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THE USE OF SKYPE ON SMARTPHONES IN THE TEACHING OF ENGLISH TO THE VISUALLY-IMPAIRED

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Final research project presented to the Language Arts English/ Portuguese College of the Academic Department of Modern Foreign Languages - DALEM - and the Academic Department of Language and Communication – DALIC – of the Federal University of Technology – Paraná, as a requirement to obtain a teaching degree.

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TERMO DE APROVAÇÃO

THE USE OF SKYPE ON SMARTPHONES IN THE TEACHING OF ENGLISH TO THE VISUALLY-IMPAIRED

por

LARISSA XAVIER DE OLIVEIRA

Este Trabalho de Conclusão de Curso foi apresentado em 19 de JUNHO de 2017 como requisito parcial para a obtenção do título de Licenciado no curso de Letras Português/Inglês. A candidata **LARISSA XAVIER DE OLIVEIRA** foi arguida pela Banca Examinadora composta pelos professores abaixo assinados. Após deliberação, a Banca Examinadora considerou o trabalho aprovado.

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ABSTRACT

OLIVEIRA, L. X. **The Use of Skype on Smartphones in the Teaching of English to the Visually-Impaired.** 2017. 46 pages. Final Research Project. Universidade Tecnológica Federal do Paraná – UTFPR. Curitiba, 19/06 /2017.

This project of Applied Linguistics aimed to investigate the role of Skype on smartphones and Personal Computers as an alternative media to teach English to visually-impaired students. This study took place at the Federal University of Technology-Paraná (UTFPR) in the project *English for Us* which was offered by the Academic Department of Modern Foreign Languages – DALEM. As for the method, it was a qualitative study in which an interview was conducted to these students. The learners had online classes by means of Skype. After the classes, the learners were interviewed, in order to evaluate the process undertaken. The theoretical framework which underlies this paper comprises the concepts of 'Digital Literacies (DLs)' by Lankshear and Knobel (2005), Mobile Literacy by UNESCO (WEST ; VOSLOO, 2013), Dysontogenesis by Vygostky (1993 apud RODINA 2006) and Assistive Technologies by Kelly and Smith (2011). By the end of this project, we were able to observe that Skype can be used as a tool for teaching visually-impaired leaners, for it provides them with the opportunity of being digitally literate and of using assistive technologies to learn the English language.

Key words: Digital Literacy. Mobile Literacy. Dysontogenesis. Teaching English to Visually-impaired Students. Inclusion. Information and Communication Technologies. Skype.

RESUMO

OLIVEIRA, L. X. O **uso do Skype em *Smartphones* no Ensino de Inglês para Pessoas com Deficiência Visual.** 2017. 46 páginas. Final Research Project. Universidade Tecnológica Federal do Paraná – UTFPR. Curitiba, 19/06 /2017.

Este projeto está inserido no âmbito da Linguística Aplicada e tem como objetivo investigar o papel do Skype em *Smartphones* e *Personal Computers* como uma mídia alternativa para o ensino de Inglês para alunos com deficiência visual. Este estudo foi realizado dentro da Universidade Tecnológica Federal do Paraná (UTFPR) no projeto *English for Us* oferecido pelo Departamento Acadêmico de Línguas Estrangeiras – DALEM. Para que a pesquisa fosse desenvolvida, uma entrevista foi aplicada à estes alunos. Após essa etapa, os aprendizes tiveram aulas de inglês por meio do Skype, e em seguida foram entrevistados para obtermos uma avaliação do processo. A pesquisa foi conduzida com uma fundamentação teórica dos conceitos de Letramento Digital (Lankshear; Knobel, 2005), Letramento Móvel (WEST ; VOSLOO, 2013), Disontogêneses (Vygotsky, 1993 apud RODINA 2006), e Tecnologias Assistivas (Kelly; Smith, 2011). No final do projeto, pudemos observar que Tecnologia de Informação e Comunicação (TIC), como o Skype, pode e deve ser utilizada como uma ferramenta para o ensino de inglês para pessoas com deficiência visual.

Palavras Chaves: Letramento Digital. Letramento Móvel. Disontogênese. Ensino de Inglês para Pessoas com Deficiência Visual. Inclusão. Tecnologia de Informação e Comunicação. Skype.

LIST OF ACRONYMS

ADEVIPAR	Associação dos Deficientes Visuais do Paraná.
App	Application.
DLs	Digital Literacies.
ICTs	Information and Communications Technologies.
IP	Internet protocol service provider.
IPC	Instituto Paranaense de Cegos.
MALL	Mobile-assisted English Learning.
PCs	Personal Computers.
VOIP	Voice over Internet Protocol.
UNESCO	The United Nations Educational, Scientific and Cultural Organization.
UTFPR	Universidade Tecnológica Federal do Paraná.

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1. INTRODUCTION

Throughout the three last decades, studies about the use of Information and Communications Technologies (ICTs) in the teaching and learning of the English language have been conducted reflecting our contemporary society. In this sense, they are considered a helpful tool for students to enhance their learning and for teachers to improve their teaching practices.

Within this scenario, assistive technologies have been developed to help disabled people to be included in a more equalitarian society. In an age where ICTs are commonly used by most citizens, it is important for researchers to find new ways that ICTs can be used as assistive technology in the teaching and learning of a foreign language. However, few studies can be found related to the teaching of English to visually-impaired learners. Therefore, the teaching of English to visually-impaired students is mostly relevant.

Since 2003, an Internet protocol service provider (IP) named Skype has offered to subscribers free calling, video chatting and messaging to people from all over the world. First, it was created exclusively to make voice calls and send instant messages on computers. Afterwards, it started to be used for live videoconferencing calls as well. Nowadays, with around 700 million users, Skype is not used only on Personal Computers (PCs), but also on Smartphones (AAMOTH, 2011).

Furthermore, by means of live videoconferencing calls, the disabled ones are able to interact with people and be taught, in an accessible way, wherever they are as long as they are logged onto Skype. Thus, the software can be used as an alternative way to teach English to visually-impaired students.

Regarding special education in Brazil, very little has been made to effectively include disabled students, even though law Nº 7.853/89 (BRASIL, 1989) was approved in 1989. This law tries to assure that children with any kind of physical disability would have the right of studying in regular schools. Only in 2002, the National Curricular Guidelines[1] (BRASIL, 2002) proposed special education inclusion. Before that, the documents only assured the integration of disabled students in regular schools, not effective inclusion.

As a consequence, instead of being treated in an equalitarian way, disabled students were integrated in the educational system and considered equal to the ones with no

[1] Author's translation for: *Parâmetros Curriculares Nacionais.*

disabilities, which meant that disabled students had to adapt to the non-disabled world while nothing and nobody had to change, in order to help them be included in society.

For the inclusion to happen in our schools, teachers are required to look for new ideas, methods and procedures to assist these students to learn and be truly included in an equalitarian way. Likewise, it is important for language teachers to be concerned about inclusive education, especially when it comes to the teaching of the English language to visualy-impaired students.

Moreover, as most of the blind students have access to a variety of electronic devices, English teachers need to take advantage of technology in order to help their students throughout their learning process. Similarly, an ICT tool/resource, such as Skype, needs to be studied for the purpose of the teaching and learning of the English Language to visually-impaired learners.

Regarding the context presented, it is of paramount importance researching about the use of ICTs to foster language learning, specifically concerning visually-impaired students. The use of Skype on smartphones and PCs represents a tool to teach English to people who are visually-impaired.

This study was conducted in the 'Project English for Us' which was held at the Federal University of Technology- Paraná (UTFPR). As in this first semester of 2017, the face-to-face classes were canceled, we attempted to replace them for Skype ones. 20 people took part in this research, 10 of them were visually-impaired students and the other 10 were volunteers who were majoring Language of Arts at UTFPR.

Being that, the main objective of this qualitative research paper is:
To investigate more specifically the role of Skype on Smartphones and PCs as a tool to facilitate the teaching of the English Language to visually-impaired students.

In this sense, the specific objectives of this research are:

- To conduct an interview on how much information visually-impaired students have about Skype and if they use it;
- To investigate how visually-impaired students use Skype, in order to communicate;
- To evaluate the process of their learning of English Language via Skype, after the workshops.

As it has been discussed, for education equality to happen, it is important for teachers to find new ways that ICTs can be used as assistive technologies. In order to do so, we attempted to use Skype as an alternative tool for teaching a foreign language to visually-

impaired students. Also, as literature on this matter is scarce, at the end of this study, it will be possible for us to contribute to the understanding on how to teach disabled students in an alternative and equalitarian way.

In this introduction, the theme, the significance and the general e specific objectives of this study were presented. Also a brief overview about special education in Brazil was shown. In chapter 2, the theoretical references will be discussed and the literature review will be exposed. Later on, in chapter 3, the methodology will be defined. In chapter 4, the data collected will be presented and analyzed. To conclude this research, in chapter 5, there will be final considerations and indications for further research on the topic.

2. THEORETICAL FRAMEWORK

This case study investigates the role of Skype in the visually-impaired students' learning of the English language. In this sense, the theoretical framework which underlies this study are the concepts of Digital Literacies (DLs) (LANKSHEAR; KNOBEL, 2005), Mobile Literacy (WEST;VOSLOO, 2013), Dysontogenesis (VYGOTSKY, 1993 apud RODINA, 2006) and Assistive Technologies (KELLY; SMITH, 2011).

