UNIVERSIDAD DE COSTA RICA

REVISTA
Actualidades Investigativas en Educación

http://revista.inie.ucr.ac.cr/
ISSN 1409-4703

INIE
Instituto de Investigación en Educación

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Volumen 14, Número 1
Enero - Abril
pp. 1-23

Este número se publicó el 30 de enero de 2014

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Revista indizada en **REDALYC**, **SCIELO**

Revista distribuida en las bases de datos:

CATÁLOGO DE LATINDEX, **IRESIE**, **CLASE**, **DIALNET**, **DOAJ**, **E-REVIST@S**, **SHERPA/ROMEO**, **QUALIS**, **MIAR**

Revista registrada en los directorios:

ULRICH'S, **REDIE**, **RINACE**, **OEI**, **MAESTROTECA**, **PREAL**, **CLASCO**

THE USE OF ICTs IN THE BA IN ENGLISH TEACHING

EL USO DE LAS TIC EN EL BACHILLERATO EN LA ENSEÑANZA DEL INGLÉS

William Charpentier Jiménez[1]

Abstract: *This article examines the role of information and communication technologies (ICTs) in language teaching. Through an electronic survey, the opinions of fifty ex-students of the B.A. in the Teaching of English at the University of Costa Rica were analyzed. The results show that information and communication technologies play an essential role in language learning to develop the macro linguistic skills. Based on these results, it can be concluded that, despite their importance, ICTs are not being fully incorporated in the major.*

Key words: *ENGLISH LANGUAGE LEARNING (ELL), EDUCATIONAL TECHNOLOGY, MODERN LANGUAGE TEACHING TOOLS, INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs)*

Resumen: *El presente artículo examina el papel de las Tecnologías de la Información y de la Comunicación (TIC) en la enseñanza del idioma inglés. A través de una encuesta electrónica, se analizaron las opiniones de cincuenta egresados del Bachillerato en la Enseñanza del Inglés de la Universidad de Costa Rica. Los resultados muestran que las Tecnologías de la Información y de la Comunicación juegan un papel esencial en el aprendizaje de un idioma para el desarrollo de las macro destrezas lingüísticas. Basándose en estos resultados, se concluye que, a pesar de su importancia, las TIC no están completamente incorporadas en esta carrera.*

Palabras Clave: *APRENDIZAJE DEL INGLÉS, TECNOLOGÍAS EDUCATIVAS, HERRAMIENTAS PEDAGÓGICAS, TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIÓN (TIC)*

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Artículo recibido*: 6 de setiembre, 2013*
Devuelto para corrección*: 1° de noviembre, 2013*
Aprobado*: 12 de diciembre, 2013*

1. Introduction

The use of information and communication technologies (ICTs) has restructured English teaching methodology in the past few years. Many schools and faculties at the University of Costa Rica have given special emphasis to providing equipment and training to professors for the use of new technologies. The Support Center for Assisted Teaching with Information and Communication Technologies (Unidad de Apoyo a la Docencia Asistida con Tecnologías de la Información y la Comunicación, also known as METICS) started operations in February 2006. Among its different roles, it trains professors so they can use ICT's in their courses. However, not all professors attend workshops or apply what they know when teaching. In the *World Declaration on Higher Education for the Twenty-first Century Vision and Action*, UNESCO (1998) stated that

> (…) the rapid breakthroughs in new information and communication technologies will further change the way knowledge is developed, acquired and delivered. It is also important to note that the new technologies offer opportunities to innovate on course content and teaching methods and to widen access to higher learning. […] Higher education institutions should lead in drawing on the advantages and potential of new information and communication technologies, ensuring quality and maintaining high standards for education practices and outcomes in a spirit of openness, equity and international co-operation […] (art. 12)

In the case of the B.A. in the Teaching of English, this is especially relevant. Not only do students miss the opportunity to learn English with the use of technology, but they also miss the chance to acquire skills to use technology when they become teachers themselves. This study benefits teacher trainees by pointing out the experiences of undergraduate students in order to seek change in the methodology and contents of different courses. It also benefits English language learners in schools, high schools, and other institutions where these students will teach in the future. English language learners will be exposed to new methodologies and technology to help them acquire the language faster and more accurately.

