Investigating the Necessity of ICT Usage in Teaching Business English at Tertiary Level: The Higher Institute of Human Sciences Medenine as a Case study

Nesrine Hamdani
PhD student, Laboratory on Approaches to Discourse
Faculty of Letters and Human Sciences of Sfax, Tunisia
nesrinehamdani479@yahoo.fr

Abstract

The globalization of economy coupled with technology explosion in society and the status of English as a world language have a great impact upon the teaching and learning of English worldwide. The business world is challenging those of us who teach business English to make use of technology in a more 21st century manner. This paper addresses the question of whether content and methods of teaching business English must be reframed to align with the 21st digital century. It seeks to investigate whether or not it is necessary to use Information and Communication Technology (ICT) tools in teaching business English at tertiary level from learners’ perspective and the extent to which those materials can be effective. To serve the purpose of the current study, a questionnaire is delivered to 3rd year business English students aiming at eliciting their perceptions of the integration of ICT materials into classroom activities and its effectiveness. The data revealed that ICT use in learning business English is perceived as unnecessary and misleading unless it is implemented efficiently and under the provision of key factors the most important of which is students’ share of ICT tools with the teacher in the classroom.

Keywords: Information and Communication Technologies – Business English – Necessity of ICT use – Tertiary level.
1. Introduction

1.1. Background to the Study

As the world is moving rapidly into digital media and information, Information and Communication Technologies (ICT) have become common place entities in all aspects of life including education. It has been proved that new technologies have the potential to support education across the curriculum and to promote effective communication between teachers and students in ways that were not possible before (Lustigová, 2012). However, the development of ICT in education especially at universities and its effective implementation in the process of education is a dynamic process modifying and challenging the roles of both teachers and students. Teaching business English, for example, across the curriculum requires teachers to be active and creative in running the teaching and learning process due to their specified targets (HS, 2013). In this context, Barad (2009) reminds teachers that they should not only be up-to-date, but sometimes even up-to-the moment given that business environment changes increasingly quickly. Jeskanen-Sundström (2003) validated Barad’s assertion with his research. He demonstrated that students are certainly interested in more than lifeless definition of business terms; they want to experience the genuine business context which is almost impossible without ICT tools.

1.2. Statement of the Problem

Given the importance of access to technology and its rapid growth in different areas and fields, one tends to question whether it is vital to integrate technology into the curriculum and whether students perceive ICT as appropriate to improve learning especially English language learning. Coutu, Alway and Lowell (2002) lamented that “students sense of their learning in relation to technology is an important venue for understanding how technology impacts on education” (p.325). Henceforth, what I have posed might be worth investigating. The present research paper sets out to explore students’ perceptions of ICT use in learning business English at the Higher Institute of Human Sciences of Medenine with regard to its status (necessary or unnecessary) and its effectiveness.

1.3. Research Objectives

The ongoing case study is guided by the following objectives:

1. To investigate whether or not it is necessary to integrate ICT tools in teaching business English at tertiary level from students’ perspective.
2. To examine the extent to which ICT use can be effective.

1.4. Research Hypotheses and Questions

Based on the aforementioned research objectives, two main hypotheses are constructed in this study:

- H1: ICT use in classroom practices might be perceived as fundamental to learn business English to align with the digital era
- H2: ICT use may be effective if only it is used efficiently by teachers and students

Accordingly, two main research questions are raised in this research paper:

- RQ1: How is ICT application in learning business English perceived by learners at the Higher Institute of Human Sciences of Medenine? Is it perceived as a fundamental or an unnecessary tool?
- RQ2: To what extent is ICT perceived as effective?

1.5. Theoretical Model

The Activity System Model (ASM) developed by Engeström (1987) is used as a theoretical framework to identify the key elements for the success and effectiveness of ICT use in learning business English, as provided by the respondents in the questionnaire. ASM is an analytical model that has the potential to “understand the process of transformation within a system such as a classroom/university laboratory as well as illustrating how different systems interact with, and transform each other over time” (Hardman, 2005, p.380).

2. Literature Review

The present chapter offers a review of the literature conducted with the purpose of identifying the theoretical and empirical body of knowledge on different aspects of interest related to ICT use. First, an explanation of the major concepts this study draws from is provided. Second, previous studies and findings on ICT attitudes and the factors that may affect ICT success in language education are summarized and assessed. Finally, the analytical framework used as a conceptual background for data analysis is introduced, namely the Activity System Model (ASM). The reasons behind the choice of such model are also provided.

