

The Effectiveness of Using ICTs as Means of Research: The Case of EFL Learners at University Djilali Liabes of Sidi Bel Abbes, Algeria

فعالية استخدام تكنولوجيا المعلومات والاتصالات كوسيلة للبحث: حالة متعلمي اللغة الإنجليزية كلغة أجنبية في

جامعة جيلالي ليايس سيدي بلعباس ، الجزائر

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Abstract:

In the last few decades, technology has rapidly developed and began to take place in English language learning and teaching. Because it has given rise to more innovative teaching methods, teachers opt for its incorporation to achieve a successful teaching. Furthermore, our learners, who have grown in the recent digital era, connect with other learners or teachers engaging themselves in a situation that enhances their motivation. This paper deals with the use of Information and Communication Technologies by English Foreign Language learners as an effective means to find possible solutions to their research topics. Data was collected using a questionnaire that was randomly distributed among 50 students. Because findings showed that ICTs help in promoting learners' research possibilities, efforts are required to launch a policy towards widespread access to ICTs in our Algerian universities.

Keywords: Information and Communication Technologies (ICTs), learning process, research.

ملخص:

في العقود القليلة الماضية ، تطورت التكنولوجيا بسرعة وبدأت تأخذ مكانها في تعلم اللغة الإنجليزية وتدريسها، مما أدى إلى ظهور طرق تدريس أكثر ابتكاراً؛ يختار المدرسون دمجها لتحقيق تعليم ناجح. علاوة على ذلك ، يتواصل المتعلمون الذين نشأوا في العصر الرقمي الحديث مع المدرسين أو المتعلمين الآخرين ويتشاركون لتقوية دوافعهم. تتناول هذه الورقة استخدام تكنولوجيا المعلومات والاتصالات من قبل متعلمي اللغة الإنجليزية كوسيلة فعالة لإيجاد حلول ممكنة لمواضيع البحث الخاصة بهم. تم جمع البيانات عن طريق استبيان وزع عشوائياً على 50 طالباً. ولأن النتائج أظهرت أن تكنولوجيا المعلومات والاتصالات تساعد في تعزيز الإمكانيات البحثية للمتعلمين، فإن هناك حاجة إلى بذل جهود للبدء في تنفيذ سياسة من أجل الوصول على نطاق واسع إلى تكنولوجيا المعلومات والاتصالات في جامعاتنا الجزائرية.

الكلمات المفتاحية: تكنولوجيا المعلومات والاتصالات، عملية التعلم ، بحث

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1. Introduction

Nowadays, our learners are always spending countless hours inside and outside of their classrooms connecting with their peers/teachers to discuss ideas or to find possible solutions to topics of research. This paper tends to examine the use of Information and Communication Technologies (ICTs) by English Foreign Language (EFL) learners as means to help them accomplish research proposals. However, technology has given them the possibility to develop their learning process and to become autonomous learners. That is probably the principal reason why researchers and pedagogues emphasize the advantages and not the inconveniences of using ICTs in EFL contexts (Depover et al. 2007). Furthermore and regarding their positive effects, the frequent use of ICTs by students might motivate their interest and stimulate them to embrace a newer mode of acquisition of knowledge and skills for the sake of promoting their thinking capacities and developing their autonomous learning (Karsenti and Larose: 2001).

This empirical study aims at examining the use of ICT by EFL students at university Djilali Liabes of Sidi Bel Abbes to better understand if they really need them to realize coherent research proposals. It is also an attempt to answer a set of questions such as: Do students need technological materials in their search for information? What benefits ICTs bring to learners? Do ICTs really help fostering learners 'autonomy'?

2. Theoretical Framework

This paper introduces firstly a theoretical framework, whereby types of ICTs are presented. A description of the advantages of using them in English learning is also provided. Secondly, it includes a description of the research method, which has been implemented in order to understand the practical part of study. Finally, findings which were obtained are presented and discussed.

