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# Digital tools for remote teaching of additional languages in times of pandemic: considerations about Duolingo

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#### Abstract

This article presents a discussion on the importance of digital tools that can be used in the process of teaching and learning additional languages at a time of emergency education. It is a bibliographic study with a qualitative approach, carried out with a search in different databases with criteria to select texts for analysis. Among the tools used, we highlight an analysis related to Duolingo, from a perspective of the CALL (Computer-Assisted Language Learning) approach, based on technical, theoretical, and social criteria. The results point to the potential of this tool due to the gratuity, multiplatform access, gamified interface, and activity management by the teacher through Duolingo Schools, in addition to the possibility of certifying the level of proficiency in the English language. The discussion also shows some limitations and social issues that highlight the precariousness of online education before and during the context of a global pandemic.

Keywords: Language teaching. Remote teaching. Digital tools. Duolingo.

### Introduction

As a result of the pandemic state decreed by the World Health Organization (WHO), educational institutions have sought ways to provide continuity of education. In this sense, several lessons have been learned since the beginning of the year 2020, especially with online education or remote education (GACS; GOERTLER; SPASOVA; 2020).

The current context shows that the evolution of the COVID-19 pandemic in the world, and particularly in the Brazilian scenario, from March to May 2020, forced the suspension of classroom activities. Faced with such a need, according to Rivas (2020, p.3), we see the "collapse of all traditional schooling schemes: there is no presence or meeting in the physical space, there are no scheduled schedules or routines, the curriculum was disarmed and the motivation based on duty and compliance with the



standard ".

The unpredictability resulting from the pandemic evidenced different challenges, among them re-signifying the bonds, in general, between teachers and students, (PALACIO, 2020) guaranteeing the continuity of classes remotely , requiring a pedagogical restructuring. In such a scenario, technological resources came to have a central place in didactic proposals, requiring teachers to have the flexibility to implement strategies that, to a certain extent, had not yet been put into practice, but which are necessary in times of social isolation. With this, many institutions started to adopt emergency remote education and demand from teachers — as well as students the frequent use "of online platforms to carry out their activities" (MENDES; LIMA, 2020, p.73).

However, it is worth mentioning that the contents were not designed to be taught and learned through the emergency remote teaching process (HODGES et al., 2020), requiring the adaptation of pedagogical practices for teaching and learning characterized by "a pedagogical revolution for classroom teaching, the strongest since the emergence of contemporary information and communication technology (PASINI; CARVALHO; ALMEIDA; 2020, p. 2).

This need for readjustments in the most different educational areas seeks to avoid the discontinuity of the teaching and learning process the institutions, to guarantee "pedagogical continuity and the social right to education" (FERNÁNDEZ, 2020, p. 1), even though the situational framework is not one of genuine inclusion (MAGGIO, 2016), since teachers recognize the opportunity offered by technologies and perform practices that include them due to the situation of exceptionality and contingency.

Thus, we highlight the importance of Information and Communication Technologies (ICT) that have been used in different spheres of society, including in the school environment, to support the teaching and learning process (AUDINO; SILVA NASCIMENTO, 2010), especially in the language area, in which teachers need to be increasingly "proficient in computer-mediated language learning" (SOUZA, 2015, p.2), as a result of making classes more interactive and participatory for students, who often, are as knowledgeable about these technologies as teachers (SOUZA, 2015; RODRIGUES, MUENCHOW, RIBAS, 2017; FRANCO, 2018).

In this sense, many platforms and tools have the potential to be used, especially those that already exist in institutions, such as learning management systems and course management systems, such as Moodle, among others. However, it is relevant to cite that

When online education is planned, the curriculum and course are designed before the semester begins. During quick transitions to online, courses are modified as they happen. Given that the course has already started in another modality, there may be less freedom in design than if you start designing from scratch and the course may not achieve some advantages of the possibilities of online education (GACS; GOERTLER; SPASOVA, 2020, p. 385)

This implies that, in times of crisis, switching to emergency remote education in the middle of the semester can cause problems, considering that the time is too short to completely redesign the course (GACS; GOERTLER; SPASOVA, 2020). Based on this observation, and due to the sudden remote teaching caused by the health crisis, the use of tools commonly used in institutions and already known by students may be more appropriate (GACS; GOERTLER; SPASOVA, 2020). For this reason, we justify the



selection of applications for teaching and learning languages in the context of a pandemic.