2.1. Discussion of the Study Major Items (concepts)

The aim of this section is to discuss the meaning of the basic concepts this study draws from. The general terms used to represent technology use in this study are ICT and CALL. Although these terms are used interchangeably in language research (Abu Samak, 2006; Gillespie & Barr, 2002; Rende, 2004), they are not equivalent to each other and do not indicate the same notion. By clarifying the distinction between these terms, this section provides a definition for each of these terms as they are used in the present study.

2.1.1. Computer Assisted Language Learning (CALL)

CALL is the most popular term used to refer to the overall application of technology in language teaching and learning (Abalhassan, 2002; Alrumaih, 2004; Braul, 2006). CALL was adopted in the TESOL (Teaching English to Speakers of Other Languages) conference in Canada in 1983 to refer to the applications of computers in ESL/EFL education (Chapelle, 2001). Levy (1997) defined CALL as “the search for and study of applications of the computer in language teaching and learning” (p.7).

2.1.2. Information and Communication Technology (ICT)

ICT is defined as a diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information. These technologies include computers, the internet, broadcasting technologies (radio & television), and telephony (Blurton, 2002). ICT refers to technology as tools of modern invention and can be used in many different fields, whereas CALL refers to the application of technology specifically in language education (Shaabii, 2010). ICT use in English classes is any use of “computing devices such as desktop computers, laptops, handheld computers, software, or internet in schools for instructional purposes” (Hew & Brush, 2007, p.225).

Within the scope of the current study, ICT specifically refers to computer-based technologies such as desktops, laptops, tablets, smartphones, software and internet-based technologies including emails, websites, and social networking sites for the purpose of English teaching and learning (Davies & Hewer, 2009).
2.2. Previous Findings on ICT Perceptions and the Key Factors for ICT Success

This section provides a general survey of previous investigations of ICT use in English language teaching (ELT) and more specifically in business English teaching. First, a survey of students’ perceptions of ICT use in business English learning is discussed. Second, a review of the key factors for effective ICT use in English language learning is presented.

2.2.1. Students’ ICT perceptions

This part offers a review of former investigations on students’ ICT perception as it is the focus of the current research paper.

Students’ attitudes toward the use of ICT in ELT and more specifically in English for Specific Purpose (ESP) have been explored by many researchers in different settings. One investigation of learners’ perceptions of ICT use in ESP courses is that of Kavaliauskienė and Kaminskiene (2010). Their examination of learners’ perceptions of employing electronic language portfolios in learning ESP showed that learners are positive about applications of ICT in ESP classes. Kavaliauskiené’s and Kaminskiene’s participants are full-time university students who study ESP for social work, law or psychology at Mykolas Romeris University. The respondents of different specializations yearned for more ICT use in ESP classes; they perceived electronic portfolios as a vital and beneficial tool for lifelong learning.

Not very differently, HS (2013) attempted to examine the attitudes of students toward the use of ICT tools in learning business English in Politeknik Negeri Semarang, Indonesia at higher education. The findings revealed that students are positive about the use of ICT tools, particularly the use of databases in writing papers, reading comprehension and building vocabulary. Very few of the respondents asserted that they do not need computers and technologies in learning business English and that they are not interested in using them. However, HS’s study was conducted among a relatively small sample of students (26 students) which may limit the generalization of findings with regard to students’ perceptions of ICT use in learning business English at a tertiary level.

Additionally, Lustigova’s (2012) investigation of the importance of ICT use in learning business English among Czech students at the university of Finance and Administration in Prague demonstrated that students are highly motivated by the use of ICT tools (video-recording of presentations, collective report writing in Google Docs and online stock market demo trade) in learning business English courses. It is found that the majority of the respondents were geared toward technologies in their learning practices, while only 5% needed time to acclimate.

In conclusion, it seems that ICT use in ESP learning is perceived positively by students at tertiary level. However, although a bulk of research studies has been conducted on students’ perceptions of ICT use in ESP, a very few studies endeavored into investigating students’ perceptions of ICT use in learning business English. This marks a gap in the literature on ICT researches, especially with regard to its necessity.

2.2.2. ICT effectiveness

This part provides an overview of the effectiveness of ICT use in learning business English. First, the strengths of ICT promotion in teaching business English are presented. Second, the key factors that might challenge and affect the extent of ICT effectiveness in business English learning are discussed.
2.2.2.1. Strengths of ICT promotion in teaching/learning business English

The usefulness of ICT use in learning business English at higher education and its positive impacts on enhancing students’ learning practices were highlighted by many researchers.

