An Interpretive Inquiry into the Integration of the Information and Communication Technology Tools in TEFL at Egyptian Universities

Dr. Safaa, M. Abdelhalim

Associate professor of Curriculum & EFL Teaching Methods, Faculty of Education, Helwan University

Abstract

This study sought to investigate EFL faculty members' perceptions, competencies, current practice and preparation in integrating information and communication technology (ICT) tools in their teaching and learning activities in relation to different variables (gender, age, teaching experience, academic level differences, training); as well as barriers that prevent them from making effective use of such tools. A total of one hundred and seventy two EFL faculty members from 14 public universities in Egypt participated in this study. They completed a five-point Likert scale questionnaire that was later analyzed using quantitative methods. Subsequently, followup interviews were conducted with 12respondents. Overall, the results revealed that while EFL staff members had positive perceptions of the usefulness of ICT tools in language teaching and learning and they are familiar with ICT use mostly in their personal lives and, to a lesser degree, in teaching practices, they were less likely to integrate them into their language teaching. Findings suggested continuous professional training should be seen as a main solution in assisting staff members strengthens their ICT skills and encouraging them to keep up to date with recent technologies in ELT.

Keywords: Information and Communication Technologies (ICTs), Web 2.0 Tools, ICT Integration, EFL Instructors' believes, Attitudes, Competency.

Introduction and background

"The necessity of ICT integration in the teaching and learning process stems from the struggle between Staff members who are termed 'technology immigrants' versus students who are natives."A university faculty member

The 21st century, known as the information age, includes a movement to a new age, which "...is said to be informational,

global and networked" (Castells, 2000, p. 10). Brunsell & Horejsi (2013, 9) indicate that with these rapid technological changes and realizing the effect of information and communication technologies (ICTs) on the workplace and everyday life, today's educational institutions try to restructure their educational curricula and classroom facilities, in order to bridge the existing technology gap in teaching and learning and to teach the skills and knowledge students need for the 21st century. Teaching approaches in today's classrooms have also changed dramatically because students' learning approaches are different from those of the previous generation (Blake, 2008, 11).

Thompson (2007, cited in Smith and Dobson, 2011, 317) assures that, in educating future students, institutions of higher education must understand students and their changing behaviors. Prensky (2001:1) argues also that learners nowadays "think and process information differently" as natives to the digital world; therefore their interests, expectations, beliefs and practices should be evaluated within the digital context. In this direction, to educate those students, educational systems must ensure that instructors are equipped for the future as well. Various forms of technology have to be integrated into learning and teaching environments. Accordingly, instructors need to have a large repertoire of skills and the ability to apply them in different situations for success (Moore, 2005).

Shroff & Vogel (2009, p.60) states that it is important to look for "clues as to how e-learning technologies can become powerful catalysts for change as well as tools for redesigning learning and instructional systems". ICTs tools include wikis, blogs, podcasts, social networks, video-sharing sites such as YouTube, and virtual worlds such as Second Life. The maturing of instructional platforms, also referred to as Learning Management Systems (LMS), is another development in recent ICTs Field. Each ICTs tool has its specific benefits and application with one of the four language parts (speaking, listening, reading, and writing).

ICTs are not just regarded as tools, which can be added to or used as a replacement of existing teaching methods. ICTs are seen as important instruments to support new ways of teaching and learning. They should be used to develop student's skills for cooperation, communication, problem solving and lifelong learning (Kern, 2006). Galy, Downey, and Johnson (2011, 210) are of the view point that these new technologies are very useful additions to daily classrooms as they can enhance learning among tech savvy students, mirroring the use of these technologies in their daily lives.

ICTs and English language Teaching and Learning

According to Sendall, Ceccucciand Peslak, (2008) new communication technologies are redefining the concept of literacy. Traditional literacy of paper, pencil, and book has expanded to include word processors, video editors, instant messaging, and virtual worlds. Smith and Dobson (2011, 317) assure that to become fully literate in today's world, students must become proficient in these new literacies, widely known as information and communications technology (ICT). Merlin (2012, 109) states that to understand such change, it would be useful to draw a brief history of Computer-Assisted Language-Learning (CALL) from a pedagogical posture (See table 1).

Table (1) Three Stages of CALL Source: Adapted from Kern and Warschauer 2000 (cited in Blake, 2008, p. 54)

Stage	Structural CALL	Communicative CALL	Integrative CALL
Technology	Mainframe	PCs	Multimedia and Internet
Teaching paradigm	Grammar translation and audio- lingual	Communicative language teaching	Content-based instruction
Views of language	Structural (formal structural system)	Cognitive (a mentally constructed system)	Socio-cognitive (developed in social interaction)
Principal use of computers	Drill and practice	Communicative exercises	Authentic discourse
Principal objective	Accuracy	Fluency	Agency

As pointed out in table (1) CALL has developed rapidly since its beginning in the 1960's.In its first stage, Call started on mainframe computers where language learning, according to Blake (2008, 49), meant memorizing a body of frequent vocabulary items, clichés, and phrases used in certain contexts. The main goal of language learning at that time was accuracy. In the second stage, with the emergence of communicative approach in TEFL classroom, CALL applications uses have been increasing. There have been more integration of advanced computer application into EFL classroom. It increased the uses of internet and gave instructors and learners greater flexibility in designing and using online activities. Finally, with emergence of web.2 tools, Integrative CALL started. Web.2 tools has provided important sources and materials into ELT context such as social networks, EFL teaching platform, blogs, YouTube, newspaper, radio broadcast, videos clip etc. Also, many integrative CALL teaching methods have been emerged such as task-based, project-based, content- based and flipped- instructional model which might be used actively in EFL classroom (Ozwero, 2009).

