer programs related to language teaching and learning	4.4	4.4	4.4	-0.008
Producing technology-based materials such as brochures and pamphlets	4.3	4.2	4.3	1.029
Employing technology to get and assess information retrieved from different resources	4.5	4.5	4.6	1.748
Using technology for data presentation and analysis	4.1	4.0	4.2	2.365*
Discussion of safety and health issues related to technology use	4.0	3.9	4.1	1.630
Operating a computer using a variety of software packages	4.4	4.5	4.4	-1.382
Employing terminology related to computers and employing appropriate technology for written and oral communications	4.2	4.3	4.2	-2.713*
Using devices such as scanners, digital cameras, and/or video cameras with computers and software	4.2	4.3	4.1	-3.118*
Utilizing word processing applications	4.1	4.4	4.0	-4.408*
Employing computers for creating databases	3.8	3.9	3.8	-1.462
Using spreadsheet applications such as MS Excel	4.2	4.3	4.2	-0.772
Creating multimedia presentations such as PowerPoint presentations	4.5	4.5	4.6	2.840*
Using computers for on-line communication (e.g., emails)	4.4	4.4	4.3	-0.773
Employing adaptive & assistive devices for students with special needs	3.7	3.7	3.7	-0.199
Designing web sites	3.3	3.4	3.3	-1.129
Using distance learning hardware and software	3.7	3.8	3.6	-2.266*
Using computers to assist students with special needs	3.7	3.8	3.6	-1.475
Utilizing computers to assess students learning	4.2	4.3	4.1	-0.895*
Integrating language labs to enhance students' learning	4.2	4.3	4.1	-3.245*
Integrating technology to enhance students' learning	4.4	4.5	4.3	-3.227*
Using computer programs that enhance students' reading ability	4.4	4.4	4.3	-1.257

*Note. *p< 0.05*

To answer question number 2 *"What kinds of barriers do language teachers perceive when integrating technology in their teaching?"*, results showed that teachers of both English and Arabic language perceived simlar barriers that hinder their integration of technology in teaching. Results from Table 2 show that teachers were somewhat moderate in their perceptions of the barriers that they encountered when employing technology in education. The overall mean scores ranged between 2.3 and 3.9. The most important barrier

acknowledged by teachers was 'lack of time needed for preparation and implementation of technology'. During the focus group interviews many teachers indicated that they can utilize technology more efficiently if time is taken into account when scheduling their teaching loads. In their study about factors that influence technology integration, ChanLin et al. (2006) reported that teachers stated that the integration of technology in their classes required much more time and effort than doing regular teaching without technology.

The least important barrier noted by teachers was 'deficiency of knowledge and skills in technology integration'. Though the analysis of the questionnaire showed that teachers perceived that they possess the necessary competencies to integrate technology in their classes, they admitted during the interview-conferences that they still need more workshops and training in using certain sophisticated programs.

Table 2
Technology Integration Barriers

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Lack of time needed for preparation and implementation of technology	3.9	3.9	4.0	0.583
Dearth of technology resources at schools	3.3	3.3	3.3	0.117
Insufficient lab-equipment	3.4	3.4	3.3	-0.483
Scarcity of labs' qualified staff	3.1	3.0	3.0	-0.227
Curricula barriers	3.2	3.3	3.2	-1.096
Insufficient encouragement	2.9	2.8	3.0	1.656
Deficiency of knowledge and skills in technology integration	2.3	2.3	2.3	-0.314
Lack of teacher training workshops	3.3	3.3	3.2	-0.716
Dearth of technologies needed for teaching languages	3.3	3.3	3.3	0.131
Shortage of equipment and technology maintenance	3.1	3.2	3.0	-1.272
Lack of students' desire for technology integration	2.8	2.8	2.8	0.189