2.1. DIGITAL LITERACIES

As this study is related to the teaching English by means of Skype, we are going to resort to digital literacy within the scenario in which the visually-impaired students are the participants. Due to this, Lankshear and Knobel's (2005) theory on Digital Literacies will underlie this study.

The authors account for the importance of Digital Literacy be conceptualized as plural and not as singular, rather than considering that digital literacies are primarily a set of skill and competences. Lanskeshear and Knobel (2005) believe that:

> [...] these 'skills' and 'techniques' actually differ in important ways when they are embedded in different practices which involve different purposes and where there are different kinds of meaning at stake (compare, for example, 'searching'). Moreover, the skills and techniques of decoding and encoding do not actually take us very far at all on their own. This is because reading and writing is always 'reading and writing with meaning' and this meaning is not primarily, or even substantially, a function of some 'skill' or 'technique' that might be called 'comprehension'. It is predominantly a function of social practice, social context [...]. (LANKSHEAR; KNOBEL, 2005, p. 8)

As it is possible to perceive, the authors state that, digital literacies are primarily a function of social practice and context. In this sense, Lankeshear and Knobel (2005) base their arguments on the sociocultural perspective. They claim that, instead of taking digital literacies as a unitary, finite competence or skill, people should consider 'digital literacy' as:

> [...] a shorthand for the myriad social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged etc., via digital codification. Hence, there will be myriad digital literacies. Indeed, there will be myriad social practices that from an 'It' perspective are seen to fall under the names of discrete 'skills'. There will be multiple social practices and conceptions of searching, of navigating links, of evaluating credibility of sources, of 'posting', and so on. These will vary according to how people 'identify' themselves: according to the values they have, the social groups they relate to, the affinities they invest in and attach themselves to, the purposes they see themselves pursuing, the kinds of images they seek to project, and so on. [...] (LANKSHEAR; KNOBEL, 2005, p. 9)

In other words, they believe that, digital literacies should be conceived as a simplified system of communication mediated by content produced via digital codification. In this perspective, reading and writing vary from person to person. According to the authors, this is possible because each person has different backgrounds, which means that a same text can be read in different ways depending on who the reader is.

Lankshear and Knobel (2005) consider some implications of the diversity of digital literacies in education and recognize the importance of considering the use of mobile phones in the classroom as they are valued "[...] scholastically, culturally and economically" (LANKSHEAR; KNOBLE, 2005, p. 19).

With this in mind, by researching on the role of Skype in the teaching of the English Language to visually-impaired students, we will attempt to digitally literate them. Consequently, those students will not only have the opportunity of being digitally literate, but they will also be able to learn English in an equal and alternative way. Due to this, the guidelines by The United Nations Educational, Scientific and Cultural Organization - UNESCO (WEST ; VOSLOO, 2013), which is about mobile literacies, a prominent area of DLs, will be discussed.

2.2 MOBILE LITERACIES

In order for the students to be digitally literate, it is necessary that they have access to technological devices such as mobile phones and PCs. Since mobiles phones are more affordable and practical to use than PCs, the center of this study we will be related to mobile literacy. This research is aware that there are other references that deal with this subject, but we will focus only on the guideline given by UNESCO (WEST; VOSLOO, 2013), because of the short period of time we have to develop this study.

In 2013, UNESCO set guidelines with the purpose of encouraging and helping policy-makers better understand that mobile devices such as mobile phones and computers are being used worldwide, for people to access information and learn in innovative ways. The document was consulted by experts over twenty countries, so that the guidelines could have a broad adaptation in different institutions and reflect the needs of different countries.

UNESCO (WEST; VOSLOO, 2013) first define mobile learning as a way to enable learning anytime and everywhere as it can unfold learning in a variety of ways. The document states that, people can use their mobiles devices with the purpose of accessing educational resources, to communicate or to create new content inside or outside the classroom. This

definition shows that the organization aims at the implementation of mobile devices in the educational system. Secondly, in order to avoid imprecision, UNESCO (WEST; VOSLOO, 2013) embraces a broad definition of mobile devices and recognizes that they are:

> [...] digital, easily portable, usually owned by and controlled by an individual rather than an institution, can access the internet, have multimedia capabilities, and can facilitate a large number of tasks, particularly those related to communication. (WEST; VOSLOO, 2013, p.6)

Additionally, UNESCO defines mobile technologies as ubiquitous. In other words, they can be found everywhere. According to the document, mobile phones are the most used ICT worldwide. Also, UNESCO (WEST ; VOSLOO, 2013) claims that devices such as tablet and computer are further changing the ICT landscape

The guidelines articulate that the policy-makers should revise and rethink the potential of mobiles in education because these ICTs are more affordable and easier to access than computers. Due to these characteristics, the document states that, mobile technologies can improve educational equality as they provide accessible pathways for learning. Furthermore, it articulates that these devices can also "[...] complement existing educational investments such as textbooks, infrastructure, hardware, training and content. [...]" (WEST; VOSLOO, 2013, p. 10).

In the same line, UNESCO (WEST ; VOSLOO, 2013) holds that, mobile technologies can provide learners and teachers an immediate feedback and assessment. Besides, the document states that the use of ICTs can make educators more efficient as they would eliminate logistical tasks. Instead, teachers would be able to work directly with students as the use of mobile technologies would automate "[...] the distribution, collection, evaluation and documentation of assessments" (WEST ; VOSLOO, 2013, p. 13). In other words, by using mobile devices, activities that were schoolwork become homework, so that teachers could devote more time to the application of disciplinary concepts in the classroom and use the time more effectively.

According to the organization, mobile devices not only enable learning to happen anytime and everywhere, but also create interaction among new communities of learning where they did not exist before. In this sense, mobile technologies "[...] facilitate learning by blurring boundaries between formal and informal education." (WEST; VOSLOO, 2013, p. 21).

In this perspective, UNESCO (WEST ; VOSLOO, 2013) articulates that, these ICTs can assist learners with disabilities and improve their learning as they integrate accessibility

features such as text-enlargement, voice transcriptions, location aware and text-to-speech technologies. In addition, UNESCO (WEST ; VOSLOO, 2013) points out that:

> For visually-impaired learners, freely available software can, for example, turn a mobile equipped with camera into a tool that read texts aloud. [...] Findings like these have prompted the creation of mobile applications tailored for people who struggle to read due to disability." (WEST ; VOSLOO, 2013, p. 23)

However, UNESCO (WEST ; VOSLOO, 2013) observes that teachers need to be trained to know how to incorporate mobile technologies into their pedagogical practice. Otherwise, educators will only be conducting old activities in a new way. To put it differently, if teachers are not taught to incorporate the use of mobile in their teaching practice, when they try to do so, these educators will not literate their students properly.

For the purpose of avoiding this, the guidelines suggest that the policy-makers: encourage teachers to use mobile technologies in the learning; provide courses through mobile technologies to support their work and their development; and offer opportunities for educators to share strategies for integrating technology in educational institutions. Likewise, the guidelines (WEST ; VOSLOO, 2013) point out that, educators need to show students how to use mobile devices responsibly as these technologies are usually overlooked or prohibited in schools.

As some learners still do not own a mobile device or have connectivity to the internet, UNESCO (WEST ; VOSLOO, 2013) claims that governments should seek to provide students equal access to mobile technologies and mobile connectivity. According to the organization (WEST ; VOSLOO, 2013), there are three models for ensuring that learners will have the mobile learning they need:

> 1. Government or other institutions provide devices directly to learners;
> 2. learners supply their own devices, commonly referred to as 'bring your own device' or BYOD; or
> 3. Governments and institutions share provisioning responsibilities with learners. (WEST ; VOSLOO, 2013, p. 36)

UNESCO (WEST ; VOSLOO, 2013) holds that, different from the first and third models, the BYOD model fails to provide equal access for all learners. As a result, high-income students could outperform the low-income ones. Due to this, the BYOD model is indicated in areas where most people already have mobile devices.

In this section, the guidelines by UNESCO (WEST ; VOSLOO, 2013) were briefly presented for the purpose of showing the importance of using mobile devices in the teaching process. Since mobiles devices can be used as assistive technologies and consequently improve the special education quality, we will proceed to the discussion of the theory of

Dysontogenesis (VYGOSTSKY, 1993 apud RODINA, 2006), which focuses on the disabled abilities rather than their disabilities.

2.3 DYSONTOGENESIS

Vygostky's theory on Dysontogenesis (1993) is a breakthrough in the special education area. The theorist, "created a comprehensive and practically-oriented paradigm of educating children with special needs". In this sense, Vygostsky's theoretical legacy on the compensation and education of children with sensory and cognitive impairments is relevant to contemporary work with disabled students (VYGOTSKY, 1993 apud GINDIS, 1995).

According to Rodina (2006), Vygotsky (1993) valued the dynamic and socio-cultural nature of disability and conceived social learning as being important in the upbringing and education of children with disabilities. The author states that, Vygotsky (1993) appreciated social and collective life experience for children with disabilities. The psychologist believed that, the social aspect was crucial in the upbringing of disabled children's life. Moreover, Vygotsky claimed that, in the collective, the child is able to develop inner functions and determine his or her personality. In this sense, the psychologist stressed that, the social environment is one of the most important socio-cultural conditions for disabled children development and socialization. (VYGOTSKY, 1993 apud RODINA, 2006).