ICTs provide so many options to ELT such as making teaching interesting and also making teaching more productive in terms of improvements. The International Reading Association highlights the prosper role of ICTs in teaching and learning process when in its position statement: Integrating literacy and technology in the curriculum (2000, 2) states: "literacy educators have a responsibility to effectively integrate these technologies into the literacy curriculum in order to prepare students for the literacy future they deserve".

Analysis on the Necessity of Integrating ICT in English language Teaching

The introduction of ICTs in language teaching has opened new horizons for language instructors to create more interactive and learner-centered classroom environment. There are many examples that reflect EFL instructors' actual usage of ICTs functionalities. Hanson and Rilling (2006) divide self-access to ICTs into four types. In the first type, true self-access, students utilize the ICTs on their own and choose whatever they think is beneficial to mastering the language. The second type, recommended self-access, is when instructor direct their students to certain ICT tools after diagnosing their needs and determining remedial materials for them. The third type, required access, refers to ICT tools that are an integral part of the course that does not require the instructors' presence. The fourth type of access is class access, in which the instructor is present to guide and supervise students who are required to access the ICT tools in class.

Shyamlee & Phil (2012, 151- 153) summarize the main reasons behind the necessity for integrating ICT tools in English language teaching and learning activities as follows:

- 1. To Cultivate Students' Interest in Study. ICTs audio, visual animation, interactive applications activates students' interest and motivation naturally and humanely.
- 2. To Promote Students' Communication Capacity. While traditional teaching has focused on understanding structure, meaning and function of the language, and makes the students passive recipients of knowledge, ICTs functionalities through its integration of teaching and learning, provide students greater incentives through facilitating collaborative learning and group interaction both face to face and online.
- 3. To Widen Students' Knowledge to Gain an Insightful Understanding to Western Culture (Intercultural competence)
- 4. To Improve Teaching Effect. ICTs enrich teaching content, make the best of class time, shift the teaching pattern from 'instructor-centered' to 'student-centered' and thus improve class efficiency.
- 5. To Create a Context for Language teaching. Through ICT English teaching, using Videos, discussion boards, wikis, blogs enrich the content of classes, and also imagine different contexts in the process of producing teaching

courseware, which enhances the initiative of both instructors and students.

6. To support Instructor's professional development. With the rise of social networks such as Facebook, LinkedIn, and micro-blogging sites such as Twitter. These have empowered instructors worldwide to join in a larger conversation with a global community of educators.

Factors Affecting Instructors' Perceptions of ICTs Integration into Language Teaching-Learning

According to Pelgrum (2001) and Rogers (2003) the success of integrating ICTs into EFL teaching, depends on several factors, such as the availability of resources, instructors' perceptions about technology, technical support, and training instructors on how to implement technology in the classrooms. Gilakjani (2012, 135) points out that ICTs can serve as a valuable and well-functioning instructional tool only in classrooms in which instructors: a) have convenient access, b) are adequately prepared, c) have some freedom in the curriculum, and d) hold personal beliefs aligned with a constructivist pedagogy. According to Liaw, Huang and Chen (2007), instructors' ICTs self-efficacy, judgment of their capability to use functionalities of ICTs tools, influences their use of ICT in teaching and learning.

Anderson and Dexter (2000) argue that although infrastructure support is imperative, educational leadership is a stronger predictor of instructors' use of ICTs in teaching.

Relationship between Instructor Beliefs, Contextual Factors, and ICTs Usage

As instructors beliefs are closely related to their practices, instructors' ICTs usage is naturally affected by their pedagogical beliefs. Condruz-Bacescu (2013,5) indicates that introducing a new ICT tool, with the expectation that it could help improve the teaching and learning process, may be perceived differently by each faculty member depending on their backgrounds, beliefs and professional interests. In many educational institutions that have done great efforts to update their equipment, spent a lot in technology, and proved the positive effects of integrating ICT in language learning (Blake, 2008; Lam, 2000), a lot of instructors still miss the appropriate interest, sufficient motivation to learn and have a challenging attitude towards teaching with ICT tools. Their reasons are the shortage of time for training in combination with the natural difficulty in incorporating new ICTs within their own teaching and learning practices. This proves that without detailed knowledge of the instructors' believes, prior knowledge and skills, and previous experiences the implementation of ICTs will be unsuccessful.

The important role instructors' beliefs play in ICTs integration in teaching and learning process has been emphasized by Liaw, Huang & Chen (2006). They state that for instructors to use technology, they must believe: (1) technology can help them achieve higher-level goals more effectively; (2) no other more important goals will be disturbed by the technology usage; and (3) they have sufficient ability and resources to use technology. They also explained that instructors may be unwilling to adopt technology if the promoted usage is inconsistent with their existing beliefs or practices.

Technology Acceptance Model (TAM)

Perceived usefulness (PU), the degree to which an individual believes that using a particular system would enhance his or her productivity, and perceived ease of use (PEU), the degree an individual believes that using a particular system would be free of effort, are key determinants of the Technology Acceptance Model (TAM) that lead to the actual usage of a particular technology or system (Davis, 1989, 17).

According to the TAM, there is a relationship between users' beliefs about a technology's usefulness and the attitude and the intention to use the technology (see figure 1). Thus an instructor may adopt a technology if he or she perceives it as convenient, useful and socially important even though they do not enjoy using the technology. Furthermore, it is suggested that there are external variables that affect both perceived ease of use and perceived usefulness.