To answer question number 3 *"What kinds of incentives do teachers anticipate to receive as a result of integrating technology in language teaching?"*, results showed that both English and Arabic language teachers highly regard the importance of incentives for successful technology integration (see table 3). The mean scores for all items were 4.4 and above. This indicated that teachers regarded having an incentive such as 'free or discounted computers', 'positive evaluations', 'release time', or 'salary increment' as very critical for successful technology integration in teaching. Solid support for this

point was raised during some of the focus-group sessions when a considerable number of Arabic and English teachers expressed their concerns about the availability of time for using technology. A similar finding about teachers' concerns of time constraints was highlighted in a study carried out by ChanLin et al. (2006) about factors influencing the utilization of technology. They stated that teachers felt that the integration of technology in classroom instruction needed more time and effort. Regarding differences between English and Arabic teachers, t-tests showed two significant differences in favor of teachers of Arabic. Arabic teachers' mean scores on 'participation in special workshops', and 'having school or educational zone recognition' were significantly higher than the mean scores of English teachers. In their study Yang & Huang (2008) argued that although teachers believed that students might benefit from the utilization of technology in instruction, they faced barriers that made integration difficult to implement. Teachers highlighted barriers such as lack of appropriate training workshops, lack of personal guidance and consultancy, lack of suitable instructional software, and hardware and time constraints. The barriers (lack of time, lack of training workshops, lack of encouragement and support) indicated in the present study were found to be similar to those found in previous research (Beckwith, 2001; Guha, 2001; Smith, 2001; Butler & Sellbom, 2002; Yang & Huang, 2008; Al-Senaidi et al. 2009).

Table 3
Teachers' Perceptions of Incentives

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Free or discounted personal computers	4.5	4.4	4.5	1.279
Participating in special workshops	4.5	4.4	4.5	2.827*
Additional resources for their classroom	4.4	4.4	4.5	0.901
Positive evaluations	4.4	4.4	4.5	0.548
School or educational zone recognition	4.5	4.4	4.6	2.676*
Free software.	4.4	4.4	4.4	0.214
Release time	4.6	4.5	4.6	1.729
Salary increment	4.5	4.5	4.6	1.109
Mentor teacher designation	4.6	4.6	4.6	0.025

To answer question number 4 *"How do teachers view their students' use of technology in the classroom to enhance language learning?"*, results showed different degrees of perceptions ranging from moderate to high regardless of the language (English or Arabic). The results did not show any significant differences between the two groups of teachers. The overall mean scores for students' technology use in the classroom and at computer and/or language labs were 4.1 and 4.0 (see table 4). In a previous study, Bungum (2006) reported

that teachers placed high value on the products made by the students when they use technology. However, the researcher expressed concerns about the overreliance of teachers on a heavily technology instructional method which was time consuming and neglected salient elements specified in the formal curriculum. In Bungum's (2006) study, teachers decided to allow students to spend the necessary time to make quality products.

Similarly, in the present study, the mean scores on the effect of technology on students' interaction, independence, and involvement were high (4.2, 4.0, and 4.1 respectively). There are indications in the literature demonstrating that students are continuously increasing their motivation, satisfying their curiosity, learning better and accomplishing various learning outcomes when technology is integrated into the curriculum (Hinson, 2005; ChanLin et al. 2006). This result coincided with Schofield & Davidson's (2003) finding which indicated that students became more self-directed learners and gained more control over content when technology was used.

On the other hand, in the present study the teachers' mean scores on other items related to technology use and effect on learning were moderate and sometimes approaching neutral such as 'using technology to participate in distance learning activities', and 'using technology to develop language skills'. A possible interpretation could be that language teachers in the UAE needed their students to use computers and technology in a hands-on fashion such as using language labs.