Rodina (2006) claims that, Vygotsky (1993) "[...] primarily focused on children's intact abilities (resources). According to Vygotsky, the resources of children with disabilities should constitute a basis for an optimal development of children's potential." (VYGOSTKY, 1993 apud RODINA, 2006, p. 15-16). In other words, Rodina (2006) articulates that Vygotsky (1993) focused his theory on children's health, not on their disorders. Due to this, the author claims that Vygotsky (1993) criticized the pathology and centered approaches in special education. According to her, in Vygostky's view, disorder can not be considered as a tragedy. (VYGOTSKY, 1993 apud RODINA, 2006).

Rodina (2006) also says that, the core of the theory of Dysontogenesis (VYGOTSKY, 1993) is to study the dialectical relation between primary and secondary defects. The first defect is related to sight and hearing impairment as well as mental and motor disorders. The second one is related to social-cultural disability that occurs due to the primary disorders. To put it differently, the exclusion from social interaction and educational environment, caused by primary defects, leads the disabled people to have a distorted connection of culture (second defect.). (VYGOTSKY, 1993 apud RODINA, 2006).

The author articulates that, Vygotsky's theory of Dysontogenesis (1993) implies that impairment is a social-cultural developed phenomenon that needs to be compensated by cultural and socialization enlightenment. This theory claims that the positive approach is beneficial to disabled children as it directs its focus on their strengthening and empowerment. For inclusion to happen, it is necessary that, studies related to the dialectical relationship between disabled learners' primary and secondary disabilities are made, so the influence of social cultural interactions in disabled students' learning can be analyzed. (VYGOTSKY, 1993 apud RODINA, 2006). In this sense, Rodina (2006) states that:

> Developing the theory on dysontogenesis, will require a thorough analysis of the dialectical relationship between primary and secondary disabilities, a disability-specific 'Zone of proximal development'. The concept of inclusion requires studies of internalization of external cultural activities into internal processes via psychological tools and mediated learning in relation to high- and low incidence disabilities. (VYGOTSKY, 1993 apud RODINA, 2006, p. 18)

In addition, Rodina (2006) articulates that in Vygostsky's (1993) view the Positive Differential which is an efficient approach, should be used in contemporary classroom to develop higher mental functions (consciousness and cognition) in disabled learners. In other words, the psychologist holds that special education should implement the Positive Differential approach because the efficient compensation for students' weakness might help to develop their higher mental functions. (VYGOTSKY, 1993 apud RODINA, 2006).

In order for our visually-impaired students to be empowered, we have chosen to use the positive differential approach in this study. To do so, we are going to attempt to compensate our learner's disabilities by using Skype as a tool for them to have social interaction and learn the English language. Since Vygotsky (1993 apud RODINA, 2006) claims that, the disability should be compensated through social and cultural interactions, Kelly and Smith (2011), which are going to underlie this study, research on the effectiveness of the use of assistive technologies in the classroom which may contribute to the compensating advocated by Vygotsky.

2.4. ASSISTIVE TECHNOLOGIES

According to Kelly and Smith (2011), most assistive devices are deemed effective as their effectiveness is not evaluated by teachers and other professionals in the field. Because of this, Kelly and Smith (2011) examined literature on assistive technology for visually-impaired students from 1965 to 2009. The authors articulate that, after the development of the

computer, a variety of hardware and software innovations have enhanced the ability of visually-impaired students to access information. However, they state that assistive technologies are being developed faster than researcher can evaluate it. Due to this, they state that not always is it possible to guarantee the effectiveness of an assistive device:

> Assistive technologies tend to be developed faster than researchers can evaluate. Despite the speed of production, such technology is not guaranteed to be effective. Professionals in the field must strive to evaluate its effectiveness in an effort to provide consumers with the information that allow them to have the highest quality experience possible when using such technology. (KELLY; SMITH, 2011, p. 74-75)

Hence, the researchers believe that, it is the professional's responsibility to show to disabled students how they can have the highest quality experience when they are using an assistive technology. After covering 45 years of research related to assistive technologies used in the classroom by visually-impaired learners, Kelly and Smith (2011) claim that, even though many studies enable teachers to use assistive technologies effectively, they lack to be researched according to the standards of scientifically based research.

Still, the authors articulate that all the works they examined are helpful for teachers and other professionals that are looking for new ideas and ways of working with visually-impaired learners. According to them:

> There is a great need to develop a body of scientifically based research. Scientifically based research methods seem to be indicative of the evaluation of the effectiveness of assistive technology, and vice versa. This interdependent relationship was demonstrated by our study. For students with visual impairment to be able to receive high-quality assistive technology that will enhance their educational success, more concrete research on the effectiveness of assistive technology needs to be conducted. (KELLY; SMITH, 2011, p. 81)

In this sense, it is possible to state that researching on assistive technologies is essential in terms of enhancing visually-impaired students' ability to access information. For this reason, by studying the role of Skype in the learning of the English language by visually disabled students, we will be able to see its effectiveness. The following section will explore the conceptual framework, by mentioning five studies conducted in Brazil as well as four international ones.

2.5. CONCEPTUAL FRAMEWORK

In this section, nine studies connected with this research will be presented. While the first two studies are articles by professors from the Federal University of Technology-Paraná

UTFPR, the three later are undergraduate final term papers of students from the university which focus on the use of ICTs in the teaching of English to blind students. The four last studies are respectively related to the teaching of English using Voice over Internet Protocol (VOIP), ICTs in the teaching practice, ICTs in the special education and ICTs in the teaching of a language to blind students.

Even though, the last three research papers do not focus on the teaching of the English language to blind students, they are relevant to this research for the fact that they deal with ICTs in education.

In Brazil, five studies related to teaching English to the Blind were found. The first research aims to investigate the role of Smartphones in the teaching of the English language to a population of fifteen Brazilian visually-impaired students. As methodological design, Retorta and Cristovão (in press) have chosen the classroom ethnography research. The authors resort to analyze the data generated within classroom in a descriptive and interpretative way, in order to find linguistics and behavioral patterns concerning the use of Smartphones for communication and learning of the English language.

Retorta and Cristovão's (in press) findings show that, in the beginning of the course, the visually-impaired students had little knowledge on how to use applications on smartphones (WhatsApp, mobile Facebook). However, after two years of formal language and Smartphones instructions, the students were able to write texts on WhatsApp and mobile Facebook, to post and listen to podcasts in their native language and in English and to interact with peers in Brazil and other parts of the world. According Retorta and Cristovão (in press), Mobile-assisted English learning (MALL) helped the impaired learners to improve socially and culturally.

In the second research paper, Bork and Retorta (2015) aim to report the experiences in the use of ICTs that Language of Arts students from the Federal UTFPR acquired in a project that teaches English to blind students. According to the authors, the ICTs were used as assistive technologies, in order to overcome the difficulties blind students face when learning a foreign language. At the end of the research, Bork and Retorta (2015) conclude that the project raised creativity in all the components of the group, since the researcher professor and the undergraduate students looked for different kinds of methods and procedures and learned new ways of teaching. Due to this, the visually-impaired students learned the English language (BORK; RETORTA, 2015).

The third study, entitled "The Use of ICT in Teaching English as an Additional Language for Blind and Visually-impaired: A Case of Study", by Oliveira (2015), investigates how visually-impaired students use ICT to communicate and learn the English language. To begin with, Oliveira (2015) analyzes the field of digital literacies. In addition, she also takes part of the study group of English for the blinds at UTFPR, in order to collaborate with the blinds' learning process. Her research findings show that, even though visually-impaired learners do not use ICT the same way, they help each other to adapt to it.

The fourth research paper, "The use of Facebook as a Virtual Environment to teach the English Language to visually-impaired students"[2] by Czarneski (2015), aims to investigate how the use of Facebook can help blind students enhance their learning of the English language. To achieve her goals, Czarneski (2015), takes part in the project of English for the blind held at UTFPR. At the end of her research project, she concludes that ICTs such as Facebook can be used as a tool for visually-impaired students to learn English, even though its accessibility needs to be improved.

The fifth study is called "The role of Podcasts in English Language Learning by Blind and Visually-impaired Students in an Extension Course"[3], by Lúcio (2015). On her research paper, she investigates the role of podcasts and how visually-impaired students who are learning the English Language use them. Her research revealed that podcasts are very important ICTs as they allow blind students to learn English in a more dynamic, interactive and inclusive way.

In Norway, Coburn (2010) focuses his action research on the online teaching of English conversation using VOIP (Voice over Internet Protocol). According to the author (2010), this online conversation was carried out in a challenging international context. Coburn analyzes interviews from eight Conversation Facilitators to show how conversation assignments need to be designed in order to promote interaction patterns conducive to the language learning. At the end of his research, the author suggests that in order to promote oral proficiency for foreign learners, teachers should carefully design tasks appropriate to students' sociocultural context, in order to promote oral proficiency for foreign language students.

