



Article

A proposal of activities involving Duolingo to foster Global Citizenship in Professional and Technological Education

Uma proposta de atividades envolvendo o Duolingo para o fomento da Cidadania Global na Educação Profissional e Tecnológica

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ABSTRACT: The author of this study suggests that education for Global Citizenship, which concerns people who care about issues related to the local and global sphere (Belli; Luna, 2024), can be promoted through a proposal of activities, which encompasses virtual exchange, digital stories and the Duolingo application, with the aim of facilitating the learning of English in the Professional and Technological Education context. Thus, based on the theoretical contribution of researchers such as Schaefer and Heemann (2024a, 2024b), Silva (to be published) and Hanna (2024), this study seeks to present a proposal of activities, which involves the use of Duolingo, as a strategy for the learning of English and for the development of Global Citizenship in the context of Professional and Technological Education. These activities, which can be applied over 16 classes, consist of the virtual exchange between students from a Brazilian institution and students from an Indian institution. It seems possible to claim that that proposals of activities that comprise the work with different digital resources, just as the resources used in this study, can encourage Global Citizenship as well as integral formation through critical thinking in educational institutions.

KEYWORDS: Internationalization. Global Citizenship. Duolingo. Virtual Exchange. Professional and Technological Education.

RESUMO: O autor deste estudo sugere que a educação para a Cidadania Global, esta concernente a pessoas que se preocupam com questões relacionadas com o âmbito local e global (Belli; Luna, 2024), pode ser promovida mediante uma proposta de atividades no âmbito da Educação Profissional e Tecnológica (EPT), proposta essa que abarca o intercâmbio virtual, histórias digitais e o aplicativo Duolingo para fins do aprendizado do inglês. Assim, a partir da contribuição teórica de pesquisadores como Schaefer e Heemann (2024a, 2024b), Silva (no prelo) e Hanna (2024), este estudo tem como objetivo apresentar uma proposta de atividades, a qual envolve a utilização do Duolingo, como estratégia para o aprendizado do inglês e para o desenvolvimento da Cidadania Global no contexto da Educação Profissional e Tecnológica. Tais atividades, que podem ser aplicadas no transcorrer de 16 aulas, abrangem o intercâmbio virtual de estudantes de uma instituição brasileira com estudantes de uma instituição indiana. Pode-se afirmar que propostas de atividades que incluem o trabalho com

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diferentes recursos digitais, tal como os da proposta que neste estudo se erigiu, podem fomentar a Cidadania Global e a formação integral mediante o pensamento crítico nas instituições educacionais.

PALAVRAS-CHAVE: Internacionalização. Cidadania Global. Duolingo. Intercâmbio Virtual. Educação Profissional e Tecnológica.

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1 Introduction

According to Hanna (2024), given the recent social and technological transformations, it is imperative that students, in addition to being aware of the role they play in the world as individuals, understand that we influence the lives of people who are far and near to us. For this reason, it is up to educational institutions, through actions that foster their internationalization, to provide students with the means to become citizens of the world (Hanna, 2024), thus encouraging "a more global mindset"¹ (p. 81). Belli and Luna (2024), in turn, argue that the internationalization of education reflects globalization, considering that the latter "expands the various interfaces that exist between countries and peoples of the world"² (p. 10). In this context, the authors contend that educational institutions must adapt their policies and theoretical-methodological procedures to the emerging demands within the globalized society.

With specific regard to the area of foreign language teaching and learning, Sabota and Peixoto (2015) explain that, over the years, different technologies have been used, such as books, Power Point slides, cassettes and blackboards and, more recently, computers and mobile devices, to optimize learning and contact with the target language. In this sense, the authors point out that digital technologies have proved to be revolutionary, since they facilitate collaborative learning, contact and interaction between students who are physically distant, which can "transform the traditional

¹ Original quote: "uma mentalidade mais global".

² Original quote: "dilata as diversas interfaces existentes entre os países e os povos do mundo".

reality of the classroom and bring about changes in the educational process"³ (Sabota; Peixoto, 2015, p. 185).

