

MOBILE ASSISTED LANGUAGE LEARNING: Teachers' Perspectives on EFL classes in public schools at Altamira-PA

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ABSTRACT

This research seeks to investigate teacher's perspectives about the use of mobile phones in language classes. It is characterized as a case study classified as exploratory and descriptive one. The use of mobile devices for educational purpose is called mobile learning and it receives the nomenclature of Mobile Language Learning when it comes to language learning purposes. As a way of having an overview of how these tools are being used in teaching practices and how students make use of them in classroom through teacher's perspectives. For this goal, this work had as literature review the main authors in Mobile Language Learning such as Kukulska-Hulme & Traxler (2015), Burston (2014), Cheon et al. (2012) and other relevant ones in the field of mobile learning. This survey was carried out with six English teachers from two high schools of the public system education. It is structured in three sections: the first one presents a brief history of the field and discusses the concept of MALL. In the second section it is discussed about the use of mobile apps in language learning, their advantages and challenges of integrating them in class and the main experiments using apps carried out in Brazil. Lastly, for methodology, it was used a semi-opened questionnaire to collect data as well as a content analysis approach which generated two categories from the study field. The results show that most of teachers make use of these tools in their classroom; it provided a better understanding regarding the benefit promoted from these tools in teaching and learning as well as the main challenges faced to integrate them.

Keywords: Mobile Language Learning. Apps. Teachers' perspectives.

INTRODUCTION

Nowadays the use of mobile devices is quite intense, the development of these devices it is in constant evolution. Some of them being as powerful as desktop computers in data processing and storage. Smartphones are the ones, which had the faster evolution in the last ten years, becoming a kind of equipment with several tools: Camera, video player, internet access and many others. The cheap price made these devices accessible for people in general. In Brazil for example, according to the national telecommunications agency (Anatel) data's in 2019 it was registered a total of 228,2 million of phones. As these devices are present in almost everywhere it is noted that they are already in schools, a growing number of teachers and students are using it to support classes. According to a survey carried out by *Centro de Estudos sobre as Tecnologias da Informação e da Comunicação* (CETIC) it found out that over the years there is an increasing number of Smartphones used by teachers and students in the educational environment. The survey data shows that 52% of the education institutions use Smartphones to educational activities; moreover, 42% of teachers use them for internet access to make activities with students in class. The survey data was collected from 1106 schools of middle and high school among 1854 teachers, 935 school principals, 922 educational coordinators and 11069 students (CETIC, 2016).

Mobile devices are tools with big potential to auxiliary language teaching, there are some initiatives around the world and in Brazil. The use of technology as a teaching tool it happened years ago. Even with computers of low processing and storage, it also existed the Computers assisted language Learning (CALL) computers used in language teaching. Now technology can provide many advantages to language teaching, with devices that provide

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many resources for teachers and students. It already exists many educational applications in language teaching each one with different approaches and methods, that show how to use mobile devices in teaching. It is becoming more and more popular, as the benefits that it is purchased. The use of mobile devices in learning is called Mobile learning and when it comes to language teaching has the name of Mobile Assisted Language Learning (MALL). The MALL concepts are still unclear and scholars adopt different perspectives when trying to conceptualize the term. Most of them do not have a solo agreement about the widely accepted definition. This happens because field of study is still fresh having less than ten years of existence and there is also an ambiguity about the term *mobile* which can refer to all kinds of devices that provide students mobility to learn anywhere they would like to.

The motivation to develop this study came from the need to investigate if teachers from public school system were using these technological devices to increase their students learning process in EFL. Although the field has proven that teachers do use these devices, especially Smartphones and they might present advantages, it is necessary to use them carefully. This case study has been developed due to the fact that it may contribute in the Information Technology researches in the Educational field as it collects and presents current data about one of the most important subjects in education, teachers. How they deal with these kinds of technological devices it might be refreshing for English student-teachers and teachers in their first year of public school education as well as other foreign language teachers that might be interested in this subject.

To develop this article it was sought a literature review in the main authors about MALL such as Kukulska-Hulme & Traxler (2015), Burston (2014), Cheon et al (2012) among other relevant ones. The survey investigated the teacher's perspectives about the use of mobile phones in language classes, for better understand the role that these tools are having in classroom. It has the teachers as an aim because it has been noted a big resistance about the use of these devices even when used for educational purposes. It was carried out with six teachers from two High schools of the public system in Altamira- Pará. It is structured in three sections: the first one presents a brief historical of the field and discuss the concept of MALL. In the second section it is discussed about mobile app in language learning, their advantage and challenges of integration in class and the main experiments using app carried out in Brazil. Lastly, in methodology to data collecting, which has a content analyze approach is specified and the data analyze is performed.

