استكشاف تصورات معلمي اللغة الإنجليزية السعوديين للكفاءاتم واستخدامهم للتكنولوجيا المدمجة

ملخص

هدفت هذه الدراسة إلى استكشاف تصورات معلمي اللغة الإنجليزية السعوديين للكفاءاتهم و 使用هم للتكنولوجيا المدمجة واستقصاء العوائق والحوافز المتعلقة بالادماج الناجح للتكنولوجيا في الفصول الدراسية السعودية العامة.

تم اختيار عينة من 05 معلما في اللغة الإنجليزية من المدارس الثانوية العامة في الرياض للمشاركة في هذه الدراسة. واستخدم الباحث استبانة من ثلاثة مقاييس: ( تصورات المعلمين للكفاءاتم) و (تصورات المعلمين لاستخدامهم التكنولوجيا المدمجة) و (مقاييس العوائق والحافز) في استخدام التكنولوجيا في تدريس اللغة الإنجليزية.

أظهرت نتائج الدراسة أن هناك فروق ذات دلالة إحصائية بين تصورات المعلمين للكفاءاتم في استخدام وإدماج التكنولوجيا. وعلى وجود فروق ذات دلالة إحصائية بين المشاركين أيضا في استخدام التكنولوجيا المدمجة في الفصول الدراسية نتيجة لسنوات الخبرة حيث سجل المعلمين ذوي الخبرة الطويلة مستويات متدنية ونقص في الحوافز من المعلمين ذوي الخبرة الأقل.

وخلصت الدراسة بتقديم مضامين وتوصيات لتسهيل استخدام التكنولوجيا في تدريس اللغة الإنجليزية في المدارس السعودية.
Exploring Saudi English Language Teachers’ Perceptions of their Competencies and Usage of Integration Technology

Abstract

This study aimed at exploring Saudi English language teachers’ perceptions of their competencies and usage of technology integration and investigating the obstacles and incentives related to the successful integration of technology in Saudi public classrooms.

A sample of 50 English language teachers from public secondary school in Riyadh Educational Zone was selected to take part in this study. A three scale questionnaire was used to explore Saudi English language teachers’ perception of their competences (TPC) scale and usage of integration technology in their classrooms (TPU) scale and the obstacles and incentives of using technology in teaching English (OIS).

The findings of the study showed that there were significant differences between teachers' perceptions of their competencies and technology Integration. Significant differences were also found in teachers’ usage of technology integration in the classroom due to years of experience. The results indicated that teachers with more years of experience reported lower levels or lack of incentives than those with less years of experience.

Implications for further research and recommendations to facilitate the use of technology in teaching English language in Saudi Schools concluded the study.
Exploring Saudi English Language Teachers’ Perceptions of their Competencies and Usage of Integration Technology

1. Introduction

The speedy developments in technology drive the educational institutions that prepare the new generations to inevitably adapt to the technological innovations. Technology integration in classrooms has become a global phenomenon in many educational institutions (Friedman et al. 2009; Steel 2009; Ismail et al. 2010).

It is believed that the integration of technology in teaching gives individual attention to the learner and acts as a tutor assessing the learner's reply, recording it, pointing out mistakes and giving explanations. It guides the learner towards the correct answer, and generally adapts the material to his or her performance (Bates, 2000, Abu Naba’h 2012).

This flexibility in using technology in teaching/learning allows the learner to choose between several modes of presentation which is something doubtful to achieve with written handouts and worksheets; it would require huge "scrambled books" with pages and pages of mostly unnecessary explanations, together with an extremely complicated system of cross-references. Nor would the learner get the instant feedback so beneficial to the learning process which the computer provides. Gonglewski, Meloni, and Brank (2007) maintained that computer-mediated instruction can provide a very valuable language learning experience.

There are a myriad of opportunities and resources for the learners to get exposed to authentic use of communicative English. For teachers, these opportunities and resources also entail greater and far more effective ways of promoting and facilitating English language learning in a more authentic manner such as the use of e-mails for collaborative writing projects (see Kabilan & Mohamed Amin 2006).

