

Teachers and Technology: Trends in English Language Teaching in Saudi Arabia

Muhammad Umar Farooq¹ & Abdul Fattah Soomro¹

¹ English Language Centre, Deanship of Supportive Studies, Taif University, Taif, Saudi Arabia

Correspondence: Muhammad Umar Farooq, English Language Centre, Deanship of Supportive Studies, Taif University, Taif, Kingdom of Saudi Arabia. E-mail: u.farooq@tu.edu.sa

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Abstract

Technology has impacted the learning approaches and vice-versa with an aim to improve the standards of language teaching/learning process. The present study focuses on teachers' preferences and use of technology in their language classrooms. A survey was conducted to seek opinion of EFL teachers both male and female at the English language center on technology-related competencies. The survey comprised four domains: planning and preparation, classroom management, instruction, and professional responsibilities (Danielson, 2007). The questionnaire was distributed to 100 English language teachers (50 males and 50 females) at Taif University English Language Centre. The responses revealed that most of the teachers thought aware of the technology and its uses in education don't integrate technology in their teaching at planning and preparation stage. They use the available technological gadget in the classroom to exploit some of the activities. They must use the university LMS for uploading certain activities and assessment otherwise they hesitate to design technology-based activities for English language learners. They and the students need training in integrating technology with teaching and learning process.

Keywords: English language teaching, technology, technology-related competencies

1. Introduction

Technology and educational development, especially in the current era, cannot be separated. We have observed various technological gadgets in the classroom during the last three decades. Technological gadgets have become part and parcel of our life which is evident from the usage of cellular phone and internet. Digital technologies are acknowledged as powerful tools in the development of education that is meaningful in the 21st century (Peeraer & Van Petegem, 2011; Norhayati & Siew, 2004). The ever-increasing use of technology has created competitive economies, constructs knowledge-based societies, and enhanced the process of innovative education (Poorfaraj, Samimi, & Keshavarz, 2011; Fong, 2009; Nasab & Aghaei; 2009; Bongo, 2005).

Also, the new generation is extremely familiar with a variety of digital technologies in their daily lives (Robertson, Fluck, & Webb, 2007; Prensky, 2001a, 2001b). So, teachers are now challenged to prepare themselves to teach these digitally competent children (Robertson et al., 2007; Smolin & Lawless, 2007).

Web-2 has provided a potential platform for educational information sharing. ELT teachers are using such websites and social networks in their teaching around the world. Technology has confronted the teachers with new challenges and duties. Technology provides so many options as making teaching interesting and more productive in terms of improvements as it is one of the most significant drivers of social and linguistic change. According to Graddol (1997, p. 16) "technology lies at the heart of the globalization process; affecting education work and culture". These opportunities may provide a chance to EFL teachers who can use these fascinating and convenience-providing technologies in the classroom. Activities that incorporate the use of cell phones, laptop computers and other technologies can be used to lower the students' anxiety which challenges them through tasks so that they may enjoy and provide effective ways of stimulating learning. Some teachers feel that these technologies detract the students from learning experience, so they discourage their use in the EFL classroom. The prior educational experiences of the students and the constraints that they have been educated under also heavily affect what the EFL teacher can accomplish in the classroom.

EFL teachers, in Saudi universities, expect and require standard classroom procedures which sometimes are not

considered by students, for example, many students regularly show up for class without pens, pencils, paper and the textbook. They make excuses that the necessary materials were left behind in any one of a thousand places. If it happens occasionally it might be tolerable, but it has become a regular occurrence. At the same time, students get frustrated with the teachers' behavior not allowing them to get away with unacceptable behavior. The situation become shocking when the teachers do not allow them to turn in late or copy work (or both). They agitate on this unfair attitude of teachers for now accepting their veracity of the endless deaths and hospitalizations of family members that they often use as excuses. Also, negotiating meaning and conveying cultural expectations go beyond the literal teaching of the English language. So, an EFL teacher must be aware of the significance of what is being communicated at the sub-textual level. The struggle to reach a common place where learning can be fostered is part of the challenge and the thrill of teaching EFL in Saudi Arabia. The incorporation of technology into the EFL classroom may foster the learning is one way to address these challenges.