Based on these considerations, we aim in this article to present a discussion on the relevance of digital tools for the process of teaching and learning languages—at times of emergency and remote teaching, considering that "virtual spaces have become one of the paths necessary for the continuation of education in Brazil "(SILVA; ANDRADE; SANTOS, 2020, p. 3), demonstrating the role and variety of functions that can be performed by computers and smartphones for the area of language teaching.

To carry out a survey and discuss the problem of which tools can be used in this pandemic period for this educational context, we present bibliographic and exploratory research, with an analysis of one of the tools found in this survey: Duolingo. This discussion is based on the perspective of the CALL (Computer-Assisted Language Learning) approach, whose main focus is to identify how to develop possibilities to "promote changes in traditional pedagogical approaches and to achieve satisfactory language learning through the use of computers" (VIEIRA , 2010, p.18) and methodological procedures that include the identification of the literature in the area, through the search and analysis of articles, dissertations, and theses, from web databases, from the Capes Journal Portal, Google Scholar, Scielo and Web of Science, which was selected from a refined search for specific inclusion criteria and descriptors.

Based on the results found, we present and discuss the main characteristics, contributions, and limitations of the adaptive Duolingo platform. The choice for such a tool is justified because it is an application that is widely disseminated and used both for autonomous study, through smartphones, and in schools, with Duolingo Schools. Several studies have already demonstrated the possibility of using this tool in the context of public schools, with the participation of teachers and the possibility of expanding the hours of language teaching, considering that students can access the platform outside the classroom (SOUZA, 2015; MOTA et al., 2017; HONORATO, 2018).

Also to this evidence, this tool was chosen due to the free access to the platform's resources, the possibility of use in schools, including the role of teachers and students, and the platform's popularity (web and mobile), considering that Duolingo has been evaluated as the best mobile app by Apple and Google Play, in the years 2013 and 2014 (SILVA; OLIVEIRA; BARBOSA, 2015), and won 108% newly registered users only in March 2020 (WARD, 2020), demonstrating its strong presence and popularity in language teaching and learning.

It is necessary to notice that the conduct of this study is motivated by the experience of the authors in the process of teaching and learning languages and the emergence of the collection of information on the possible contributions and characteristics of the tools, in an attempt to assist teachers in the selection of potential resources for be used in this emergency period, based on a theoretical construct and not just a selection made due to the availability of the online resource or the facility of locating that resource.

## The pandemic and the use of digital tools for language teaching and learning

Searching for new strategies to mitigate learning obstacles is essential in this period when the pandemic is characterized as a laboratory to learn every day (RIVAS, 2020). Due to the constant changes that demand an exception pedagogy, it is decisive to carry out a new pandemic didactic transposition exercise, "something never seen, neither theorized nor imagined. Something to deposit the work of the teachers who are reinstalling the school in their homes and learning in the students' lives." (RIVAS, 2020, p. 3).

According to Rivas (2020, p. 3),

The starting point is that it is not possible for a while, return to normal educational curricula, or leave the students in their realities without the protection of the educational system. It is necessary to assume this situation as it is: a rupture in all the schemes and identity that we have built with them. Re (trying to) install them will not work or create new problems.

For Rivas (2020, p.3), a new sensible, reflective and human pedagogy is needed, amid the pandemic, the uncertainty, and challenges we face, considering that there is no more presence, nor the physical gathering of bodies, classes, or a group of interaction imposes its dynamics; there are no more schedules, "except for synchronous meetings of groups with connectivity, nor class hours, nor framed routines, nor any clarity in how to use learning time." There is no longer the completeness of the curriculum, which has collapsed, as it is not known whether it can be fully addressed "(...) or what criteria to use to split or reorganize it" (RIVAS, 2020, p.3). The motivation based on external duty was disarmed, there is no longer the power of the school norm, the motivation is now negotiated, imposed or unfolds in each home in ways invisible to the school system and, finally, harmony was disarmed, the (false) balance of things,

since we live in a state of global exception, as we do not know what will happen to the Coronavirus, neither with our lives nor with the future, [...] in which the state of mind is crossed by the unpredictable, the unprecedented and the painful this situation (RIVAS, 2020, p. 3).

In this context, the use of digital tools will be paramount in the new school reality, as these resources provide "greater motivation, are more interactive, assist in learning and improve the performance of language learners, making possible the means of digital and social inclusion." (FINARDI; PREBIANCA; MOMM, 2013, p. 199).

