English Language Teacher Training: An Analysis on the Use of Information and Communication Technologies at Biângulo School Taguatinga

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Abstract: This article features the results of a survey about the academic education of the English language teacher regarding the use of Information and Communication Technologies. In this sense, the study had the following question: does the English language teacher learn in his initial training to use technological tools in the classroom? The research had a methodological objective to be applied, inductive and with a qualitative approach. It is concluded that the interviewed teachers do not receive, in their graduation periods, the necessary preparation to master the use of Information and Communication Technologies in the classroom, therefore there is a need for improvement in the academic education of these professionals in order to better prepare them for the job market.

Keywords: Information and Communication Technologies; Teacher; English Language; Academic education

1. Introduction

Living in a society where "people around the world are connected, sharing information, disseminating impressions and spreading forms of culture and knowledge,"[1] it is common to wonder whether the technological tools available help or hinder adolescents during their academic life. But for this, it is more important to ask if the teacher has the ability to use these tools for the benefit of the teaching-learning process.

The research topic is based on this context to question the teachers' preparation regarding something that is present in school reality, the use of ICTs (Information and Communication Technologies) in the context of English language teaching. For this, it starts from the researcher's experience during an internship carried out in a public school, where the presence of technology was given through a partnership between the school and Google, providing teachers and students with the most updated tools to help in the school environment.

In this research, an analysis will be conducted on the preparation of teachers for the technological challenges present in the classroom, taking into consideration the following research question: Does the English language teacher learn to use technological tools in the classroom during his/her initial training?

From the context presented, the general objective is to present the results of a research carried out with a group of English language teachers regarding the use of ICTs. In order to do so, the researcher has the following specific objectives: to define ICTs and to present their importance, to explain the importance of ICTs in the education of English language teachers, and to present cases of teachers who use ICTs to teach.

Methodologically, this is an applied research with an inductive approach and qualitative methodology. It is organized based on a literature review that provides conceptualizations of Information and Communication Technologies (ICTs) and analyzes their importance in the training of English language teachers. After that, an information survey conducted with four English language teachers already working in a public school in the Federal District is described. Finally, based on the research findings, it discusses how these teachers were trained in relation to ICTs and how ICTs are present in the classroom in their professional performance.

2. What are ICTs and what is their importance in teacher training?

According to Costa and Souza (2017), the man, by necessity, perfected the way of communicating so that the group coexistence could be improved [1]. From that, we reached the era of technological communication with the development of computer networks that can connect people regardless of the geographical distances between them.

For Anderson (2010), ICTs (Information and Communication Technologies) are not only the technological devices available, but also the technologies that connect these devices, i.e., it is the possibility of using tools, whether computers, laptops, mobile phones or tablets, to communicate via the internet [2].

According to the *TIC Domicílios 2019* survey launched by the Internet Management Committee in Brazil (CGI.br), 74% of the Brazilian population has access to the internet [3]. Although not the totality of the population, this number shows an increase when compared to previous years 2017 and 2018, where the percentage of population with internet access was 61 and 70 percent respectively. The survey also shows that the percentage of the population in rural areas with access to the internet is 53%, a smaller number than the population in urban areas with 77%, but the first time in history that this number is greater than half the surveyed population [3].

The ICTs have been increasingly present in the lives of the Brazilian population, especially in rural areas, which generally have less access to basic services in society, such as schools and hospitals. It is therefore possible to reflect on how the use of these tools can change the course of education in the country, increasing access to information and facilitating communication between people.

> […] the technological advancements in recent centuries have provided contemporary society with sociocultural advances and with this, the need for change in educational institutions to adapt to this new profile of society (Costa and Souza, 2017, p. 223) [1].

It is evident, as mentioned by the aforementioned author and supported by the presented research, that technology has become very prevalent in all layers of Brazilian society. Therefore, it is necessary for education to adapt to these new social behaviors of students.

> […] the school will inevitably have to change, according to the social modernity it finds itself in, and it will be necessary to firm up and transform educational practices so that they meet the demands of society. And, whatever the general form that educational institutions of the future will take, we can expect them to place an even greater emphasis on social interaction as a fundamental element in knowledge construction and the definition of social and individual identities (Costa and Souza, 2017, p. 225) [1].