2.1 Types of ICTs

ICTs refer to all communication and information technologies. Lim and Toy (2003) classify them into four major categories, which are the following:

- 2.1.1 Communicative Tools:** These include all the systems that facilitate communication between students and teachers such as: e-mail, social media, chat, teleconferencing....etc
- 2.1.2 Informative Tools:** These include all the applications that provide information in various formats such as videos, multimedia encyclopedias, texts, sounds, graphics as well as the various digital resources available on the internet.
- 2.1.3 Constructive Tools:** These are the tools that allow learners to produce a certain product of educational purposes such as: wiki and office tools, which allow them to create their own web pages.
- 2.1.4 Situating Tools:** These include all systems that place students in an environment, where they can experience both the context and the real life situation such as games, simulation and virtual reality.

2.2 Advantages of ICTs

Several research studies on the use of technology in the learning/ teaching process have emphasized that ICTs have brought positive benefits for learners and teachers alike. Indeed, they have involved major changes in the way English language is taught and acquired. Arno (2012) showed that since 1991; technologies have provided authentic materials and resources for English learning in a real situation practice as a consequence of a greater number of resources and materials available on the internet. It has also conceived new possibilities for language learners and teachers. Gholomina (2014) confirmed that there is an enormous demand for technology that offers teaching methods and resources in order to create and stimulate motivational and dynamic learning environment. Pedagogy, in fact, is the driver and technology is the accelerator (Merzi & Gonulal: 2018). Mujtaba (2013) added that technology has helped to change teacher centered approaches towards learner centered ones, while Cutter (2015) stressed that technology increases motivation and Hover (1999) mentioned that it provides learners great opportunities to become autonomous.

3. Methodology

This paper has been designed to know whether or not EFL learners depend heavily on ICTs for the sake of searching information. They were all requested to fill in a respective questionnaire. The latter is composed of a set o questions and it was distributed randomly among 50 students at the end of the academic year 2020/2021.

4. Results

4.1 General Information on Respondents

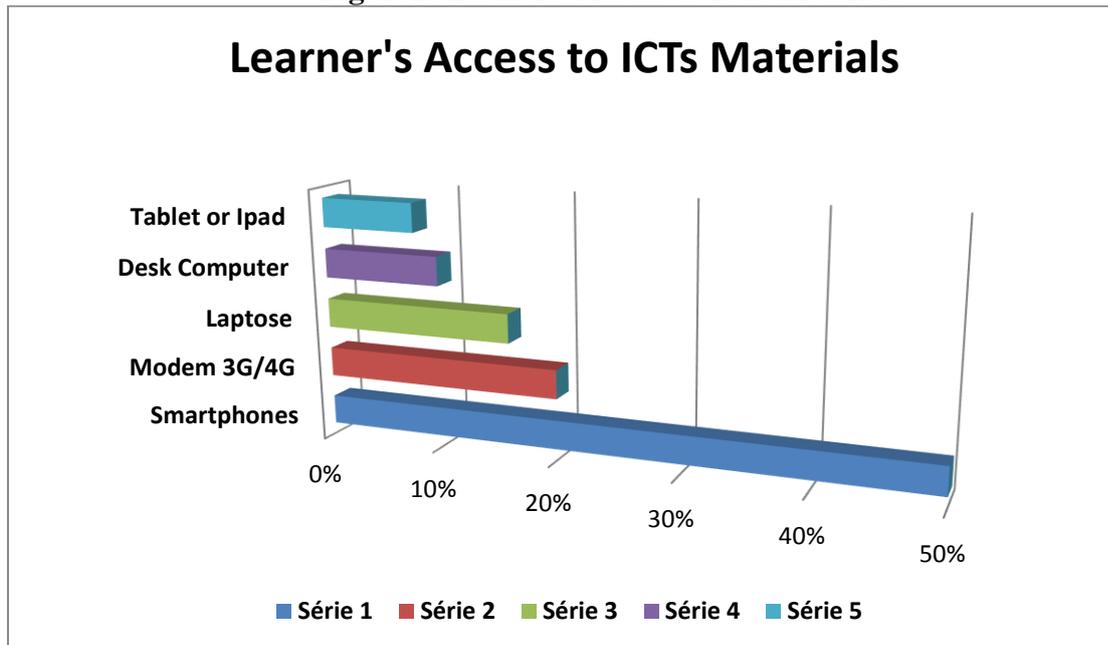
Table1: Distribution of Respondents by Gender and Level of Study

	Gender /level	Number	Proportion
Gender	Male	10	20%
Gender	Female	40	80%
Level of study	3rd year	50	100%
Total	Fifty students	50	100%

More than a half of respondents were women representing (80%) and almost (20%) were men. All of them are 3rd year undergraduate students.