One research study that emphasized the positive effects of ICT use in learning business English courses is Lustigovà’s (2012) exploration of the usefulness of ICT use in learning business English courses among Czech students at the university of Finance and Administration in Prague, Czech Republic. The results demonstrated that functioning and suitably selected on-line tools (video-recording of presentations, collective report writing in Google Docs and online stock market demo trade) helped to establish a genuine business context. Additionally, it is found that ICT use triggered students’ motivation and helped them to improve their proficiency in understanding professional texts, compiling their own reports, writing business letters and developing CVs which could be useful in their future career at the workplace.

Another study that highlighted the invaluable benefits of ICT use in learning business English courses at tertiary level is HS’s (2013) investigation of the role of ICT in promoting learners’ autonomy. His study demonstrated the importance of ICT tools, namely the use of databases in promoting learners’ autonomy and fostering their writing and speaking skills. However, HS’s investigation is carried out among only 26 students which may limit the generalization of his findings.

The significant role of ICT in business English learning was also underlined by Bin Baharum and Tretiakov (2007) in their examination of the role of ICT in ensuring a real life learning of business English among Malay learners at higher education. Their study showed that ICT tools (internet, PC) helped Malay learners to minimize their reliance on formal grammar rules ensuring that the skills learned are directly relevant to business English communication. The findings also revealed that the use of technologies ensured a real life learning context for Malay business English learners. Yet, Bin Baharum’s and Tretiakov’s findings cannot be generalized to other population as they are limited to Malay learners.

In summary, the reviewed literature underlined the invaluable benefits of ICT use in learning business English at higher education. Yet, one might question the extent of ICT effectiveness which will be discussed in the next section.

2.2.2.2. The key factors affecting the effectiveness of ICT use

This section introduces the key factors that might challenge ICT use in business English learning as reported by former researchers in the literature.

Despite the considerable benefits of ICT use in business English courses, a number of challenges are reported to influence its effectiveness namely, lack of adequate technical support, lack of adequate funding for ICT tools, the teacher’s potential low competence in ICT use, lack of adequately-funded teacher training opportunities, students’ limited knowledge and students’ various levels of technology proficiency (Lustigová, 2012, p.59).

Bingimlas (2009: 237-241) defined other obstacles to the successful ICT use in the teaching and learning environment: lack of teacher confidence and competence, resistance to change and negative attitudes, and lack of accessibility of resources. Additionally, Shaabi’s (2010) investigation of the key factors that may affect the effectiveness of ICT in ESP classes in a public tertiary institution in Saudi Arabia identified five essential elements. Those
components are: adequacy of ICT tools, teacher professional development, reliable technical support, sufficient funding and thorough planning.

Overall, effective ICT use in business English courses would not have been possible without sufficient levels of confidence, training and preparation to improve the desired skills and competencies of the students. The accessibility of standard ICT resources, such as computer, data projectors and interactive whiteboards are also reported to be essential elements for positive ICT outcomes. The same applies for good quality software and fast internet connections. In addition to flexible and adequate technical support (Lustigová, 2012).

In summary, the reviewed literature identified many elements as significant in determining the success and effectiveness of ICT use in English language learning. Training, funding, teachers’ and students’ ICT competencies, accessibility of adequate and appropriate ICT resources and technical support are the most emphasized.

2.3. Theoretical Model: The Activity System Model

This section provides a brief outline of the Activity System Model (ASM) and explains the rationale behind the choice of this model.

The Activity System Model (ASM) is an analytical framework developed by Engeström (1987) designed to identify the key tensions that might affect the success and effectiveness of ICT use in language education. ASM is defined by Engeström (1987) as a “tool-mediated, goal-driven, pre-determined, participant-motivated, and historically-developed system” (p.54). These adjectives describe the functions of ASM and thus show how it is a multi-purpose model that can be used and developed in many ways.

ASM as an analytical tool has achieved a high status and is credited with offering a number of advantages to research including: its ability to assist researchers in exploring the use of the computer by individuals through a social lens (Kuutti, 1995); assisting researchers to see technology as a tool that mediates teaching and learning (Shaabi, 2010); clarifying the nature of transformations in work/educational environments (Blin & Munro, 2008) and analyzing tensions in work/educational settings (Russell, 2002; Yamagat-Lynch & Haudenschild, 2005). Recent research reported an additional advantage of providing a conceptual framework for understanding the diversity in both teachers’ and students’ approach to ICT (Demiraslan & Kocak Usluel, 2008; Karasavvidis, 2009).