In view of the situation mentioned by Hanna (2024) and Sabota and Peixoto (2015), language learning apps have the potential to provide interactive activities, which can, in line with Sabota and Peixoto (2015), contribute to learning. One of these apps, Duolingo, which had more than 500 million users by 2020 (Garlet *et al.*, 2021), is "one of the most recognized names in the language teaching market, having not only a commercial but also a cultural impact on teaching and the development of other applications"⁴ (Harres *et al.*, 2021, p. 14).

In the context of language teaching and learning, Hanna (2024), Schaefer and Heemann (2024a) and Belli and Luna (2024) emphasize the inseparable nature of language and culture(s), as well as the importance of using local and global issues in the classroom. In fact, this study, which falls within the scope of internationalization, is consistent not only with the notion of education for Global Citizenship, but also with learning English using the Duolingo app in the Professional and Technological Education context.

Professional and Technological Education, according to Nitschke *et al.* (2021), is related to the idea of an integral education, and offers technical and professional education integrated with both secondary and higher education. The authors add that Professional and Technological Education, in addition to considering work as an educational principle, is committed to "an entire, or integral, education, in the sense of developing the subject's physical and intellectual faculties in a broad perspective"⁵ (Nitschke *et al.*, 2021, p. 42). Interestingly, Pacheco (2015) suggests that "The Federal Institutes of Education, Science and Technology are the synthesis of the best of what

³ Original quote: "transformar a realidade tradicional da aula e proporcionar mudanças no processo educativo".

⁴ Original quote: "um dos nomes mais reconhecidos no mercado de ensino de línguas, tendo não só um impacto comercial como também cultural no ensino e no desenvolvimento de outros aplicativos".

⁵ Original quote: "uma formação inteira, ou integral, no sentido de desenvolver as faculdades físicas e intelectuais do sujeito em uma perspectiva ampla".

the Federal Network has built throughout its history and of the federal government's professional and technological education policies"⁶ (p. 12).

The author of this study chose to present a proposal for activities using Duolingo as a strategy for developing Global Citizenship, which relates to the student who "knows the world, even without leaving their school, their campus, in its linguistic-cultural manifestations"⁷ (Luna, 2018, p. 41). Having said this, the aim of this study is to present a proposal for activities involving the use of Duolingo as a strategy for learning English and developing Global Citizenship in the context of Professional and Technological Education. It should be noted that such proposal, which is placed in the internationalization context, includes virtual exchange (Schaefer; Heemann, 2024a, 2024b; O'Dowd, 2023a, 2023b), which, in this study, enables the contact between Professional and Technological Education students and students from a foreign institution, and the creation of digital stories (Robin, 2016; Schaefer, 2022, 2024; Rodgers; Ní Dhonnchadha, 2023; Schaefer; Heemann, 2024a), through which students will be encouraged to reflect on social issues.

The way in which this study can foster education for Global Citizenship in the context of internationalization can be explained by four main reasons. First, as stated by Hudzik (2011, p. 22), it is crucial to "move from rhetoric to action" to promote internationalization, which means that there is an urgent need to systematize theory and practice. The second reason, in turn, converges with Nunes and Silva (2022), who state that language teaching in Brazilian institutions, sometimes conservative and dogmatic, is not committed to activities that stimulate students to participate in meaningful linguistic-discursive situations. From this perspective, through the proposed activities of this work, it is possible to facilitate, in addition to learning the

⁶ Original quote: "Os Institutos Federais de Educação, Ciência e Tecnologia são a síntese daquilo que de melhor a Rede Federal construiu ao longo de sua história e das políticas de educação profissional e tecnológica do governo federal".

⁷ Original quote: "conhece o mundo, mesmo sem sair da sua escola, do seu campus, em suas manifestações linguístico-culturais".

English language, creativity, intercultural communication, and critical thinking among students.

The third reason that attests to the relevance of this study refers to the "lack of publications"⁸ (Caparros Junior, 2020, p. 117) concerning research in the context of internationalization, as well as, in line with Köhler, Britz and Morosini (2023, p. 271), the understanding that, contrary to what occurs in higher education, "internationalization in the context of basic education is little studied and discussed in Brazil"⁹. Indeed, the proposal of this study is aimed at both students from the 1st to 3rd year of high school and higher education.