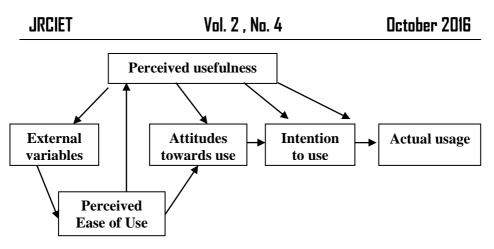


Figure. 1. Technology Acceptance Model (TAM) Source: Davis (1989)

Context of the problem

Instructors' pedagogy and their use of information and communication technologies (ICTs) as instructional tools are factors in helping staff members and universities meet the challenge of preparing students with the essential skills necessary for success in the 21st century. Ministry of Higher Education in Egypt, which consists of 17 public universities, 10 private universities and colleges, and a number of community colleges, mirrors this evolving situation in education. Thus, many Egyptian universities and colleges have begun a continuous effort to apply information technologies to teaching and learning process so that delivery of instruction can be more flexible and able to provide more opportunities to all students. These bring increasing expectations of staff members, both experienced and newly qualified, to integrate ICT into their Teaching and learning practices. They need to develop their teaching potential, adjusting their attitudes and visions so that they are able to better guide and prepare their students with the essential skills necessary for success in a rapidly changing, technology-driven society (Center of Educational Technology, 2003).

However, evidence of effective ICTs integration in EFL teaching practice at Egyptian Universities is still questionable. How well EFL staff members accept adapt to, and integrate ICT tools, when mastering a variety of teaching techniques and strategies is a necessity, is suspicious too.

Statement of the problem

This study addressed the problem that there is a lack of information regarding the ICT integration in the context of EFL teaching and learning at Egyptian universities and that the pedagogical potential of ICT integration in ELT remains largely unexploited by EFL staff members. Therefore, the present study revolved around the following main question:

How far do the EFL staff members in the Egyptian universities effectively integrate ICT tools in their teaching and learning activities?

The following research questions were derived from the main question:

- 1. What are the perceptions of university EFL staff members regarding the usefulness of integrating ICT tools in ELT?
- 2. What are the current practices of ICT tools by university EFL staff members in ELT?
- **3.** Is there a correlation between EFL staff members' perceptions of the usefulness of ICT tools and using them in their current teaching practices?
- 4. Are there statistical significant differences among university EFL staff members in their current practice of ICT tools integration in ELT in relation to number of related variables, including gender, age, and teaching experience?
- 5. What barriers are involved in the integration of ICT tools into ELT at Egyptian universities?
- 6. What are the possible strategies to successfully overcome the challenges that EFL staff members at Egyptian universities face while integrating ICT tools in ELT?

Purpose of the Study

The purpose of this study is four-fold:

1. Investigating EFL university staff members' perceptions of integrating ICT in EFL teaching and learning context;

- 2. Determining the relationship between staff members' perceptions of the usefulness of ICT tools and using them in their current teaching practices;
- 3. Exploring if there are statistical significant differences among university EFL staff members in their current practice of ICT tools integration in ELT in relation to number of related variables, including gender, age, and teaching experience; and
- 4. Exploring factors that may influence the integration of ICTs in ELT by Egyptian EFL university staff members and possible strategies to successfully overcome them.

Significance of the study

- 1. motivating EFL staff members to integrate ICTs in their teaching in order to create communicative language learning environment that goes beyond traditional TEFL classes;
- 2. guiding the design and implementation of ICT and pedagogy professional development of EFL university staff members;
- 3. Providing EFL educational system policy makers, instructors, administrators, curriculum designers and other researchers with first, a list of ICT tools that can be effectively integrated in EFL teaching and learning. Second, a list of barriers that may prevent EFL staff members from integrating ICT tools in their teaching and learning activities;
- 4. Exploring some possible strategies to successfully overcome the challenges that EFL staff members at Egyptian universities face while integrating ICT tools in a language classroom; and
- 5. Calling for a paradigm shift in university education to one that is search- and discovery-centered, emphasizing creativity and initiative, and valuing interaction and collaboration through integrating ICT tools in the teaching and learning context.

Delimitations of the study

- 1. A sample of active EFL staff members in the public Egyptian universities (A total of one hundred and seventy two EFL members from 14 public universities)
- 2. List of the ICT tools that could be integrated in EFL teaching and learning contexts. The chosen ICT tools were selected from Jane Hart's (2013) 'the top 100 ICT tools list', according to the votes of learning professionals worldwide.

Assumption of the study

A questionnaire was used in this study. Therefore, it has been assumed that the statements provided by the respondents are given honestly and not given in an attempt to mislead.

Definition of Key Terms ICTs Integration

Williams (2003) described ICT integration as the means of using any ICT tool (Internet, e-learning technologies, CD ROMs, etc) to assist teaching and learning.

For the purpose of the present study ICTs integration is defined as 'the use of web-based teaching materials and hypermedia in general as supplementary and/or comprehensive tools to deliver, support, and enhance EFL teaching, learning, and evaluation. This includes specialized assessment. educational web sites, discussion boards, collaborative software, e-mail, blogs, text chat, wikis, social bookmarking, social networking, micro-blogging, online presentations, video-sharing, photo-sharing. Web tours, podcasting. computer-aided assessment, and education animation, simulations, learning management software, electronic voting systems and more, with possibly a combination of different methods used.

Methodology

Participants

A total of 172 EFL staff members (104 females and 68 males) from 14 Egyptian Universities filled in the questionnaire.