With regard to ICT itself, ASM is found to assist in investigating the particular socio-cultural factors that are reported to account for achieving positive results in ICT use (Liu, 2006; Warriner, 2005; Webb, 2007; Zapata, 2002). In the ASM, ICT can be seen as a cultural tool and researchers can use ASM to address significant questions about how the tools can affect the users which has deep and significant implications for the planning and practice of ICT (Engeström, 1987).

In summary, ASM has the potential to “understand [the] process of transformation within a system such as a classroom/university laboratory as well as illustrating how different systems interact with, and transform each other over time” (Hardman, 2005, p.380). This assertion encapsulates the choice of ASM as the framework of analysis of the current research data.
3. Methodology

This chapter outlines the methodology followed in conducting this piece of research. It comprises four main sections. The first section is a presentation of the population sample and its criteria selection. The second is an outline of the research methods used for data collection. The third section goes through a detailed description of the procedure followed to collect the data. The last section explains how the Activity System Model (ASM) is applied to the current data analysis.

3.1. Population Sample and its Criteria Selection

The population of the ongoing investigation are 3rd year business English students selected from the Higher Institute of Human Sciences of Medenine based on two main criteria. First, they are chosen because they studied business English. Second, they are selected from those who volunteered to participate; no one was pressured to participate. The informants’ names are kept unanimous. A total number of 70 undergraduate students participated in the current study. The participants’ demographic information shows that their age basically range from 20 to 24 years olds as it is shown in figure 1:

![Fig 1. Participants’ age](image)

The informants are all female. The majority of them use ICT tools, especially computers and tablets.

3.3. Research Methods

A questionnaire survey is used aiming at investigating students’ perceptions of ICT use in business English learning with regard to its status (necessary or unnecessary) and its effectiveness.

The questions are grouped into four main sections: students’ demographic information (1, 2), students’ ICT use (3, 4), students’ agreement on the necessity of ICT use in learning business English (5, 6) and students’ perceptions of ICT effectiveness (7, 8, 9). The questions range from close questions (3, 5) to multiple choice questions (4, 7, 8, 9). Students’ perceptions of ICT use in learning business English were statistically treated using Microsoft Excel software.
3.4. Data Collection Procedure

Data was collected on January 2016 from the Higher Institute of Human Sciences of Medenine and lasted two weeks. 3\textsuperscript{rd} year Business English students were kindly invited to fill in a questionnaire (see appendix) during the break time to elicit their perceptions of ICT use in learning business English with regard to its status and its effectiveness. To elicit data for the study, students responded to three parts: 1) their ICT use, 2) their perceptions of ICT use in terms of its necessity and 3) their perceptions of ICT effectiveness by selecting the key factors necessary for effective ICT use. English language was used in the questionnaire since the respondents are accomplished speakers of English. All terms related to technology were explained to the respondents so as to avoid any confusion and misunderstanding thus to obtain higher rate of responses.

3.5. Data Analysis Framework

Engeström’s (1987) Activity System Model (ASM) is used to examine the key factors that might affect ICT success. ASM includes 7 components (Subject, Object, Outcome, Tools, Community, Division of labour and Rules) which are described by Engeström as constantly developing and subject to change. The following table describes the aforementioned components according to their definitions as provided by Engeström (1987: 53):

<table>
<thead>
<tr>
<th>Component</th>
<th>Definition and Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>The entity/group that is being focused as the centre of the action</td>
</tr>
<tr>
<td>Object</td>
<td>The goal of activity. The behavior of the Subject is directed toward the Object which is the Subject’s motive for participating in an activity. The Object is transformed into Outcome with the help of the Tools (Engeström, 1993).</td>
</tr>
<tr>
<td>Outcome</td>
<td>The consequences that the Subject(s) faces because of their actions. The Outcome can encourage or hinder the Subjects’ participation in future activities.</td>
</tr>
<tr>
<td>Tools</td>
<td>Socially-based cognitive or material resources that the Subject uses to achieve the Object. Tools mediate the relationship between the Subject and the Object.</td>
</tr>
<tr>
<td>Community</td>
<td>Individuals and subgroups of similar interests or expertise. The Community members share the same general Object as the Subject. The degree of involvement of the Community members varies from little or no motivation to a highly interactive environment (Kuutti &amp; Arvonén, 1992, as cited in Shaabi, 2010, p. 53).</td>
</tr>
<tr>
<td>Division of labour</td>
<td>Distribution of duties/responsibilities</td>
</tr>
</tbody>
</table>
between Community members and distribution of authority.