It is also held that the integration of technology in the learning/teaching process promotes autonomous learning, curriculum differentiation (Smeets 2005), student-centred learning, higher order thinking, problem-solving, cooperative learning (Smeets & Mooij 2001; Bangert 2008). Consequently, it has generated many studies that had investigated different aspects of such integration (e.g., Abbit & Klett, 2007; Anderson & Maninger, 2007; Bauer & Kenton, 2005; ChanLin, Hong, Horng, Chang, & Chu, 2006; Gulbahar, 2007; Judson, 2006; Kotrlik & Redmann, 2005; Wood & Ashfield, 2008; Zhao, 2007).

On the other hand, convincing and preparing teachers to integrate ICT into their teaching has become a global mission in the last few decades. These concerns emerged because effective use of ICT in classrooms can significantly improve the overall teaching-learning environment, enrich students' learning experiences, foster participation, increase self-reliance and responsibility, and establish the foundations of long life learning (sustained learning) and personal development of individuals (Galanouli, Murphy, & Gardner, 2004).
Research emphasizes the importance of professional development for the successful use of ICT in classrooms. Baylor & Ritchie (2002), for instance, found that the support of professional development and the level of technology literacy of school leadership affected technology acceptance in classrooms and enabled teachers to master these technologies. Teachers cannot prepare their students to be information literate unless they themselves understand how to find and use information.

The technology adoption in education is a very complex process that includes different components and variables such as quality of teacher training in technology, quality of technology hardware and software, and student and teacher attitudes toward technology. Even though technology can be an effective tool when used properly in teaching and learning, teachers still show resistance to integrate technology into their classrooms. Much research has expounded upon the need for teachers to overcome barriers of using technology, such as the lack of time to learn technology and a lack of technology support and access (Almekhlafi, 2006a; Butler & Sellbom, 2002; Fletcher, 2006).

Teachers’ teaching beliefs are mostly formed through their personal experience starting as a student and later as a teacher. They lack the opportunities of observing alternative classroom practices because of their work load and environment. Therefore, their teaching beliefs resist the change. They need to be provided with alternative visions of what teaching with technology looks like and opportunities to experience alternative approaches in supporting context. Teachers need opportunities to observe peers working with technology and access to mentors or coaching support as they implement changes in their own teaching (Albion & Ertmer, 2002).

Some researches state that with the current educational system, integrating technology is difficult per se (Sheingold & Hadley, 1990). They advocate that the current instructional design tactics are not useful and practical, and there is lack of appropriate and efficient approaches to plan technology integration. The following factors are also considered to be related to teachers’ educational computer use: risk of using technology, sharing of technology resources between teachers (Dusic, 1998), discouraging climate to use computer within schools, lack of use of computers for personal purposes and not having a computer at home (Downes, 1993).

Attitude is not a clear indicator of teachers’ disposition towards technology, such as high/good attitude and low/bad attitude. Teachers having different experiences, varying support and different incentives and barriers may exhibit different attitudes. Hardy (1998) classifies computer users into five categories; enthusiastic beginners, supported integrators, high school naturals, unsupported achievers and struggling aspires. While enthusiastic beginners are less experienced compared to the others and showed optimistic attitudes by believing that computers are the future for improving the quality of education, unsupported achievers are comfortable with technology and they see computer as a way of expending on what teachers have taught.

Thus, in order to use the technology for teaching and learning purposes, the educational institutions should develop an innovative approach shaped by a proper planning process, if they want to keep track of changes in technology and get up-to-date. Conlon (2000) summarizes this process as follows: “The introduction of new technology will change our schools. But technology without philosophy is blind. Unless it is harnessed to a clear vision of change then chip by chip, the technology could take us into a future that we would never willingly have chosen for ourselves” (p. 116).
Based on indications reflecting a need for better training of teachers, the following issues related to technology use and teacher education programs have been identified: (a) university faculty factors such as a lack of modeling of technology in courses; (b) lack of technology implementation in activities and coursework; (c) a lack of expertise to develop complex technology mediated instruction; and (d) lack of technology integration in education field experiences (Ludlow 2001; Roblyer, 2004).