1.1 Use of Technology in Language Teaching—An Overview

Use of modern technology into education may be traced back in 1921 with the issuance of first educational radio license to Pennsylvania State College for broadcasting courses and then in 1924, the British Broadcast Corporation (BBC) started educational programs including English language learning and teaching through radio broadcast. The next step was experiments with television in 1930s. Skinner was an advocate of programmed learning and he “advocated the use of teaching machines for individualized instructions which would be responsive to the preferred pace of the learner” (Levy, 1997, p. 14).

1970s and 80s significant changes occurred in the fields of language, language learning and teaching with the introduction of two-way communication and use of computer-based technologies for interaction. White (2003, p. 15) mentions it an era of a “greater and enhanced communication opportunities between the teacher and learners, and between the learners themselves, either individually or in groups”. This introduces virtual learning environments in English language learning and teaching programs. Bates (2005, p. 7) says that “systems are sometimes described as knowledge-based, more constructivist approach to teaching and learning, dependent on student dialogue and discussion, and relatively flexible web-based administrative services”. Later, in late 1980s, text reconstruction programs, like Developing Tray, TextPlay, Storyline, Quartext, Storycorner and Storybroad were introduced to project the idea of e-learning.

In 1990s, the introduction of internet into education brought a tremendous change in the field of language education and it transformed the textbooks into e-books, face-to-face to blended learning, paper-based exam to online exam, etc. minimizing the constraints of time and space. Study materials were made available online to be accessed at any time and from anywhere. Also, the “training can be customized by allowing material to be adapted to individual levels and tasks to be paced according to personal progress” (Semenov, 2005, online). Technology has changed not only the way the humans interact among them, but also the material resources which are used in a teaching learning setting. Sharma (2005, p. 2) argues that “these changes have initiated a paradigm shift from the development of information-based competencies to communicative competence”. The internet has changed the way the education is imparted enabling the students to attain new learning experience which was not possible through traditional approaches (Farooq, 2011).

Now, the teachers need to learn “cutting edge” technology and need the same to be incorporated into their teaching style. It has already be proved that technology plays a positive role in promoting activities and initiatives of student and teaching effect in English class (Brierley, 1991; Sabourin, 1994; Boswood, 1997; Beatty, 2003; Lee, Jor, & Lai, 2005; Szendeffy, 2005; Towndrow, 2007). Whereas some studies have addressed specific issues in second language acquisition (Chapelle, 2001), communication (Warschauer & Kern, 2000) or language teaching for the professions (Arnó, Soler, & Rueda, 2006) to only mention some. But at the same time, technology is still a source of fears and insecurity for many teachers everywhere in the world despite the latest advances applicable to language teaching such as specialized websites, blogs, wikis, language teaching methodology, journals, and so. Most times the reasons are the lack of time for out-of-school training in combination with the natural difficulty in incorporating new working schemata within their own classrooms.

Lingard, Rawolle, & Taylor (2005) mention that such rapid technological changes have posed challenges to national and international educational policies. According to UNESCO (2004, p. 19), “introducing change into a system is relatively easy; ensuring that change flows from policy to the classroom is a formidable challenge”. However, integration of technology into the educational system does not happen “overnight” (Robertson, Fluck, & Webb, 2007, p. 115). The most important challenge is the need to critically rethink our engagement with educational policies from a different perspective—especially in higher education (Marshall, 2007; Gale, 2007;

Altun, 2007).

Alharbi (2013) mentions that a teacher's belief is an important factor in using technology in the classroom as they don't take into consideration when and how to use technology in the classroom. Teachers tend to traditional methods follow moralistic instructional methods whereas teachers with constructive approach tend towards student centered methods. Previous studies reported that teachers who were forced to use computers in their teaching ultimately gained confidence and skills.