The inclusion of these tools has become a growing movement, considering that we live in a period of immersion of technology in daily activities. According to Vieira (2010, p. 16), language teaching is not far from the emergence of ICT. IConcerning it , the author emphasizes that "ICTs are not a solution for all the problems that affect teaching and learning, but they can be seen as an instrument for the development of skills and socio-affective predispositions about learning."

There are several approaches to the use of technologies for language teaching. In general, the trends in the area of language teaching are based on research that deals with "investigation of computer-mediated language teaching processes [...]" (COSTA; SILVA, 2020, p. 2). Computer- Assisted Language Learning (CALL) is an approach that has been adopted historically. According to Warschauer and Healey (1998), this approach can be divided into three stages: behaviorist, communicative, and



integrative. Each stage corresponds to a certain level of use of technology, as well as a particular pedagogical approach.

In each of these stages of evolution, the use of technology was adapted to the reality of teaching, at different times, when the language vision was structural, in the CALL behaviorist stage (1970-1980), with computers to perform exercises repetitive, moving to a cognitive vision (mentally constructed system, in which the main use of computers served to carry out communicative exercises (1980-1990) and finally, evolving in the 21st century to the stage of integrative CALL, with a vision of socio-cognitive language, with computers as tools for authentic discourse, through multimedia and the Internet (VIEIRA, 2010).

There are also the most recent biases of the CALL approach, signaled in the literature as "the established CALL" and the "emerging CALL" (AMARAL, 2011; GASPARINI, 2020). In the CALL approach, study efforts are focused on including technology in language teaching and learning practices. The emerging CALL approach, on the other hand, takes into account the improvement of existing technologies considering the language teaching-learning scenarios (GASPARINI, 2020).

More recently, investigations consolidated under the acronym CALL have taken on new discussions, being possible to verify a rise of Mobile Assisted Language Learning (MALL), which includes the use of mobile devices, smartphones, tablets, etc. (COSTA; SILVA, 2020; MARTINS et al., 2020).

This aspect has been highlighted in the studies, with the use of smartphones, for having become popular in the social and school environment providing connectivity, interactivity and "personalization of the learning environments and a great ease of publication and sharing of materials online." (MONTEIRO, 2020, p.7). The highlight is the APPs (Application software) for these mobile platforms, which, in addition to providing quick and easy access to existing platforms, present us with their own learning spaces, such as applications for the study of languages, such as Duolingo, Busuu and many others.

## Methodological procedures

The methodological procedures involve exploratory research, with a bibliographic focus, organized in four phases: 1) survey of the literature on language teaching and pandemic; 2) extraction and analysis of selected works with general information on resources used in language teaching and learning; and 3) analysis of Duolingo.

The literature survey was carried out through consultations on web databases, Capes' Portal of Journals, Google Scholar, Scielo, and Web of Science, to verify a set of works (articles, theses, and dissertations). To answer the problem raised, we established a theoretical framework of reference (PRODANOV; FREITAS, 2013), based on these collections that were carried out, using two key terms in the searches: "language teaching" and "pandemic", in which we obtained 94 resulting works.

In Figure 1, we present the quantity by base and type of production (article, dissertation, or thesis).



Figure 1: Survey of the literature



Source: The authors (2020).

With the help of the free Start tool that assists in the revision process, the second step involved the review and selection of the materials to be analyzed, taking into account the following inclusion criteria: the works refer to the period of the pandemic, they deal with the teaching of languages and deal with the use of technological resources. Considering these criteria, 16 studies were selected for further analysis. Chart 1 highlights the analyzed works and their respective authors.

Chart 1: Extracted works

## Title (Authors)

Utilização de ferramentas tecnológicas nas práticas pedagógicas e sociais de linguagem com foco em comunicação oral em língua inglesa (NUNES, 2020).

Interfaces gráficas para dispositivos móveis na educação a distância (EAD) (SILVA; SOGABE, 2020).

Parfor no Amazonas: fronteiras, deslocamentos, e formação de professores de Espanhol (TEIXEIRA; BRANDÃO, 2020).

"Olha, teacher, acho que dá pra gente usar isso na sala de aula, né?" – diferentes usos de tecnologias digitais no desenvolvimento da produção oral da língua inglesa em contexto da escola pública pelo viés da teoria sociocultural. (RIO; NICOLADES, 2020).