[2] Author's translation for O Uso do Facebook como Ava no Ensino de Língua Inglesa para Cegos.

[3] Author's translation for *O Papel dos Podcasts na Aprendizagem do Inglês Como Língua Adicional: Experiência de Alunos Cegos e de Baixa Visão em um Curso de Extensão*.

In The United States, Wang, Hsu, Reevers and Coster (2014) conducted research on professional development to enhance teachers' practices in using information and communication technologies (ICTs) as cognitive tools, lessons learned from a design-based research study. The main purpose of this project was to facilitate science teachers' use of ICTs as a tool in students' learning process. As a result, the researchers saw positive changes in the classroom as the learners had autonomy over the use of technology and improved their skills and science learning.

In Greece, Drigas and Ioannidou (2013) presented an overview of studies related to Special Education and ICT. According to them, as of 2001, this topic began to be more discussed in society as it was discovered that the use of ICTs in education could be adapted to the needs of disabled students. Therefore, Drigas and Ioannidou (2013) stated that ICTs represent an important resource for teachers and parents in special education.

In Portugal, Andrade and Ramos (2016) conducted a study about ICT in Portuguese reference schools for the education of blind and partially sighted students. Their work focuses on the learning of Portuguese by blind and partially sighted students and analyzes how Portuguese language teachers use ICTs to teach their learners. At the end of their study, they concluded that there are many obstacles for teachers and students as most of them still do not know how to work with ICTs in the classroom.

To conclude, in this section five studies about ICTs in the teaching of English to blind students were shown as well as four studies related to the teaching of English using VOIP, the use of ICTs in the teaching practice, ICTs in the special education and ICTs in the teaching of a language to blind students. These studies reinforce the claim that ICTs may foster language development, as this study holds.

3.METHODOLOGICAL DESIGN

The purpose of this section is to provide information about the methodological design in which this study was based on. In this section, we will present the study design, by justifying the use of the action research approach and its main characteristics. For a better understanding of this information, first and foremost, the methodological concepts of qualitative research, action research will be briefly explained.

The qualitative study was designed to reveal targets' behaviors and perceptions in a given determined situation. In this sense, this research paper is a qualitative study. Due to the fact that we aim to investigate the role of the ICT Skype in the teaching of the English language to blind students, we have chosen to apply the concept of action research in this study.

According to Engel (2000), action research is related to engaging participants in projects. It attempts to combine the research theory with the practice. In this sense, in this study, we are going to conduct activities to the blind students based on different theories. To put it differently, we are going to apply activities through Skype, in order to attempt to teach visually-impaired learners in an accessible way.

Being that, once we apply the activities to the students, the data will be collected and analyzed. Afterwards, we are going to examine existing theories, so that we can evaluate the effectiveness of teaching English to the blinds by means of Skype. (GABRIEL, 2013)

In this sense, based on the target public's reality, we are going to lead the participants to perform a particular activity, so that, the results of the application of the methods studied can be described (BORTONI-RICARDO, 2008). Regarding this, this research has a descriptive nature, which means that, it describes the events gathered from data collection, in order to produce statistic information.

In this perspective, the collected data is not quantified. Instead, it is analyzed in an inductive way through phenomenal analyses and meaning attribution. This study is an action research because it relates to the collaboration between the action researcher and the target audience to diagnose and develop solutions to problems (BORTONI- RICARDO, 2008).

According to Engel (2000), action research was created to overcome the gap between the theory and the practice. As a consequence, it enables researchers to conduct surveys in an innovative way as the results of the methods applied can be analyzed during the research

project. This approach is widely used in the teaching area because it helps professors to solve problems that they face in the classroom. (ENGEL, 2000)

Action research consists of a spiral of the following reflecting- cycles stages: identification of the problem, preliminary research, hypothesis, action plan development, implementation of the action plan, data collection, action plan evaluation and communication of the results (ENGEL, 2000). Being that the next subsections will be about the conduction of each fase.

As it has been discussed, this qualitative study is an action research. In this sense, we are going to use this approach, in order to investigate the role of Skype in the teaching of the English Language to visually-impaired students. Then, we are going to describe this process and analyze it, so that, we can generate statistic information about using Skype as a tool for teaching visually-impaired students. In the next subsection, the identification of the problems will of this study will be presented.

3.1. IDENTIFICATION OF THE PROBLEMS

In this section, information about the reason why I researched on the teaching of English to visually-impaired students by means of Skype will be given.

As I have always aspired to help the minorities, I have chosen to study on inclusive education. For this reason, as soon as I knew about Professor Retorta's project about teaching English to blind students, I wanted to participate. After taking part of the classes and getting to know about students' struggles and achievements in the learning of the English Language , I decided to research more about this matter.

Also, as in this first semester of 2017, UTFPR is changing the policies of volunteer projects, the English activities that were conducted in person to the blind students were canceled. Being that, we managed to replace our face-to-face classes by Skype ones.

3.1.1. SCENARIO

The aim of this subsection is, to present the scenario where this study took place. This study was conducted during the project 'English for Us' which was conceived by Professor Retorta, in March 2014 at UTFPR (Curitiba Campus). Its purpose was to research on the

teaching and learning of an additional Language for visually-impaired students. As it was a volunteer project, it was for free.

Ten learners from IPC[4] and ADEVIPAR[5] took part in the course: seven were totally blind and three had low vision. Since 2014, they have been in the project. In addition, the classes were oriented by Professor Retorta and given by the undergraduate students of Language of Arts (Portuguese and English). Classes were held every other Saturday morning from 9:00 AM to 12:00 PM, in room E-107. This classroom was chosen due to its accessibility.

As the project did not require that visually-impaired students had any previous knowledge on the English language, it was only necessary that to volunteer to be part of it. The learners decided to participate in the project after being informed about it at IPC and ADEVIPAR. For the reason that the students were not on the same English language level, the classes were given in a multi-level way.

Every semester, the learners would be divided into small groups and each group was taught by different undergraduate students. It is important to mention that the content they studied would always be the same. At the end of the term, the undergraduate students as well as the visually-impaired ones received a certificate.

In this subsection, the scenario was presented and also a few comments about the extension project – English for Us – were made. In the following subsection, the institutions that were related to this study will be briefly shown.

3.1.1.1. UTFPR, IPC AND ADEVIPAR

As UTFPR, IPC and ADEVIPAR were involved in our research, their historical background will be showed in this subsection, respectively. The Federal Center of Technological Education of Paraná, which was founded in 1908, turned into UTFPR in 2005. In this sense, UTFPR focuses on undergraduate, graduate and extension courses.

It offers 100 higher educational technology, bachelor degrees and language of arts degrees as well as 19 technical courses. It also offers 90 specialized courses, 40 post-graduate studies programs, masters and doctoral courses and research groups. UTFPR has 2,549 professors, 1,176 technicians, employees, and about 32 thousand students.(UTFPR, 2016).

[4] Instituto Paranaense de Cegos.

[5] Associação dos Deficientes Visuais do Paraná.

Founded in 1939, the Institute for Blind People of Paraná[6] (IPC) is a civil society. The institute creates and develops actions, in order to contribute in the visually-impaired people's social formation. In this sense, IPC promotes and facilitates the personal development and social and economic inclusion of blind people (IPC, 2017).

The Association of Blind People of Paraná[7] (ADEVIPAR) was created in 1979 by a group of blind people who wanted to help the visual impaired community. Its main objective is to give to blind people access to sports and socialization. In addition, ADEVIPAR promotes professional qualification and vocational training and guidance to blind students. It offers legal assistance, specialized educational assistance and socio cultural activities to visually-impaired learners. (ADEVIPAR, 2013)

It is important to stress that this research was only possible because of the existence of UTFPR, IPC and ADEVIPAR. While the former provided us with assistance and resources for the conduction of this study, the second and the third institutions provide us with the visually-impaired students. In this section, UTFPR, IPC and ADEVIPAR institutions were shown. In the following section, the participants that took part in this study will be presented.

3.1.2. PARTICIPANTS

This section is intended to present the participants of this study, that being, the learners of the extension project 'English for Us' that was held at UTFPR.

As mentioned previously, the visually-impaired students would volunteer to be part of the project 'English for Us' and were a multi-level group. The majority of the students had previous experiences with the English language as they had studied in language schools or taken part of governmental projects related to the learning of the English language. Still, for the reason that, most of the learners did not have opportunities to practice, they forgot the contents they had learned.

To train the visually-impaired students to use Skype, this research was conducted in the project "English for Us", in order to them take part in three workshops. Before starting the workshop on how to use Skype, I have contacted 11 visually-impaired students. As soon as I called them, most students were excited to participate, however, some of them got insecure as they did not know how to use Skype. After explaining that this research also aimed to teach them how to access Skype, 10 students agreed to participate.

[6] Author's translation for: Instituto Paranaense de Cegos.

[7] Author's translation for: Associação dos Deficientes Visuais do Paraná.

According to their degree of disability, it was possible to separate these students into two groups: six of them were totally blind and four had low sight. While the first group had access to Skype with narrator screen reader[8], the second one also had the option of using magnifying features[9] to do so. In this heterogeneous group, their ages varied from 10 to 59.