To date, there has been no survey study conducted on the use of technology and preparation for undergraduate students from the B.A. in the Teaching of English at the University of Costa Rica. The purpose of this study is to determine whether the B.A. in English Teaching provides students with the necessary skills to apply technology in their

classes. It also seeks to discover how much technology is used in the program and what the undergraduate students' perspective is on its implementation. Because of the limited prior research in this area, three general research questions have been developed to guide the survey. For the present study, the following questions were asked: (a) how often did undergraduate students use ICTs in their core courses?; (b) what courses do undergraduate students believe should incorporate more technology?; (c) what are the main undergraduate students' impressions on the B.A. in the Teaching of English and their ability to use technology in their workplace?

The present study is also limited to students that could be located and agreed to be part of the study. Only students who have graduated within the last five years from the B.A. in English Teaching at the University of Costa Rica were selected. This article describes how frequent professors in the B.A. in English Teaching use ICTs to teach second language learners. It also examines how relevant students consider the use of technology in this major.

2. Review of Literature

So far, the term ICT has been used in its broader sense. It encompasses a myriad of devices or tools. In this study, special attention will be given to those tools that university professors have access to and that have proven to be effective for second language learning. They will be defined below using Downing et al. Dictionary of Computer and Internet Terms (2009).

> *Wikis*: a multi-user BLOG or set of web pages where all users can add content and edit other people's ideas. The term comes from Hawaiian wiki "quick" (p. 528).
>
> *Blog*: a "web log"; a type of personal column posted on the Internet. Most blogs consist of small, plentiful entries. Some blogs are similar to an individual's diary while others have a focused topic, such as recipes or political news (p. 59).
>
> *Podcasting* (video casting): (from iPod and broadcast, but not confined to the Apple iPod) the practice of preparing audio and video programs such as radio and TV broadcasts, but distributing them through the Internet for playback on MP3 players, iPods, and similar devices (p. 370).
>
> *Smartboard*: an interactive, electronic whiteboard manufactured by SMART Technologies, which often captures all notes and diagrams written on the board so that students can access them online later (p. 441).

> *Online forums*: a public forum or discussion area on a computer network where all users of the network can post messages and read all the messages that have been posted by others (p. 330).
>
> *Video conferencing*: the use of video cameras and computer networking to enable participants to converse while seeing one another (p. 513).
>
> *Virtual learning environments*: a way of providing a teaching and learning environment online (p. 7).
>
> *Shared documents*: a service […] to easily share information that includes spreadsheets and presentations that can be edited by a group of people, such as co-workers (p. 513).

Not many authors make the distinction between computer labs, language labs, and audio labs. For the purposes of this study, computer labs will be a cluster of computers connected to each other. The audio lab will be defined as a cluster of booths connected to each other for the purpose of communicating orally with people or listening to recordings, among other audio-lingual tasks. A set of booths will fall under the umbrella term "language lab."

Times are changing for higher education. We no longer consider learning to be a retelling of facts, nor do we consider knowledge to be exclusively in the classroom or communicated by a single person to a group. The role that the modern university should assume is that of making its academic community produce knowledge. ICTs favor the acquisition of contents, the production of knowledge, and the transmission of that knowledge beyond borders and time. In no other era have we experienced this revolution in higher education. An example of this is given by Davis and Botkin (1994).

> Ben Franklin, James Madison, and Patrick Henry were all taught at home rather than in school. In colonial America, the kitchen was the schoolhouse, mother was the teacher, and church was the overseer. As the agrarian economy expanded, children were educated in one-room schoolhouses. With the move from an agrarian to an industrial economy, the small rural schoolhouse was supplanted by the big brick urban schoolhouse. Four decades ago, in the early 1950's, we began to move to another economy, but we have yet to develop a new educational paradigm, let alone create the "schoolhouse" of the future, which may be neither school nor house. (p. 23).

Worldwide, it seems that we are seeking to create that schoolhouse of the future. The technology and training are there, but we need to start implementing more and new 2.0 activities in the language class.