1. FROM COMPUTER ASSISTED LANGUAGE LEARNING TO MOBILE ASSISTED LANGUAGE LEARNING

1.1 How it all started

To Charpelle (2001) the first use of computers in language education documented was around 1960 when studies in this area began. This area of research received a few terminologies over the years but the most accepted and used by researchers it is Computer-Assisted Language Learning (CALL). The term became established in language education in the early 1980s (CHARPELLE, 2001,) Warshauer and Healey (1998, p.57) divide CALL in three phases: behavioristic CALL, communicative CALL, and integrative CALL, where "each stage corresponds to a certain level of technology as well as a certain pedagogical approach".

According to Kukulska-Hulme & Traxler (2015) in the 1960s, computers were immense and had many limitations of processing, storage and their price was very expensive. The main users were enthusiastic people or specialized on computation. These characteristics made the implementation of computers in schools difficult. It was not widespread in language education. In the course of computers development the advent of personal desktops

transformed the people's lives, their jobs, social life and the way they communicated. The personal Apple II computer released in 1977 brought new possibilities on the 1980s for being much smaller and easier to handle, making it possible to anyone to use it. The author emphasizes that only around the 1990s with the amazingly increase of hardware and software industries and the beginning of the World Wide Web (WWW) the use of computers in other fields of teaching started to be widely adopted. Over the years, previous limitations were surpassed what had facilitated the implement of computers in education.

The development of technology enabled devices to increase with greater capacity for processing and storage; moreover, the new functionalities of these devices affected in some aspects people daily life. One of the great advances was the arrival of handheld devices like notebooks, Smartphones, Personal Digital Assistants (PDA) and many others. These devices were revolutionaries allowing people to do things that times ago were only possible with computers. Noting the opportunities that mobile devices can give to language learners many educators began to adopt them as educational tools using their functionalities to enhance the process of teaching and learning a second language. The most popular term used to describe the use of mobile devices in Language Learning among researchers it is called Mobile Assisted Language Learning (MALL). So it is seen as "a new phase of Second and Foreign Language Learning by its researchers, a Computer Assisted Language Learning successor, and a subset of the large field of Mobile Learning" (PALALAS, 2016. p.1).

1.2 Mobile Assisted Language Learning

The MALL concepts given by researchers adopt different perspectives and there is not consent among them to an ideal definition. Mainly because the field is experiencing rapid evolution and partly because of its ambiguity. This happens because the term 'mobile' can be a reference of Mobile technologies and/or student's mobility" (KUKULSKA-HULME, 2009. p 158). Winters (2006) divide these perspectives in four categories: A *Relationship to e-learning* perspective that views Mobile Learning (M-Learning) as "an extension of e-learning" with portability differential that is provided to the learner. The *technocentric* perspective places mobile learning to the use of mobile devices in learning education. An *Augmenting formal education* is to consider how mobile learning can happen in different forms or styles of learning, other than the traditional classroom-based learning. Finally, there is the *Learner-Centred* perspective that focus on the learner's mobility and its needs; it is a kind of "learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies" (O'MALLEY, 2003, *apud* WINTERS, 2006, p 5). This article will follow the definition of Kukulka-Hulme and Traxler that places MALL as:

The experience and opportunity afforded by the evolution of educational technologies. It is anywhere, anytime learning enabled by instant, on-demand access to a personalized world filled with the tools and resources we prefer for creating our knowledge, satisfying our curiosities, collaborations with others, and cultivating experiences otherwise unattainable. Mobile learning implies adapting and building upon the latest advances in mobile technology, redefining the responsibilities of teachers and students, and blurring the lines between formal and informal learning. (KUKULSKA-HULME; TRAXLER, 2015, p. 31).

In this perspective, Mobile Learning happens in both formal and informal contexts of learning. When thinking about formal context as public school classrooms the opportunities provided need to be adapted since mobile devices are not specifically produced for teaching or learning. When talking about personalized learning, it refers to specific characteristics of

these tools, as mobile devices are highly customizable and easy to carry around over the day. The users have a personal tool with functionalities, which they know how easily handle, “many of which are already in the pockets of millions of people and they can give students greater flexibility to move at their own pace and follow their own interests, potentially increasing their motivation to pursue learning opportunities”. (UNESCO, 2013, p 12).