Relações entre tarefas e atividades em um curso online de língua adicional (BULLA; SHULZ, 2020).

Interculturalidade e estratégias de negociação de sentido em interações de Teletandem (MORETTI, 2020).

WhatsApp e fake news no ensino de língua inglesa em uma escola pública do interior do estado do Ceará (LIMA; SAMPAIO, 2020).

Rádio IFCWEB Campus Brusque: uma experiência na formação crítica e no processo de construção do conhecimento em tempos de COVID-19 (MENEZES et al., 2020).

Antes e depois da COVID-19: volta com as práticas de ensino presencial e remoto-novas tecnologias e tradições educacionais (POZA, 2020).

A aprendizagem de língua inglesa de alunos cegos e com baixa visão em um contexto de pandemia (LIMA, 2020).

A educação e as novas tecnologias de informação e comunicação no contexto da pandemia do novo Coronavírus: o professor "R" e o esvaziamento do ato de ensinar (SOUSA, 2020).



Made in Brazil (BEVILÁQUA; COSTA; FIALHO, 2020).

Unidade didática para a aula de espanhol no contexto da pandemia de COVID-19 (SILVA JÚNIOR, 2020).

Softwares educacionais e suas aplicações em tempos de pandemia: estudo sobre possibilidades de aplicação (SILVA; LEITO FILHO, 2020).

Construção de um campo semântico por meio de prática espaçada em ensino de línguas adicionais online (SILVA, 2020).

Teaching alternatives in pandemic times (SILVA; ANDRADE; SANTOS, 2020).

O ensino remoto em tempos da pandemia do COVID-19: uma adequação metodológica do curso de línguas popular aberto à comunidade (ALVES *et al.*, 2020).

Source: The authors (2020).

The studies indicate the use of technological features that include: computers, the Internet and smartphones and other specific ones for use in activities for teaching and learning languages, in pandemic times, such as Whatsapp, Podcast, Duolingo, EDMODO, Mycity – My world, Moodle, Skype, Wiki, Chat, Teletandem, Streaming, Facebook, Google, Google classroom, Google suite, Google Hangout, Google Meet, Facebook, Microsoft one note, Zoom, Youtube, ELO, Blog, Videos, Software Luz do Saber, Quizzes, Google Forms, Bigo Live - Live Stream, Live Video & Live Chat; Amino: Communities and Chats, Yalla - Free Voice Chat Rooms, Bermuda Video Chat - Meet New People, Tandem Language Exchange: Speak & learn languages, WhatsApp Messenger.

Among the tools identified in the works, we highlight Duolingo to expand the analysis, for having a multiplatform interface (mobile and web) and focused on "language teaching that provides the user with a gamified experience for acquiring vocabulary, expressions, and phrases in numerous languages" (SILVA, 2020, p.148).

## Results and discussions

To perform the analysis of Duolingo, we considered technical, theoretical, and social criteria. According to Sabota and Pereira (2017, p.51), these aspects cover "the quality of the material, the guarantee of access to a large number of apprentices and teachers, as well as the impact that the tool would bring on the user's life". The technical aspects refer to the functional characteristics of the tool, which include issues of usability, free access, and support. The theoretical criteria involve questions about the teaching and learning process, with a focus on the CALL approach and the social ones address a necessary reflection on social issues related to teaching and learning, from a practical point of view, with an emphasis on the possible interaction between the individual and the tool, with possible development of aspects such as self-knowledge and affection.

Regarding theoretical issues, it is worth mentioning that we take as a parameter an integrative orientation CALL approach (WARSCHAUER; HEALEY, 1998). Although we recognize that through Duolingo there is a focus on activities characterized by instructional initiatives, arranged in sequence, correlating cognitive styles and performance, we defend its use from an integrative perspective, which seeks to incorporate and expand activities that can integrate other tools, such as WhatsApp.



widely used according to the researched literature, to foster the creation of communicative situations that can promote interaction between learners. The integration of this tool provides communication spaces mediated by writing and orality. through the recording of audios and videos, and aims at the creation of new virtual learning communities, built at a distance, in an emergency period.

In this sense, we seek to integrate technology more completely with the process of teaching and learning languages, seeking harmonious and functional incorporation of the tools used in contingency and adversity situations, such as the one we are facing with the pandemic.

> In integrative approaches, students learn to use a variety of technological tools as a continuous process of learning and use of languages, instead of visiting the computer lab once a week basis for isolated exercises (whether behavioral or communicative exercises. (WARSCHAUER; HEALEY, 1998, p. 58).