Nomass (2013), in a study conducted at the Department of English Language of Al-Jabal Al-Gharbi University in Libya concluded that

- 98% of the students believe that the computer can improve their English vocabulary.
- 96% of the students believe that using computers in the classroom increases students' interaction with learning.
- 96% of the students believe that using computers will help them develop their writing skills.
- 33% of the students assert that their university has a good source of technology for learning English language.
- 83% of the students believe that the use of computers will improve their listening skills.
- 98% of the students believe that using technology will help them learn English language faster than by using other means.
- 90% of the students believe that using technology can help them improve their speaking skills. (p. 114)

This research study supports the idea that students do believe that technology is an effective teaching aid. English language learners realize that by using technology they will improve the main skills and the sub-skills. This study demonstrates that students feel that technology is necessary to learn the target language faster. On the other hand, not all students believe that their university provides them with enough technology to learn the language. According to Nomass (2013), traditional methods for teaching English present important disadvantages compared to teaching methods using ICTs. First, traditional methods focus more on theory rather than on practice. They rely more on the mere transmission of knowledge. Little or no effort is placed on the creating process or challenging the notions that are being learned. Secondly, traditional methods miss the motivation factor. Students often sit in front of a board or listen to their professors talking. In this model, they are not just receptacles of the information, but they are passive members of the learning community. On the contrary, by using ICT's, students can, after the class is over, devote themselves to chatting, texting, writing, and listening to people all over the world about

different topics. They share and seek experiences and knowledge that classes are, otherwise, failing to supply. The third point that Nomass (2013) addresses is efficiency. Technology aided language learning is generally faster in helping students acquire the language. It is available at times when professors are not, and it offers individualized attention, without mentioning its patience and gamut of possibilities. Lastly, the author mentions that for the most part, education continues being teacher-centered. When incorporating ICTs to the educational process, students are given a more active role. They are free to work at their own pace, and they can receive input and produce output in different and often more sophisticated ways.

According to Prensky (2001), "…the single biggest problem facing education today is that our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language" (p. 2). Different institutions have tried to incorporate new technologies at the service of professors and students. But what happens when professors reject using those resources? Prensky (2001) suggested that

> Digital Immigrant teachers assume that learners are the same as they have always been, and that the same methods that worked for the teachers when they were students will work for their students now. But that assumption is no longer valid. (p. 3)

Therefore, the idea that we can work without technology or that technology can work by itself is illusory. As seen before, students do not oppose the use of technology. Moreover, many higher education institutions make a great effort in order to buy appropriate equipment. But to what extent professors are willing to learn how to use it remains vague. Kirschner (2012) mentioned that "As the creators of new knowledge, faculty should be in the vanguard of change, and sometimes they are. But they are also fierce guardians of the status quo" (párr. 20). This dichotomy creates a breach between what society and students expect and what the university offers in return. Technology is not a solution, but it is part of the solution. Teaching and learning have undergone different changes and knowledge expands drastically. Cuban (2002) expanded this idea by explaining that

> (…) although promoters of new technologies often spout the rhetoric of fundamental change, few have pursued deep and comprehensive changes in the existing systems of schooling. The introduction of information technologies into schools over the past two

> decades has achieved neither the transformation of teaching and learning nor the productivity gains that a reform coalition of corporate executives, public officials, parents, academics, and educators have sought. (p. 195)

Avriam (2000) agreed with Cuban (2002) and mentioned that there is no clear model in the incorporation of ICTs. Technologies are meant to enhance methods and models of learning, but they have been incorporated without really considering any guidelines and without taking into account their actual use in education.

Learning cannot be considered unidirectional. Learning is a process that aims at students constructing their own knowledge and creating new information. With the advent of the web 2.0, a model that allows the non specialist to create and share electronic content over the Internet, creating collaborative activities, has become common in different settings, and second language learning and teaching are no exceptions. New trends call for knowledge that can be created in conjunction with other institutions or people from around the globe. Ariza and Hancock (2003) stated that "two-way interaction is critical in learning a second language" (p. 2). In the past, this interaction was limited to professor-student or student-student interaction. Lightbrown and Spada (1999) stated that negotiation of meaning is fundamental in the learning process. Students should be able to "express and clarify their intentions, thoughts, opinions, etc., in a way which permits them to arrive at a mutual understanding. This is especially true when the learners are working together to accomplish a particular goal" (p. 22). New web 2.0 based activities, as the ones described in the review of the literature, offer a platform for students acquiring knowledge, collaborating to construct it, and sharing it with their peers, the academic community, or any person interested in their topic worldwide.