Finally, the fourth reason refers to the notion that, according to Garlet *et al.* (2021, p. 12), Duolingo does not enable interaction between users of the application, promoting "interactivity with the tool in a passive way"¹⁰. That said, it is necessary to highlight that the proposal of this study aims to foster not only intercultural interaction, but also the development of Global Citizenship and integral education in the context of Professional and Technological Education.

This text is divided into five sections. The first concentrated on the objective, as well as on a brief contextualization regarding this study. The second and third sections, in turn, will address theoretical contributions on Professional and Technological Education, internationalization, Global Citizenship, the Duolingo app, virtual exchange and digital stories. Later, in the fourth section, the focus will be on the presentation of the proposed activities itself, and, in the fifth section, some final considerations will be made.

⁸ Original quote: "carência de publicações".

⁹ Original quote: "a internacionalização no âmbito da Educação Básica é pouco estudada e discutida no Brasil".

¹⁰ Original quote: "a interatividade com a ferramenta de modo passivo".

2 Professional and Technological Education, Internationalization and Global Citizenship

In the introductory session, it was explained that the proposed activities of this article are aimed at the context of Professional and Technological Education (Pacheco, 2015; Nitschke *et al.*, 2021). Ramos (2008) formulated two perspectives in relation to the education of students for the world of work, namely, **unilateral** and **integral**. Unilateral concerns the development of capacities to be used in specific functions of the work activity, which Saviani (2007), with a critical eye, calls the **training of individuals**¹¹. The integral perspective, on the other hand, is linked to the view that students are part of a socially and culturally situated universe. In line with the latter perspective, therefore, work should be considered as an educational principle (Saviani, 2007, 2015). Moura *et al.* (2015) go on to say that, through curricular organization, there should be space for "intellectual, physical and technological formation, which suggests that the concept of polytechnics can encompass the idea of integral human education"¹² (p. 1061).

Based on the conceptualization of integral education according to Ramos (2008), Moura *et al.* (2015) and Nitschke *et al.*, (2021), the study conducted by Schaefer and Heemann (2024b) focused on internationalization processes undertaken in a Professional and Technological Education institution, more specifically at Instituto Federal Catarinense. The research aimed to analyze the way in which telecollaboration – or virtual exchange – favored critical thinking through the discussion of issues such as **cultural stereotypes**, **racial discrimination** and *the* **use of animals in scientific experiments**. The data, generated from the application of questionnaires and interviews, revealed that the intercultural contact facilitated not only the development of a student's integral formation, but also the respectful and critical dialogue between

¹¹ In Portuguese, "adestramento dos indivíduos".

¹² Original quote: "a formação intelectual, física e tecnológica, o que sugere que o conceito de politecnia pode abarcar a ideia de formação humana integral".

students from different countries, for example, Argentina, England, Spain, Puerto Rico and the United States.

It is worth highlighting that, in line with Ramos (2008), Moura *et al.* (2015), Nitschke *et al.* (2021) and Schaefer and Heemann (2024b), the proposed activities of this study, in keeping with the essential nature of a critical perspective regarding sociocultural aspects, value the integral formation of students. In this connection, Hanna (2024) underlines that, in today's information and knowledge society, due to the "imperative force of internationalization, interculturality, and global citizenship"¹³ (p. 91), there is a need to develop metacognitive skills, including critical thinking and the evaluation of arguments and information in general.

Belli and Luna (2024) stress that educational practices and actions for internationalization are materialized from the school curriculum, which is considered "the school's identity document"¹⁴ (p. 10). For the authors, who argue that curricular internationalization "seeks to transform students into global citizens with social responsibility, respect for differences and intercultural communicability"¹⁵ (p. 23), "the marks of the internationalization of HEIs¹⁶ are perceived and registered, formally or not"¹⁷ (p. 10), through the activities and content present in the curriculum.