Some teachers are afraid of being replaced by the technology in their own classrooms. However, the purpose of integrating technology is not to replace the teacher but to acknowledge and understanding the importance of the fact that technology can improve the learning process (Healy, McCutcheon, O'Sullivan-Rochford, & Carr, 2010). Ertmer (2005) highlights some fundamental barriers associated with underlying such beliefs which are not easily detected or understood, and therefore, are more challenging to overcome. Some of the challenges are: 1) the availability of and access to computers, 2) the content knowledge, and 5) technical, administrative, and peer support (Deborah, 2008, p. 198).

1.2 Relevant Studies

Windschitl & Sahl (2002) conducted a research on teachers' beliefs about using technology and concluded that teaching with technology can alter the traditional roles of teachers and they must realize to change their role in the classrooms to achieve better outcomes.

Schoepp (2005) researched on the barriers towards using the technology and found that scarcity of technology for either faculty or students was the least cited barrier. On the other hand, the most referred barrier was the belief that faculty are unsure how to integrate technology with teaching.

Newhouse (1999) discussed the common barriers associated with the adoption of the technology and found that the barriers preventing teachers from integrating technology were poor computer literacy, lack of time, lack of confidence, and hardware malfunctions.

Wachira & Keenwe (2010) revealed that organizations and administration have voiced the need to prepare teachers to integrate technology into their teaching for decades. They also found that the teachers committed to integrate technology with teaching faced many challenges which included lack of equipment, lack of equipment support, the organization culture, teacher beliefs and attitudes about teaching, and accepting the change to digital teaching (p. 18).

Ertmer (1999) also highlighted certain barriers to integrating technology into teaching and learning. He classified technology integration barriers in two major categories. The first-order barriers which refer to obstacles that are external to teachers including barriers such as lack of resources, institution, subject culture, and assessment. The second-order barriers are intrinsic to teachers and include obstacles such as attitudes, beliefs, knowledge, and skills.

Previous research from 1995 to 2006 identified six major categories of the barriers faced by the teachers in integrating technology into their instructions: (a) resources, (b) knowledge and skills, (c) institution, (d) attitudes and beliefs, (e) assessment, and (f) subject culture.

Therefore, the effective integration of technology with teaching seems a challenging task (Peeraer & Van Petegem, 2011; Polly et al., 2010; Smolin & Lawless, 2007). Smolin & Lawless (2007, p. 2) argue that "technology-based reform is especially challenging because it is a multifaceted endeavor". This concept is further described as a "terrain of complexity, multiplicity and interconnectedness" (Gale, 2007, p. 471).

1.3 Saudi Arabian Context

In Saudi Arabia, the use of technology is being used as an effective tool for improving productivity and an economic growth (Al-Daweesh, 2011, p. 9) and improving sustainable economic gains. In 1980s, technology was first introduced to Saudi education system and in 1991 the Ministry of Education made it is part of the curriculum (Oyaid, 2009, p. 23). BouJaoude (2003, p. 3) indicated that technology is advantageous to Saudi Arabia in many ways because it helps make the abstract knowledge real, develop public awareness, and improve standard of living and a source of income for some cohorts in the society. Since then, Saudi Ministry of Education has taken various steps to incorporate information technology, computer science, and computer application to aid the teachers, students at school level as well as at the societal level to eradicate illiteracy from the Saudi society to have a sustainable envisioned growth (Oyaid, 2009, p. 30). In Saudi education system, technology was incorporated at all levels from 2000 to 2004 to progressively develop teachers as knowledge producers and economic growers (Al-Omran, 2007). In the above-mentioned years computer skills are made

mandatory for Saudi teachers and a requirement for their qualification.