1.3 Mobile devices as teaching tools background

The first study of teaching and learning languages assisted by mobile devices was published in 1994, and involved native language by using word process programs. According to Burston (2014), the devices used were PDAs with focus on improving writing skills of Australian secondary school students and primary school pupils. This and other researches that followed were carried out using PDAs keeping the focus on writing skills.

The studies in English as a Second Language (ESL) and English as a Foreign Language (EFL) started a few years later. The popularity of pocket bilingual dictionaries among students in Japan led researchers to investigate the use of portable e-dictionaries as an English Learning tool. The same happened when mobile phones began to be popular having a high rate among Japanese students. This situation sparked an early interest in to explore the use of text messages for the out-class acquisition of L2 English vocabulary (BURSTON, 2014, p.6). Equally, to computers the level of technology influenced the way that mobile devices were used. Initially their main functions were based on providing the opportunity to learners to practice writing, reading and grammar, simply because the mobile devices were not so developed as nowadays.

The first attempt to integrate them in language education was limited by technology and the main devices used were the most popular by that time. PDAs and iPods were the most used ones. They had a few implementations of mobile phones in the early years of MALL. However, this scenario has changed accordingly to more functionality added to them. The release of a Smartphone called iPhone in 2007 had the same impact to MALL as the personal computer Apple II had to CALL. The unification of a cell phone, navigator and iPod in only one device, integrating many other innovations, defined the standards of how phones would be produced from this moment on. However, there were still some difficulties related to implement them due to their expensive prices and incompatibility of operation system. Twelve years later changing in the market of mobile phones led to an inclination in shared platforms of operating system and prices got more accessible to high technology phones.

Even nowadays with the advances in technology, it has been appearing new functions and possibilities to use mobile phones. Hundreds of applications focused in enhancing Language Learning demonstrate a growing interest on how mobile devices can be used as teaching tools providing a variety of options for teachers. It is also noted the use of applications which are not designed specifically to language learning, applications like social medias are some of the most used ones, some of their main functions are communication and entertainment, these aspects can cultivate better experiences to learners when well used for teachers in formal and informal learning environments.

2. MOBILE APPS IN LANGUAGE LEARNING

2.1 Uses and research

App is short for “application software”. Some applications are called native, such as the *voice memo* application, *the camera* application, or *the weather* application as in the ones

that come within the mobile phone. Some are downloaded to mobile devices as discrete software programs. Apps are compatible to their operation systems (OS), which may be found in *Google Play* store in android and *Iphone Operating System (IOS)* apple store. In these app stores there are thousands of apps and they are divided into categories according to their usage purpose. Among them there are apps created specifically to language learning purposes. There are two main categories for them, called non-dedicated and dedicated apps.

Dedicated apps are “specifically aimed at learning English as a Foreign Language” (SWEENEY *et. al* 2012, p.3). These apps offer opportunities of learning in different ways for people who want to learn a language by themselves or use them as a resource to improve their in-classroom learning process. Some teachers note opportunities in these applications and use them in classroom to enhance their students’ learning. Sweeney et al. (2012) subdivides this category into dictionaries, vocabulary skills, exam practice, reading skills, ELT readers, grammar, listening skills, writing skills, course book apps and teacher resources.

On the other hand, non-dedicated apps are not specifically designed to Language Learning purposes. These apps have functionalities with potential to enhance the process of learning a language in an individual learning process or in a classroom environment. It is the teacher’s role to design an effective class using this kind of app, “they are of potential benefit for language learning, though, not specifically created for this end [...] most of these apps are intended to be engaging and relevant for in-class use” such as *WhatsApp*, *Facebook*, *Duolingo* and many others” (SWEENEY, 2012, p. 3).

Even with the potentialities that smart phones had in MALL, “the primary researches that had been done just redid some ideas, taking advantages of some characteristics that they had in common with PDAs, IPods, MP3 players and other medias that do not explore the communication function of Smartphone” (BURSTON, 2014, p.13). However, it is noted that some studies are beginning to explore video calls, internet and multimedia capabilities using them to communicate, collect and share data among students and teachers.

In Brazil Costa (2013) analyzed the potentialities that emerged with phone use within EFL in public high school classrooms. In developing English learning skills, when to use these devices and their effectiveness to Language Learning process. She concluded that the implementation of these tools improved the four skills, placed students in a real context and made the process more attractive, motivational and interesting.