According to Cavas et al. (2009), personal success of using the technology can encourage teachers to use the technology in other areas such as teaching and learning. However, factors such as access and cost may be some of the factors that may limit ICT integration in schools.

A number of studies have been conducted to explore teachers’ use of technology and factors hindering such use (e.g., Anderson & Maninger, 2007; Becker & Ravitz, 2001; Gulbahar, 2007). This is because it allows students to learn more in less time and allows schools to focus on global learning environments if used appropriately. In addition, it could be an effective teaching tool when used to engage all students in the learning process (Almekhlafi, 2006a).

The Saudi education system constantly encourages the use of educational technology such as educational television programs, tape recorders, overhead projectors, videotapes, laboratories, workshops, libraries, and computer technology.

This study aims to explore how Saudi secondary English language teachers perceive their competence of technology integration, and their usage of these technologies in teaching English language in classrooms, in addition, the study investigates the barriers and incentives relating to successful technology integration in the school.

2. Statement of the Problem

In light of the information revolution and the scientific challenges of the 21st century, there is a sweeping trend to integrate technology in all fields of life and education is no exception. On the other hand, there is no doubt that teachers play a pivotal role in the process of integrating technology in their classrooms and one of the main players in the educational field. Therefore, it is worth investigating the perceptions of English Language teachers’ competencies and usage of technology and exploring the obstacles and incentives related to the successful integration of technology in Saudi public classrooms.

3. Aims of the Study

The study attempts to addresses the following questions:

1) What is the level of Saudi secondary English Language teachers' perceptions of their competencies in Technology Integration in classrooms?
2) What is the level of Saudi secondary English Language teachers' perceptions of their usage of Technology Integration in classrooms?
3) What is the level of Saudi secondary English Language teachers’ perceptions of the obstacles and incentives of Technology Integration in classrooms?
4) Is there a significant difference between teachers' perceptions of their competencies in Technology Integration in classrooms and their perceptions of their usage of it?

4. Importance of Study

The domain of CALL in Saudi Arabia is in need of more research. To the researcher's best knowledge, studies on English language teachers' perceptions of technology integration in Saudi Arabia are rare. It is anticipated that this study will shed light on the competencies and the usage of technology by English language teachers in Saudi Arabia. Thereupon, the findings of this study may be functional for different categories of people; it may be educational planners to identify the instructional potentials of teachers for using technology to facilitate the process of teaching and learning English as a foreign language, and the possibilities of using the Internet as a source of authentic instructional materials and professional development for the English language teachers. Teachers’ experiences of using ICT shade light on proper integration of ICT in teaching and learning, and, in turn, these experiences help to determine teachers’ professional development needs for proper ICT integration in the classrooms. Finally, it may also be of assistance for EFL curricula designers and EFL methodologists develop practical ways to train and encourage teachers to integrate technology in their classrooms.

5. Limitations of the Study

This study has the following primary limitation:

- Due to technical and logistic constraints, this study is confined to public male secondary English Language teachers in the second semester of the academic year 2011/2012 in Riyadh Area in Saudi Arabia.

6. Review of Related Literature

Technology use in education is becoming an increasingly important part of higher and professional education (Almekhlafi, 2006a, 2006b; 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 control (Lam & Lawrence, 2002).

According to Rowand (2000), a survey based on a National Center for Education Statistics (NCES, 2000), found that 39% of teachers indicated that they used computers or the Internet to create instructional materials, 34% for administrative record keeping, less than 10% reported to access model lesson plans or to access research and best practices. Novice teachers were more likely to use computers or the Internet.

Similarly and according to a report released by the U. S. Department of Education, NCES (2000), novice teachers were more likely to use computers or the Internet to
accomplish various teaching objectives. Teachers with at most nine years of teaching experience were more likely compared teachers with 20 or more years of experience to report using computers or the Internet to communicate with colleagues.

Bauer and Kenton (2005) found that teachers, who were highly educated and skilled with technology, were innovative and adept at overcoming obstacles, but they did not integrate technology on a consistent basis both as a teaching and learning tool. Results suggest that schools have not yet achieved true technology integration.