| Rules                                                                 | « Explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system and control the subject’s participation while engaging in an activity » (Engeström, 1993, p. 67). Rules mediate the relationship between the Subject(s) and each of the Community and the Object. |

ASM, as an analytical model, enables researchers to identify internal contradictions that occur between the elements and consequently create anxiety (Engeström, 1987). More importantly, identification of any contradictions (tension or disturbance) allows the participants to improve the conditions of the activity (Yamagat & Haudensdschild, 2006).

In the current study, the investigation of the extent of ICT effectiveness will be determined by identifying any tensions within the ASM’s components thus determining the key factors for effective ICT use.

In the questionnaire, the respondents are given a list of key factors for ICT effectiveness designed according to the ASM’s components: adequacy of ICT tools (Tools), proficient ICT users (Subject), careful design of ICT-based tasks/appropriate selection of ICT materials/explanation of ICT use/technical support and training (Division of labour), a great deal of collaboration between teachers and students on the choice of ICT materials/use of ICT tools in the classroom by both the teacher and the students (Community) and efficient funding, planning and training rules (Rules).

4. Research Findings and Discussion

This chapter deals with the analysis of the data and the discussion of the findings. It comprises two main sections. The first section analyses students’ perceptions of ICT use in learning business English with regard to its status (necessary or unnecessary). The second section examines the extent to which ICT can be effective by identifying the key factors for effective ICT use applying the ASM.

4.1. ICT Status: necessary or unnecessary

This part seeks to unveil students’ perceptions of ICT use in learning business English. It particularly seeks to determine whether or not students perceive ICT as a necessary component in learning business English. Students’ responses are calculated via Excel software and then discussed and interpreted qualitatively. The following figures display the obtained data:
Fig 2. Students’ perception of ICT necessity

![Pie chart showing 83% No and 17% Yes]

Fig 3. Students’ agreement on the necessity of ICT use in learning business English

As is shown in figure 2, 83% of the students (58/70) assume that it is not necessary to learn business English with ICT tools, while only 11% (12/70) of them advocate the necessity of ICT use in learning business English. Using Likert 4-points scale, 19 students out of 70 strongly disagree that teachers must integrate ICT tools in teaching business English, 39 out of 70 disagree on the necessity of ICT usage, 9 out of 70 agree on the necessity of ICT usage and only 3 students strongly agree on the necessity of ICT usage in learning business English.

One significant observation from figure 3 is that very few of the respondents (9/70) agree on the necessity of ICT usage in learning business English. As a justification for their responses, students asserted that it is not necessary to learn business English with ICT tools because they believe that the traditional teaching aids (books, texts, the board, etc) are sufficient for successful and effective business English learning. This finding contradicts with Jeskenen-Sundström’s (2003) assumption that students’ learning of genuine business context is impossible without ICT tools. What can be inferred from this observation is that the informants hold negative attitudes towards ICT use. Students’ negative attitudes might be due to their assimilation of technology, the way the teacher uses ICT in other subjects and students’ purpose of technology use. For instance, only 8.6% (6/70) of the respondents stated that they use ICT tools to learn foreign languages, whereas 45.7% (32/70) declared that they use ICT tools for entertainment and 97.2% (68/70) use ICT tools, namely computers and internet to make research and prepare projects. This high percentage for making research and projects is due to the fact that 3rd year English students are preparing their project graduation so they are obliged to use some ICT tools.
Overall, the respondents of the current study do not promote the necessity of ICT use in learning business English. Henceforth, the first hypothesis of the current research assuming that ICT might be fundamental in learning business English in the Higher Institute of Human Sciences of Medenine is not upheld.

4.2. ICT Effectiveness

This part examines the extent to which ICT use in learning business English can be effective, as perceived by the participants. First, it explores students’ perceptions of the role of ICT in business English learning. Second, it investigates the extent to which ICT use in learning business English can be effective by identifying the key factors for successful ICT use.