Advantages of incorporating ICTs to language learning are numerous. Gorard, Selwyn and Williams (2000) believed that

> One of the central tenets of the drive towards widening participation in adult learning lies in the facilitation of easy access to learning resources and opportunities away from the traditional confines of educational institutions. The use of information and communication technologies (ICTs) is widely regarded as the chief means by which this goal will be accomplished. (p. 506)

People who study at the university are young adults and adults. In recent years, this population is not only studying but also working and/or raising a family. The idea is not to remove people from classrooms, as there are advantages to physical and synchronic interaction, but to promote new ways and new spaces for learning. Kirschner (2012) concluded that "Technology provides ways for great teachers to refresh their own scholarship and pedagogy and bridges the gap between how our students experience their college curriculum and how they learn everything else" (párr. 23). As we have already mentioned, not only current students but the whole society may benefit from incorporating new practices into second language acquisition. In addition, professors will have an opportunity to update their skills and refresh their knowledge by blending it with technological tools. By integrating technology, professors will also learn the new digital language of Information and Communication Technologies that has often been a barrier between faculty expertise and the internalization of information by students when using technological resources. Akinwamide (2012) described a third advantage of using technology in the classroom. He claimed that

> The quality of teaching and the efficiency of learning are evidently improved by the use of technologies and long time constraints disappear with the correct application of the right soft-ware in language learning. More so that the development and use of methodological and didactical e-learning concepts or a meaningful integration of multimedia learning modules in existing learning environments can certainly enhance the expected desirable goals. (p. 3)

Thus, equipment is only valuable if used properly. Faculty members should participate in deciding what resources should be acquired and how they will be used. Technology will aid teaching, but it will not replace it. Akinwamide (2012) also mentioned that

> with the appropriate pedagogic preparation, certain skills can be specifically enhanced using the new technologies. Study skills and problem-solving, as well as negotiating skills, are advanced by communication and group learning and by the interplay within an interactive learning environment. The use of a learning platform that permits both synchronous and asynchronous work--also on shared documents--and communication, for instance in forums and chats, supports this goal of skills acquisition in language education… (p. 3).

Therefore, not only language skills will improve. The blending of technology with current teaching practices improves communication, sharing of knowledge, interactivity and spaces and activities where students can advance at their own pace.

Technology has become a necessary resource in the language class. It bridges the gap between professors and students who were born in the digital era. It also promotes independent and collaborative learning through synchronic and asynchronic guided activities. The implementation of strong digital activities can improve students' linguistic skills and abilities, content acquisition and interaction among students. Technology cannot replace the instructor, but it can improve linguistic performance and make learning a more enjoyable experience.

3. Method

Participants

A personal electronic mailing list of 113 undergraduate students from the B.A. in English Teaching was created. The list consists of students who have graduated in the last five years. From the list, a sample of 50 undergraduate students was selected randomly and sent survey materials. A total of 47 surveys were returned (94% return rate). Data from these surveys was collected and analyzed. No survey was kept from analysis.

Survey Materials

An 11-item survey was developed to obtain information about undergraduate students' impressions on the use of technology in the B.A. in English Teaching at the University of Costa Rica. A copy of the survey can be found at the end of this document. The survey was pilot-tested with five students with the same affiliation as the target population. It was later revised on the basis of the pilot-testing.

Each item on the survey was categorized into one of the following three sections: (a) background information, (b) experience using technology at the University, (c) and suggestions for modifying the use of technology in the B A. program in English Teaching. Various question formats were used in the survey, including forced choice, rank order, and at least two open-ended questions. For example, some items asked the participants to indicate whether they thought certain courses (roughly divided into Integrated Courses, Oral Courses, Grammar Courses, and Writing Courses) should include more technology. These items were

rated on a 4-point Likert scale that included the following choices: 1=Strongly disagree, 2=Disagree, 3=Agree, and 4=Strongly agree. This type of scaling format, or a similar one, was also used for other items on the survey.

Additional items asked the participants to rank course blocks in terms of courses they believe need to incorporate technology more urgently. The last part of the survey contained two open-ended questions. The first one asked participants if they would incorporate any other device or technological activity into the major. The second one was an open-ended question asking participants whether they wanted to provide any additional information or comments. The total time to complete the survey materials was estimated between 10 and 15 minutes.