Gulbahar (2007) concluded that teachers and administrative staff felt themselves competent in using ICT available at the school; they reported a lack of guidelines that would lead them to successful integration. On the other hand, students reported that ICT is not utilized sufficiently in their classes.

Zhao (2007) conducted a qualitative research to investigate the perspectives and experiences of 17 social studies teachers following technology integration training. The research indicated that teachers held a variety of views towards technology integration. These views influenced their use of technology in the classroom. Most teachers were willing to use technology, expressed positive experiences with technology integration training, increased their use of technology in the classroom, and used technology more creatively.

On the other hand, numerous studies have been carried out to identify factors facilitating or prohibiting technology integration in the classroom, particularly computers. Some studies focus on the availability of computers in the classroom, sharing of resources, a supportive administration, and a strong support staff as the primary influencing factors. As an example, the Becker and Ravitz (2001) study showed that computer use among teachers is related to more constructivist views and practices and to changes in practice in a more constructivist-compatible direction.

In addition, other research studies suggest that there is a relationship between a teacher’s student-centered beliefs about instruction and the nature of teacher’s technology-integrated experiences (Judson, 2006; Totter, Stutz, & Grote, 2006).

Similarly, ChanLin et al. (2006) conducted a study to identify the factors affecting eight teachers’ use of technology in creative teaching practices. The identified factors were classified into four categories: environmental, personal, social and curricular issues. Besides ChanLin's study, Anderson and Maninger (2007) investigated the changes in and factors related to students' technology-related abilities, beliefs, and intentions. Statistically significant changes were found in students’ perceived abilities, self-efficacy beliefs, value beliefs, and intentions to use software in their future classrooms. Students' self-efficacy, value beliefs, and intentions were moderately correlated with each other. Abilities were correlated with self-efficacy and computer access. The best predictors of intentions were self-efficacy beliefs, gender, and value beliefs.

7. Methodology and Procedures

7.1. Sample of the Study

The population of this study included teachers of English Language in secondary public schools in Riyadh. A sample of 50 teachers from 10 schools located in Riyadh city in Saudi
Arabia were voluntarily selected to participate in the study and filled in the study questionnaire which was designed for the purposes of the current study. They declared they have technological aids in their classrooms such as internet access, computers, data shows, projectors, video, etc.

Eighty five percent of the participants hold bachelor degree (BA) in English Language and Literature and the rest are currently enrolled in different relevant M.A programs in Saudi universities; 40% had 3-6 years of teaching experience, 37.5% less than 3 years, and 22.5% had more than six years, with average age for the whole sample (M=36.6; SD= 4.6) with age range from 29-45 years.

Each school has two computer laboratories (with 25 computers and a projection system), one electronic classroom (with 25 computers, a projection system, overhead projector and TV-video set), and one library. The schools have 71 computers for administrative staff and teachers’ use and 75 computers for student use (1:13 ratio at student level). In addition, there are 31 overhead projectors, 10 TV-video sets, 2 computer-projection systems and 4 VCD players.

7.2. Instrumentation

The researcher developed the instrument used in the current study after a thorough review of the literature worldwide, especially research related to technology integration and language construction development. The survey questionnaire consists of two sections.

A demographic section gives a description of the sample used in the study, such as type of educational certification degree (bachelor-Master), and years of working experience. The second section includes three scales; Teachers' Perceptions of their Competencies Scale (TPC Scale), which consists of 22 items using a 3-point scale of responses, with 3 indicating strongly agree and 1 indicating strongly disagree; Teachers' Perceptions of their Usage Scale (TPU Scale), which consists of 22 items used in the TPC Scale a 3-point scale of responses, but this time asking how frequently the teachers practice the behaviors described in the 22 items, with 3 indicating always and 1 indicating never; thirdly, the last part contains obstacles and incentives scale (OIS), and employing a 5-point Likert-type scale of responses, with 5 indicating strongly agree and 1 indicating strongly disagree.

7.3. Validity of the Questionnaire

The face validity of the study questionnaire was established by refereeing it by a panel of university professors with different specializations, including educational technology, English language and Information Technology [IT] teaching methods, in addition, the researcher selected ten English language male teachers who identified themselves as providers of technology integration in their teaching practice.