Additionally, out of the 10 students, six already had smartphones nor laptops, two had only a smartphone and two of them neither had smartphones and laptops. In order for these two latter learners participate in this research, two smartphones were donated to them. Also, 10 undergraduate students who were majoring in Language of arts Portuguese / English were invited to be volunteers in the project, so that each visually-impaired learner could be assisted properly.

This section was designed to provide some information about the participants of the extension project English for the Blinds. The following chapter gives information about Skype.

3.1.3. SKYPE AND ITS INTERFACE WITH PCS, LAPTOPS AND MOBILES

For a better understanding of how Skype functions, in this section, information about Skype and its interface with PCs, laptops and mobiles will be discussed. For accessing this application, it is not necessary to download it, but have an internet connection is needed. Whereas, for making calls, speakers and a microphone are required, having a camera is optional for devices that do not have built-in one (SKYPE, 2017).

To get started with Skype, it is users need to create a Skype account or synchronize their Microsoft accounts to sign in. After this, they need to go to their contacts list and search for new friends. If these people accept the user's friend request, calls can be made. The application has accessibility features available as it assures that: "Assistive features help people with disabilities navigate and control their device as well as get better access to online content" (SKYPE, 2017). In this perspective, Skype supports nine kinds of devices, respectively: Windows desktop 7 and 8, Windows RT, Mac, IOS, Android, Amazon Kindle, Blackberry. In general, the accessibilities features are Narrator screen readers, high contrast settings and magnifiers (SKYPE, 2017).

[8] It reads text aloud, so that visually-impaired people can read texts on their mobile devices.

[9] They are applications that enable Visually-impaired individuals to read as it magnifies what is selected by them on their mobile devices.

According to the Skype website (2017), it is possible to access Skype across devices, such as: computers, mobiles, tablets, x-box, wearables[10] and televisions. However, as the focus of this research relies in the use of Skype for computers and mobiles, only information about them will be presented.

On PCs and laptops, Skype can be downloaded for free and launched in any Windows device, MAC and Linux devices. On mobiles, Skype can be downloaded on: Android, iPhone, Windows phone and Blackberry devices (SKYPE, 2017). Due to its popularity, the word Skype has become a verb, so usually when friends want to contact each other through Skype they usually say: 'skype me' instead of 'call me'. (SKYPE, 2017)

As it has been showed, Skype is a free application that allows people to interact with each other from long distances. In order to digitally literate our students and compensate their visual disability by social interaction, we decided to study the role of Skype in the teaching of a foreign language. Also, we have chosen to work with this internet protocol service provider, due to its accessibility. In this section, information about Skype was given. The next section is going to be related to the preliminary research conducted.

3.2. PRELIMINARY RESEARCH

The purpose of this section is to briefly discuss about the first two specific objectives of this research. The first one was related to conducting an interview on how much information visually-impaired students had about Skype and if they used it, while the second objective was about investigating how visually-impaired students used Skype, in order to communicate.

For the reason that we did not know our learners' background knowledge on Skype, we decided to interview them, so that we could have a better understanding on how to conduct our workshops about Skype. Subsequently, the interview outline of this research will be presented.

3.2.1 INTERVIEW OUTLINE

The aim of this section is to describe the interview outline carried out to investigate how much information 10 visually-impaired students had about Skype and if they used it. Seven students were interviewed in person and the other three were interviewed by means of

[10] Wearables are techonologies that can be worn on human body. (TECHNOPEDIA, 2017)

Skype. To the first group, the questions were asked individually during the first workshop. Three learners asked this researcher to translate the questions and the other four answered the questions in English. The questions were respectively:

1. Do you know what Skype is?
2. Have you ever used it?
3. If so, how often do you use it? How many hours?
4. For what purposes?
5. Where do you use it? At home? At work? At the library?
6. Did you learn how to use it by yourself?
7. What kind of device do you usually use to access Skype? PC? Laptop? Smartphone? Why?

From all students who answered the interview outline, six of them already knew what Skype was and five of them had used Skype before. From these five students, one learner used Skype every day, while the other four hardly ever used it. Even though these students accessed Skype at home to communicate with friends, only one of them also used Skype to work. In addition, while one student learned how to use Skype by himself, two students learned about it in a course about Skype and the last two students were taught by friends. According to these five learners, they accessed Skype through their Smartphones, as it was more practical for them.

Three students were not able to attend the first workshop, so they were interviewed them through Skype (at home) by this researcher. After that, they went to the second day of the workshop. For this reason, while the first question was changed into 'Did you already know what Skype was before the workshop was given?' the second one was removed. The other questions remained the same.

Out of three only one student had never used Skype before, even though she had taken a course on Skype. The other two had only accessed Skype through their laptops, in order to work and to talk with friends. Both of them accessed Skype at home and learned how to use it by themselves. In contrast, out of these two students, only one often accessed Skype.

The most important aspect of this interview outline was to find out that, although most students knew what Skype was and had even used it at some point in their lives, they did not access Skype very often. On the other hand, after their first day in the workshop, they started

using it through their mobiles devices. Instructions on how to use Skype were given, so that they would be able to use Skype confidently during this research.

It is possible to state that, the results of the interview outline were essential in terms of showing the need to digitally literate the visually-impaired students as most of them did not use Skype as a tool for learning. Also, as UNESCO advocates (WEST ; VOSLOO, 2013), we could discover that the learners preferred to access Skype through their mobile devices as they considered it to be more practical and economical than computers. In this sense, as it has been discussed, in order to digitally literate (LANKSHEAR; KNOBLE, 2005) the students and work with the Positive Differential approach (VYGOTSKY, 1993), we decided to focus our research on the teaching of the English language by means of Skype onto mobile phones. It is important to mention that not only Skype was used in this study, but also Gmail (free Web-Based email service), and WhatsApp (free messenger application for Smartphones). In this section, the interview outline done with learners was presented. In the following section, comments about the hypothesis of this research will be made.

3.3 HYPOTHESIS

In this section, subsection information about the hypothesis of this research will be given. Our main idea was to investigate if visually-impaired students would be able to learn English by means of Skype on their Smartphones.

We have chosen to work with Skype and Smartphones as they are practical and affordable to use. By using this application on visually-impaired mobile phones, we believed that, it would be possible for them to learn English in accessible and equal way. In this subsection, information the main idea of this study was presented. In the next one, the action plan developments will be explained.

3.4. ACTION PLAN DEVELOPMENT

In this subsection, we are going to mention, the procedures of this research. This study was carried out in three stages. In the first stage, an interview outline about visually-impaired students' knowledge on Skype was applied. In order for the students to share their previous experience with Skype, this interview outline had four closed questions and five opened ones.

Secondly, we conducted three workshops to the learners at UTFPR, so the English activities through Skype could be done. In this sense, the blind students were taught how to use Skype.

During each workshop basic vocabulary about "Introducing yourself", talking about food and music was revised .by means of Skype. After the workshops, we taught them the First Conditional through Skype. We decided to focus our Skype classes on grammar because one of our visually-impaired students suggested. For the students who were not fluent, we taught the future tenses.

In the third stage, we conducted an interview with these students and evaluated the process of the activity. The achievements were reported as well as the difficulties faced during the project. In this section, the procedures of this study were presented. In the next one, the implementation of the action research will be detailed.

3.5 IMPLEMENTATION OF THE ACTION AND DATA COLLECTION

In this subsection, the workshops we conducted will be analyzed. As UNESCO (WEST; VOSLOO, 2013) advocates, before teaching the students, the volunteers and I studied how to use Skype. Therefore, we were be able to assist the visually-impaired learners and incorporate properly the use of mobiles into pedagogical activity. Likewise, the UNESCO (WEST; VOSLOO, 2013) point out that, educators need to show students how to use mobile devices responsibly as these technologies are usually overlooked or prohibited in schools.

As it has been discussed, as most students did not have personal computers, the project was focused on teaching blind learners through their mobile phones. As UNESCO (WEST; VOSLOO,2013) suggest, the policy-makers should revise and rethink the potential of mobiles phones in education because these ICTs are more affordable. In a like manner, Lankshear and Knobel (2005) corroborate that it is important to consider the use of mobile phones in the classroom, as they bring educational, economical and cultural benefits to society.

On March 4th 2017, the workshop was scheduled to start at 9 o'clock in the morning. However as some students arrived late, while I waited for them at the entrance, I interviewed the students who had already arrived. As UTFPR does not have tactile floor tiles, in most of its paths, the volunteers and I waited for each blind student to arrive and led them to the computer lab. After seven learners had arrived, the workshop started.

Professor Retorta introduced the project to the students. Subsequently, she asked the volunteers and I to teach each blind learner individually. As there were ten volunteers for seven blind learners, some of us worked in pairs. As most of them already had a Skype

account, all volunteers made voice calls to the blind learners. For those students who did not have an account, we created one. After downloading the Skype app on their smartphones. In order to stimulate them to use Skype through mobile phone, all the calls were made using this mobile device. Only those who had forgotten their Skype account used the computer. With the intention to pretend that we were Skyping each other from a long distance, the volunteer who was calling a particular blind student would go to another room.

I taught two students. The first learner had already accessed Skype through her mobile before. We had free conversations related to "introducing yourself", family, hobbies, work, etc. Afterwards, I started teaching another learner. Even though, some of them were not fluent, the conversations were conducted orally. In order for all the visually-impaired students interact in English, the volunteers would adjust the difficulty level of the conversation for each learner.