Most respondents were from Helwan university (25), followed by Ain Shams University (23), Cairo University (22), Al-Fayoum University (16), Minia University (14) and AL-Azhar University (11), whereas few respondents were received from the other fifteen Universities (less than 9 from each University). As for their age, academic degree and teaching experience Table (2) displays the sample distribution according to these variables.

Variables	Category	Number of respondents	Percentage
	Less than 35	84	48.84
	35: 45	65	37.79
Ago	46: 55	16	9.31
Age	More than 56	7	4.06
	Total	172	100%
	Demonstrator	30	17.45
	Assistant lecturer	41	23.83
Academic	Lecturer (PHD)	69	40.12
Degree	Assistant professor	22	12.79
Degree	Professor	10	5.81
	Total	172	100%
	Less than five years	12	9.30
	5 - 10	32	19.67
Teaching experience	11-16	41	25.00
	17 - 22	52	31.39
	More than 22	35	20.34
	Total	172	100%

 Table (2) Distribution of sample according to age, academic degree

 and teaching experience

Respondents' ages were significant to the study in that this data would add to the analysis of the study. As shown in table (1) Majority of the respondents' age fall in the category (less than 35) with total number 84 (48.84 %) who were digital natives , followed by the category (35-45) with total number 65 (37.79%). Also, there were 16 respondents aged 46- 55 and 7 respondents aged more than 56 who would be considered as digital immigrants. Table (2) shows also that the majority of the respondents (40.12 % of respondents) were lecturers (PhD holders), with total number (69). Moreover, 31.39% of the respondents had teaching experience that ranges from 17-22 years plus 20.34 % with teaching experience more than 22 years.

Table (3) presents respondents' answers to the first three questions of the questionnaire (level and frequency of access to computers and internet services, and how they gained their ICT knowledge and skills) in order to reveal their relation to computers and internet services.

Category	Level	Ν	%
	can use (with sufficient experience)	169	98.25
Experience	can use with the help of others (with limited experience)	3	1.75
	Total	172	100%
	Usually	157	91.5
Frequency of use	Often	10	6.00
riequency of use	Sometimes	5	2.5
	Total	172	100%
	Self-training	118	68.4
Source of ICT	Professional training	32	18.5
professional	Family and friends	20	11.5
development	Private tuition	3	1.6
	Total	172	100%

Table (3) Respondents' characteristics in relation to level and
frequency of computer and internet services use

Table (3) shows that:

- 1. The answers given to the question related to computer experience revealed that majority of respondents were experienced in their use of computer and internet services while only 3 respondents (1.75%) reported that they had limited experience.
- 2. Respondents' answers to the question about the frequency of ICTs use, varied; 157 respondents reported using computers usually (91.5 %). Only a small number of respondents reported using them often (6%) or sometimes (2.5 %).
- 3. Most of the respondents got their ICT skills through self training (68.4%). While only (18.5%) received professional training.

Design of the study

This study is a descriptive study. Accordingly, survey method design was used to achieve the aim of the present study. Thus during the Second Semester of the academic year 2014 -2015, invitation email was sent to 260 staff members. A total of 200 members, accepted to share in the study and the same number of instructors were emailed the questionnaire link. All the respondents were approached via e-mails, Facebook, text messages and phone calls. The purpose of the study was explained to them and they were informed that their participation was voluntary.

Research Instruments

The current study utilized two main tools: A multi-sections questionnaire with close and open-ended questions on a five-point Likert scale and a semi-structured interview, conducted with a group of 12 EFL staff members.

The ICTs integration in ELT Questionnaire

The development of the questionnaire was based on the research questions and review of existing literature previously conducted in this field. The questionnaire items were derived from instruments from previous studies (Galanouli, Murphy & Gardner, 2004; and Torres, 2006) that had been conducted in fields similar to this study. There were two versions of the questionnaire (e-version designed on survey monkey website https://www.surveymonkey.com/r/DPQIS2T and paper version).The questionnaire in its final form consisted of four main Sections:

- **a.** Section one: (8 items) dealt with biographical data such as gender, age, academic degree and teaching experience. There were also two items about respondents' ICT competency level (level and frequency of access to computers and internet services), and ICT professional development (how they gained their ICT knowledge and skills);
- b. Section two: (10 items), the respondents responded to statements on 5-point Likert-type attitudinal scale

(Strongly Agree, Agree, Not Applicable, Disagree, and Strongly Disagree) about their perceptions of the usefulness of ICT tools integration into language teaching and learning process;

- c. Section three: firstly, (15point Likert-type items) dealt with statements relating to the respondents' current practices of ICTs integration in ELT activities or as a planned student learning activity. Secondly, respondents were asked to select the frequency of using each ICT tool on a list of ICT tools selected from Jane Hart's (2013) " the top 100 ICT tools list"; and
- d. Section four: firstly, respondents were asked to select the barriers that prevent them from integrating ICT tools in their teaching and learning practices from a list. Secondly, they were asked to provide answers to an open question regarding their suggestions for overcoming these barriers/challenges. For details, see appendix I.

The questionnaire was submitted to 9 specialized jury members. The jurors were asked to provide their opinions in terms of the extent to which the questionnaire was suitable for application and deciding whether some items needed to be modified, added, or omitted. Their suggestions such as rewording some items for clarity and defining a few terminologies were used to improve the questionnaire. As for the instrument reliability, the Cronbach's alpha index (Cronbach, 1951) was calculated to determine the internal consistency of the different items in the questionnaire; that is, how closely related the set of items were in the questionnaire. The reliability coefficients show that the survey has good internal consistency within each section at .79, .70, .83 and .85.