The team of panel professors and teachers were asked to validate the content of the questionnaires with regard to instructions, the relevance of questions to target assessed variable, its suitability to the research goals and objectives, and the number questions. The remarks of the validating team, their notes and suggestions were taken into consideration, and the researcher made the necessary modifications before implementing the instruments. The three questionnaire (TPC, TPU and OIS Scales) validity using Cronbach's Alpha was 0.94; 0.88; 0.91 respectively.
7.4. Reliability of the Questionnaire

The questionnaire’s reliability was obtained through a test-retest method, which was applied on a pilot group of (10) teachers who were chosen from the population of the study and excluded from the sample.

The scales were repeated on the same group to check its reliability two weeks later. The reliability correlation coefficient of the test-retest was calculated using Pearson correlation formula.

It was found to be (0.84), which is considered to be suitable from a statistical point of view for the purpose of this study.

7.5 Data Analysis

Data gathered from the questionnaire items were analyzed using SPSS 15.0. Descriptive statistics, a t-test, multivariate analysis, and analysis of variance (ANOVA) were used. In addition, the researcher analyzed these items using “Item Analysis” method in order to get a deep understanding of the results from the questionnaire.

8. Findings of the study

Question 1: “What is the level of Saudi secondary English Language teachers' perceptions of their competencies in Technology Integration in classrooms?

Results indicated that teachers were rated moderately regard their competencies in technology integration (M=1.82). The mean scores ranged from 1.64 to 2.09 on a 3-point scale (see Table 1).

This moderate perception by teachers might be due to the fact that technology integration in classrooms is highly influenced by the barriers involved in this process though it is a part of teacher evaluation particularly at public schools. Investigating the items in details, the highest mean scores were for items that are related to teachers’ ability to use presentation and analysis, word processing applications, utilize computers to assess students learning hardware and software, using technology to locate, evaluate, and collect information from a variety of sources. While the lowest mean scores were for items that are related to teachers’ ability to integrate language labs to enhance students” learning.

These results are in agreement with Bauer and Kenton (2005), where they found that teachers were highly skilled with technology and had the competencies required from successful technology integration. In addition, they were also supported by Zhao (2007) who investigated the perspectives and experiences of 17 social studies teachers following technology integration training.

**Table 1: Teachers’ Perception of their Competencies in Technology Integration**

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Selecting the appropriate computer programs related to language teaching and learning</td>
<td>1.8</td>
<td>.533</td>
</tr>
<tr>
<td>2. Engaging students in the selection of technology-based materials</td>
<td>1.8</td>
<td>.648</td>
</tr>
<tr>
<td>3. Using computer programs related to language teaching and learning</td>
<td>1.9</td>
<td>.693</td>
</tr>
</tbody>
</table>
4. Producing technology-based materials such as brochures and pamphlets | 1.8 | .549
5. Employing technology to get and assess information retrieved from different resources | 1.9 | .545
6. Using technology for data presentation and analysis | 2.0 | .525
7. Discussion of safety and health issues related to technology use | 1.8 | .463
8. Operating a computer using a variety of software packages | 1.9 | .619
9. Employing terminology related to computers and employing appropriate technology for written and oral communications | 1.8 | .549
10. Using devices such as scanners, digital cameras, and/or video cameras with computers and software | 1.8 | .500
11. Utilizing word processing applications | 2.0 | .597
12. Employing computers for creating databases | 1.9 | .530
13. Using spreadsheet applications such as MS Excel | 1.9 | .552
14. Creating multimedia presentations such as PowerPoint presentations | 1.9 | .632
15. Employing adaptive & assistive devices for students with special needs | 1.9 | .530
16. Designing web sites | 1.8 | .533
17. Using distance learning hardware and software | 1.9 | .590
18. Using computers to assist students with special needs | 1.8 | .405
19. Utilizing computers to assess students learning | 2.0 | .749
20. Integrating language labs to enhance students’ learning | 1.7 | .619
21. Integrating technology to enhance students’ learning | 1.9 | .729
22. Using computer programs that enhance students’ reading ability | 1.8 | .516
TOTAL | 1.82 | .116
Range | 1.64 | 2.09

**Question 2** "What is the level of Saudi secondary English Language teachers' perceptions of their usage of Technology Integration in classrooms?