To evaluate the features and functionality of the tool selected, we identified a set of works, criteria relating to the characteristics, contributions, and Duolingo limitations in the process of teaching and learning. In general, the following contributions were found for the teaching and learning of languages: free use, multiplatform (works both through the web and on smartphones), gamified interface, activities managed by teachers (Duolingo Schools), and the possibility of certification level of language proficiency.

Duolingo is described in the literature as an adaptive platform, 100% free, and gamified. It is characterized as a multiplatform, as it has Web and Mobile versions. It that the number of downloads is representative in the App Store (Play Store), exceeding 100,000.00 installations. Also, this tool provides students, from the choice of the language they intend to learn, various activities for the development of language skills.

According to Mota et al. (2016, p.143), this educational app is

easily downloaded on the internet, free of charge for IOS, Android, Windows Phone, and Windows 10 computer. With over 50 million downloads, it offers courses in English, Spanish, French and German; in addition to individual learning, it also offers the platform - Duolingo for Schools - for teachers to use as a tool in the classroom, which can culminate in extra-class activity (MOTA et al., 2017, p.143).

The platform also includes gamification aspects, providing a stimulating environment for students. For Cuellar and Sapiña (2016), it is possible to incorporate gamification aspects into language teaching considering existing experiences and using this complimentary resource in language learning. The platform includes in its scope questionnaires in interactive quiz formats, containing images, audios, and gamification elements, which enable autonomous learning and self-assessment by students who can only pass lessons, through the "correct resolution of all exercises and, in turn, only after a certain number of lessons / blocks are passed, the subsequent ones are unlocked" (CUELLAR; SAPIÑA, 2016, p. 2533).

Gamification elements are important for student engagement and the development of autonomous language learning (QUADROS, 2014). According to Quadros (2014, p. 355):

> The proposal for teaching and learning gamified systems usually comes in the form of word games, with a structure in phase-modules. At each end of the phase the student wins a set of points that lead to the achievement of trophies,



medals. Among the systems for teaching gamified languages, Duolingo, Lingualeo, Livemocha, and Busuu stand out. In each of these virtual environments it is possible to observe that as the student advances in level, he gains recognition for his dedication, whether for virtual coins, fruits, medals, etc.

It should be noted that, currently, this language learning platform is available for the classroom, the 'Duolingo for Schools', in which the teacher can create virtual classrooms with their students. In this perspective, the teacher guides the students' learning, creating activities, and monitoring the development and performance of the class. Besides — the virtual room created at Duolingo, it is possible to have access to reports by activities and progress to monitor the activities carried out.

One of the characteristics identified during the analysis of Duolingo for Schools was the possibility of registering activities aimed at monitoring the students of the class. It is noteworthy that the platform allows the use of questions, activities, and other available resources, which can be 'point collection' or 'level up'. The Duolingo for Schools tool has a feature aimed at monitoring by a teacher profile, with resources available for assessment: videos, questionnaires, chats, with the possibility of self-assessment and teaching geared towards meeting the specific needs of each student. Thus, the teacher must decide which lessons offered by the application can be used as activities (LIMA; SOARES, 2019).

Another necessary element that should be put to discussion and reflection, when referring to pre-existing virtual tools with the potential to complement teaching and learning, such as Duolingo (with the awareness that they are two interrelated, but changeable processes), is the question and concept of workload. The workload assumed new outlines for teachers and students, taking into account the perception of how the hours of contact (in class) and the hours dedicated (outside of class) changed with physical distance. The hours dedicated (therefore, in which the student conducts his learning autonomously, guided by the teacher in moments of virtual contact) increased significantly for the students.

Mobile applications to support teaching and learning processes have gained significant expression, similar to what Artificial Intelligence has contributed to surpassing human performance in recent decades. Not in the sense of substitution, but of compensation for processes that would be stagnant with the pandemic scenario (GAO; ZHANG, 2020), given the new emergency teaching regime.

According to Vessellinov and Grego (2012), the improvement of language skills is related to hours of study on the platform, however, other issues must be observed especially, due to the implications of this new context. For example, it is noted how programmatic content involving laboratory sessions and tests had to be adjusted in virtual mode, with time restrictions and behavioral regulation that are generating higher levels of anxiety, stress, and sleep problems (GEORGE, 2020; LIU et al., 2020; MACINTYRE et al., 2020).