Internationalization, according to Köhler, Britz and Morosini (2023), is essential for the development of students' Global Citizenship and the integral education, a concept that is central, as we have seen, in the Professional and Technological Education context. For such development to be possible, it is crucial to conduct international projects, (inter)cultural exchanges and, furthermore, international cooperation (Köhler; Britz; Morosini, 2023). Internationalization, as Köhler, Britz and

¹³ Original quote: "imperative force of internationalization, interculturality, and global citizenship".

¹⁴ Original quote: "o documento de identidade da escola".

¹⁵ Original quote: "busca transformar os estudantes em cidadãos globais com responsabilidade social, respeito ao diferente e comunicabilidade intercultural".

¹⁶ Higher Education Institutions.

¹⁷ Original quote: "as marcas da internacionalização das IES são percebidas e registradas, formalmente ou não".

Morosini (2023, p. 271) put it, entails "an important proposal to prepare global students, capable of acting responsibly and ethically in an increasingly connected and interdependent world"¹⁸, which implies working with both academic and socio-emotional aspects.

For Leask (2015), internationalization takes place through the implementation of intercultural, global, and international dimensions in curriculum activities. This implementation, according to Guimarães and Silva (2022, p. 42), allows the study of languages to be viewed as an option to bring about the transformation of social relations, making it possible "the construction of a more just and democratic society that cares about global problems"¹⁹. In this conception, it is necessary for teaching strategies to pay attention to social, political, and cultural characteristics related to the target language in different parts of the world (Hanna, 2024; Schaefer, 2022, 2024). In fact, the proposed activities of this study facilitate the contact, through communication in English, between students from a Brazilian Professional and Technological Education institution and students from a foreign institution. The contact, as will be seen later, is committed to critical thinking and education for Global Citizenship.

Clifford (2018) relates the concept of Global Citizenship to people who are concerned with local, international and global issues, while at the same time "understand that the world is interdependent, that every action we take, every decision we make, affects other people" (p. 15). Converging with this line of reasoning, Belli and Luna (2024) argue that education for Global Citizenship must be committed to the global transformations that have occurred over the centuries. Thus, "education can be global, as well as multicultural and multilingual. Education can be internationalized. This is a challenge"²⁰ (Belli; Luna, 2024, p. 10).

¹⁸ Original quote: "uma proposta importante para preparar estudantes globais, capazes de atuar com responsabilidade e ética em um mundo cada vez mais conectado e interdependente".

¹⁹ Original quote: "a construção de uma sociedade mais justa e democrática e que se importa com os problemas de cunho global".

²⁰ Original quote: ""a educação pode ser global, além de multicultural e multilíngue. A educação pode internacionalizar-se. Trata-se de um desafio".

The conceptualization of Global Citizenship in the previous paragraphs is in line with Silva (in press), a researcher who, having focused on the development of Global Citizenship based on the theme of climate change driven by the invasion of indigenous lands in the Amazon Rainforest and the consequent environmental degradation, proposes the following Emotional Intelligence Model for Global Citizens: CHAP (Compassion, Hope, Action and Positionality).

Compassion, the first component of CHAP, highlights the importance of the ability to show compassion and empathy when communicating with people from other cultures, whether at the local, regional or global level. The second component, **Hope**, refers to the need to seek inspiration, strength and optimism amid complex social situations and problems, while **Action** points to the commitment to reflect, through practical actions, on possible solutions concerning different problems of a sociocultural nature. Finally, **Positionality** suggests that people, through critical thinking, who need to be aware of their privileges and limitations, should recognize and consider the voices, opinions and needs of others.

The author of this study proposes that both education for Global Citizenship and internationalization can be fostered by activities which aim to contribute to the inclusion of various digital resources within the scope of Professional and Technological Education. In the next section, theories related not only to the Duolingo app, but also to virtual exchange and digital stories, will be addressed, given that such activities involve the online intercultural contact and the creation of stories using different digital tools.