Table 4

Teachers' Perceptions of their Students' Use of Technology in Classrooms

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Students' use of technology at computer and/or language labs	4.0	4.0	4.0	-0.335
In-class use of technology by students to learn different language skills	4.1	4.1	4.1	0.679
Employing technology to participate in distance learning activities with fellow students from other schools	3.4	3.4	3.4	-0.071
Using computer to develop their language skills.	3.8	3.8	3.8	-0.419
Increasing different level of students' interaction as a result of using technology	4.2	4.2	4.3	0.938
Becoming more independent as a result of using different dictionaries	4.0	4.0	4.0	0.096
More engagement in different activities outside the school a result of using technology	3.8	3.8	3.9	0.994
Becoming more involved a result of using technology	4.1	4.1	4.2	0.585

Question number 5 was: *"What types of technology do teachers prefer to use in teaching languages?"*. Results showed that the kind of technology preferred by teachers depends on its application to teaching languages. The overall mean scores for all teachers ranged from 3.6 to 4.5 on a 5-point scale. In Table 5, the mean score for using videotapes in teaching is significantly higher for Arabic teachers than for English (4.0 versus 3.8). This may be due to the efficacy and viability of teaching Arabic as a first language and English teachers teaching English as a second language. During the focus-group interviews both Arabic and English teachers specified that they video-tape their students while they are in action during different tasks such as participating in a dialogue or reporting a group's answer. In their view, the purpose of such activity is to provide students with a valuable opportunity to view themselves in action and reflect on their own performance. This result was supported by Ma, Andersson & Streith (2005) who reported in their study that teachers' perceived usefulness of technology contributed to their enthusiasm to use computer for classroom instructional purposes.

Contrarily, results showed significant differences in favor of English teachers in using email, dictionaries and encyclopedias, language labs, and electronic forums. The means scores for those variables were 3.9, 4.0, 3.8, and 3.6 respectively as opposed to 3.4, 3.8, 3.4, and 3.5 for Arabic teachers. This indicates that English language teachers may need to provide their students with more opportunities to practice and use the language since English is an EFL language for almost all students in the UAE. However, the continuous overuse of technology might result in students developing a negative attitude toward it. In their study, McKinnon, Nolan, & Sinclair (2000) reported that students' motivation and attitudes toward technology decreased once the use of computer became part of the daily classroom instructional routine.

Table 5
Teachers' Perceptions of Using Technology Tools in the Classrooms

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Language teaching programs	4.1	4.1	4.2	0.670
Video tapes	3.9	3.8	4.0	2.084*
Over Head and Opaque Projectors	4.4	4.3	4.4	0.283
TV	3.8	3.7	3.8	0.977
Email	3.6	3.9	3.4	-4.641*
www	4.2	4.3	4.2	-1.574
Distance -training sessions	3.7	3.7	3.6	-0.181
Resources from local environment	4.2	4.2	4.1	-0.750
Smart and interactive boards	3.7	3.7	3.7	-0.125
Chat rooms and discussion boards	3.4	3.3	3.4	1.059
Newsgroups	3.6	3.6	3.6	0.049
Audio tapes	4.2	4.3	4.2	-1.547
Dictionaries, encyclopedias	3.9	4.0	3.8	-2.028*
Language labs	3.6	3.8	3.4	-4.162*
Electronic forums	3.6	3.6	3.5	-1.219*

The results for question number 6 *"How do teachers view the use of technology in enhancing language teaching and learning?"*, demonstrated that both teachers of Arabic and teachers of English appreciated the role of technology in promoting teaching and learning. The overall mean scores for both languages ranged from 4.1 to 4.5 on a 5 point scale. This indicates that many teachers view technology as an essential requirement for their classes. A similar result was reported by Wong et al. (2006) about teachers' positive perceptions about the use of computer in supporting the face-to-face teaching and learning in 'project work' classroom. With regard to differences between results, Table 6 shows five significant means in favor of English teachers as opposed to those of Arabic teachers' low means. This could explain the fact that English teachers appreciated a number of technological facilities more than Arabic teachers as they needed their students to have continuous contact with the foreign language.

During the focus group interview sessions many teachers asserted that technology has become essential in their daily teaching activities. Teachers usually teach in the same way they were taught, but technology provides them with valuable chance to review their teaching. Teachers' views over the last two decades have changed as a result of changing the methods of conducting teacher-training programs (Wang, 2002).