Results showed that teachers weakly regard (M=1.57) their practice of technology integration. The mean scores ranged from 1.32 to 1.82 on a 3-point scale (see Table 2).

This low moderate perception by teachers might be due to the fact that technology integration in classrooms in reality faced by the many obstacles that prevent teachers from conducting it such as anxiety, lack of administrative cooperation and encouragement, lack of enough time and resources etc. particularly at public schools.

Investigating the items in details, the highest mean scores were for items that are related to teachers’ use of word processing applications.

While the lowest mean scores were for items that are related to teachers’ use of terminology related to computers and employing appropriate technology for written and oral communications.

These results are supported by Ertmer, Addison, Lane, Ross, and Woods (1999) who found that teachers' perceptions of the role of technology are closely linked to how technology is used. Another study confirming the results of this study was conducted by Kotrlik and Redmann (2005), where results revealed that although teachers feel some anxiety when it comes to technology integration, they perceived that they are effective in using technology.
Table 2. Teachers’ Perception of their usage of Technology Integration

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
</tr>
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<tbody>
<tr>
<td>1. Selecting the appropriate computer programs related to language teaching and learning</td>
<td>1.6</td>
<td>.545</td>
</tr>
<tr>
<td>2. Engaging students in the selection of technology-based materials</td>
<td>1.5</td>
<td>.640</td>
</tr>
<tr>
<td>3. Using computer programs related to language teaching and learning</td>
<td>1.6</td>
<td>.627</td>
</tr>
<tr>
<td>4. Producing technology-based materials such as brochures and pamphlets</td>
<td>1.5</td>
<td>.598</td>
</tr>
<tr>
<td>5. Employing technology to get and assess information retrieved from different resources</td>
<td>1.5</td>
<td>.598</td>
</tr>
<tr>
<td>6. Using technology for data presentation and analysis</td>
<td>1.7</td>
<td>.554</td>
</tr>
<tr>
<td>7. Discussion of safety and health issues related to technology use</td>
<td>1.5</td>
<td>.506</td>
</tr>
<tr>
<td>8. Operating a computer using a variety of software packages</td>
<td>1.7</td>
<td>.588</td>
</tr>
<tr>
<td>9. Employing terminology related to computers and employing appropriate technology for written and oral communications</td>
<td>1.4</td>
<td>.505</td>
</tr>
<tr>
<td>10. Using devices such as scanners, digital cameras, and/or video cameras with computers and software</td>
<td>1.6</td>
<td>.585</td>
</tr>
<tr>
<td>11. Utilizing word processing applications</td>
<td>2.0</td>
<td>.599</td>
</tr>
<tr>
<td>12. Employing computers for creating databases</td>
<td>1.7</td>
<td>.588</td>
</tr>
<tr>
<td>13. Using spreadsheet applications such as MS Excel</td>
<td>1.5</td>
<td>.638</td>
</tr>
<tr>
<td>14. Creating multimedia presentations such as PowerPoint presentations</td>
<td>1.6</td>
<td>.585</td>
</tr>
<tr>
<td>15. Employing adaptive &amp; assistive devices for students with special needs</td>
<td>1.8</td>
<td>.648</td>
</tr>
<tr>
<td>16. Designing web sites</td>
<td>1.7</td>
<td>.576</td>
</tr>
<tr>
<td>17. Using distance learning hardware and software</td>
<td>1.7</td>
<td>.697</td>
</tr>
<tr>
<td>18. Using computers to assist students with special needs</td>
<td>1.6</td>
<td>.496</td>
</tr>
<tr>
<td>19. Utilizing computers to assess students learning</td>
<td>1.7</td>
<td>.757</td>
</tr>
<tr>
<td>20. Integrating language labs to enhance students’ learning</td>
<td>1.6</td>
<td>.540</td>
</tr>
<tr>
<td>21. Integrating technology to enhance students’ learning</td>
<td>1.6</td>
<td>.585</td>
</tr>
<tr>
<td>22. Using computer programs that enhance students’ reading ability</td>
<td>1.6</td>
<td>.590</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.57</td>
<td>.114</td>
</tr>
<tr>
<td>Range</td>
<td>1.32</td>
<td>1.82</td>
</tr>
</tbody>
</table>

Question 3 “How do teachers perceive obstacles and incentives related to successful technology integration in the classroom?”