Teachers' capacity can be built on technology use if they are given a thorough training. In his study, Khan (2001) found that the lecturers and trainers' competency could be enhanced on technology when they made use of various ICT-based hardware and software. It will give them the capability to deliver a more enhanced graphics-oriented presentation of lectures (Ageel & John, 2012, p. 2), facilitate computer based technologies for knowledge sharing (Lindvall & Rus, 2003, p. 4), change the ways of teaching (Almalki & Williams, 2012, p. 3) deliver high quality education and prepare students for the information era (AbdulKafi, 2006, p. 5), and help reduce teachers' efforts to deliver knowledge, achieve better visualization and motivate the learners (Almalki & Williams, 2012, p. 1).

1.4 Research Questions

- 1) How do teachers plan and prepare their lessons using technology in their classrooms?
- 2) How does technology affect the classroom management and instructions?
- 3) Do technology-related competencies influence professional responsibilities of teachers?

2. Method

The framework applied in this research is based on constructivism theory that can include any tools that naturally produce interactive learning environments. Constructivism consists of learning or knowledge construction emphasizing learners as active participants in making sense of their environment and their experiences within that environment (Abdal-Haqq, 1998; Vygotsky, 1978). Active participants are encouraged to complete the knowledge construction sequence as outlined by Piaget (schemata-disequilibrium-accommodation or assimilation) (Piaget, 1954). Interactive teaching begins with a philosophy about teaching with technology and results in a new process of interactive teaching and learning. Teachers are responsible for planning, teaching, and facilitating sequences integrated with technology. In the planning phase, teachers reflect on what tools will enhance cognitive expansion for students such as the implementation of Web 2.0 tools that aid students in accessing and processing information. In the interactive teaching phase, teachers model uses of technology to construct knowledge and demonstrate concepts through dynamic interactions. In the third phase, teachers facilitate knowledge construction through discourse as students participate in whole class instruction.

To know teachers' perception regarding integration of technology with teaching, a questionnaire was designed based on the rubrics by Danielson (2007). The questionnaire was distributed among the English language teachers (50 male and 50 female) at the Taif University English Language Centre. The questionnaire has four parts focusing on technology-related competencies: planning and preparation, the classroom environment, instructions, and professional responsibilities. The researcher used Likert scale (strongly agreed, agreed, not sure, disagreed, and strongly disagreed) and the collected data was tabulated and presented in a table form using scale 1-5 (strongly disagreed - strongly agreed).

3. Data Analysis

The data was collected through a questionnaire based on technology-related competencies suggested by Danielson (2007). The responses received from English language teachers are discussed here under different domains.

3.1 Domain 1: Planning and Preparation

Integrating technology at planning and preparation stage is fundamental to create a technology enhanced learning environment.

Table 1. Planning and preparation (technology-related competencies)

	Statements	Responses on scale 1-5 (Min-Max)		
		Both	Male	Female
1	I use online resources, including professional social networking sites, to stay current on the latest research and best practices in the field.	1.76	1.96	1.56
2	I am aware of the characteristics of “net generation” learners and their relationship with technology and use this information to design engaging activities.	2.32	2.52	2.12
3	I determine the technology skill level of students, knows the expected competencies for productivity and research, and finds means of remediation of individual students when needed.	2.14	2.44	1.84
4	I use adaptive and adoptive technologies with students with special needs.	2.38	2.60	2.16
5	I establish appropriate goals for technology applications for students.	2.02	2.16	1.88
6	I know, access, and use digital resources provided by the state and district, including productivity tools, online teaching and reference materials, and textbook supplemental materials	1.94	2.04	1.84
7	I design learning activities that use the technology resources available	2.00	2.20	1.80
8	I use online resources to provide instructional materials at differing levels and subjects to meet individual student abilities, needs and interests.	2.06	2.12	2.00
9	Assessment criteria of student work include qualitative indicators of effective technology production	2.08	2.24	1.92

The responses are not encouraging which reflect that teachers either don't use technology in their classrooms or are not aware of the technological gadgets. The most favored statement (2.38) was “I use adaptive and adoptive technologies with students with special needs” which shows that the teachers usually don't include technology at planning stage unless there is a need for special students. Though the respondent mentioned that they (2.32) are aware of the characteristics of “net generation” learners but only (1.76) use online resources, including professional social networking sites and they (1.94) access, and use digital resources including productivity tools, online teaching and reference materials, and textbook supplemental materials.