Procedure

This study used a survey study design. The first electronic mailing was sent to 50 randomly selected undergraduate students from the B.A. in the Teaching of English as described previously. The electronic mail included a consent form addressed to the participants that briefly described the purpose of the study and encouraged him/her to participate. A second electronic mail was sent approximately 1 week after the first one. The purpose of this second mailing was to thank those who had already completed the survey and encourage those who had not completed it to do it promptly. After 2 weeks, a final mail was sent thanking all undergraduates for their participation and offering research results to those interested.

4. Analysis of the Results

To answer the initial research question "How often did undergraduate students use ICTs in their core courses?" each course block was analyzed separately by taking into account seven (7) of the main technological devices or activities described in the review of the literature. The reason for eliminating three of them was that equipment needed to carry out some of the activities was not available before 2012. The items that will not be taken into account are audio (language) labs, smartboards, and video conferencing.

The first course block corresponds to Integrated Courses. These are English language courses that include the four skills. Table 1 summarizes the responses to the seven (7) devices or technological activities.

TABLE 1
UNDERGRADUATE STUDENTS' OPINIONS ABOUT THE USE OF TECHNOLOGY IN FIRST- YEAR COURSES IN THE B.A. IN THE TEACHING OF ENGLISH AT THE UNIVERSITY OF COSTA RICA

Type of resource or activity	Never	Not very often	Sometimes	Most of the time	Always
wikis	70%	15%	9%	6%	0%
blogs	74%	15%	9%	2%	0%
podcasting	79%	15%	6%	0%	0%
online forums	74%	13%	13%	0%	0%
computer labs	6%	2%	40%	35%	17%
collaborative documents	74%	9%	13%	2%	2%
Virtual Learning Environment	77%	13%	6%	2%	2%

Source: Prepared by the author

More than 70% of the undergraduate students surveyed believe that they "never" used wikis, blogs, podcasting, online forums, collaborative documents or Virtual Learning Environments, whereas from 9% to 15% think that these resources were "not very often" used. Integrated Courses include and assess the four main skills: listening, speaking, reading, and writing. Because it focuses on the main aspects of English, it would be expected that more technological activities were used. Among these resources, there is a bigger variation when we take into account computer labs. In this case, more than 90% of the students believe that they used the computer lab "sometimes", "most of the time" or "always." Only 8% think that their use of the lab was scarce. A reason that may influence the use of the computer lab in first year is that it used to be graded. When students did not attend classes, their overall grade went down.

The second course block corresponds to Oral Courses. These are English language courses that focus on developing pronunciation, accuracy, fluency, and public speaking skills. Table 2 summarizes the responses to the seven devices or technological activities.

TABLE 2
UNDERGRADUATE STUDENTS' OPINIONS ABOUT THE USE OF TECHNOLOGY IN ORAL COURSES IN THE B.A. IN THE TEACHING OF ENGLISH AT THE UNIVERSITY OF COSTA RICA

Type of resource or activity	Never	Not very often	Sometimes	Most of the time	Always
Wikis	55%	13%	28%	4%	0%
Blogs	70%	19%	11%	0%	0%
Podcasting	85%	6%	6%	2%	0%
online forums	68%	17%	15%	0%	0%
computer labs	6%	11%	49%	30%	4%
collaborative documents	62%	17%	17%	2%	2%
Virtual Learning Environment	70%	17%	11%	2%	0%

Source: Prepared by the author

In this case, 55% to 85% of the students assert that they "never" used wikis, blogs, podcasting, online forums, collaborative documents or Virtual Learning Environments. Podcasting holds the least usability rate (85%). This is especially important because podcasts have been promoted as an excellent tool to improve students' listening and speaking skills and these are the most important skills in oral courses. More than 80% of the students claim that the computer lab was used "sometimes" or more during their classes.

The third course block corresponds to Writing Courses. These are English language courses that focus on developing writing skills. Table 3 summarizes the responses to the 7 devices or technological activities.