The interview

12respondents responded to five open-ended semistructured interview questions, through either face to face session or telephone calls (see appendix B). The interview data were then transcribed, translated, and extracted to triangulate with the other data.

Results and Discussion

Because the study was a sequential mixed method design and collected two sets of data, the results are presented in the same logic, starting with the quantitative section and then the qualitative section. The findings from both data analysis are triangulated and synthesized.

Quantitative Results

Results are presented by research questions.

The first question: What are the perceptions of university EFL staff members regarding the usefulness of integrating ICT tools in ELT?

The second section of the questionnaire included ten fivepoint Likert-type items concerning this question; the results are presented in Table (4).

perception Items		St. agree	Agree	Can't say	Dis- agree	St. disagree
I think the use of ICT promotes students' active engagement with learning		88%	12%			
I think the use of ICT is an immense source of motivatilearners.		73%	27%			
I think the use of ICT enrich content of teaching		87%	13%			
I think the use of ICT raises t teaching quality.		34%	66%			
I think the use of ICT provides various and actual opportunities for communicating in English language.		89%	11%			
I think the use of ICT provides various evaluation methods for students' language performances.		42%	58%			
I think the use of ICT overcomes the limitations of lecturing large classes		24%	34%	30%*	12%*	
I think the use of ICT helps students' self-directed learn		39%	61%			
Unless I use technology, stud think that I am far behind ot staff members	ther	45%	37%	10%	8%	
	Funda- mental		ort-ive	overvalued	surface led	Underva- lued
How would you characterize the overall ICT tools integration/use in English language teaching and learning?	9	42%	51%	7%		

 Table (4) Percentages given to the perception items

Table (4) showed that respondents of EFL staff members had overall positive attitudes towards ICT integration in English language teaching and learning context with an overall mean of 4.98 and standard deviation of 0.629. The results further highlighted that EFL staff members were well aware of the importance of integrating ICT in EFL teaching especially in promoting students' motivation and student-centered learning; enriching the content of teaching and improving students' learning of the English language communication skills through providing various and actual opportunities for interaction; and communication as stated in previous studies findings (Earl, 2000; Liaw, Huang & Chen, 2007). Yet it is clear from the responses, as highlighted in table (4) that they feel doubtful concerning the usefulness of ICT in overcoming the limitations of lecturing large classes.

The second question: What are the current practices of ICT tools by university EFL staff members in ELT?

The third section of the questionnaire related to current practice of ICT tools in ELT. The results are presented in Table (5).

Table (5) shows that 42% of the respondents often/always direct students to relevant links on the internet. 47% of the respondents (often or usually) encourage students to access language teaching websites (e.g., BBC, VOA, British council ... etc) as autonomous learners. In Item 5, only 24% of the respondents expressed that they sometimes use ICT tools to plan their courses and lectures. 50% reported that they often or usually use internet specialized websites to download teaching materials. No respondent has teaching website to help students learn (100% disagreed). 16% of the respondents reported that they often use social networking sites in teaching and learning activities. 4% reported that they sometimes use briefings in teaching; 16% of the respondents reported that they often use YouTube in their teaching; 30% of the respondents claimed that they would ask students to share their work in social networking sites. 100% of the respondents reported that they never or rarely ask students

to blog during lecture. 65% of the respondents reported that they often or usually ask students to use search engines to search information. Emails were more commonly used by the respondents (19% always and 67% often), whereas only 6% reported that they often combine other teaching software, such as eBooks and automatic feedback software, with their teaching.

Table (5) Percentages given to the teaching practicesstatement regarding current practice of the functionalities offered by ICT tools

	-			-	
Items	Never	Rarely	Sometimes	Often	Always
I direct students to relevant links on the internet,		11%	57%	33%	9%
I created my own teaching website to help students learn as they can access at any time.	100%				
I encourage students to access language teaching websites (e.g., BBC, VOA, British council etc) as autonomous learners	3%	10%	40%	35%	12%
I teach students to use search engines to search information,		5%	20%	35%	30%
I use ICT tools to plan my courses and lectures	29%	47%	24%		
I use internet specialized websites to download teaching materials		15%	25%	30%	20%
I often use teaching software (e.g., ebooks, automatic feedback software) in teaching to facilitate students' self-directed learning	20%	42%	31%	6%	
I use social networking sites to connect students with each other as well as native speakers, as it offers real time discussions.	9%	40%	35%	16%	
I ask students to share their work in social networking sites.	10%	23%	37%	30%	
I often use briefings in teaching because the visual information provides helps the students to learn.	39%	57%	4%		
I ask students to blog during lecture	96%	4%			
I often use internet forums in teaching because it offers interactive discussions.	23%	40%	26%	20%	
I often use YouTube in preparing lectures as it provides videos from actual scenarios	17%	25%	42%	16%	
I often use email in teaching as I can have a complete record of sending and receiving.		6%	18%	67%	19%

According to these findings, although respondents are willing to familiarize themselves with ICTs usage, they seem to be rather reluctant regarding integration of ICT into their teaching. Results also point out that, even when respondents integrate ICT in their teaching, integration is limited to low-range applications such as email services or getting information from the Internet. This result is in consistence with the findings of other related studies (Arnold, 2007; and Galanouli, Murphy & Gardner, 2004).

The responses of the respondents on section two of the questionnaire regarding frequency of using each ICT tool in the five given categories came as follows:

The first category: Educational planning and training tools

100% of the respondents never use any of the course management, course platforms, and authoring tools. As for the English language teaching websites, 57% of the respondents reported that they often use the British council web site in their teaching. While breaking news website got 50%, Randall cyber got 45%. While few numbers of respondents reported that they sometimes use BBC and VOA (20% and 18%). As for Quizzers and survey tools, only24% of the respondents reported that they sometimes use survey monkey.