Observing the quoted excerpt, it is possible to note that the school can adopt not only new tools for the construction of knowledge, but also new methods focused on social interaction as an important tool in the teaching-learning process. However, "(...) TDICs (*Tecnologias Digitais de Informação e Comunicação*) are still underexplored and not fully utilized in all their potentialities and possibilities by teachers in a pedagogical manner with their students." (Araújo, 2018, p. 1594) [4], so having a good infrastructure in the school does not guarantee that it is used in a totally effective way inside the classroom and depends on the presence of a responsible teacher who is able to use it with the students. For this integration to happen, it is

necessary that the teacher has knowledge about the technologies available for his or her field of knowledge, in addition to the will to use them in the classroom, which, if it does not exist, may be due to fear or lack of familiarity of the professional with the tools available for his or her area of expertise.

Thus, it is possible to realize the importance of the presence of ICTs in teacher training, because only then he/she will be able to apply this knowledge for the benefit of a more modern and inclusive education.

3. The formation of the English Language teacher

In a research carried out in the Portuguese/English Language course of a public university in the state of Paraná, an analysis of some items that make up the teaching plan points out that:

> In relation to the Know-how to Teach, the documents point to a genre-based teaching, aiming at the development of CL and the development of phonetic and phonological aspects of the English Language (Miquelante and Cristovão, 2020, p.187) [5].

This analysis helps to understand that the training of a language teacher is focused on spoken language, language skills, and from this it is possible to pursue the previous topic and note how much ICTs can help him/her to present to the students phonetic and phonological aspects of fluent speakers of the language.

Regarding this research, Miquelante and Cristovão (2020) make an interesting observation [5]: complementary activities focused on students' oral difficulties are implemented, and as mediation instruments, activities extracted from the internet are also used. With this, once again it is observed the presence of ICTs in the teachers' own training. It is experiences like these that can create interest in this professional, so that during their profession practice, they have the necessary motivation to use ICTs in the classroom.

> Regarding the issue of Know-how to Teach, the following knowledge is present in the course:
> i. Mastery of pedagogical methods and techniques that enable the transposition of scientific knowledge to the different levels of education - didactic transposition; ii. Mastery of contemporary educational and training theoretical references for the understanding and proposition of didactic-pedagogical actions; iii. Development of criticality and creativity through language; iv. Reflectivity taking into account the scientific knowledge and the experience of social and cultural reality; v. Process of multi-literacies; vi. Pedagogical practices in line with educational and social changes; vi. Context and the role of the teacher in the formation of students as social subjects (Miquelante and Cristovão, 2020, p.188) [5].

These points show the basic competences suitable for any teacher, as well as competences specifically aimed at language teaching, such as point III, the development of criticality and creativity through language. Point IV also deals with an important point for language teaching, the knowledge about the social and cultural reality.

It is possible to observe and reflect on the use of ICTs in teacher education based on point VI mentioned above, which discusses pedagogical practices that align with social and educational changes. Referring back to the data from the ICT Household survey mentioned earlier, it is evident that Brazilian society as a whole has increasingly embraced the use of ICTs in their personal lives, coupled with the continuous evolution of technological devices. Therefore, it is necessary for teachers to be prepared to keep pace with these social and digital changes. Having this preparation during their initial education can greatly assist them in their professional practice.

4. The importance of ICTs for the English Language teacher

The famous *radinho* (little radio) is perhaps the most well-known object among English language teachers, as it is a tool that greatly aids students in their contact with the pronunciation of the language being taught. Just by considering this image, it is possible to perceive how the use of ICTs is prevalent in the daily life

of an English language teacher.

In the educational context, ICTs must be seen as allies and not as obstacles to the learning of the English language. Therefore, the curriculum should no longer be limited only to the textbook, and allow different ways of presenting the syllabus through the potentialities of technologies and digital media. In this regard, I see the need to review the curricula in order to connect the school content with real-life context of students. This can transform ICTs into a powerful interface for the teaching-learning process, both in the school and in the academic context (Araújo, 2018, p. 1610) [4].