Results indicated that teachers moderately reported existence of obstacles and incentives interfere with their using technology integration (M=3.30; 3.36) respectively. The mean scores for obstacles ranged from 2.62 to 4.04, and for incentives from 2.42 to 3.83, on a 5-point scale (see Table 3). Results showed that teachers perceive large number of students per class as major obstacle that hinder their technology integration in their classrooms (see Table 3). They also perceive Lack of participation in special workshops to prepare them well and availability of additional resources for classrooms as reasons that discourage them to integrate technology (see Table 3).

These results conform to Ismail, Almekhlafi and Al-Mekhlafy (2010), where they found that barriers that hinder technology integration among teachers include lack of training on how to integrate technology effectively, and that most teachers depend on self learning, and they need to be involved in subjects that enable them to learn technology integration techniques and strategies so they can use it successfully in their classes.

Table 3. Teachers’ Perceptions of Obstacles and Incentives Related to Successful Technology Integration in Classroom
Obstacles

1. The teacher does not have much time to prepare and implement them
   M: 4.00  SD: 0.751

2. Curricula are not ready to use such new technologies
   M: 4.00  SD: 0.816

3. Difficulty in usage of technology in teaching due to the large number of students per class
   M: 4.37  SD: 0.627

4. Technologies are not available in schools
   M: 4.00  SD: 0.815

5. Equipped labs are not available in schools
   M: 4.10  SD: 0.810

Incentives

6. Not enough encouragement to use them
   M: 4.12  SD: 0.790

7. No positive evaluations
   M: 4.12  SD: 0.647

8. Lack of participation in special workshops
   M: 4.25  SD: 0.588

9. Availability of additional resources for classrooms
   M: 4.15  SD: 0.699

10. School or educational zone recognition program
    M: 4.12  SD: 0.790

Question 4 "Is there a significant difference between teachers' perceptions of their competencies in Technology Integration in classrooms and their perceptions of their usage of it?"

T-tests for Paired Samples showed that there is a significant difference in all items of the scales between teachers' perceptions of their competencies in Technology Integration in classrooms and their perceptions of their usage of it, as seen from the table 4. Teachers' perceptions of their competencies were more higher than it was their using of it in every items except for three concerning utilizing word processing applications, designing web sites and using distance learning hardware and software. Figure 1 depicts differences between Teachers’ Perception of their Competencies and Usage of Technology Integration.

Table 4. Results of Paired Samples T-tests of Teachers' Perception of their Competencies and Usage of Technology Integration

<table>
<thead>
<tr>
<th>Items</th>
<th>Competencies</th>
<th>Usage</th>
<th>T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Selecting the appropriate computer programs related to language teaching and learning</td>
<td>1.8 (.533)</td>
<td>1.6 (.545)</td>
<td>2.91**</td>
</tr>
<tr>
<td>2. Engaging students in the selection of technology-based materials</td>
<td>1.8 (.648)</td>
<td>1.5 (.640)</td>
<td>3.36**</td>
</tr>
<tr>
<td>3. Using computer programs related to language teaching and learning</td>
<td>1.9 (.693)</td>
<td>1.6 (.627)</td>
<td>2.76**</td>
</tr>
<tr>
<td>4. Producing technology-based materials such as brochures and pamphlets</td>
<td>1.8 (.549)</td>
<td>1.5 (.598)</td>
<td>3.67**</td>
</tr>
<tr>
<td>5. Employing technology to get and assess information retrieved from different resources</td>
<td>1.9 (.545)</td>
<td>1.5 (.598)</td>
<td>4.05**</td>
</tr>
<tr>
<td>6. Using technology for data presentation and analysis</td>
<td>2.0 (.525)</td>
<td>1.7 (.554)</td>
<td>3.34**</td>
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<tr>
<td>7. Discussion of safety and health issues related to technology use</td>
<td>1.8 (.463)</td>
<td>1.5 (.506)</td>
<td>4.05**</td>
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<tr>
<td>8. Operating a computer using a variety of software packages</td>
<td>1.9 (.619)</td>
<td>1.7 (.588)</td>
<td>2.96**</td>
</tr>
<tr>
<td>9. Employing terminology related to computers and employing appropriate technology for written and</td>
<td>1.8 (.549)</td>
<td>1.4 (.505)</td>
<td>3.81**</td>
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</table>
oral communications