4.2 Accessibility to ICTs Materials

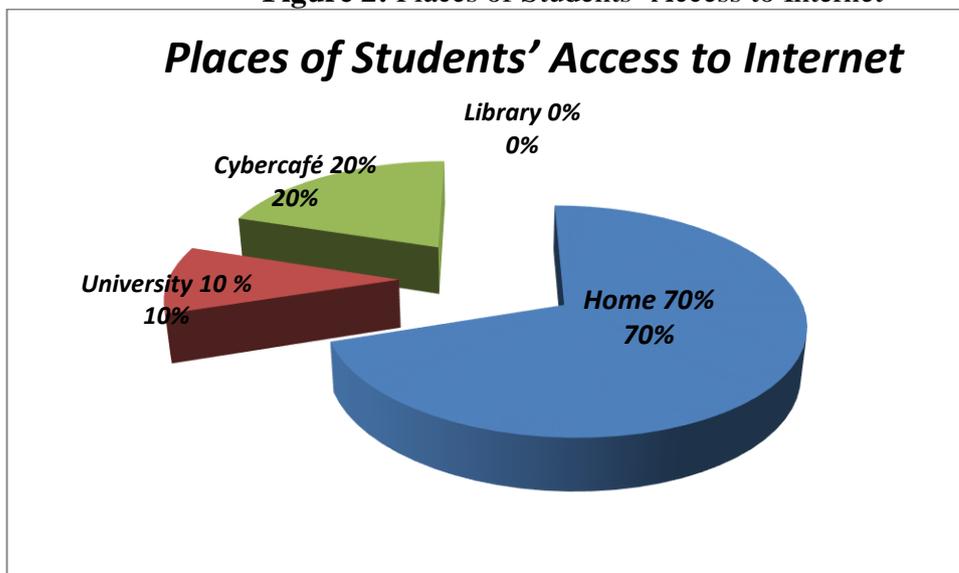
Figure1: Learners' Access to ICTs Materials



It is revealed according to the findings that the majority of students depend in their research on smart phones, and nearly half of them have 3G/4G modems. It appears also that one third of them rely on laptops and almost a quarter of them depend on other equipments such as tablets and desktop computers.