Based on the excerpt from the aforementioned author, it is evident that there is a need for the adaptation of technologies not only in the academic sphere but also for English language education professionals to view these technologies as allies in the teaching and learning process. They can then bring this knowledge into the school context in a way that does not pose obstacles for themselves or their students. This is important because, as can be observed, in the following citation, English language teachers have found technology to be a great ally in the classroom, even though each teacher may have their own methodology:

Foreign language teachers more directly perceive the relationship between technologies and their teaching practices. In an earlier period of history, audio and video resources already stood out as frequent elements in foreign language classes, with two main focuses: pronunciation and minimizing the use of the native language in class. Naturally, this issue also varies from one methodology to another and depending on the classroom reality (Vilaça, 2017, p.1776) [6].

According to Vilaça (2017), unlike languages, which change relatively little over a decade or two, technology updates rapidly within short periods of time [6]. Applying this to the present day, technologies available in 2020 were often unthinkable in 2010, or they had significantly different functionalities compared to what we have now. The same applies to technological devices themselves. For example, a computer with components from 10 years ago would struggle to perform tasks required in today's world, either due to lack of support or processing power. Therefore, it needs to be updated to adequately fulfill day-to-day tasks.

Another important point raised by Vilaça (2017) is that teachers, even if they do not work directly with technology, are still impacted by it [6]. This impact can be seen in their professional development, in the characteristics of their students, and in the ways of social interaction. It is crucial to pay attention to the fact that students' profiles align with technological changes. This highlights the potential productivity of integrating ICTs into the classroom, as it is already a common aspect of students' personal lives, sometimes even more so than in the lives of their teachers.

Indeed, analyzing the statements of both authors, Vilaça and Araújo, it becomes apparent that technological tools evolve rapidly and are also present in the lives of teachers and students. As a result, teachers in training need to strive to stay updated in order to be prepared upon graduation, while those already in the field must constantly keep up with the changes that occur over time in order to try to keep pace with them.

5. Data collection and analysis
The Biângulo School was inaugurated in 1963 and currently has 6 units in the Federal District (DF), serving middle-class students in the administrative regions of Taguatinga, Águas Claras, Guará, and Asa Norte. It offers educational programs from nursery to high school.

Methodologically, this research is applied, inductive, and follows a qualitative approach. Eight open-ended questions were written in a Google Forms document and sent via email to five English language teachers at Biângulo School between April 12 and April 16, 2021. Out of the five teachers, only four agreed to participate and respond to the survey. They were identified as Teacher 1, Teacher 2, Teacher 3, and Teacher 4.

These teachers work both in the regular shift, attending students from Elementary School (Elementary 1 and 2) and High School, with a workload of 20 hours per week. They also work in the full-time shift, attending Elementary School (Elementary 1 and 2) students in what the school calls a bilingual project, also with a 20-hour workload.

6. Results and discussion

To get a brief idea about the teachers' education, two questions were asked.

Firstly, the researcher asked, "How long have you been trained as an English Language graduate?"

Response from Teacher 1: "1 year"
Response from Teacher 2: "8 years"
Response from Teacher 3: "6 years"
Response from Teacher 4: "4 years"

Following this, the following questions were asked: "Did you graduate from a public or private HEI? What is the name of the HEI? Where is it located (city/state)?"

Response from Teacher 1: "Private; Catholic University of Brasília; Taguatinga/DF"
Response from Teacher 2: "Private; Faculdade Evangélica de Brasília; Brasília/DF"
Response from Teacher 3: "Private; Anhanguera; Taguatinga/DF"
Response from Teacher 4: "Private; Anhanguera; Taguatinga/DF"

Thus, of the four teachers who responded, only Teacher 1 graduated recently, responding that he has been graduated for 1 year, whereas the other three have graduated for 4 years or more. As for the institution of higher education, all four interviewees graduated from private institutions in the Federal District.

The third question presented was "In your undergraduate studies, do you consider that you received the necessary training to assist you in the use of ICTs (Information and Communication Technologies) in your teaching practice? Why?"