Gonçalves and Silva (2014) carried out a survey about a new methodology for the acquisition of EFL regarding listening and reading skills, by the use of mobile devices, especially Smartphone in public school classrooms. They analyzed the autonomy that mobile applications provided learners and sought to identify those resources as English studying techniques. The study shows that mobile applications can provide advantages for students such as low cost, interactivity with the user, facility of use, practical exercises and many contents even though, the authors have found that students are not aware of these resources.

Costa and Lopes (2015) developed an experiment using *WhatsApp* in a random English course. They used this application to promote interaction among students and exchange of general information about the classes. The teachers provided some materials for students throughout *WhatsApp* groups. It also instigated students to use the target language, and solve tasks. Even though students’ objectives as to use English Language in the groups were reached, the authors verified low student’s interest in answering questions and accessing materials provided by teachers.

Burdinhão and Motter (2016) carried out a similar experiment using the *WhatsApp* app as a pedagogic tool in English Teaching and Learning process. The study was performed in an education program development from Paraná state and had as a main goal to promote student

interaction in the target language among themselves and student-teacher interaction as well in public school classrooms. The application contributed with teacher practice providing students interactive activities in speaking skill development and in listening comprehension.

These surveys found out diverse benefits and challenges that teachers need to surpass to use these tools in the English language teaching process. In order for better implement, mobile learning requires that teachers recognize the real advantages and methods necessary to achieve their goals.

2.2 MALL Advantages

A great number of apps with different functions are released every day. These can be adapted and implemented in teaching practices. However, it is necessary to be aware that mobile devices are not the solution to all teaching issues, but when well designed it can improve the teaching and learning process. Some experiments and surveys about the use of these tools in Language Teaching found out some advantages and opportunities.

Kukulska-Hulme & Traxler (2015, p.35) point the ability to learn on the go, which is stressed by other researchers as the portability of mobile devices and the “power of mobility” as Churches et al (2011) places. These technologies enable learning at times and in places that were not previously conducive to education (UNESCO, 2013, p 14). In an EFL teaching or learning context, the frequent contact with the target language is important in the learning process. However, this contact in most part of the time occurs only in formal contexts. Most of the time, the interaction in the target language on environments such as public schools are not enough to improve learning, due to the few time available for foreign language subjects. Thus, “the connectivity of mobile devices enable opportunities to a continue contact through means, seen that a foreign language learning requires informal students practice” (Kukulska-Hulme, 2012, p. 10). Differently from CALL “the learner can finally goes from away fastened computer, with a complete digital toolbox in his/her hand and practice language in authentic language situations and a variety of settings conducive to language acquisition” (PALALAS, 2016, p 5).

According to UNESCO (2013) the low cost of these tools implementation in teaching is another advantage when compared to other technological resources. Students bring powerful devices with tools such as internet connectivity, audio record, camera, communications apps and so on. According to the 30th annual management survey and use of Information Technology in companies carried out by *Getúlio Vargas* foundation from *São Paulo* in 2019, there are 230 million active Smartphones in Brazil. The high rate of their users among adults, teenagers and children demonstrate the viability of using in many contexts. UNESCO (2013) highlights that mobile devices facilitate exchange of information, as well as messages sent by mobile devices are usually faster, more reliable, more efficient and less expensive than alternative channels of communication. Several mobile communicative applications provide a better contact among educators and learners, some teachers provide class information or materials through mobile devices in a more agile and efficient way.

Attractiveness, autonomy and motivation are some points that can be found in many researches that use mobile technology to foster education “with the familiarity and ubiquity of mobile devices, mobile learning provides a new way to motivate students by providing high levels of engagement and novelty, personalization, and autonomy” (KUKULSKA-HULME; TRAXLER, 2015, p.35).

2.3 MALL challenges

The use of this tool as discussed before may offer some unique advantages, but it is necessary to be aware about challenges that can be faced when using them in classrooms. According to Cheon et al (2012), describes two main limitations when using mobile devices in class such as, technical and psychological limitation.