Also, (2.14) of respondents know the expected competencies for productivity and research and finds means of remediation of individual students when needed whereas only (2.0) replied that they design learning activities that use the technology resources available. This reflects that most of the teachers (males and females) don't use technology at planning and presentation stages.

However, they agreed to assessment through technology (2.08), using online resources (2.06), and establish appropriate goals for technology application for students (2.02). This means that the teachers need training on how to integrate technology at planning and preparation stages.

3.2 Domain 2: The Classroom Environment

The second domain reflects teachers' attitude towards technology in classroom environment which reflects actual use of technology in the classroom.

Table 2. The classroom environment (technology-related competencies)

	Statements	Responses on scale 1-5 (Min-Max)		
		Both	Male	Female
1	My interactions online follow the same guidelines as face-to-face interactions.	1.86	1.72	2.00
2	I demonstrate an enthusiasm for educational technology and its uses.	1.94	2.00	1.88
3	I use technology to provide a wider audience for student work. Appropriate safety and privacy efforts are made.	2.32	2.44	2.20
4	I help students use technology in the revision process of their creative efforts.	1.70	1.72	1.68
5	I use technology to facilitate peer editing of student work.	2.32	2.56	2.08
6	I have rules and expectations for productive technology use in the classroom, including the use of personally owned technology devices.	2.10	2.28	1.92
7	I use the student information system efficiently, resulting in minimum use of class time for management tasks.	1.94	1.96	1.92
8	I monitor student technology use and responds to misbehavior if it occurs.	1.88	2.04	1.72
9	I arrange the technology in the classroom for ease of monitoring and flexible use.	2.32	2.36	2.28

Almost the same number of respondents (2.32) favored the statements that they use technology in their classrooms to provide a wider audience for student work, to facilitate peer editing of student work and classroom for ease of monitoring and flexible use. This reflects that they use the available technology in their classroom as per their requirements.

On the other hand, as they don't include technology properly at planning and preparation stages, they confuse online interaction with face-to-face interaction (1.86), monitor student technology use (1.88), and help students use technology in the revision process (1.70). This reflects that a minor number of teachers usually use technology in the classroom and most of them are not trained to integrate technology with their teaching.

However, they want to make a productive use of technology (2.10), are enthusiastic about technology and its uses (1.94) and want to improve their managerial skills through effective use of technology (1.94).

3.3 Domain 3: Instructions

The third domain relates to technology-related competencies in instructions.

Table 3. Instructions (technology-related competencies)

	Statements	Responses on scale 1-5 (Min-Max)		
		Both	Male	Female
1	I give students alternate means of discussion and asking questions using technologies to bring out the ideas of all students.	1.78	1.92	1.64
2	I allow students to initiate discussions in online forums such as classroom blogs, discussion lists, and social networking sites.	1.76	2.04	1.48
3	I expect and reinforce appropriate student interaction when using online tools.	1.90	2.04	1.76
4	I use technology to create and project visual and auditory data that help explain content and concepts.	2.00	2.25	1.76
5	I use technologies such as interactive whiteboards, student response systems, and computer games to engage students.	2.16	2.20	2.12
6	I encourage students to use online resources to answer questions and explore concepts during class and teach search and information evaluation strategies.	2.06	2.28	1.84
7	I use technology in ways that make students productive and meet the instructional goals of the lesson.	2.02	2.16	1.88

The responses suggest that the teachers try to use the available resources in their instructions. They use interactive boards and student response system (Blackboard) in their instructions (2.16), encourage students to use online resources through different activities (2.06), and try to involve the students making them productive (2.02).