4.2.1. The perceived role of ICT in learning business English

This section aims at exploring students’ expectations about the impact of ICT use on learning business English courses. The following table recapitulates students’ responses:

**Table 2.** Students’ perceptions of ICT role in business English learning

<table>
<thead>
<tr>
<th>Students’ ICT attitudes</th>
<th>Participants’ number</th>
<th>Participants’ percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT use leads to authentic business communication and learning</td>
<td>10</td>
<td>14.3%</td>
</tr>
<tr>
<td>ICT use is a good innovative strategy that helps to improve the quality of learning business vocabulary and structure</td>
<td>9</td>
<td>12.9%</td>
</tr>
<tr>
<td>ICT use is the most effective learning mode to align with the 21st digital century</td>
<td>5</td>
<td>7.1%</td>
</tr>
<tr>
<td>ICT use is the best and effective method of learning business English</td>
<td>3</td>
<td>4.3%</td>
</tr>
<tr>
<td>ICT tools are entertaining</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>ICT use may disturb the learner and thus mislead and distort the learning process</td>
<td>54</td>
<td>77.2%</td>
</tr>
<tr>
<td>ICT tools may enhance laziness and impede creativity</td>
<td>20</td>
<td>28.6%</td>
</tr>
<tr>
<td>ICT tools are boring and time-consuming</td>
<td>46</td>
<td>65.7%</td>
</tr>
</tbody>
</table>
One significant observation drawn from table 2 is that 77.2% of the respondents (54/70) assume that « ICT use may disturb the learner and thus mislead and distort the learning process ». Equally important (65.7%) was the response of the participants that « ICT tools are boring and time-consuming », whereas only 2.9% (2/70) think that « ICT tools are entertaining ». Another observation is that 28.6% (20/70) presume that « ICT tools may enhance laziness and impede creativity ». Conversely, only 4.3% (3/70) of the students believe that « ICT use is the best and effective method of learning business English ». Other informants (7.1%) admit that « ICT use is the most effective learning mode to align with the 21st digital century ». Still another noticeable discovery is that 14.3% (10/70) of the participants think that « ICT use leads to authentic business communication and learning » and 12.9% (9/70) see that « ICT use is a good innovative strategy that helps to improve the quality of learning business vocabulary and structure ».

What can be deduced from these statistics is that ICT use in learning business English is perceived by the participants to have negative contributions. One possible implication from this finding is that students’ best and most effective method of learning business English is based on the traditional teaching aids (books, text, board, etc) as it is illustrated in the figure below:

![Fig 4. Students’ most effective method of learning business English](image)

As is demonstrated in figure 4, 89% (62/70) of the informants concur that the traditional teaching aids based on books, papers, the board, etc are the best and most effective methods of learning business English, while only 11% (2/70) of them think that ICT is the most effective one. From this observation, one may infer that ICT use in learning business English do not seem to be appealing to the students of the current research context. Students’ negative perceptions of ICT role might be due to their lack of exposure to technology when learning business English. It might also be explicated by the fact that in other subjects taught with ICT tools (grammar and sociolinguistics), ICT tools are only used by the teacher in the classroom as it is declared by the informants.

### 3.2.2. The key factors for effective ICT use

This section aims to identify the key elements for effective ICT use using the ASM. First, students’ responses are treated quantitatively via Excel software. Second, their responses are analyzed qualitatively applying the ASM. A quantitative treatment of the students’ responses yields the following results:
Table 3. Students’ responses to the key factors for ICT effectiveness

<table>
<thead>
<tr>
<th>Students’ responses to key factors for effective ICT use</th>
<th>Participants’ number</th>
<th>Participants’ percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of adequate ICT tools</td>
<td>52</td>
<td>74, 74.3% 3%</td>
</tr>
<tr>
<td>ICT tools must be used by both teachers and students in the classroom</td>
<td>70</td>
<td>100%</td>
</tr>
<tr>
<td>Teachers’ and students’ professional training on ICT use</td>
<td>45</td>
<td>64.3%</td>
</tr>
<tr>
<td>Teachers must carefully design ICT-based tasks in a way that is likely to enhance students’ communicative needs and employability</td>
<td>65</td>
<td>92.9%</td>
</tr>
<tr>
<td>Teachers must select appropriate online authentic materials that meet learners’ needs and expectations</td>
<td>68</td>
<td>97.2%</td>
</tr>
<tr>
<td>Teachers must explain every detail on ICT use</td>
<td>55</td>
<td>78.6%</td>
</tr>
<tr>
<td>Provision of sufficient technical support for any prompt ICT breakdown</td>
<td>47</td>
<td>67.2%</td>
</tr>
<tr>
<td>Clear and efficient training and funding rules for ICT use</td>
<td>30</td>
<td>42.9%</td>
</tr>
<tr>
<td>A great deal of collaboration between teachers, administrators and students on the choice of appropriate ICT materials</td>
<td>33</td>
<td>47.2%</td>
</tr>
</tbody>
</table>