The technical limitation refers to technical aspects of mobile devices, due to the great variety of this equipment. One of the main problems with mobile devices is that they have “small screen with low resolution display, inadequate memory, slow network speeds, and lack of standardization and comparability” as Cheon (2012, p 04.) highlights. Kim and Kim (2010) carried out a survey over the effects of three different screen size (small, medium and large) and two types of multimedia instruction (text only and text with pictorial annotation) on vocabulary learning, the outcome showed that the large screen multimedia instruction helped students to learn English vocabulary more effectively than the small screen instruction. They found out that small screen size create cognitive disadvantages related to students’ attention and visual perception (KIM; KIM, 2010). However, over the years it is noted that technological advances are improving these devices, a rapidly enhanced in hardware capacity, functions and applications show that technical concerns should be temporary.

Cheon (2012) also explains that the psychological limitations have to do with students’ inclination to use mobile devices for hedonic uses such as texting with friends, listening to music and checking social network services randomly, rather than for instructional purposes. As mobile devices are not designed to educational purpose and nowadays the main use of these tools are still for communication, access social media and many others functions, so implementing them in classroom may be a hard task to make learners using their mobile devices only for learning purposes, due the established habits of use that students have. As the author suggests it may be common to assume that using mobile devices in class may hinder student concentration and interrupt class progress.

Most teachers do not know how to use these tools for teaching, it is necessary to creatively adapt it for class, the creation of other pedagogies and new approaches for delivering and facilitating instruction. Kukulska-Hulme & Traxler (2015) recommend that it is necessary to look for better ways to implement these tools in classroom. The technology itself does not change the teaching and learning process; teachers must have or obtain the requisite skills to incorporate them. Students when familiarized they are automatically able to use the app functions. When using mobile devices in education as an adjustment for students needs it will be for teachers’ as well. The adaptation of using an application or any other technology resource to a classroom it is not easy, but professional development can provide educators with the means for effectively use this technology.

3. METHODOLOGY

3.1 Research Design

In the field of education, researches seek for results that allow educators to understand or solve problems related to teaching and learning processes. When looking for this field there are several reasons that can influence in the process of investigation, “they are classified in two main groups, intellectual reasons and practical reasons. The first ones come from the desire to know by its own satisfaction of knowing. The last ones come from the desire to know in order to make something in a more efficient or effective way” (GIL, 2002, p.19, our

translation). With this in mind, this study has primarily qualitative approach that looks for data about the teachers' perspectives regarding the use of mobile devices in EFL teaching and learning. As for quantitative approach this article settles the number of public education schools in Altamira, the number of teachers involved, the number of classes and their levels, years of experience and educational background. Through this study, it is intended to make a description about the involved ones reality so that it would be possible to understand and interpret it. For better understand the teachers' perspectives it was contextualized the field of mobile learning through a literature review based on the main well known authors of this area.

This study is classified as an exploratory/descriptive and interpretative one because it seeks to provide an overview about the subject we are discussing, which has not been so much explored over the years and involves a bibliographic and documental survey (GIL, 2008). It is descriptive for seeking to describe the facts and phenomenon of the reality through detailed analysis of the collected data (TRIVIÑOS, 2009) in order to energize the participant's perspectives about the use of mobile devices in language teaching.

With the data at hand, it will be possible to have an overview of teacher's perspectives about mobile devices as teaching tool, categorizing the main topics related to the use of these tools in teaching and learning process. Identifying the teacher classroom experiences when implementing the use of mobile devices in EFL classes.

3.2 School and labs, participants profile, research instrument and procedures

Schools and labs

In this study, there were selected schools from the teaching public system interested in this research and available to participate in the survey. It was established that the participants should be English teachers that agreed voluntarily to participate. This survey was carried out in Altamira-PA where there are eight high schools from the public system. It was made with teachers from two different schools who agreed to participate, in which correspond to 25% of the public high schools from this region such as *Odila de Souza* and *Polivalente* schools.

The *Odila de Souza* school was founded in 2017, located at *Mógno* Street, *Jatobá* neighborhood, and its INEP number is 15169138 which means it is authorized to function. According to *Secretária de Educação do Pará* (SEDUC/PA), in this school there are 911 enrolled students divided in three shifts, morning, afternoon and night. To be exact there are 37 students in each class. There are 23 teachers; four out of these 23 are English teachers who participated in this survey.

The *Polivalente* school was founded in 1974, it is located at Tancredo Neves Avenue, Premem neighborhood, and its INEP number is 15104907. Data from SEDUC/PA inform that there are 1089 enrolled students in the school divided in three shifts, morning; afternoon and night, three English teachers from this school participated of the survey.