The second category: Presentation and content design tools

54% of the respondents reported that they often use PowerPoint in their teaching. 42% often use YouTube. While only 20% use Google slides. 100% of the respondents never or rarely use photo and audio tools.

The third category: communication and collaboration tools

100% of the respondents never use Webinars and web meetings in their teaching. As for Networking and collaboration tools: 38% of the respondents reported that they often or

sometimes use Facebook in their teaching practices. While only 20% of the respondents reported that they use Google sites

The fourth category: mobile devices and synchronization

100% of the respondents reported that they never use Mobile devices. As for Cloud storage, 30% of the respondents often use Google drive 24% sometimes use drive Dropbox.

The fifth category: productivity tools

89% of the respondents often use Google search, 60% sometimes use Google scholar, 25% sometimes use Wikipedia.

It is clear from the results shown above that EFL staff members integrate ICTs into their instruction practices at a minimal level as their responses indicate a low rate of frequency with using ICT tools such as course management, course platforms and authoring tools, forums, wikis, and weblog to enhance instruction for their students. As for the type of functionalities used, results showed that only one ICT applications, namely sending students to specific Web sites were used to a significantly larger extent than other forms of interactive functionalities (forums, wikis), and especially synchronous ones (discussion boards, creation of audio files, Weblogs, creation of Web site, video conferencing), which were utilized to a lesser extent. These findings are in agreement with previous research (Arnold, 2007; and Shyamlee& Phill, 2012).

The Third Question: Is there a correlation between EFL staff members' perceptions of the usefulness of ICT tools and using them in their current teaching experiences?

The Pearson product-moment correlation and the Spearman rank ordered correlation were used. The results are presented in table (6).

Table.6. Correlation between EFL staff members' perceptions and using of ICTs

Paired Items	N	Correlation	Sig.
Usefulness of ICT versus Its use for language teaching	172	187	not significant

As shown by Table 6, there is not a correlation between respondents' perceptions of the usefulness of ICT integration in ELT and using it for language teaching. That is, while the percentages of their perceptions of the usefulness of ICT integration in ELT are high, the percentages of the functionalities they actually use to integrate ICT in their teaching are low. Also, when it came to current practice of certain ICT tools, the percentages decreased except in the use of Language Teaching websites, Google search engine, YouTube and PPT, which were the four most frequently adopted ICTs in language teaching and learning observed in this study. It can be inferred that staff members have positive attitudes toward ICT integration, but they are reluctant to use the technology in language teaching. This result is consistent with other previous studies (e.g.Kern (2006); and Shyamlee, 2012).

The Fourth Question: Are there statistical significant differences among university EFL staff members in their current practice of ICT tools integration in ELT in relation to number of related variables, including gender, age, and teaching experience? Independent samples t-test was carried out to answer this question. Table (7) and (8) show the results.

Table (7) the difference between the respondents' responses regarding their current practice of ICT in relation to gender(N= 172)

Gender	N	Μ	SD	Т	DF	Sig
Male	68	3.66	0.59	-4.663	286	.000
Female	104	3.22	.64	1.005	200	.000

According to Table (7) the difference between the male and female respondents' current practice of ICT in EFL teaching and learning is statistically significant (p<.05, Cohen's *d*: .7148). The male respondents reported higher level (Mean= 3.66) when compared to the level of female respondents (Mean= 3.22). This result is consistent with the literature on gender differences in general and many other research studies investigating gender and computer use or self-efficacy (Cassidy & Eachus, 2002; Kern, 2006; and Liaw & chin, 2007).

Table (8) One-way analysis of variance (ANOVA) for respondents' current practice of ICT integration in relation to age and teaching experience

variables	Source of variation	Sum of squares	DF	Mean square	F	Sig
4.00	Between groups	112.7	3	37.65	4.43	.005
Age	Within groups	1423.5	168	8.47		.005
Teaching	Between groups	170.00	3	56.66	4.88	.005
experience	Within groups	1947.8	168	11.59	4.00	.005

As shown by table (8), a statistical significance difference was found between the current practice of ICT integration of EFL staff member and their age level (p< .05) and teaching experience (p<.05). Further analysis was carried out to better understand within which groupthis significance was seen. Results show that:

High level of ICT integration practices were recorded at respondents' whose age under 35 followed by respondents at 35-45 age category. Staff members between 46-56 and above 56 age categories fell below their counterparts of ages under 35 and between 35-45 years. This sharp decline is indeed a cause for concern. This result is consistent with Prensky's (2001,1) speculation that persons born before the 1970s have had less experience with new technologies as opposed to those born during or after the 1970s and have grown up with technology.

Respondents with teaching experience less than 5, ranges from 5 to 10 and from 11 to 16 years categories integrate ICT in their teaching and learning activities more than their counterparts whose teaching experience is from 17 to 22 years and those who have more than 22 years teaching experience. This result is consistent with other studies conducted byDrent &Meelissen (2007); and Lam (2000). Also, Gorder's study (2008) revealed that experienced instructors generally decide to use technology involuntarily in response to external forces while instructors with little experience are more likely to use it on their own will. **The Fifth Question:** What barriers are involved in the integration of ICT tools into ELT at Egyptian universities?

Results concerning this question are shown in table (9).