Response from Teacher 1: "Yes, but in practice it is a little different, on a daily basis we observe the necessary resources that meet the class."
Response from Teacher 2: "No. Because I had a hard time working with electronic forms after I left college. I had to work alone to learn."
Response from Teacher 3: "Not at all. It was during my teaching career that I saw the need to improve."
Response from Teacher 4: "No."

Based on these responses, it is possible to revisit the data from the TIC Household Survey 2019 released by the Brazilian Internet Steering Committee (CGI.br), which indicates a gradual increase in the number of people with internet access when comparing the years 2017, 2018, and 2019, with rates of 61%, 70%, and 74% respectively [3].

Taking into account the mentioned data and the statement "In this direction, I see the need to revise the curriculum as a way to connect school content with the real context of the student" (ARAÚJO, 2018, p. 1610) [4], it is possible to examine the graduation dates of the teachers and observe that those who graduated more than four years ago responded that they did not receive the necessary training to assist them in using ICTs in the classroom. Only Teacher 1, who graduated one year ago, responded affirmatively that they did receive this training.

Indeed, it is evident that higher education institutions have been adapting over time to keep up with the changes happening in Brazilian society regarding access to technological tools. These changes are reflected in the ICT Household survey, which demonstrates how the Brazilian population has been increasingly interested in Information and Communication Technologies.

The fourth question presented was "Did you have any course in your undergraduate studies that taught educational technology? Which course was it? How many semesters?"

Response from Teacher 1: "Technologies Applied to Teaching and Learning Additional Languages – 1 semester – 60 hours"
Response from Teacher 2: "No."
Response from Teacher 3: "No."
Response from Teacher 4: "No."

Once again, only Teacher 1 responded positively to the question, while Teachers 1, 2, and 3 answered "No." This question can be related to the previous question, once again indicating that the undergraduate programs completed by teachers who graduated more than four years ago did not include subjects related to teaching technologies. However, Teacher 1, who graduated one year ago, took the course "Technologies Applied to Teaching and Learning Additional Languages."

It was also asked "As an undergraduate student, did you have teachers who used ICTs (Information and Communication Technologies) in teaching? Relate your experience."

Response from Teacher 1: "Yes, digital communication tools greatly assist studies both inside and outside the school environment, making it easy to obtain information without face-to-face contact."
Response from Teacher 2: "No."
Response from Teacher 3: "No."
Response from Teacher 4: "I took some subjects online. It was the only medium that involved technology."

Indeed, only Teacher 1, who graduated one year ago, had teachers who utilized ICTs in the classroom. Teacher 4, who graduated four years ago, mentioned the completion of online courses (EAD), but did not mention the use of ICTs in the classroom context. Teachers 2 and 3, who graduated eight and six years ago respectively, claimed not to have had this experience during their academic studies. Analyzing this information and considering Araújo's (2018) statement regarding the need to revise curricula to incorporate available technologies into the school context [4], the author also suggests that incorporating technology into the academic context can make ICTs a powerful tool for the teaching and learning process.

Indeed, in addition to the curriculum adjustments in recent years, including the incorporation of online courses, as seen in the case of Teacher 4, there has also been a change in the attitude of university professors. This is exemplified by Teacher 1, who reported a positive experience with the use of ICTs as a student, both within and outside the school environment, as it facilitates information retrieval. These developments highlight the importance of adapting teaching approaches to leverage the benefits of technology for students' learning experiences.

The next question was "Have you taken external courses to update yourself in relation to the use of ICTs (Information and Communication Technologies)? Report the courses you have taken. Have they helped you in the exercise of your profession?"

Response from Teacher 1: "I did a technical course in technology in CEBRAC, and the school where I work is currently a Google reference, so we use all the Google resources, during the pandemic period was extremely essential."
Response from Teacher 2: "No."
Response from Teacher 3: "Yes. Google for Education."
Response from Teacher 4: "I am taking Google for Education courses."
That said, when it comes to digital literacies, although the need to know how to use technological tools is understood as a prerequisite to make effective use of digital technologies, the concept of digital literacies goes beyond this ability. Being "electronically literate" requires the mastery of skills that allow the construction of meaning from the information on the screen, considering the learning practices of reading and writing in this new context (Magalhães, 2017, p.51) [7].
Thus, as stated by the author mentioned above, simply being able to handle digital tools does not

guarantee the ability to build knowledge from it.