4.3 Places of Internet Access

Figure 2: Places of Students' Access to Internet

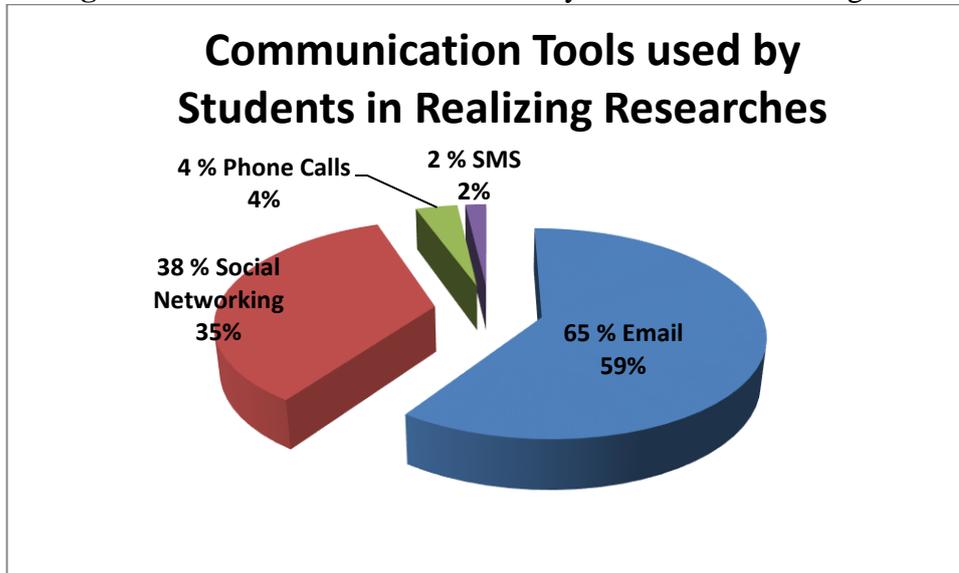


Regarding the place of access to internet, almost the majority of them confirm to have access from their homes, while one third of them stated that they connect from cybercafés. Furthermore, a minority reported that they sometimes can have access from universities; while no one of them confirmed to have access from library.

4.4 The use of ICTs as Tools of Research

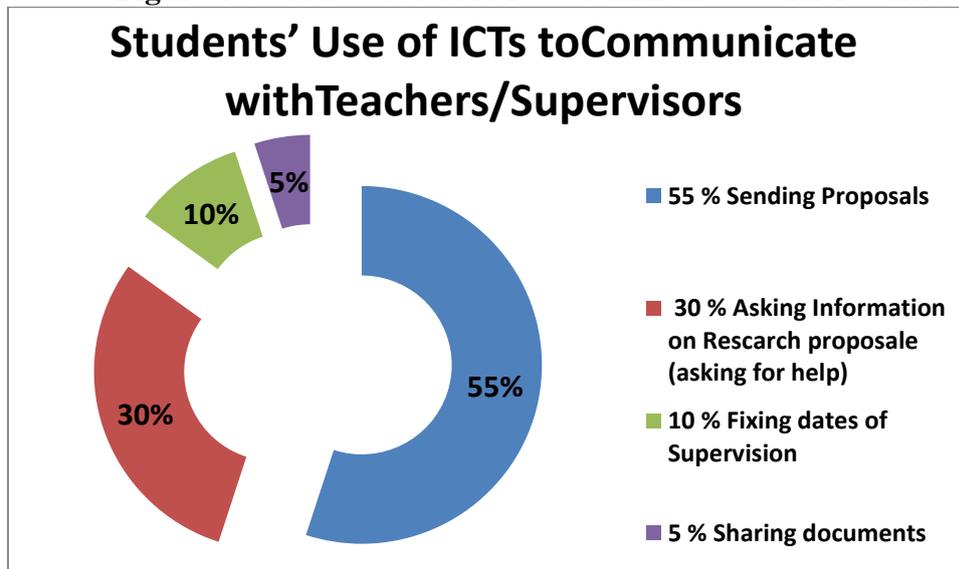
4.4.1 Communication Tools

Figure 3: Communication Tools used by Students in Realizing Researches



The results show that the majority of students focus on the use of e-mail to keep in touch with their supervisors. In addition, nearly half of them confirmed using networking sites, while a minority reported using cell phones and SMS.