What stands out from table 3 is that the most emphasized factors by the participants are students’ share of ICT tools with the teacher (100%), appropriate selection of online authentic materials that meet learners’ needs and expectations (97.2%) followed by careful design of ICT-based tasks by the teacher in a way that is likely to enhance students’ communicative needs and employability (92.9%) and the provision of adequate ICT tools (74.3%). Other underlined factors for ICT effectiveness reported by the participants are the teacher’s explanation of every detail on ICT use (78.6%), the provision of sufficient technical support for any prompt ICT breakdown (67.2%) and teachers’ and students’ professional training on ICT use (64.3%). «A great deal of collaboration between teachers, administrators and students on the choice of appropriate ICT materials» (47.2%) and «Clear and efficient training and funding rules for ICT use» (42.9%) are other important elements highlighted by the
respondents. In short, the participants agreed that a number of determining factors are necessary for effective ICT use thus positive learning outcomes.

Applying Engeström’s (1987) Activity System Model, the aforementioned factors are illustrated in the following triangle figure:

**Tools**

Adequate ICT tools

**Subject**: professional ICT users (teachers and students)

**Rules**:

- Efficient and well documented planning, funding and training rules about ICT integration

**Community**:

- A great deal of collaboration between teachers, administrators and students on the choice of appropriate ICT materials
- Students must equally use ICT tools with teachers in the classroom
- Teachers must explain every detail on ICT use

**Object**: bring about positive changes to the learning process

**Outcome**: effective business English learning

**Division of labour**:

- Teachers must select appropriate online authentic materials that meet learners’ needs and expectations
- Teachers must carefully design ICT-based tasks in a way that is likely to enhance students’ communicative needs and employability
- Provision of sufficient technical support for any prompt ICT breakdown by IT technicians
- Administrators must provide regular professional training on ICT use for both teachers and students

**Fig 5. Activity Triangle System**

As is outlined in figure 5, at the level of (Tools) component students pinpointed that ICT tools used in the classroom or in the CALL lab must be adequate to ensure effective ICT-based business English learning. At the level of Subject, the informants emphasized that teachers and students must be professional ICT users because if the teacher or students misuse any ICT tools, the learning process will be misleading resulting in ineffective business English learning. At the level of Rules, the participants stated that there must be efficient and well documented planning, funding and training rules about ICT integration. If the rules are not efficient and well documented, teachers will hesitate about the use of ICT and their Object will be unclear and this cause a tension between the Subject and Object resulting in
ineffective business English learning. At the level of Community, the informants asserted that there must be a great deal of collaboration between teachers, administrators and students on the choice of appropriate ICT tools because if students were not consulted on the choice of ICT materials, the teacher may choose ICT tools that do not meet students’ needs and expectations thus causing a tension between the Community, the Object and the Outcome. Still at the Community level, students concurred that they highly need to share ICT tools with the teacher so that to be able to concentrate and follow. If ICT tools are only used by the teacher, students will be passive receivers of information and there won’t be any interaction between the students and the teacher which may cause a tension between the Community, the Subject, the Object and the Outcome. What can be inferred from this finding is that the informants need to learn business English in the CALL lab.

At the level of Division of labour, the respondents maintained that teachers must select appropriate online authentic materials that meet learners’ needs and expectations and must carefully design ICT-based tasks in a way that is likely to enhance students’ communicative needs and employability. If ICT-based tasks are not designed according to students’ needs and expectations, there would be a tension between the Division of labour and the Outcome. That is, uncareful design of ICT-based activities results in ineffective business English learning. Still at the level of Division of labour, the informants asserted that IT technicians must provide sufficient technical support. For instance, insufficient IT support may have a direct negative effect on lesson procedure and cause tensions within the Community members: teachers on the one hand and IT technicians on the other, resulting in ineffective business English learning. In addition to IT technician’s responsibility to provide sufficient technical support, the responsibility of administrators to provide regular professional training for both teachers and students was also highlighted by the participants. Indeed, lack or absence of professional training for teachers and students affect the Object of teachers resulting in negative learning outcomes.