TABLE 3
UNDERGRADUATE STUDENTS' OPINIONS ABOUT THE USE OF TECHNOLOGY IN WRITING COURSES IN THE B.A. IN THE TEACHING OF ENGLISH AT THE UNIVERSITY OF COSTA RICA

Type of resource or activity	Never	Not very often	Sometimes	Most of the time	Always
Wikis	50%	15%	29%	6%	0%
Blogs	63%	25%	10%	2%	0%
Podcasting	96%	2%	2%	0%	0%
online forums	74%	13%	13%	0%	0%
computer labs	48%	25%	19%	6%	2%
collaborative documents	60%	17%	19%	4%	0%
Virtual Learning Environment	72%	15%	13%	0%	0%

Source: Prepared by the author

The main resources that focus on writing abilities are wikis, blogs, online forums, computer labs and Virtual Learning Environments (VLE). In the case of blogs, 63% mention that they "never" used blogs. Thirty five percent (35%) think that they used blogs "not very often" or "sometimes." If we consider online forums, 74% of the undergraduate students "never" used them. The other 26% claims that they used them "not very often" or "sometimes." In terms of collaborative documents, 60% of students "never" used them and 36% used them "not very often" or "sometimes." Virtual Learning Environments were also left aside when teaching writing courses. Seventy two percent (72%) "never" used them and 28% claim to have used them "not very often" or "sometimes." In turn, Collaborative documents also show a low level of use. They were "never" used by 60% of the students while 36% used them "not very often" or "sometimes."

Although not very far from these results, wikis and computer labs show a variation in terms of frequency. It is evident that half of the undergraduate students "never" had contact with wikis. Forty four percent (44%) of undergraduate students mention that they used them "not very often" or "sometimes." Very close to that come computer labs. Forty eight percent (48%) claim that they were "never" used. Forty four percent (44%) mention that they were "not very often" used or "sometimes" used. In this case, a relevant 8% believes that computer labs were used "most of the time" or "always."

The fourth course block corresponds to Grammar Courses. These are English language courses that focus on teaching students both the use and rules that govern the structure of the English language. Table 4 summarizes the responses to the 7 devices or technological activities.

TABLE 4
UNDERGRADUATE STUDENTS' OPINIONS ABOUT THE USE OF TECHNOLOGY IN GRAMMAR COURSES IN THE B.A. IN THE TEACHING OF ENGLISH AT THE UNIVERSITY OF COSTA RICA

Type of resource or activity	Never	Not very often	Sometimes	Most of the time	Always
wikis	83%	6%	9%	2%	0%
blogs	85%	9%	6%	0%	0%
podcasting	94%	4%	2%	0%	0%
online forums	85%	6%	9%	0%	0%
computer labs	64%	15%	17%	2%	2%
collaborative documents	81%	13%	6%	0%	0)
Virtual Learning Environment	82%	9%	9%	0%	0%

Source: Prepared by the author

Grammar is often considered a sub-skill that is part of all major skills. Therefore, there is no particular technological resource that may be more or less beneficial to students. In spite of this, grammar courses fall last in incorporating digital tools in their courses. More than 80% of the undergraduate students believe that they "never" used wikis, blogs, podcasting, online forums, collaborative documents or Virtual Learning Environments, whereas from 9% to 15% state that these resources were "not very often" used. The rest of the results mainly correspond to "not very often" and "sometimes." Some people may argue that grammar courses have a lot of content and very few hours per class. Nevertheless, we must remember that these tools are not necessarily meant for "in class use". They support the language learning experience in out of class environments as well.

To the question "what courses should incorporate technology more urgently?", forty five percent (45%) of the undergraduate students answer Oral Courses. Thirty seven percent (37%) claim that First-year courses (LM-1001 and LM-1002) should be second in including more technological resources. In the case of Writing and Grammar Courses, each of them obtained the same 9%, being the third set of courses that should incorporate technology more urgently.

Because students in the B.A. in the Teaching of English apply what they learn in their major, the question "which best describes your technological competence acquired directly from the B.A. in English Teaching?" was asked, and shed the following results:

TABLE 5
UNDERGRADUATE STUDENTS' OPINIONS ABOUT THEIR TECHNOLOGICAL COMPETENCE ACQUIRED DIRECTLY FROM THE B.A. IN ENGLISH TEACHING

Criteria	Number of students	Percentage
Excellent	**1**	2%
Good	**3**	6%
Acceptable	**13**	27%
Basic	**20**	44%
Poor	**10**	21%

Source: Prepared by the author

It is evident that most students (65%) are aware of the fact that the expertise in using technologies to teach English is "basic" or "poor." Twenty seven percent (27%) believe it is acceptable, and only 8% would consider it "good" or "excellent."