Figure 4: Students' Use of ICTs to Communicate with Teachers/Supervisors

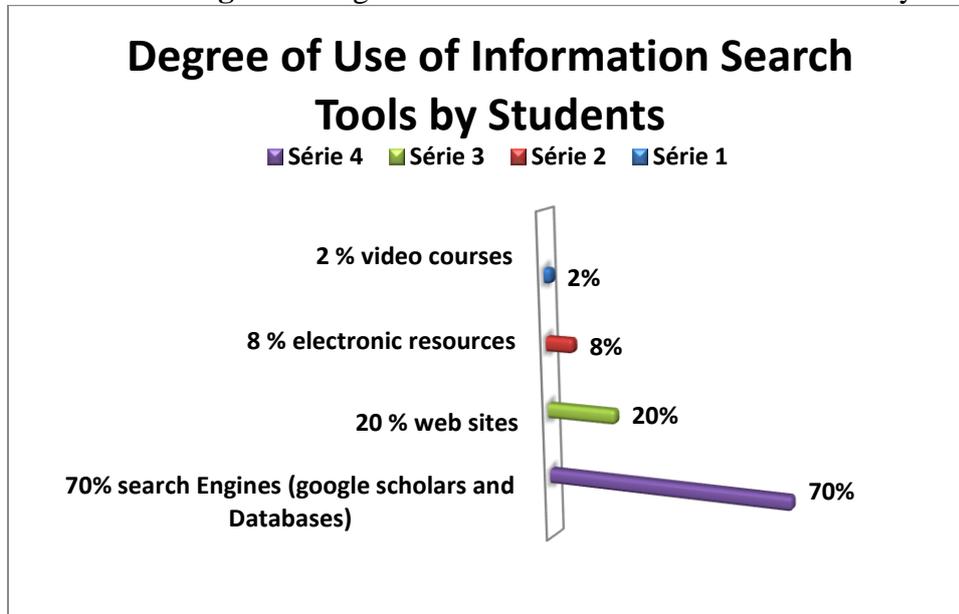


Findings reveal that the majority of participants mentioned the use of ICTs to send parts of their research proposals to their supervisors for correction, while nearly one third of them confirmed using them for the purpose of developing their research abilities through their request for information. Furthermore, the minority of them

reported that they use them in arranging meetings with their supervisors and sharing documents related to the supervising research proposals.

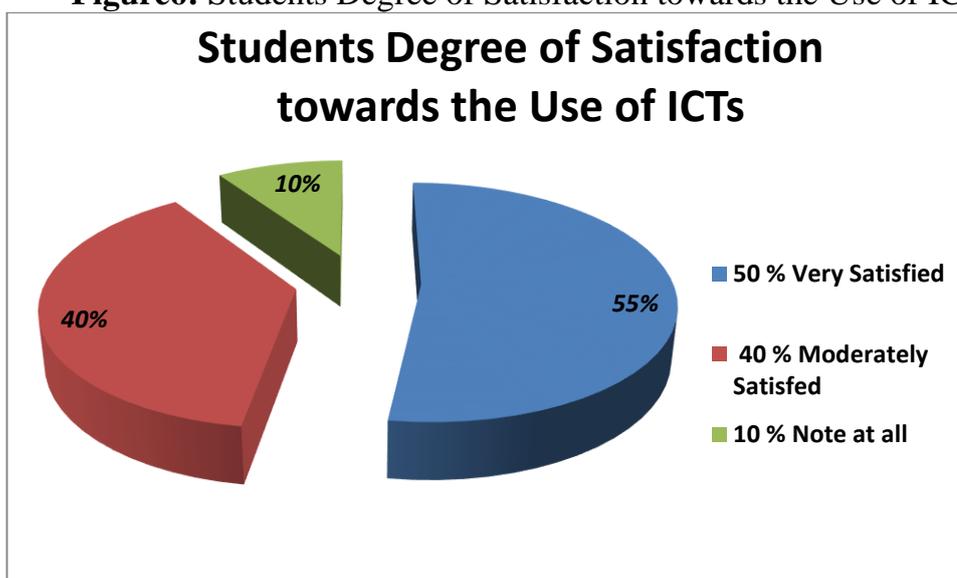
4.4.2 Information Search Tools

Figure5: Degree of Use of Information Search Tools by Students



Findings prove that a large proportion of respondents focused on Google search engines in their information search process. In fact, they largely explore the academic research tools such as Google Scholar and Databases (theses, online libraries, articles...etc). In addition, one third of them reported using web-sites and a minority of them mentioned their dependence on electronic resources for the sake of looking for information.