As UNESCO (WEST ; VOSLOO, 2013) affirms, the government or institutions should provide devices for the students who are not able to afford one. For this reason, as neither my second student nor his twin brother had mobiles, as they received smartphones as donations, they could participate in the project. Since this student did not know much about English, I taught him how to introduce himself. He was very excited and eager to learn. During this workshop, the students complained about the noise in the lab, caused by the amount of people in the room.

As UNESCO (WEST ; VOSLOO, 2013) advocates, mobile devices not only blurry the boundaries between formal and informal education, but also create interaction among new communities of learning where they did not exist before. Similarly, Vygotsky (1993 apud RODINA 2006), claims that, interacting with peers is an important socio-cultural condition for the development and socialization among people with disabilities. Owing to this fact, the author claims that disability is a social-cultural developed phenomenon that needs to be compensated by cultural and socialization enlightenment. For this reason, at the end of the class everybody shared their Skype contacts, so that it would be possible for us to keep in touch.

On March 18th 2017 , the second workshop was held. I was not able to participate in the meeting in person. Instead, I scheduled to call five students. In order for me not to expose the real identity of the learners, I used fictional names.

It is important to mention that, the students who were not taught by me, were taught by the other volunteers in the project. Also, on March 25th 2017, it was not possible to give

the third workshop at UTFPR because of a bus strike. For this reason, the classes were given through Skype according to student's availability.

On March 19th 2017, I skyped the students “Ana” and “Luíz” after sending an audio by WhatsApp to them. As they were married, the couple chose to have class together. For the simple fact that these blind learners did not have internet at home, they had to go to the study room of their building. In order not to turn on their mobile data and spend more.When our conversation started, the students got shy and started to say, “we don’t know English”, “we’re lazy”, but as the time went by, they felt more at ease. Even though they could understand what I was asking, they would translate it into Portuguese.

During the class, there were some words in English such as country music duo” and “song” that they did not know, so I explained to them in English. As they were learning new vocabulary, the couple regretted not having brought something to write on. “Luíz” was already used to using Skype, so he helped his wife to access it.

In spite of their difficulties in speaking English, they tried as much as possible to communicate only in the English language. Our conversation lasted only 10 minutes as the couple had to skype a blind friend of theirs.

On March 20th 2017, I scheduled to skype the student “Rosa”. As she had some health issues, the class was postponed to March 21st 2017 . This third learner skyped me individually. I revised the future structure form (APPENDIX A). First, I interviewed her as she had missed the first workshop. It was the first time she had ever used Skype through her mobile. Besides, the student did not have Internet at home, consequently, she used her mobile data. By turning on her data service, “Rosa” would have to pay more to have access to the Internet than she would if she were connected to Wi-Fi.

Subsequently, I asked her twice about what she was going to do in the following week (first in English and then in Portuguese). Owing to the fact that she had some degree of mental disorders, it was very difficult for her to pronounce the /r/ sound. As a result, the learner could not pronounce correctly the word rest and friend. Most part of the class, I had to speak to her in Portuguese because the student had a lot of difficulties in understanding the English Language.

As student “Ana” and Luíz had done before, even when “Rosa” could understand what I had asked in English, she would translate the question into Portuguese. In fact, my intention was to teach her the content about the First Conditional, however as the learner could not remember about the use of the future structure, I revised the use of will and going to.

Being that, I asked her “What are you going to do next week?”, so as to induce her to use the future structure. I repeated the question and substituted “weekend” for Monday, Tuesday, etc. “Rosa” would misplace the adjectives of the sentences sometimes. To illustrate, she would say: “I will visit my friend that have a children special”.

Our Skype class lasted for 40 minutes. Due to the difficulties the student had, after the class, I advised her to study the content she had learned. I told “Rosa” that I would send her an e-mail with the activities that we had practiced through Skype, so that she could study by herself. However, as she did not have a computer at home it would be difficult for her to open the file.

As UNESCO (WEST ; VOSLOO, 2013) state, the educator needs to provide access to information to all students, so that high-income learners will not outperform the low-income ones. For this reason, I sent her all the content we had studied through WhatsApp. As a result, it was easier for her to read the sentences that were practiced and listen to the audio regarding these same sentences.

Likewise, as Lankshear and Knobel (2005) articulate, it is a paramount to consider the diversity of digital literacies since it is a social practice via digital codification. In this sense, even though the focus of this project was related to the use of Skype in the teaching of the English Language, I also used Gmail (free Web-Based email service), and WhatsApp (free messenger application for Smartphones). Therefore, it would be possible for me to schedule Skype meetings with the blind students and to send them material about the content we had practiced through Skype.

On March 22nd 2017, I taught “Pedro”. Before our Skype class, he sent me a message through WhatsApp to confirm our meeting, then we started our class. Firstly, he said that he had a lot of difficulties in the English Language. I asked him “What are you going to do next Monday? ” , so that we could practice the structure of the future tense and revise the days of the week. In this sense, I asked what he was going to do each day of the following week and he would have to reply in English. I explained to him the uses of going to and will (APPENDIX A).

Observing that “Pedro” did not know much about English, we spoke mostly in Portuguese. At the end of the class, he told me that he preferred to have classes through Skype as it was more practical for him. “Pedro” had already used Skype before. However, in view of the fact that he did not have any friends to talk to, he would not use Skype frequently. “Pedro” had Internet at home, so we did not have connection problems.

Our class lasted for 40 minutes. After the class, I sent him a voice message with the sentences that we had practiced through WhatsApp as it was easier for him to understand them and listen to the audio regarding these same sentences. Later, this student was scheduled to have classes with another volunteer, so I did not teach him anymore.

On March 24th , I skyped “Luíz” again. This time his wife did not want to participate. We talked about the future clauses. When the class started, “Luiz” did not want to talk about a grammar topic. Instead, he wanted to talk about his life. It was difficult to bring his attention to my purpose. Luíz explained to me that many years ago, he had studied English in a language school, but he forgot what he had learned as he did not practice.

This time, he brought a voice recorder so he could practice the new vocabulary he was about to learn. I asked him “What are you going to do tomorrow”? (APPENDIX B). Then, he replied “In my work I used to talk with people not Brazilian”. Afterwards, I explained to him the use of foreign and foreigner. One more time, I asked him “What are you going to do tomorrow?” and he said he was going to work.

Next, I ask him what time he would have to be at work. “Luíz” told me that he needed to be at work at 8:00 in the morning. Then, I questioned him about how he would normally go to go to work. “Luíz” answered that he would take the bus. In this moment, I ask him “What if you miss your bus?” He replied “I never miss the bus and if I miss the bus I usually take an Uber”. Subsequently I said, if you miss the bus you will take an Uber tomorrow. I started to explain the structure of the First Conditional. Though “Luíz” said he had forgotten some structures of the English Language, he had a good level of the language. For this reason, the class was given in English. Only when the student could not understand the structure of the first conditional, I had to use Portuguese.

In order to practice the new content, I gave him give some incomplete statements. He would have to create affirmative, negative and interrogative sentences. For instance, when I gave him the structure: “Call Maria, she be happy”, he responded, “If I call Maria, she will be happy”, “If I do not call Maria, she will be happy” or “If I call Maria, she will not be happy” and “Will she be happy if I call her? (All the sentences are attached in the Lesson Plan 2.).

During the exercise, the learner had some troubles to put the sentences into their interrogative forms, for example, he would say: “Do if she happy if I will call Maria”. As we were practicing, he could understand better the structure of the First Conditional. It is important to mention that the exercise was conducted orally.

At the end of the class he told me that he preferred to have classes through Skype as he could practice English more intensively. As UNESCO (WEST ; VOSLOO, 2013) states, mobile technologies can provide learners and teachers an immediate feedback. Due to this fact, the student claimed that he could receive more attention from me while I was teaching him through Skype.

Our class lasted for 40 minutes, but as he started to lose his connection through Skype, he had to continue the activities through voice calling on WhatsApp. As Lankshear and Knobel (2005) claim, Digital Literacies can provide new ways to learn. The authors believe that, DLs should be used with the purpose for students to become digitally literate. In this sense, when Student "Luíz's" Skype was not working anymore, we managed to continue our class through another application. After the class had finished the student asked me when we would skype each other again. I replied that every Sunday I could call him.

On March 27th 2017, I skyped "Marcela", she was from Brasilia and was invited by our research group to take part in the project. As she is studying Translation in English at Federal University of Brazilia (UNB), she had a good level of fluency in the English Language.

First, I interviewed "Marcela", as she could not participate in the workshop in person. Then, I asked her about what she was going to do the following day (APPENDIX B). She told me: "I'll go to UNB". Subsequently I asked how she used to go to university. The learner responded: "I take the bus."

Afterwards, I questioned her: "What if you miss the bus to go to UNB? What happens?". The student could not answer due to lack of vocabulary. For this reason, I helped her and then she stated, "If I miss the bus I'm going to be late for University." Then I explained to her what the first conditional was. She told me that she had already learned about this content before, but had forgotten, as she did not practice it.