On the whole, the respondents concurred that a number of interrelated factors must be provided to ensure an effective ICT-based business English learning. Similarly, applying the ASM, Shaabi’s (2010) investigation of the elements affecting the success of ICT use in ESP classes in Saudi Arabia demonstrated that adequacy of ICT tools, teacher professional development, reliable technical support, sufficient funding and thorough planning are the most important key factors for ICT success. Equally, Lustigova (2012) reported a number of considerable factors that may affect the effectiveness of ICT use in business English classes at higher education in the Czech Republic. The most emphasized challenges are lack of adequate technical support, lack of adequate funding for ICT tools, the teacher’s potential low competence in ICT use, lack of adequately-funded teacher training opportunities, students’ limited knowledge and students’ various levels of technology proficiency. The current and the previous findings on the effectiveness of ICT use in business English learning implicate that true innovation brought about by ICT use is the result of an interactive process that brings together teachers, learners and resources in ways that have the greatest impact on learning outcomes.

To summarize, the participants agreed that ICT use in learning business English cannot be effective unless certain key factors are provided, the most important of which is students’ share of ICT tools with the teacher in the classroom. Accordingly, the second hypothesis of
the present study stating that ICT use in business English learning cannot be effective unless it is used efficiently by teachers and students is supported.

**Conclusion**

In the present research, the majority of the informants hold negative perception of ICT use in business English courses. They do not advocate the necessity of ICT use in business English learning. According to them, the traditional teaching aids (textbooks, papers, board, etc.) are sufficient for successful business English learning. With regard to its effectiveness, the respondents admitted that ICT use in business English lessons could not bring about positive learning outcomes unless it is used efficiently. The participants reported a number of key factors for ICT success, the most important of which are students’ share of ICT tools with the teacher in the classroom, careful design of ICT-based tasks and the choice of appropriate authentic online materials in a way that is likely to meet students’ needs and expectations.

However, the current research study is restricted to the Higher Institute of Medenine which limits the generalization of findings. That’s why, future researches should investigate ICT perceptions in other settings. Moreover, teachers are excluded from the population of the present research. Accordingly, future studies should elicit teachers’ attitudes toward ICT use in teaching/learning business English at higher education to ensure a wider scope of findings.
References


Appendix A

Questionnaire

*Instruction:* Please, kindly fill this questionnaire completely by ticking the space you select for each number. The answers will be used for scientific purposes and anonymity is guaranteed.

**ICT: Information and Communication Technology**

1. Age:
2. Gender:
   - Male
   - Female

3. Do you use any ICT tools (laptops, internet applications, Tablets, I-phones, etc) in your daily life?
   - Yes
   - No

4. For which purpose do you use ICT tools (Tablets, I-Phones, internet, computers, etc)?
   - To entertain myself
   - To surf on the net
   - To make research and projects
   - To learn foreign languages
   - Others: please specify

5. Do you think that it is necessary to learn business English with ICT materials (computers, mobile phones, tablettes, etc)?
   - Yes say why:
   - No say why:

6. Do you agree that teachers must integrate ICT materials in the classrooms to teach business English?
   - Yes, I agree
   - I strongly agree
I disagree

☐ I strongly disagree

7. What is your own perception about ICT use in learning business English?

☐ ICT use may lead to authentic business communication and learning

☐ ICT is a good innovative strategy that helps improve the quality of learning business vocabulary and structure

☐ ICT use is the most effective learning method to align with the requirements of the 21st digital century

☐ Business English is a technical area thus ICT use is the best and most effective strategy of learning it

☐ ICT materials are entertaining; they help alleviate the boredom of learning

☐ ICT materials are time consuming and boring

☐ ICT materials may disturb the learner and thus distort the learning process

☐ ICT tools may enhance laziness and impede creativity

☐ Others: state other perceptions if you have any others

8. In your opinion, what is the most effective and successful way of learning business English at school?

☐ Books, sheets and the board

☐ ICT materials: internet applications, videos, mobile phones technologies (I-Pad, Tablettes, I-Phone, etc), computers (laptops/desktops)

9. In your opinion, what are the key factors for effective ICT use?

☐ The provision of adequate ICT tools

☐ Teachers’ professional training on ICT use

☐ Use of ICT tools by both teachers and students in the classroom

☐ Sufficient technical support

☐ Careful design of ICT-based tasks
Selection of appropriate online authentic materials that are likely to enhance students’ communicative needs and employability

A great deal of collaboration between teachers, students and administrators on the choice of ICT materials

Efficient and well documented planning, funding and training rules of ICT integration

Others: please specify: ……………………………………………