Based on the responses to the question and the author's statement, the researcher understands that the mastery of digital tools by teachers becomes increasingly necessary over time. In the case of this school where the teachers work, there is a predefined technology to be used, requiring knowledge of it for professional practice within the institution. However, it is not only about having that knowledge but also the ability to use those tools in a way that fosters the construction of knowledge through their use.

The penultimate question was: "Do you believe that ICTs help you as an English teacher (in the classroom)?"

Response from Teacher 1: "In this pandemic period I can't imagine what it would be like without the digital resources, organization, simultaneous correction, quality online class in the applications."

Response from Teacher 2: "Yes."

Response from Teacher 3: "Yes."

Response from Teacher 4: "Yes."

Here, all teachers responded positively, with the addition of Teacher 1, recalling that the technological tools available were of great help during the pandemic period of COVID-19.

Finally, it was asked, "Do you make use of ICTs in the classroom? Explain how you use it in your classes."

Response from Teacher 1: "Yes, with the return of the classroom I discovered how it is better to use digital tools in the classroom, the whiteboard has become a resource that I almost do not use anymore."

Response from Teacher 2 answer: "No."

Response from Teacher 3: "Yes. In activities and content teaching."

Response from Teacher 4: "For the purpose of interaction and differentiation of classes, making them more interesting and attracting more students to various forms of learning."

In this second question, only Teacher 2 responded negatively. However, with the positive responses from the other three participants, it can be observed that there is a significant use of ICTs within the classroom. Among the responses, the remarks of Teacher 1 in the penultimate question stand out, stating that they hardly use the whiteboard in the classroom anymore, and the comments of Teacher 4 in the last question, highlighting the effect that these tools have on students' interest and making the content more engaging. Analyzing these responses, it can be noticed that "foreign language teachers more directly perceive the relationship between technologies and their teaching practices" (Vilança, 2017, p.1776) [6].

Taking into consideration the last two questions, the researcher understands that English language teachers have a significant ally in the Information and Communication Technologies (ICTs) in the construction of teaching and learning. These technologies provide greater ease in the exercise of the profession and generate increased interest among students in the content being studied.

7. Final conclusion

This research started from the questioning about the preparation of English language teachers in their initial training to use technological tools in the classroom.

Based on this inquiry, the aim was to investigate elements that comprise the education of these professionals, from their undergraduate studies to the ongoing training required for their adaptation in the job market.

Through the literature review, it was possible to observe the increasing presence of technology in Brazilian society and in the classroom. This highlights the need for adequate preparation of teachers to keep up with this evolution in their teaching practice. Analyzing the responses provided by the teachers in the research, it was noted that those who graduated more recently had a better exposure to the use of ICTs, either through online courses or specific subjects. However, despite this observation, it was also mentioned that these teachers engage in specific and independent courses focused on ICTs to better adapt to the current classroom scenario.

Based on this information, it is evident that the previously raised questions highlight the significant importance of ICTs in teacher education. As Brazilian society increasingly gains access to Information and Communication Technologies, the effective utilization of these tools in the classroom relies on teachers receiving proper training and education.

Regarding the English language teacher specifically, it was noticeable that their education is not yet fully aligned with the demands of the job market. However, it is still evident that these professionals have a strong ally in Information and Communication Technology tools within the classroom.

This study raises questions about the use of Information and Communication Technologies not only in the classroom but also in the academic setting by English language teachers. It aims to reflect on the structure and curricula of the undergraduate English Language Teaching program and possibly modify them to make these professionals more capable of using these tools in the school context.

This research can be expanded to include investigations related to other teacher education programs, as they share a common focus of transmitting knowledge.

Disclosure statement

The authors declare no conflict of interest.

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