It was reported by teachers involved that there is no functioning computer lab in both schools. Although *Polivalente* school does have a computer lab, it is now deactivated. On the other hand, *Odila de Souza* school does not have a computer lab at all. Both schools however are about to make that change. Both current principals are doing everything in their power to have their computer lab projects approved so they can provide students a chance to improve their learning skills in a technological atmosphere.

Participant's profiles

The type of sample used for this study is a sampling by accessibility or convenience, Gil (2008) describe it as a moment in which "the researcher select the elements which has

access, admitting that these can, somehow, represent their own universe” (GIL, 2008, p. 94, our translation). In order to fulfill the research objective, six English teachers whose native language is Portuguese agreed to answer the questionnaire to find out their main perspectives over the use of mobile devices as language learning tool in EFL classes. These participants come from public educational systems. The public sector schools refer to educational establishments that are completely owned and subsidized by the state government. Teachers who participated work in different shifts in the mentioned schools. Table 1 presents a more detailed summary of the participants’ profiles of this study.

Table – Personal and professional data of the research collaborators.

VARIABLES		NUMBER OF TEACHERS
SEX	Male	02
	Female	04
AGE	18 - 25	01
	26 – 35	04
	from 36 to more than 55 years old	01
EMPLOYMENT STATUS	HIRED	03
	FROM PUBLIC CONTEST	03
YEARS OF EXPERIENCE	1 to 3 years	00
	4 to 6 years	02
	6 to 10 years	02
	10 to 15 years	02
EDUCATIONAL BACKGROUND	Degree in Letters	06
	Institute of languages	00
LEVEL TAUGHT	Elementary	00
	High school	06

Source: Own table (2019).

Research instrument

As data instrument it was used a *self-applied questionnaire*, which are the ones that participants answer the questions by themselves. It is not needed the presence of the researcher (CORBETTA, 2003). The questionnaire is divided in two parts; the first one has objective questions with the purpose of getting profile information of the participants. The second part are the *attitudinal questions* type, “which are used to find out what people think, covering attitudes, opinions, beliefs, interests, and values” (DORNYEI, 2007, p. 102). These questions were designed to understand the context where teachers work and identify their perspectives regarding to the use of mobile devices in EFL teaching and learning process.

Procedures

This survey has taken a semester to be completed. Firstly the schools were visited and it was required permission to start the survey. Then, it was asked to the present English

teachers whether they would like to participate, for the ones absent, were contacted through email or *WhatsApp*. After having selected the schools and the voluntaries, it was given to the English teachers from each school the questionnaires and the term of consent. They were selected based on their time availability and willingness to take part in this study. It was not determined a deadline to give the answered questionnaires back. It was preferred this way to take into account their working time, to give them more time to think about the questions and to let them more comfortable to answer the questionnaires on the time they did have available.

To collect the questionnaires it was kept contact with the participants by *WhatsApp* messages about when they have finished; they sent a message giving a date that the researcher could collect the answered questionnaire. Some of them thought more convenient to digitalize or to take photos and send the questionnaire through email or *WhatsApp* messages. The other ones involved, the researcher took the answered questionnaires at their working addresses.

The steps used during data analysis for this study were first data segmentation, which is a process of shortening the text while still preserving the core meaning. According to Catanzaro (1988) data meaningful units are the smallest unit that contains some of the insights for the researcher needs, and it is the set of sentences or paragraphs containing aspects related to each other, answering the question set out in the aim. Secondly, it was done a data coding, describing what a particular meaning unit is about. Then a categorization process was carried out to identify the relationship among the codes founded, and finally it was related the codes to the base literature in MALL area.

3.3 Data Analysis and Discussion

As suggested by Cantanzaro (1988), firstly it was done a selection of the statements related to the theme of this study. Secondly, it was performed an analysis on the meaningful units in order to find their meanings. Therefore, it was done a categorization of these meaningful units and then a related interpretation with the participant's statements in order to reach their perspectives on the use of MALL in EFL classes at public school systems.

A content analysis and a grounded theory screening all the responses were conducted to identify categories to describe the content. Qualitative content analysis is "an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytic rules and step-by-step models, without rash quantification" (MAYRING, 2000, p.23). The content analysis type used it is classified as conventional. This type of content analysis is generally used with a study design whose aim is to describe a phenomenon. According to Kondracki & Wellman (2002) researchers avoid using preconceived categories, allowing the categories and its names to flow from data.