Similarly to what I had done with Student "Luíz", I gave "Marcela" some situations, so she could practice orally the new vocabulary she had learned. During the exercise, the learner had some difficulties in creating interrogative sentences. To demonstrate: "Do I will to go call Maria, if she be happy."

After we finished the class, "Marcela" wanted to talk more, so I asked her more about her routine at University. She told me that she participated in a study group related to translation. Then, "Marcela" explained to me that, when she was in High School, she had the

opportunity to study English, but she was an underachiever. For this reason, she needed to practice more the English Language, as it is required for her major.

Our class lasted for 40 minutes. For the simple reason that she had internet at her house, we did not have connection issues. At the end of the call, “Marcela” said that she was grateful for being part of the project. Also, she asked me when our next class was going to be.

On March 31st 2017, I called Student “Rosa” again. She canceled our class because she had had problems with her Smartphone. Due to this, we postpone it to March 31st at 8:00 p.m. An hour before the class she sent me a message through Skype and said that her phone was discharging.

Due to this, skype her at 8:40 p.m. She greeted me with “Good night”. Then I told her that good night was used to say goodbye while good evening was used to greet people in the evening. Subsequently, she admitted that she had not studied the content about the future tenses that we had studied on March 20th. As “Rosa” did not studied the content she had learned, she made the same mistakes she had committed in our previous class through Skype.

Moreover, “Rosa” recognized that the reason why she did not know how to use future tenses was because during the Project English for Us she had skipped some classes about this content. She would say sentences like “I go will to my house friend”, or she would not know when to use the future tense structure “I will went to the doctor”. Most of the class was in Portuguese. I stimulated her to use the future tenses will and going to. In this sense, I asked her “What are you going to do tomorrow?”. Owing to the fact that she had not practiced the content we had learned in our previous class, she could not understand my questions and I would have to translate them into Portuguese. Our conversation lasted for 20 minutes.

As it has been stated, this student had a mental disorder. In this sense, even though “Rosa” faced difficulties in learning, she was very interested in the classes. Different from the other blind learners, she had to cope not only with her blindness, but also with schizophrenia. As it has been discussed, Vygotsky (1993, apud RODINA, 2006) focused his theory on people’s health and strengths, not on their disorders, so that learners’ high mental function could be developed. In this sense, during the Skype classes, the activities were conducted orally, so the learners would have the opportunity of practicing more their speaking skills. As the group was a multi-level one, the students who were more fluent, were able to use more their English than the ones who were not fluent. Even though, during the Skype classes, I used mostly Portuguese with the less proficient learners, in the exercises they would have to use their English speaking skills. Consequently, they also could practice their English.

Regarding the effectiveness of the Skype classes, Kelly and Smith (2011) claim that, not always researchers can evaluate the effectiveness of assistive devices in education as a variety of them have been developed throughout the years. In this research, it was possible to see that learning through Skype was effective for the 'English for Us' group.

At the end of each class by means of Skype, I would ask them how they liked to learn through Skype and they would reply that they were very grateful for being part of the project. In addition, they said that they had the opportunity of practicing and revising contents that they had already learned before, but did not practice by themselves.

This data collection was essential in terms of analyzing the role of Skype in the teaching of the English language. Due to the fact that the students were taught by Skype for approximately a month, they could be digitally literated. This was only possible because of the use of mobiles in their learning process. For the reason that the Skype application was used onto mobiles, we could attempt to compensate student's visual disability by interacting orally with them in an accessible way. In this section, the data collected during the workshop and the classes through Skype were analyzed. In the following section, the action of this research will be evaluated.

3.6. ACTION PLAN EVALUATION

In this subsection, the results of this research will be discussed, so that it will be possible to see whether we could reach our specific objectives or not. The aim of this qualitative research was to investigate the role of Skype in visually-impaired students' learning of the English language.

Our first goal was to conduct a survey on how much information blind students had about Skype and if they used it. We applied an interview outline to the visually-impaired students from the project 'English for Us. Our findings showed that, most students knew what Skype was, but they did not access it very often, specially through their mobiles.

Second, our objective was to investigate how visually-impaired students used Skype in order to communicate. In this sense, we were able to identify that most learners did not use Skype, in order to learn, but to talk to friends and work.

Third, we evaluated the process of their learning of the English language through Skype. In order for this to be possible, we expected to have conducted three workshops about learning English through Skype. However, due to a bus strike in Curitiba we had to cancel our

last workshop at UTFPR and substitute it for a Skype one. Still, we were able to conduct three workshops to our visually-impaired students. The data gathered showed that, the use of the Skype by the visually-impaired student to learn English was effective.

As it has been discussed, the theoretical framework which underlined this study were the concepts of DLs (LANKSHEAR; KNOBEL, 2005), Mobile Literacy (WEST ; VOSLOO, 2013), Dysontogenesis (VIGOTSKY, 1993, apud RODINA, 2006) and assistive technologies (KELLY; SMITH, 2011). By studying these theoretical frameworks, we could have a better understanding of the importance of researching on assistive technologies, in order to empower our visually-impaired students and digitally literate them. Also, to conduct this study we used the action research approach, so that we would be able to describe and analyze the results of our project.

Based on all this information, it is possible to see that we were able to reach our research objectives. Each stage of this research was essential in terms of getting to know our students' needs, as well as digitally literating them by means of Skype classes onto their mobiles.

In this subsection, we reflected about our specific objectives and related them to the results we had in this research. In the following section, a few final considerations will be made.

3.7. COMMUNICATION OF RESULTS

Based on the student's feedbacks, we could come to the conclusion that teaching English through Skype allowed them to be more confident about their speaking skills. Even though the students were insecure, from the moment they knew about the project, they wanted to participate as they did not have many opportunities to practice the English language outside the classroom environment. For this reason, they were grateful for being part of project. They were also eager to learn more about the English language. As UNESCO (WEST ; VOSLOO, 2013) states, mobile literacy needs to reflect the needs of local context. Due to this, we decided to interact orally with the visually-impaired learners as the majority of them would say that, as they did not have many opportunities of using the language, they were not fluent.

Even though we had little time to conduct this research, the blind learners could have access to information in a practical way. As a result, all my students told me that they would like to have classes only through Skype. Another important aspect of this study is the fact that, some of the students only started to use Skype on their mobiles phones in this project.

After doing so, they claimed that it was easier to access Skype through these devices. In this sense, the effectiveness of teaching by means of Skype was so significant that Professor Retorta, created a new project for undergraduate students to teach English to blind learners through Skype. Even after my data collection, I kept on teaching the students by means of Skype.

Likewise, the effectiveness of teaching with Information and Communication Technologies proved to be a tool for learning when there was a bus strike in Curitiba and we could substitute our classes at UTFPR for a Skype meeting. As the learners enjoyed the project, after each Skype class, they would ask me immediately when our next class was going to be. During the week, even though we had already scheduled our classes, some of them would call me to know if our classes could be every day. Unfortunately, as I did not have much free time, I would only teach them once a week. It is important to mention that the other volunteers also reported positive results in their Skype classes to visually-impaired students.

Being digitally literate enabled the visually-impaired learners to know how to use Skype on their own whenever they were and in order for them to learn. As Rodina (2006) claims, Vygotsky (1993) conceived social interaction as being an important tool in disabled learners' education. Regarding this, by using the Positive Differential approach, we could not only interact with the visually-impaired students through Skype, but we were also able to compensate their disability by focusing our project in our students's strengths. As it has been discussed, Kelly and Smith (2011), it is professional's responsibility to show to disabled students how they can have the highest quality experience when they are using an assistive technology. Being that, as the volunteers and I researched on Skype and prepare our Skype classes the best as we could, the visually-impaired students were motivated to participate of the project and made the most of it.

A difficulty found in the development of the project was that, some students did not have Internet at home, so they would have to use their mobile data to participate of the project. Also, the fact that few visually-impaired students knew how to read Braille made it harder to prepare activities for them to read. This occured because the screen reader in Portuguese does not read the words in English correctly. On the other hand, for some students it is not possible to understand what the screen reader of the English language is reading as it speaks very fast. Another obstacle found was related to setting the time for the Skype classes.

There were moments when the available time that I had to teach was not the same time that my students had to be taught.

Due to the fact that I had very little time to teach the students, I only had one month to apply the project and make sense of the data. Above all, during the classes, the blind learners, the volunteers and I could share significant experiences concerning teaching the English Language through Skype. At the end of this research, we could see that I had learned more from the blind students than they had learned from me.

The use of an ICT in the teaching of a foreign language proved to be an important tool to empower students. However, as not all learners have access to ICTs or even to Internet, it is a challenge to teach in an alternative and equal way. In relation to future studies, research concerning the application of English reading and writing activities to visually-impaired students, by means of Skype, could be conducted, so that the learners could also have the opportunity of practicing skills such as reading and writing through Skype.

REFERENCES:

AAMOTH, D. **A Brief History of Skype**. Disponível em: <http://techland.time.com/2011/05/10/a-brief-history-of-skype/2/>. Acesso em: 23 jun. 2016.

ADEVIPAR. **Quem somos**. Disponível em: <http://www.adevipar.com/quem_s.php>. Acesso em: 27 fev. 2017.