Table (9) Barriers of ICT integration in ELT at Egyptian Universities

Item	Frequency	Reason
1	90	Lack of university administrative support
2	172	Lack of resources or access to computers, related teaching software
3	86	Lack of technical assistance
4	172	Lack of relative ICT tools training
5	172	Lack of knowledge about ICT integration in ELT
6	3	lack of experience with or confidence in computer skills
7	91	overcrowded curriculum and extremely busy workday
8	100	Increased workload related to ICT tools integration in ELT
9	92	lack of time for preparation, implementation, evaluation
10	125	large classes
11		Lack of students' knowledge and/or motivation towards ICT
12		I don't think that ICT tools helps with teaching or that technology is necessary for language instructor

According to table (8) all respondents (172) attributed ICT barriers to 'Lack of relative ICT tools training', 'Lack of knowledge about ICT integration in ELT' and Lack of resources or access to internet, and related teaching software.125 respondents see that the main barrier might be "Large classes". 100respondentschose'increased workload related to ICT tools integration in ELT'. 92respondents chose "lack of time for preparation, implementation, and evaluation". 91 chose 'overcrowded curriculum and extremely busy workday'. 90 respondents referred to 'the Lack of university administrative support'. 86respondents chose "Lack of technical assistance". Only three respondents chose "lack of experience with or confidence in computer skills". The above results are consistent with those of Lam, 2000; and Pelgrum, 2001.

The Sixth Question: What are the possible strategies to successfully overcome the challenges that EFL staff members at

Egyptian universities face while integrating ICT tools in a language classroom?

The respondents provided a number of suggestions for overcoming the barriers that prevent them from integrating ICT tools in their teaching and learning practices as follows:

- 1. Ongoing professional development must be provided for EFL staff members to model the new pedagogies and ICTs for learning with the aim of enhancing the teaching-learning process.
- 2. Providing EFL staff members with academic mentors as consultants and advisors concerning the practices of ICT integration in ELT.
- 3. Working on a new policy that support ICT culture and consider ICT integration in university teaching as obligation on all staff members.
- 4. Dividing students in large classes into small groups.
- 5. Equipping lecture halls and study classes with internet access points.

Qualitative Results analysis (Results of the interview)

Three major themes emerged from the interview data were as follows:

First, staff members' perceptions of ICT's potentials

All the interviewees shared the belief that ICT integration in English language teaching and learning context is necessary for 21st century literacy development. However, they are doubtful about the degree and nature of ICT use in teaching. They are also found to be doubtful with respect to the effectiveness of policy makers' strategy of implementing ICT integration into university teaching, specifically in terms of inadequate professional training. It was deducted that the majority of respondents do not feel adequately trained. This result corresponds to findings of the above mentioned quantitative research and is in accordance with relative literature review (Afshari, etal. 2009; Ajayi, 2013; and Drent & Meelissen, 2007).

JRCIET

Second, staff members' use of ICT in their teaching and learning activities

Although most interviewees are familiar with number of ICT tools (English language teaching websites, Google forms, Google sites, youtube, skype, wikis, blogs, Facebook, Dropbox .. etc), they admit that they do not use them in their teaching as in their personal life. Very few numbers of them actually incorporate interaction-oriented digital tools in their language teaching and learning practices (Facebook, Skype, whatsup, Hangout).

Third, challenges in integrating ICT tools in ELT at Egyptian universities

All the interviewees highlighted that the lack of facilities and technical malfunction in universities and their selfacknowledged deficient training in ICTs as the two biggest obstacles for staff members in their efforts to integrate ICT in the classroom. They also reported that overloaded compulsory courses do not provide them with the time needed and flexibility to experiment in ICT initiatives. Most of the interviewees reported another obstacle that is "their classes are large". One of the interviewees mentioned "we have over 90 students in each class, and there is no chance to help them each time they encountered technical problems". Five interviewees mentioned that 'lack of relevant technical skills regarding effectively utilizing ICTs as an instructional tool in EFL classes' is a main obstacle to ICTs integration in TEFL. Two other obstacles were mentioned: need for a change in the teaching style, lack of time for searching for appropriate materials.

Conclusion

Essentially, both quantitative and qualitative findings of this study revealed complementary results about EFL staff members' perceptions of ICT tools and using them to support language teaching. The qualitative part highlighted the *why* question that arose from the quantitative analysis. For instance, according to the quantitative results the mean for staff members' potential to use ICT tools in language teaching was lower than that of their perceptions of its usefulness, suggesting EFL staff members were less likely to use ICT to support language teaching. The reasons staff members gave during the interviews when triangulated with the quantitative results complemented each other. Therefore, the barriers staff members encountered was related to lack of professional training, class size, and practice time. The findings further indicate that universities provide limited support for integrating ICT into instruction.

Also, the quantitative results revealed that male respondents reported higher level when compared to the level of female respondents. However, it should be noted that other recent studies (e.g. Akkoyunlu and Orhan, 2003 cited in Kayaa & Alpaslan, 2010, 4373) have identified greater gender equivalence in use and skills levels. Therefore, as recommended by Shyamlee and Phil (2012) more research should be done on gender differences before definite conclusions may be drawn.

Recommendations

These findings have important implications for effectively integrating ICTs in ELT at Egyptian Universities.

- 1. Providing EFL staff members with training manual supported with practical examples and activities, of how they can integrate certain ICT tools in ELT.
- **2.** Identifying a list of the ICT skills necessary for EFL staff members for effectively integrating ICT in ELT.
- **3.** Preparing a well trained specialized ICT mentors for EFL staff members to help them in designing their ICT based activities.

Results of this study also imply areas for future research:

- 1. Designing professional training programs for developing university English language staff members' skills necessary for integrating ICT tools in ELT.
- 2. Future studies that examine the effect of various approaches and models which may help EFL staff members integrate ICT in their teaching such as Flipped model of instruction.