Through the meaningful units extracted from the statements, it was identified two categories that emerged from the field of study, which are mentioned as the most relevant ones. The first one is *Teachers' use of technological resources*, which consists on technologies that teachers are using in their classes and how they are using them. The other category is *Teachers' perspectives about benefits and challenges in using apps in class* where teachers talk about their views over the benefits and challenges of using apps in EFL teaching and learning process.

Teacher's use of technological resources

The first relevant question was about what technological resources teachers used in classroom. That question had the intention to overview the main resources that teachers use to

assist them in classes. Teachers reported technologies such as Data show (3)³, sound box (3), notebooks (2), blogs (1) and all of the teachers reported that used mobile devices in their classes. Some of them reported using it frequently, while others mentioned a few uses per month. The findings show that the participants seek to use many different technological resources in their classes and all of them reported to have used cell phones in class at least once in their teaching practices. As described by UNESCO (2013) cell phones have low cost to be implemented because they are already present in students life, so it is comprehensible the reason why so many teachers are taking advantages using these devices to assist their classes somehow.

They have mentioned the phone uses in two different ways. One as the main tool responsible for providing class content and the other as using them to help in some activity such as searching for words or other information necessary to the ongoing classes. When implementing these tools teachers reported different ways for school-related work. Their uses are divided as the main resources in a class and as helpful tool for students or teachers in class activity. When talking about main resources, teachers refer to the use of apps with the purpose to teach some content through it; smartphones in this case work as instructional tools, which students can access the class content or learning some topics through using their devices and have an instant feedback. Therefore, this way looks similar to as computers worked in CALL. The teacher A argued that the school provides educational materials such as books, the phone should have the role of working as an supporting tool for students to do some activities not as a means of students access the class content:

Depending on the app, if it is a language learning app, it is not good to use as a main resource, but as a secondary; since the institution already has its own pedagogic material (book) and its programmatic content. However, there are some apps that can serve to support complementary tasks; for example: quiz apps, mimic, question and answers, audiovisual editors etc. (Teacher A on June 25th, 2019, our translation).

So one of the reasons for this concern is that using these tools are not recommended for long tasks due to their limitations. Although Smartphones look like a computer and have its similarities, they are not designed for education and most of them have small screens which is a disadvantage in relation to the teaching practice because of spending a long time staring at small screens. It can be harmful to students' health and also unfavorable to their learning (KIM; KIM, 2010). Researchers recommend that mobile tasks or activities need to be shorter and brief, divide longer tasks or activities into smaller ones, "interruptions which will occur predictably in many mobile environments, should trigger as little backtracking as possible when students are returning to the task" (STOCKWELL; HUBBARD, 2013, p. 9).

The majority of teachers reported using mobile apps as a support in class activities as translating apps like Google translator is the most cited by teachers. *I used Google translator, I have used mainly in seminaries whereupon I require the vocabulary to be spoken in English, this way students can practice their fluency and purchase new vocabulary with this app (Teacher B on June 18th, 2019, our translation).*

Some teachers reported using language learning app in the class; *[...] some ones were Google classroom; lesson plan ideas; English exercises; English texts; and other ones. I ask students to download the app in advance and in the next class we use it (Teacher C on June 18th, 2019, our translation).* As observed to this kind of use is required a better lesson planning

³ The following numbers represent the quantity of teachers.

to achieve the class goal. It is also necessary more time when integrating these tools this way, which can be a hard task for teachers who have many classes over the day and little time left for class planning. Therefore, it is necessary to be aware that it is not because students bring their devices to school that operation will be easy, “successful technology integrations occur only after careful planning, strategy, and continuous refinement “(KUKULSKA-HULME; TRAXLER, 2015, p.87).

Teachers’ perspective about benefits and challenges in using mobile apps in class

The use of Smartphones in schools is not permitted for a great number of schools in Brazil. One of the reasons for this situation in teacher’s perspective is that they incite disruption to the class progress. In this survey, the findings show that even though all teachers reported using these devices in their classes, the majority showed concerns about problems that can be caused by these tools in a class progress. The participants were asked about the benefits and challenges that the uses of apps bring to life and how they can assist classes introducing them in teaching practice. The majority (5) reported that it is possible to use apps in class. They described some advantages related to these tools. One of them is that it helps in lesson planning, some teachers reported that use these devices to search for information related to their classes, as Teacher D reported, *I always search YouTube channels about English teaching. Thereby, I can filtrate the content and teach the more relevant aspects over a class.* (Teacher D on June 17th, 2019, our translation).