BORTONI-RICARDO, S. M. **O professor pesquisador: introdução à pesquisa qualitativa**. Estratégia ed. São Paulo: Parábola Editorial, 2008.

BRASIL. **Lei nº 7.853, de 24 de outubro de 1989Diário da República, 1ª série - nº 116**, 1989. Disponível em: <https://dre.pt/application/file/67508032>

BRASIL. Resolução CNE/CP 1/2002. **Diário Oficial da União**, v. 2002, p. 1–7, 2002.

COBURN, J. Teaching Oral English Online - Through Skype (VOIP). **Acta Didactica Norge**, v. 4, n. 1, p. 1–28, 2010.

CZARNESKI, C. C. **O uso do Facebook como Ava no Ensino de Língua Inglesa para Cegos**. [s.l.] UTFPR, 2015.

DRIGAS, A. S.; IOANNIDOU, R. E. Special education and ICTs. **International Journal of Emerging Technologies in Learning**, v. 8, n. 2, p. 41–47, 2013.

ENGEL, G. **Pesquisa Ação**. Curitiba: Editora da UFPR, 2000. v. n. 16

GABRIEL, D. **Inductive and deductive approaches to research**. Disponível em: <http://deborahgabriel.com/2013/03/17/inductive-and-deductive-approaches-to-research/>. Acesso em: 19 maio. 2017.

GINDIS, B. The social/cultural implication of disability: Vygotsky's paradigm for special education. **"Educational Psychologist"**, v. 30, n. 2, p. 77–81, 1995.

IPC. **Quem Somos**. Disponível em: <http://www.novoipc.org.br>. Acesso em: 27 fev. 2017.

KELLY, S. M; SMITH, D. W. The Impact of Assistive Technology on the Educational Performance of Students with Visual Impairments: A Synthesis of the Research. **Journal of Visual Impairment & Blindness**, v. 105, n. 2, p. 73–83, 2011.

LANKSHEAR, C; KNOBEL, M. **Digital literacies: Policy, Pedagogy and Research Considerations for Education.** Opening Plenary Adress to ITU Conference. **Anais**...2005Disponível em: <http://www.oocities.org/c.lankshear/Oslo.pdf>

LÚCIO, H. R. T. **Papel dos Podcasts na Aprendizagem do Inglês Como Língua Adicional: Experiência de Alunos Cegos e de Baixa Visão em um Curso de Extensão.** [s.l.] UTFPR, 2015.

OLIVEIRA, R. S. **The Use Of ICT In Teaching English As An Additional Language For Blind And Visually-impaired: A Case Of Study**. [s.l.] UTFPR, 2015.

RAMOS, S. I. M.; DE ANDRADE, A. M. V. ICT in Portuguese reference schools for the education of blind and partially sighted students. **Education and Information Technologies**, v. 21, n. 3, p. 625–641, 2016.

RETORTA, M. S.; BORK, A. V. B. Tecnologia Assitiva no Ensino de Língua Inglesa como Língua Adicional para Cegos. **Linguagem e Educação: ensino-aprendizagem e formação de professores de línguas. Uma homenagem à Professora Vera Cristóvão**, p. 209–233, 2015.

RODINA, K. Vygotsky's Social Constructionist View on Disability: A Methodology for Inclusive Education. **Enabling Lifelong Learning in Education, Training and Development: European Learning Styles Information Nettwork (ELSIN), University of Oslo: Oslo, CD/ISDN**, n. 318, p. 82–8075, 2006.

SKYPE. **Suppot.Skype**. Disponível em: <https://support.skype.com/en/skype/windows-desktop/>. Acesso em: 3 dez. 2017.

TECHNOPEDIA. **Wearable Device**. Disponível em: <https://www.techopedia.com/definition/31206/wearable-device>. Acesso em: 24 maio. 2017.

UTFPR. **UTFPR: inovação e geração de tecnologias**. Disponível em: <http://www.utfpr.edu.br/a-instituicao>. Acesso em: 20 nov. 2016.

VYGOTSKY, L. S. et al. **The collected works of L. S. Vygotsky, Vol. 2: The fundamentals of defectology (abnormal psychology and learning disabilities)**. [s.l: s.n.].

WANG, S.-K. et al. Professional development to enhance teachers' practices in using information and communication technologies (ICTs) as cognitive tools: Lessons learned from a design-based research study. **Computers & Education**, v. 79, p. 101–115, 2014.

WEST, M. ; VOSLOO, S. UNESCO Policy and guidelines for Mobile Learning. 2013.

APPENDIX A – LESSON PLAN – FUTURE TENSES

	MINISTÉRIO DA EDUCAÇÃO **UNIVERSIDADE TECNOLÓGICA FEDERAL DO PARANÁ** **Diretoria do Câmpus Curitiba** **Diretoria de Graduação e Educação Profissional** **Departamento Acadêmico de Línguas Estrangeiras Modernas**	

UTFPR Pre-service Practicum Student: Larissa Xavier de Oliveira

UTFPR Mentor: Miriam Sester Retorta

LESSON PLAN (01)

Grade/Level: Basic Level

Number of students in the group: 1

Class time and length: 30 minutes

1. **Topic**: Future tenses

2. **Assumptions of Previous Knowledge**: Simple present structure and future tenses.

3. **Instructional Goals**: Review the content related future structures and the days of the week.

4**. Pedagogic Resources Needed**: Skype.

5. **Development of the Topic**

Teaching Activity	Students' Activity	Allotted Time
• **Warm up:** - Ask : What are you going to do next week? • Revise the use of future tenses (will, going to)	• Answer the question.	• 10 min.

Practice the future structure: - Ask the students what he or she is going to do in each days of the week • **Finish the class.**	- Answer the question based on his or her routine.	• 15 min. • Finish the class.

6. **Exercises / Assessment**

Students will be evaluated by their participation on the activities proposed

APPENDIX B – LESSON PLAN – FIRST CONDITIONAL CLAUSES

	MINISTÉRIO DA EDUCAÇÃO **UNIVERSIDADE TECNOLÓGICA FEDERAL DO PARANÁ** **Diretoria do Câmpus Curitiba** **Diretoria de Graduação e Educação Profissional** **Departamento Acadêmico de Línguas Estrangeiras Modernas**	UTFPR UNIVERSIDADE TECNOLÓGICA FEDERAL DO PARANÁ

UTFPR Pre-service Practicum Student: Larissa Xavier de Oliveira

UTFPR Mentor: Miriam Sester Retorta

LESSON PLAN (02)

Grade/Level: Pre- Intermediate

Number of students in the group: 1

Coursebook / Unit:

Class time and length: 30 minutes

1. **Topic**: First Conditional.

2. **Assumptions of Previous Knowledge**: Simple present structure and future tenses.

3. **Instructional Goals**: Explain to the students how to use the first conditional.

4**. Pedagogic Resources Needed** : Skype.

5. **Development of the Topic:**

Teaching Activity	Students' Activity	Allotted Time
Warm up: Ask : What are you going to do next week? Revise the use of future tenses (will, going to)	• Answer the question.	• 10min.
Introduce the first conditional clause: Give examples of sentences (orally) and discuss about them; Ask about: the structure of the sentences. Explain the structure of the first conditional clause.	- Repeat the examples; - Ask questions about the content; - Answer teacher's questions.	• 10 min.
First Clause Practice.	**First Clause Practice:** - Create affirmative, negative and interrogative sentences using the first clause.	• 10 min.
Finish the class.		

6. **Exercises / Assessment**

Students will be evaluated by their participation on the activities proposed

7. **Final observations**

The paper sheet about the First Clause will be sent to the students by email.

8. **References**

[According to UTFPR norms]

http://mundoeducacao.bol.uol.com.br/ingles/condicional-ingles-first-conditional.htm

http://www.solinguainglesa.com.br/conteudo/Conditional2.php

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[UTFPR Pre-service Practicum Student signature]

[APPENDIXS]

	MINISTÉRIO DA EDUCAÇÃO **UNIVERSIDADE TECNOLÓGICA FEDERAL DO PARANÁ** **Diretoria do Câmpus Curitiba** **Diretoria de Graduação e Educação Profissional** **Departamento Acadêmico de Línguas Estrangeiras Modernas**	

UTFPR Pre-service Practicum Student: Larissa Xavier de Oliveira

UTFPR Mentor: Miriam Sester Retorta

First Conditional

1. Read the examples.

- If I call Maria, she will be really happy.
- She will, be very happy, if I call her.
- Will she be very happy, if I call her?

- If you give her some love, she will love you back.
- She will love you back, if you give her some love.
- Will she love you back, if I give her some love?

- If they don't study, they will fail the test.
- They will fail the test, if they don't study.
- Will they fail the test, if they don't study?

- If they don't hurry, they will miss the bus
- They will miss the bus, if they don't study.
- Will they miss the bus, if they don't study?

- If it doesn't rain, he will go the beach.
- He will go to beach, if it doesn't rain.
- Will he go to the beach, if it doesn't rain?

- If I save move, I can go to The United States.
- I can go to The United States, if I save money.
- Can I go to the United States, if I save money?

- If he loses his job, he isn't going to travel.
- He isn't going to travel, if he loses his job.
- Is he not going to travel, if he loses his job?

2. First Conditional Form:

If + Simple Present + Simple Future.