Another more recent contribution can be mentioned and refers to the use of this tool to carry out the international language proficiency certification process. In 2014, the Duolingo Test Center was launched, which had its nomenclature changed in 2016 to Duolingo English Test (DET) (BÉZY; SETTLES, 2016). Through this test, it is possible to certify knowledge of English, with reliability standards such as the TOEFL (Test of



English as a Foreign Language) and the IELTS (International English Language Testing System) exam (ROMERO, 2016).

We identified it as a meaningful contribution of this tool, due to the constant difficulties of students in carrying out types of tests, such as IELTS and TOELF. According to news from Folha de São Paulo, the Duolingo app with the Duolingo English Test already competes with other proficiency tests like TOEFL. According to the news, the test is already accepted in more than three hundred institutions.

A study by Bézy and Settles (2015) identified that future graduate programs are part of the audience that demand more such tests, because they need to provide proof, via certified skills of a language, especially of English language proficiency.

We emphasize that the considerations regarding this functionality are still contradictory among some authors. According to Bézy and Settles (2015), Duolingo certification has a high level of correlation and agreement with other internationally recognized exams, such as IELTS and TOEFL, according to the studies they did correlating the 'scores' obtained by the participants in the certifications at Duolingo and IELTS. However, for authors like Wagner (2020), instruments such as Duolingo are not feasible to respond to the testing carried out by TOEFL IBT and IELTS.

It is also worth mentioning on this issue, the idea of 'compensation' and not 'replacement', and it is necessary to understand that it will not be tested like Duolingo that will supplant tests and university activities (WAGNER, 2020). Regarding testing, in particular, language proficiency test centers were closed at certain times in 2020 in many countries.

About social aspects, it is worth mentioning that studies such as those by KIM et al. (2020) denoted one of the limiting results of the resource in the digital scenario in this period of COVID-19: students who come from disadvantaged socioeconomic groups who do not necessarily have full access to instruments and broadband to complete the learning process. The online modality presupposes resources that the on-site modality did not consider as a problem. About assisted learning for language teaching, the same question applies. Duolingo is an attractive navigation tool and facilitates the learning process, however, it is a satellite tool (REDJEKI; MUHAJIR, 2020; WAGNER, 2020).

So, it is important to say that, with the implementation of the online modality, we must take into account a teaching and learning process that includes a set of dedicated hours and contact hours. Bearing in mind that adapting to this modality can prevent objectives and program content from being completely met, it is significant to reflect on the fact that although Duolingo is one of the most successful apps, this tool can only serve the context of dedicated hours and not in the context of contact hours, needed between teacher and students.

In this sense, we highlight Duolingo as an additional tool for language classes, which has the role of providing positive and / or negative feedback, showing students an overview of the successes or errors and the evolution of the performance achieved.

Another point to be discussed refers to the study by Macintyre et al. (2020) who demonstrated the correlation between the prevention of high levels of stress and low performance in the specific context of teaching and learning languages in this alteration and adaptation of the settings of the classroom to the virtual. Language teaching has not yet been focused on investigating the implications of this change and adapting the settings. However, some results (DUBREIL, 2020) are already showing how



learning new languages is being affected, especially with the fact that empathy is crucial in a multicultural world that today suffers because of physical distance. Empathy, according to Dubreil (2020), is an essential circumstance for linguistic development. Thus, new digital methods need to be aware of this circumstance.

Besides this limitation, other disadvantages can be pointed out, related especially to technical issues, such as the activation of recurring advertisements while the student performs the activities, among others, "childish interface; does not develop the four skills: reading, writing, speaking and listening; repetition of exercises; predominance of a single method: grammar- translation." (HONORATO, 2018, p.140).

Another factor that should be mentioned refers to the initial need for Internet access because when accessing Duolingo via the web or through Android and iOS applications, an Internet connection is required to download the lessons. However, for Duolingo Plus subscribers it is possible to download lessons and as soon as this process is completed, it is possible to set the device to offline mode.

This concern refers to the fact that studies point to this emergency during the pandemic period (SANTANA et al., 2020; MÉDICI; TATTO; LEÃO, 2020) and for that, it is necessary to plan new dynamics on how to use these tools, aiming to enhance the use through practices aimed at digital inclusion, contributing to new research interfaces in support of the development of equitable communicative competence in learning and teaching languages online and offline.