Students were also asked what other types of technology the BA in English Teaching should incorporate. Many students answered that they agreed with the ones already mentioned in this study. However, some students mentioned other relevant resources. Table 6 depicts their opinions:

TABLE 6
UNDERGRADUATE STUDENTS' OPINIONS ABOUT OTHER TYPES OF TECHNOLOGY THAT SHOULD THE INCORPORATED IN THE B.A. IN ENGLISH TEACHING

Resource	Number of students
Programs to teach English	**1**
Screen readers	**1**
Web design tools	**1**
Mimio®	**1**
Activinspire®	**1**
Smartphones	**4**
Audio/video generator programs	**7**
Microsoft ® Power point	**7**
Prezi®	**10**
Microsoft ® Excel	**14**

Source: Prepared by the author

Most of the students who answered this question believe that Microsoft® Excel and Prezi® are the resources that should be incorporated more promptly. Microsoft® Power Point and programs to manipulate video and audio are also considered important. Programs to teach English, screen readers, web design tools, Mimio®, and Activinspire® were mentioned by at least one student.

5. Conclusions

Wikis, blogs, podcasting, collaborative documents and Virtual Learning Environment are all activities that are ubiquitous among "digital natives" (Prensky, 2001). Concurrently, these technologies are turning from tools used primarily as a source of information and sometimes entertainment to pedagogical tools, where students create and share new information and content with others. Day by day, different technologies permeate the language classroom. Despite their availability, undergraduate students believe that faculty members do not use them as often as they should. In addition, there is no relationship between the type of skill being taught and the most appropriate tools for teaching that skill.

Professors are often trying to add value to students. Using Web 2.0 technologies to support in-class learning may be the best option. Students are generally familiarized with the tools, and they are usually attractive to students. Web 2.0 applications could help increase responsibilities of students, enable them to learn outside the classroom, and share knowledge with their peers. However, undergraduate students believe that at least First-Year Courses and Oral Courses should urgently incorporate technological tools. On the one hand, students may believe that Integrated Courses should provide students with a good basis for the rest of their major. On the other hand, society often believes that you know the language when you know how to speak it. Therefore, they might sense that they should practice more and that digital tools are a good option.

Another conclusion that can be drawn from the present study is that of modeling. Professors serve as models to students, especially to those students that want to work in the field of education. By not using and, therefore, not showing students how to use digital tools when teaching English, learners do not develop the necessary skills and do not feel confident to use these tools themselves. Although it is true that "Due to long exposure to new technologies, students entering the higher education setting have a different set of technological skills and are much more prepared to use new technologies than most faculty members" (Prensky, 2001), professors should close the gap by experimenting and updating their current practices. Additionally, professors could design activities in which, together with their students, they explore how to use new technologies, thus creating a cooperative, learning, and digital community.

No technology is meant to replace the teacher. Especially at the beginning, it is absolutely recommended to guide students in using these digital tools. It is necessary to analyze what contents lend themselves to be supported with the use of technology. Once that is done, faculty members should decide how feasible this is in terms of equipment, time, and skills. No change must be carried out overnight. It would not be advantageous to move all the contents to the digital sphere. A good start may be to include extra materials and activities and pilot the results with students. Later, some contents or additional procedures may be included to incorporate more technology. As a base, those mentioned in Table 6 should be prioritized.

Maloney (2007) and Rollett et al. (2007) mention that it is necessary to continue to explore the extent of the impact of tools that support these tasks in higher education. It would

be very helpful to replicate this study and analyze the results from different perspectives. First, it would be convenient to analyze what undergraduate and non-undergraduate students from the B.A. in English believe about the use of technology in their major. This would incorporate other sets of courses not mentioned in this study. Second, faculty should be considered as a primary source of information. In this way, it would be possible to know what they think about their use of technology in the classroom and their reasons for using or avoiding it in the language class. Finally, it would be convenient to replicate this type of study annually or every two years. Technology changes and there are several types of digital tools that were not part of this study because undergraduate students were never exposed to them. As new ways to teach evolve, professors should learn about them, apply them, and ultimately develop them, not just to transmit knowledge but to have students create their own.

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Appendix 1
QUESTIONNAIRE

University of Costa Rica
BA in English Teaching

I. Personal Information

1. Please select your gender below:

☐ Female
☐ Male

2. Please write your age: _____

3. Please write your profession: _____

II. University Experience

Answer the following questions taking into account your studies in the BA. Consider the courses you have taken in Lenguas Modernas only.