However, a significant number of teachers of English argued that they were encouraged by the availability of technology in English programs to utilize technology for different purposes. The mean score for using pronunciation

dictionaries (4.4) was higher for the English teachers than that of the Arabic teachers (4.2).   Many English teachers thought that technology provides students with concrete tools to use off-line, as well as online pronunciation dictionaries to check and learn the correct utterances of new words. This significant result in favor of English teachers might be attributed to the fact that Arabic is the first language of the learners and they rarely encounter a pronunciation problem.

In the present study it was obvious that the use of technology by Arabic teachers for substantial learning and teaching activities is very modest. They mainly use a computer to help them prepare for their instruction. A similar conclusion was made by Yang & Huang (2008) who found that teachers used technology mainly to prepare their teaching activities and did not pay much attention to the utilization of technology in promoting crucial instructional activities. ChanLin, et al. (2006), however, argued that teachers used technology to prepare tests, activities and handouts because they wanted their teaching to be diverse and creative. They also argued that a computer might be employed as a self-monitoring instrument to encourage students to make more creative efforts.

Table 6
Role of Technology in Enhancing Language Teaching and Learning

Variables	Overall Mean	English Mean	Arabic Mean	T-Test
Using technology helps students acquire languages.	4.4	4.4	4.4	0.116
Technology assists students in improving their academic achievement and grades.	4.3	4.2	4.3	1.301
Students' language proficiency level improves as a result of using technology.	4.2	4.3	4.1	-1.812
Technology assists in making language learning interesting and enjoyable.	4.4	4.4	4.4	0.997
Students' motivation increases as a result of using technology in teaching.	4.4	4.5	4.4	-1.102
Technology assists in activating learning during language classes.	4.4	4.4	4.3	-2.215*
Technology helps students improve their language skills and knowledge.	4.4	4.4	4.4	-0.232
Technology provides opportunities for using different strategies in learning languages.	4.3	4.4	4.3	-1.090
Technology helps in integrating different language activities.	4.3	4.3	4.3	-0.935
Technology assists in learning the language content in the classroom.	4.2	4.2	4.2	-0.326
Technology helps in promoting cooperative activities during language learning.	4.2	4.2	4.2	1.358
Technology assists in supporting project activities and problem-solving.	4.1	4.1	4.1	-0.012
Technology helps in evaluating classroom activities and saving different files.	4.4	4.4	4.4	-1.138
Technology helps students meet their different language needs in the classroom.	4.3	4.3	4.3	0.038
Technology assists in abandoning the traditional approaches and developing more interactive ways in teaching and learning languages	4.4	4.5	4.3	-2.390*
Technology plays a great role in learning the different language skills.	4.3	4.4	4.2	-2.647*
Technology provides students with tools for using electronic pronunciation dictionaries.	4.3	4.4	4.2	-3.205*
Technology offers electronic exercises that promote autonomous learning.	4.3	4.3	4.3	-1.037
Technology assists in developing electronic exams and marking them in the same way.	4.2	4.3	4.1	-2.101*

Recommendations

Although this study has made some contribution, the topic needs to be examined further to investigate the impact of technology integration on

language education in general and students' language proficiency in particular. Consequently, future studies will unquestionably contribute to provide concrete understanding of the role of technology integration in ESL /EFL classes, as well as first language classes. There is a need to conduct workshops for both teachers of Arabic and teachers of English to improve their technology integration skills. Also, rewarding teachers who integrate technology in their classes will assist in encouraging more teachers to use technology to promote language teaching and learning.

Conclusion

This study examined teachers' perceptions about integrating instructional technology in both Arabic and English classes in K-12 schools in the UAE. The analysis of both quantitative and qualitative data revealed a number of significant results about teachers' perceptions toward the integration of instructional technology in their classes. The overall findings emphasized teachers' perceptions about the important role of technology in first and second language teaching and learning. One of the prominent results is that teachers confirmed the unavoidable impact of technology on their own teaching practices which in turn may promote students' learning. Another result was that teachers showed willingness to accelerate the integration of technology in their classes to improve language teaching and learning. However, time and incentive variables were seen by teachers as preconditions for more technology integration.

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