References

- Afshari M., Abu Bakar K., Su Luan W., Abu Samah B. & Say F. (2009). Factors affecting teachers' use of information and communication technology, *International Journal of Instruction January 2009, 2 (1), 32-45.*
- Anderson, R. E., & Dexter, S.L. (2000). School Technology Leadership: Incidence and Impact (Teaching, Learning, and Computing: 1998 NationalSurvey Report#6). Irvine, CA: Center for Research on Information Technologyand Organizations, University of California, Irvine.
- Arnold, N. (2007). Technology-mediated learning 10 years later: Emphasizing pedagogical or utilitarian applications? *Foreign Language Annals, 40*(1), 161–181.
- Blake, R. (2008) Brave New Digital Classroom Technology and Foreign Language Learning, Georgetown University Press, Washington D.C., USA
- Brunsell, E., & Horejsi, M. (2013). Flipping your classroom in one "take". *The Science Teacher, 80*(3), 8-18.
- Castells, M. (2000). The rise of the network society (2nd ed.). Oxford, Great Britain: Blackwell.
- Center of Educational Technology. (2003). *Research report on the development and direction of e-learning in Thailand*. Bangkok, Thailand: Center ofEducational Technology, Ministry of Education.
- Condruz-Bacescu Monica (2013)cultural challenges of e-learning, The 9th International Scientific Conference eLearning and software for Education Bucharest, April 25-26, 2013, 573-57810.12753/2066-026X-13-093
- Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 318-341.
- Drent, M., & Meelissen, M. (2007). Which Factors Obstruct or Stimulate Teacher Educators to Use ICT Innovatively? *Journal of Computers & Education*, 4 (3), 12-36.
- Galanouli, D., Murphy, C. & Gardner, J. (2004). Teachers' Perceptions of the Effectiveness of ICT-competence Training. *Computers & Education*. 43, 63-79.

- Galy, E., Downey, C., and Johnson, J. (2011), The Effect of E-Learning Tools in both Online and Campus-based Classrooms on Student Performance. *Journal of Information Technology Education*, 10, 209-230.
- Hanson-Smith, E. & Rilling, S. (Eds). (2006). *Language Learning Through Technology*. IV, 332. Alexandria, VA: TESOL, Inc
- Hart Jane (2013) A practical guide to the top 100 tools for learning, Centre for Learning & Performance Technologies, October 2013
- International Reading Association. (2000). *Integrating literacy and technology in the curriculum*: A position statement of the International Reading Association. Newark, DE: Author.
- Kayaa Sinan & Alpaslan Durmuú (2010). Pre-service teachers' perceived internet self-efficacy and levels of internet use for research. *Procedia Social and Behavioral Sciences* 2 (2010) 4370-4376
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, Vol. 40 (1), P. 183
- Kessler, G. (2006). Assessing CALL teacher training: What are we doing and what could we do better? In P. Hubbard & M. Levy (Eds.) *Teacher education in CALL* (pp. 23–42). Amsterdam and Philadelphia: John Benjamins.
- Lam, Y. (2000). Technophilia vs. technophobia: A preliminary look at why second language teachers do or do not use technology in their classrooms. *Canadian Modern LanguageReview*, 56, 389-420. <u>http://dx.doi.org/10.3138/</u> <u>cmlr.56.3.389</u>
- Liaw, S., Huang, H., & Chen, G. (2007). Surveying instructor and learner attitudes toward E-learning. *Computers & Education*, vol. 49, no. 4, pp. 1066-1080
- Merlin, P. (2012). Investigations in university teaching and learning, *Educational Technology*. 8, summer 2012, pp. 109-118, ISSN 1740-5106
- Moore, K. D. (2005). *Effective instructional strategies from theory to practice*. Thousand Oaks, CA: Sage Publications.

- Pelgrum W.J. (2001). Obstacles to the integration of ICT in education: results from a worldwide educational assessment. *Computers & Education*, 37 (2001) 163–178
- Prensky, M. (2001). Digital natives, digital Immigrants. On the *Horizon*, 9(5), 23-36.
- Sendall, P., Ceccucci, W., & Peslak, A. (2008). Web 2.0 matters: An analysis of implementing Web 2.0 in the classroom. Information Systems Education Journal, 6 (64).
- Shroff. R. H., & Vogel, D. R. (2009). Assessing the Factors Deemed to Support Individuals' Intrinsic Motive in Technology Supported Online and Face-to-Face Discussions. *Journal of Informational Technology Education*, 8, 59-85
- Shyamlee, S. & Phil, M. (2012). "Use of Technology in English Language Teaching and Learning": An Analysis, International Conference on Language, *Medias and Culture IPEDR* (33), 234-246
- Smith, J. and Dobson, E. (2011). Beyond the Book: Using Web 2.0 Tools to Develop 21st Century Literacies. *Computers in the Schools*, (28), 316–327, DOI: 10.1080/07380569.2011. 620939
- Thompson, J. (2007). Is education 1.0 ready for Web 2.0 students? Innovate: Journal of Online Education, 3(4). 22-31
- Torres, N. V. (2006) How Well are ESL Teachers Being Prepared to Integrate Technology in Their Classroom? *Teaching English as Second or Foreign Language e- Journal (TESL-EJ).* 9(4): 1-28
- Williams, M. D. (2003). Technology integration in education. In Tan, S.C. & Wong, F.L. (Eds.), *Teaching and Learning with Technology*, pp. 17-31: An Asia-pacific perspective. Singapore: Prentice Hall.