This finding takes into account a problematization about "the precariousness of online education before and during the context of the global pandemic that we currently experience due to the SARS-CoV-2 (Covid-19) Coronavirus." (COSTA; SILVA, 2020, p. 2).

Virtual Learning Environments (VLE) without adequate structure, poor internet signal, obsolete equipment ... all these are indications that we had a precarious cycle before, we are having another now, which reaches other points, and we may have other cycles later, that is, in that absolutely unpredictable future (COSTA; SILVA, 2020, p. 3).

Ortega (2017) points out that digital technologies are an integral part of the lives of multilingual speakers and this fact often highlights the inequalities and social injustices in our society. This implies the need not only for language learning but for students' digital literacy to access practices mediated by digital technologies (GONZÁLEZ-LLORET, 2014).

Other factors must also be taken into account, such as the "importance of an alignment between the popularization of digital technologies and teacher training" (COSTA; SILVA, 2020, p. 3), the effective mediation of teachers, seeking new experiences learning, the promotion of policies, to provide digital technology and services and to increase access to digital resources while schools remain closed, evaluating the constant complexities in the use of digital resources for the construction of learning.

With this, it is vital to consolidate a new ecosystem of learning a target language, considering the role of the student and their co-responsibility in this process. In this way, new roles are being demanded, in which the teacher starts to act as a tutor and the student starts to take more responsibility for the learning, based on the autonomy and activities that he will act.

Educational dialogues in schools, education during the pandemic - and afterward - are and will be surrounded by cultural and health issues that are likely to be present in the daily life of the school environment. These dialogues will remain impregnated by the spirit of this time of torment, with the most varied and new relationships created and established by COVID-19, of which we can mention: greater hygiene, the distance between students, decreased touch, only verbal compliance, use of facial protection (PASINI; CARVALHO; ALMEIDA; 2020, p. 8).

Based on the discussion and reflections presented, we cannot say how the future will be, however, it is presumed that the computer and "digital technologies will not fail to play an important role in society, as they already did long before the pandemic" (COSTA; SILVA, 2020, p. 4), therefore, it will be necessary to expand studies and discussions, seeking to assess successful practices and significant results in the process of teaching and learning languages.

## Final considerations

The panoramic look at the teaching and learning of languages presented in this article, given the emerging demands, aimed to highlight some tools that can be used by language teachers, to foster new practices, for teaching and learning in this exceptional situation.

We demonstrate some effective conditions for implementing educational technology, especially Duolingo, to enhance the learning process and students' autonomy. Among the potentialities of this tool, we can highlight the free use, multiplatform access (works both through the web and on smartphones), the gamified interface, activities managed by teachers (Duolingo Schools), in addition to the possibility of certifying the proficiency level of language. With Duolingo, the student can study autonomously, however, the planning of online learning must include the identification of the contents, the learning objectives and careful orientation of the support for the interactions to happen, understanding the learning as a process social and cognitive (HODGES et al., 2020).

The promotion of the use of this tool aims to expand learning opportunities, especially in times of emergency, such as what we are experiencing with the evolution of the pandemic of COVID-19 in the world, being necessary to establish a new pedagogical link, new mediations, and use of resources technological, according to the needs of each context, seeking a quick adaptation. This implies thinking from a formative perspective, with an emphasis no longer from the curricula, but from a new ecosystem that involves the search for constant interaction with students, through tutorials and or new learning spaces for more personalized attention, focusing on the difficulties of each student, which can be expanded through WhatsApp groups.

This also implies recognizing the emergence of new research and adaptation of online courses and the use of tools, based on the current needs of students, which change due to the complexity of language teaching, as well as the new formats of production and interaction that arise with the disruption of traditional education schemes.

Thus, thinking about emergency remote language teaching means reflecting on what objectives, learning outcomes, knowledge, skills, and attitudes need to be developed,



especially with the use of ICT, to ensure the continuity of the students' learning process, either during the COVID 19 crisis or after it.

The guarantee of pedagogical continuity, by the provisions and regulations, implies, on the one hand, considering the impact of the discontinuity of the teaching and learning process on the subjects involved in the education act and, on the other hand, making available and sharing pedagogical proposals that enable the learning of significantly in the most different contexts. To this end, we see as future work, the realization of applied research with Duolingo in the teaching and learning of languages, considering the different pedagogical and technical implications in this emergency period, considering the results regarding the contributions and limitations of this tool through this analysis panoramic shown.

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