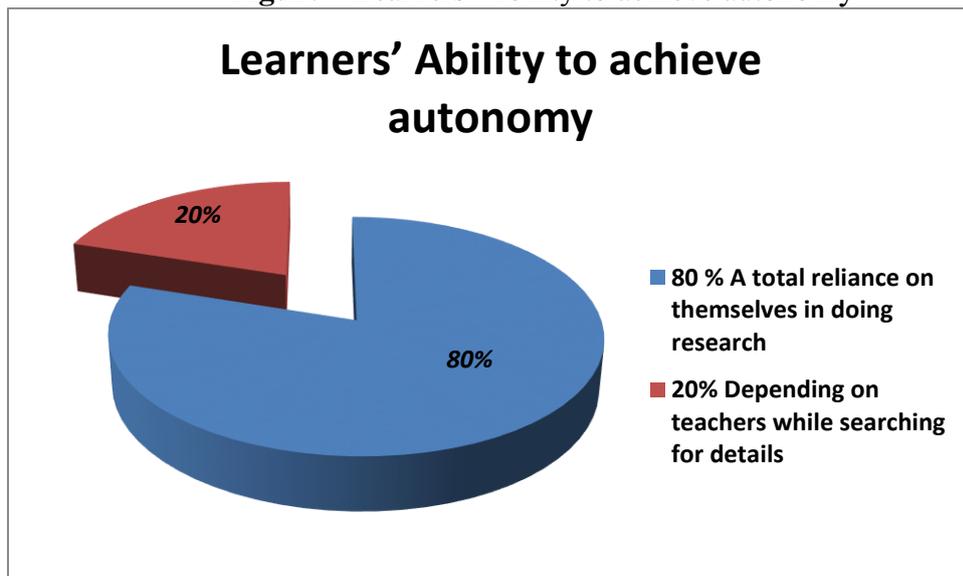
Figure6: Students Degree of Satisfaction towards the Use of ICTs



Regarding the use of online search tools by students and their degree of satisfaction while searching for information, only (10%) of them confirmed their dissatisfaction with the results they usually find. They stated that most of the time they confront difficulties and do not know how to use appropriately the search tools. On the other hand, a half of the participants affirmed their satisfaction and almost a large number of them remained moderately satisfied

4.5 ICTs as Means to Promote Learners' Autonomy

Figure7. Learners' Ability to achieve autonomy



As it is illustrated in figure.7, students affirmed that ICTs help them to become autonomous learners relying on themselves in searching details on any research topic. For almost a majority of them, an easy access to a variety of research tools really helps them to achieve a high degree of independence in doing research. On the other hand, a minority of them responded that they cannot deny the efficient help usually obtained from their teachers and more in particular their supervisors. For them, they need such contributions in order to realize appropriate research proposals.

5. Interpretation of the Results

In the present study, a questionnaire was administered to 3rd students, who responded and fulfilled it. Accordingly, related data are obtained in which many findings reveal that learners need a massive use of ICT tools to realize their research proposals. Based on the details of the data analysis of the questions advocated to seek the students' reliance on communication research tools, the majority of respondents personally chose the e-mail and social networking sites to remain in a permanent contact with their supervisors/teachers; the fact which reveals that students have already developed a certain competency towards the use of such tools. It also proves that they get the ability to adapt themselves to a constantly progressing technology through their frequent use of a variety of ICTs materials such as desktops, Laptops, IPods, Smart phones...etc. Yet, a minority of them is still not familiar with such materials and most of the time faces difficulties. Hence, this situation should be highly

taken into consideration. Findings also show that the majority of participants have significant objectives behind their use of ICTs in writing their proposals explaining that these tools might help them accelerate the process of sending and receiving details, sharing documents, asking for help...etc, as it is clearly confirmed in the answers listing the benefits of ICTs in enhancing contacts between learners/teachers. It is also worth noting that all the informants declared that they have no possibilities to access the Internet from the university and more in particular the library. This means that although the educational system in Algeria had undergone an impressive transformation in the last decades; higher institutions remain reluctant to embrace effectively the new technologies.

As for the results obtained from the section related to the notion of the use of ICTs as information search tools; the majority of participants confirm that they spend countless hours outside their classes exploring the academic research tools such as Google Scholar and Databases to facilitate their search for information. This might be true because most of them show a great or a moderate satisfaction towards the use of these tools because of the unlimited quantities of data they usually obtain from them. Yet, a minority of them remains different and dissatisfied because they feel uncomfortable and they still have no sufficient technological capacities to master the variety of Soft ware.