Teachers also reported that it is easier to practice the four communicating skills since there are a great variety of apps that can be used in class to help students improve their pronunciations, listening and to enhance vocabulary as well, *there are specific apps for all skills, it is up to the teacher to choose the one which is preferred to work with* (Teacher C on June 26th, 2019). As well as *through teaching/learning of English apps, students can practice listening and speaking as an example. Expanding their vocabulary and, consequently contributing for a better performance in the subject.* (Teacher D on June 17th, 2019, our translation).

As Kukulska-Hulme & Traxler (2015) place connectivity as one of the main characteristics of these devices, to search for information on internet and the facility of usage afforded teachers and students to prefer these tools as a search task. Teachers also described enhancing students’ engagement in class. They reported that students are familiarized to that kind of technology because they use it all the time, and the practicability promoted by these tools optimize students tasks, *the well informed educator does not need to be a computer technician, even because mobile apps nowadays are very self-explanatory* (Teacher A on June 25th, 2019, our translation). Therefore, *it can facilitate information use; moreover, they are more practical of using* (Teacher B on June 18th, 2019, our translation).

These features also lead to another advantage. Students can get a certain level of autonomy to go after their own learning. This can be noted when teachers described their students usages on these tools to learning purposes, *many students use idiom apps to learn other languages, such as German and Spanish as well* (Teacher A on June 25th, 2019, our translation). In this way, the teacher is not the only way to get knowledge in class; new possibilities are opened to students that can themselves look for relevant information to understand the class. In resume, the main teachers’ uses of mobile devices in class are to get information for class planning or getting help in doubt moments. The use of these tools is quite profitable to help students practice the pronunciation of words and to search in internet for information that can help them to do their classes activities. They are used as a way to gather data for classroom presentations as well.

Regarding to challenges perspectives teachers report some such as students' distractions, internet connection failure and control over class. When asked their opinions about the phone use as a pedagogical tool, all teachers agreed that these tools could be useful in the process of teaching and learning. However, most of them demonstrated concern about eventual distractions that these tools may provoke in students when used in classroom. They argue that some apps can distract students during class, what troubles student's learning, [...] *The problem is sometimes we can't keep students focused, they get distracted by apps such as WhatsApp and Facebook* (Teacher B on June 18th, 2019, our translation). Consequently, *the distraction with other mobile apps may disrupt the learning process inducing students to lose focus on what really matters* (Teacher D, June 2019, our translation).

Another challenge reported by teachers it is related to technical issues, some teachers talked about their difficulties when they were trying to make some activities using phones with their students. The most reported is internet connection flaws. This happens because many apps that can be used to English classes only work online. As a result, it is needed from student's phone data, so even when students have the devices to use them, it can be very expensive to some students; *what can get in the way would be internet failure than can happen or the difficulties in monitoring every student, when it is not a group work activity* (Teacher C, July 2019, our translation). Another thing that can be noted in this statement, it is that management and control over the class is also a difficulty found when implementing these tools. The number of students in each classroom is huge what makes it difficult for teachers to assist each student individually or even to verify if they are really using the phone to make the activities rather than other distracting purposes. Among the six teachers who participated in this survey, only four teachers' statements were categorized and interpreted, because they provided more detailed reports, which contributed in a better way to the analysis and discussion topic.

Final regards

This study sought to investigate teachers' perspectives regarding the use of mobile devices in EFL teaching and learning context. Further, it investigated their current experiences using phone devices and their perspectives on the benefits and challenges of implementing these tools in classroom. This research aims to afford insights for teachers using phones in teaching and school administrators involved in the judgment about the role of these tools to have an overview of the advantages and challenges faced to integrate them in class. It also provides bases for future researches in this area. After analyzing the statements, it was possible to better comprehend what teachers think about mobile phones as educational tools. It was conceivable to identify through teachers' statements that these tools can provide some advantages when used in class such as connectivity, use easiness, student autonomy and a great number of mobile apps that can help teachers and students to solve tasks and practice language skills, what demonstrates how useful these tools can be in the teaching and learning process. Also, it was identified some of the main challenges faced to implement these tools in teaching practices, students' distractions, internet failure and control over class may make it hard for educators to use it in class. These devices are already present in the students' life and in school environment. To integrate these technologies in education it is necessary the knowledge of how they can be beneficial and what are the difficulties that will be found in a class. With this essential information in mind, teachers can prepare their lesson planning taking advantage of these devices best features. Therefore, these tools can be effective tools to enhance student's language learning and help teachers' practices to be successful.

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