However, involving all the students in technology-based instructions is difficult (1.78) and in discussions in online forum or social networking (1.76). The respondents expect and reinforce appropriate student interaction when using online tools (1.90) and use technology to create and project visual and auditory data that help explain content and concepts (2.00). The responses of the teachers reflect that they want to use technology in their instructions and due to limited resources and may be lack of interest on the part of students restrain them to a limited use of technology.

3.4 Domain 4: Professional Responsibilities

The fourth domain is using technology in fulfilling professional responsibilities.

Table 4. Professional responsibilities (technology-related competencies)

	Statements	Responses on scale 1-5 (Min-Max)		
		Both	Male	Female
1	I use online grading and reporting system to maintain information on student completion rates and share this information through student and parent portals in real time.	1.96	2.08	1.84
2	I use online grading system portal to inform students of upcoming assignments, projects, and assessments.	2.04	2.16	1.92
3	I use the university website to provide a wide range of up-to-date information to students.	1.84	2.04	1.64
4	I use online communication tools such as e-mail, blogging, and social networking to keep students informed on a regular basis.	1.80	1.84	1.76
5	I use collaborative online tools to communicate and work with colleagues.	2.02	2.36	1.68
6	I volunteer to share effective uses of technology at staff meetings and in-service trainings, through professional writings and presentations, and through demonstrations to community organizations.	1.72	1.88	1.56
7	I participate in both organized and personal learning opportunities online.	1.96	2.12	1.80
8	I honor and learn from students who have technology competencies and knowledge.	1.92	2.12	1.72
9	I keep an open but critical mind about technology uses.	1.98	2.20	1.76

As the university is using an online system, so the teachers feel comfortable in using online grading system portal to inform students about their assignments and assessment (2.04) and use collaborative online tools to communicate and work with colleagues (2.02).

However, they showed reservations regarding using university website to provide a wide range of up-to-date information to students (1.84), using online communication tools such as e-mail, blogging, and social networking to keep students informed on a regular basis (1.80), and volunteering to share effective uses of technology at staff meetings to community organizations (1.72). The respondents use online grading system (1.96), participant in online activities (1.96), honor students' technology competencies (1.92), and keep an open mind towards using technology (1.98).

4. Discussion and Conclusion

Technology has provided us new opportunities that can transform the process of teaching and learning which means that a teacher can create a different learning environment that promotes interactivity (Sessoms, 2008). For such an environment, a teacher must have some technology-related competencies and training how to integrate technology with teaching. The responses to the questionnaire suggest that teachers are aware of the technological developments and are using technology at different stages of teaching process but without any proper training. Teachers need time to sift through the capabilities of interactive technology and to understand which of those capabilities can influence teaching and learning practices. When teachers are prepared with a sense of integrating technology to create interactive learning environments, it will be part of everything starting from planning and preparation, the classroom environment, instructions, and professional responsibilities.

Teachers need to be trained in ways that encourage them to think of learners as knowledge producers, rather than consumers. The tools available today have the power to provide the necessary background for this new model of teaching. While many tools exist, an interactive board is the one tool that provides an interactive platform that promotes interactive teaching and interactive learning. Many tools might provide the opportunity for interactive learning; however, very few, if any, provide opportunities for both interactive teaching and interactive learning. Teachers that create interactive learning environments must be equipped with both technical skill and an integrated pedagogy with technology as the foundation.

In Saudi Arabia, new generations of educational technology are moving towards models and theories that are expected to provide the insights necessary to advance educational technology research in promising new directions (Samaras, Giouvanakis, Bousiou, & Tarabanis, 2006). New tools are thought to empower educators to change the way teaching and learning occurs. Getting to the level of students using technology in this manner is not easy but it can be accomplished by preparing future teachers to think interactively and to teach interactively. Creating an interactive learning environment is paramount as learners are changing and as information is becoming more accessible to all.

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