4. When taking integrated courses in the first year of English, how often did you use…

Type of Resource	Always	Most of the time	Sometimes	Not very often	Never
online forums?					
wikis?					
blogs?					
podcasting?					
collaborative documents?					
Virtual Learning Environments?					
computer labs?					

5. When taking oral courses in the English Teaching major, how often did you use…

Type of Resource	Always	Most of the time	Sometimes	Not very often	Never
online forums?					
wikis?					
blogs?					
podcasting?					
collaborative documents?					
Virtual Learning Environments?					
computer labs?					

6. When taking writing courses in the English Teaching major, how often did you use…

Type of Resource	Always	Most of the time	Sometimes	Not very often	Never
online forums?					
wikis?					
blogs?					
podcasting?					
collaborative documents?					
Virtual Learning Environments?					
computer labs?					

7. When taking grammar courses in the English Teaching major, how often did you use…

Type of Resource	Always	Most of the time	Sometimes	Not very often	Never
online forums?					
wikis?					
blogs?					
podcasting?					
collaborative documents?					

8. What set of courses should incorporate technology more urgently?

☐ First year courses
☐ Oral Courses
☐ Writing Courses
☐ Grammar Courses

9. Taking into account your requirements as a professional, which best describes your technological competence acquired directly from the B. A. in English Teaching?

☐ Poor
☐ Basic
☐ Acceptable
☐ Good
☐ Excellent

10. According to your experience and current needs, what other types of technology should the B. A. in English Teaching incorporate?

11. Please add any other comment you believe necessary[2].

[2] Some of these comments may be found in Appendix 2 in this document.

Appendix 2
STUDENTS' COMMENTS ABOUTFREE-FORM ITEM #8

I learned most of my skills in the use of technology in the master's program. I think the use of technology is encouraged by young professionals who have been involved in the use of technology. Old generations do not rely on technology.

They need to be open to the change and trained before technology can be used more often in the B.A. I've seen a change in the school, though.

By the time I entered my major, technology wasn´t as trendy as now it is. I didn't have a good computer or access to internet either, so for new students of English teaching it is a must to include technology since it is part of our era.

We almost never used those tools for learning or teching (*sic*) purposes. In some of the oral courses (communication 1 and 2, and técnicas 1-3) we went to the labs to receive classes; however, we never used the computers for anything. So, that is a big waste of technology in my opinion.

Students must be updated with the most recent technology; otherwise, they will be left behind with the rest of the teachers… Just to add that I'm glad in knowing that this kind of work is being done for the good of the present and new students of English teaching and looking forward to seeing its tangible results.

The competence of the professors at the University is excelent (*sic*), but a University that ranks as the best university of Costa Rica should step up in the technological field and prepare teachers that excel in the technological area.

students (*sic*) of english (*sic*) teaching need to learn how to use technology to present specific topics to the class. Teachers need hints and need to know whats (*sic*) new, available and accessible to the students. Also need to know which tools to use in order to teach and assest (*sic*). I believe in adding technological resources in the courses of the university, but it also

consider not only technology during classes but also evaluation in the acquisition of the language. Even if in the teaching part we take a course which is supposed to teach us something related to technology, it just give us an example of how to prepare a PPT related to a specific topic like body parts. To be honest, the only professors that incorporated technology were Adriana jimenez (*sic*), Erick salas (*sic*) and you. In the oral courses that might not be that necessary because you can "pick up" many things from direct interaction with classmates and professors (I'm not saying that is not necesary (*sic*) at all) but in courses such as grammar, writing and rhetoric courses I think it should be mandatory. Also, it is amazing how many teachers undergraduate and they are not very acquainted with what I call "the basics" of technology.

It is important to include a course to learn how to incorporate tecnology (*sic*) in teaching, and not only in the process of training. I think that we should get better (more demanding) training on the use of tools like power point, prezi (*sic*) and any other more recent tool. I wish I had learned more on how to use power point or excel (*sic*) since those tools have become very important in my career. Besides, the use of interactive boards seems to be the logical next step in the classroom. So we should pay attention to the newest of these tools. Finally, I have seen how frequently we are asked to use virtual learning environments and how tedious it is. The university can help us with this aspect by researching on it.