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<td>10.</td>
<td>Using devices such as scanners, digital cameras, and/or video cameras with computers and software</td>
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<td>.500</td>
<td>1.6</td>
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<td>Creating multimedia presentations such as PowerPoint presentations</td>
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<td>15.</td>
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<td>Integrating language labs to enhance students’ learning</td>
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<td>1.6</td>
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<td>Integrating technology to enhance students’ learning</td>
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<td>22.</td>
<td>Using computer programs that enhance students’ reading ability</td>
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<td>1.6</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>1.82</td>
<td>.116</td>
<td>1.5</td>
<td>.114</td>
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*p< 0.05

9. Discussion and Recommendation

This study, along with others of its kind, brings to light the reality of real issues affecting technology integration in schools versus technology use and the real dynamics that keep that vision from taking firm hold in public schools. By integrating a quantities approach in this study, the researcher were able to gather real issues and frustrations that if taken into a broader picture, apply to many schools and districts to their inability to upstart technology rich classrooms and curricula.

Additionally, there is a need for more professional development programs that help teachers learn how to use technology and to be transferred from the workshop model of "how" to use a tool to the more sophisticated professional learning group model that encourages sustainability and accountability across the curriculum (Guhlin, Omelas, & Diem, 2002; Jenson, Lewis, & Smith, 2002; Willis & Cifuentes, 2002). However, as some scholars have noted, simply becoming more comfortable with the technology and understanding a too does not equal nor "ensure effective technologically facilitated teaching" (Harris & Hofer, 2009, p. 23).

Most researchers and teachers agree that professional development for teachers in the area of technology integration must continue to evolve from the 2 hour "this is the technology and here is how to use it" workshop to a sustainable model from which teachers can "systemically change instruction" (Brock, 2009, p. 10) and learn from other educators' failures and successes over a period of time (Jenson, Lewis, & Smith, 2002).

The integration of technology into content, as reflected by the Technological Pedagogical Content Knowledge (TPACK) model (Mishra & Koehler, 2006) should focus on the interplay of technology, pedagogy, and content knowledge.
As noted by Mishra and Koehler, "Knowledge of technology, content, and pedagogy does not exist in a vacuum; it exists and functions within specific contexts" (2009, p. 16). Peer coaching and modeling technology lessons in teaching and learning (Joyce & Showers, 2002) may help teachers contextually overcome personal and classroom barriers, to think outside the box (Wright & Wilson, 2005-2006), and to develop "creative repurposing" (Mishra & Koehler, 2009, p. 16), to use a technology that is specific to the teacher's classroom and curricular needs, and to create better in-service teacher training and learning opportunities for faculty and pre-service teachers in university teacher education program (TEP) to understand and integrate technology in elementary education classrooms.

10. CONCLUSION

Technology should be used as a tool to support instruction. Educational choices have to be made first in terms of objectives, methodologies, and roles of teachers and students before decisions on the appropriate technologies can be made. No technology can fix bad educational philosophy and practice. The challenge is to rethink learning objectives and to align the learning technologies with these objectives.

Since technology adoption and utilization are an ongoing issue, there is still need for further investigation. The successful implementation of computers in the classrooms may depend on how well the teachers are prepared to use technologies. There is a need to identify the competencies teachers must possess to use computer technology effectively in classroom.

An important question to address is which teacher competencies are viewed as important for the development and operation of computer technology in different school settings. Research studies should focus on various facets of technology implementation and innovation and their specific effects, as well as how students and teachers use technology, rather than simply comparing different delivery methods.

REFERENCES