Regarding the last section related to the use of ICTs as means to develop autonomy among learners; the results have shown that they help significantly in promoting research and independent learning. Indeed, the great majority of respondents have emphasized that they totally depend on themselves, which was not the fact for a minority of them. The latter have insisted on teachers' assistance and guidance and this seems very logical because autonomy in language learning can be achieved only when ICTs are appropriately and effectively used.

6. Conclusion

The present paper was aimed at analyzing the use of ICTs among EFL learners for the realization of research proposals. In order to achieve my objectives a questionnaire was designed and distributed to 3rd year students at the department of English Language at University Djilali Liabes of Sidi Bel Abbes for the collection and analysis. Results described in this study indicate that the use of technology by students in language learning is pertinent for the submission of coherent research proposals at the end of their academic year. Consequently, the integration of technology in higher education is recommended basing our analysis on the fact that the use of ICTs enhances interests among EFL students and gives them the capacity to convey concepts in new ways that could otherwise not be possible with other instructional methods (Rogers: 2004); the possibility to promote social interaction (Jezegou: 2010); the ability to solve problems and to use meta cognitive strategies (Janssen & Reeves: 1996) and of course the ability to become autonomous. Furthermore, ICTs as it was proved by other researches will enhance the learning process and maximize the students' abilities in active learning (Finger & Trim dad: 2002; Jorge et al: 2003; Jamieson et al: 2013). Regarding students' limited opportunities of accessibility and connectivity to Internet services on university campus; mainly those who do not have desktop computers or laptops, it is worth noting the problem of inequality in terms of computer ownership. This fact brings us

to the issue that it is really time to multiply actions in the higher education sector to generalize ICT, thus facilitating students' access to digital services.

As for the use of ICTs by learners as communication tools, their importance remains in giving them the possibility to stay in touch with their teachers and more precisely their supervisors. In fact, they can submit their works by email from home and look for various sources provided online to fulfill the task given to them. This might also be beneficial for the students who are not ready to get involved in face to face discussion (Ipsos: 2008). ICTs might further increase the interaction among students, between teachers and students as well as between educational materials and students (Wang: 2007). For instance, a Microsoft PowerPoint can be used by students to present their topics in a very innovative and creative way that will lead into discussion and exchanging thoughts.

Noting the use of ICTs as information search tools, students generally use Google in order to access information that meets their needs. Yet, there are still those who do not know how to use research tools due to their lack of technological skills. Thus, it is necessary to develop an ICT learners training promoting in them a high level of confidence. In addition, technical supports and continuous professional developments should be conducted from time to time to avoid technical serious problems. Indeed, deficiencies and constraints of technological instruments, financial supports, lack of time, lack of information and how to use various types of technological equipment and programs and the lack of effective training courses are the challenges that discourage training language learning and teachers progress (I mad: 2015).

All in all, although ICT integration is not a one step process (Young: 2003), it is time to begin launching a policy towards a widespread access to ICT in higher education so that technology will become a common part of teaching/learning English language in the future.

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Appendix**Students' questionnaire**

Dear students would you please answer the following questions by putting a tick (X) in the appropriate box.

Part 1:

General information on participants:

Sex: male or female

Part 2:

Question1: How do you make access to ICTs materials?

- Smart phones
- Modem 3G / 4G
- Laptops
- Desk computer
- Tablet or I pad

Question2: Where do you make access to internet?

- Home
- University
- Library
- Cyber café

Question3: On which communication tools do you rely in realizing researches?

- Gmail
- Social Networking
- Phone calls
- SMS

Question4: For which purpose do you use ICTs?

- Sending proposals
- asking for information
- Fixing dates of supervision
- Sharing documents

Question5: What kind of information search tools do you usually explore?

- Web sites
- Electronic resources
- Search Engines (Google Scholars...)
- Video courses

Question6: What is your degree of satisfaction, while searching for information using ICTs?

Very satisfied moderately satisfied Not at all satisfied

Question7: Do you think that ICTs can really help you to become autonomous learners?

- Yes
- No