3 Duolingo, virtual exchange and digital stories

According to Guimarães and Silva (2022), there are two narratives corresponding to the relationship between internationalization and language: (1) internationalization as mobility and (2) the importance of English. As for the first narrative, languages are essential for access to institutions in other countries, while the second points to the central role that the English language plays in the global context. In view of this, the authors argue that "languages are at the genesis, essence and imaginary of internationalization"²¹ (Guimarães; Silva, 2022, p. 37), although they do not determine the complex and multifaceted nature of the internationalization of education, which demands organicity beyond the knowledge of other languages.

As previously stated, the proposed activities of this study, which, in addition to promoting the learning of English, are part of the scope of internationalization, include the Duolingo application. Melo (2021) emphasizes that the work of language teachers today is no longer limited to conducting activities in the classroom, since they also need to develop activities made possible by digital resources. From this perspective, the author of this study considers that Duolingo has the potential to contribute, as a complementary resource to face-to-face contexts, to the learning of foreign languages, as well as the expansion of vocabulary and grammatical structures.

Melo's (2021) study aimed to understand to what extent the Duolingo app facilitated students' foreign language learning in a face-to-face context. The thematic units carried out in Duolingo were articulated with the content studied in the textbook, which was used as methodological support for students. The results of the research, obtained based on the interpretation of reports automatically generated by the Duolingo for Schools platform, revealed that the fact that Duolingo is free and consists of elements such as gamification, interactivity and accessibility, gave learners not only frequent contact with the target language, but also lexical expansion and the learning of grammatical structures through oral and written activities.

Despite the learning opportunities offered by Duolingo, Harres *et al.* (2021) explain that, because the app is mainly based on the use of translation, its lessons do not differ much from each other and social interaction is very limited, which is why the author of this study chose to propose activities that promote intercultural exchange and Global Citizenship. Thus, in the proposal of this study, in line with Harres *et al.*

²¹ Original quote: "as línguas estão na gênese, na essência e no imaginário da internacionalização".

(2021), Duolingo is conceived of as an auxiliary tool, and not an exclusive and substitute for the classroom, leading students "to work in groups in the classroom, fostering discussions and encouraging the use of technology"²² (Harres *et al.*, 2021, p. 14).

Previously, it was explained that the proposed activities of this study, which will be presented in the next section, encompass virtual exchange and the production of digital stories. According to Schaefer and Heemann (2024a) and Schaefer (2024), virtual exchange and digital stories have the potential to facilitate internationalization and education for Global Citizenship.

For O'Dowd (2019), through virtual exchange, which has stood out in the context of language teaching and learning in recent decades, groups of students participate, for a certain period, in communication with students from other countries. Furthermore, O'Dowd (2023a, 2023b) makes clear that online interaction between students from different cultures has received special attention from educational institutions whose objective is to provide students with a meaningful language learning experience. In the same vein, Schaefer *et al.* (2017, p. 239) maintain that virtual exchange is "an instrument of connection with the world, capable of promoting intercultural encounters between students"²³.

The creation of digital stories, in turn, which allows students to tell stories through the use of various digital resources, such as images, music and recorded narration (Robin, 2016; Schaefer, 2022; Rodgers; Ní Dhonnchadha, 2023; Schaefer; Heemann, 2024a; Schaefer, 2022, 2024), fosters the development of students' critical thinking (Robin, 2016; Schaefer; Heemann, 2024a, 2024b; Schaefer, 2022, 2024), as they "begin to research and tell stories of their own [as well as] to research rich, deep

²² Original quote: "a trabalharem em grupos em sala, montando discussões e incentivando o uso da tecnologia".

²³ Original quote: "um instrumento de ligação com o mundo, capaz de promover encontros interculturais entre estudantes".

content while analyzing and synthesizing a wide range of information and opinions" (Robin, 2016, p. 19).

For Lambert (2006, 2007), the production of digital stories requires several steps. **Planning** involves establishing all the procedures that make up the creation of a digital story; **presenting samples** refers to the need to provide students with examples of digital stories previously created by others. While **scripting** refers to the writing of the events that make up the story itself, **receiving feedback** encompasses the linguistic correction of the script, which can be provided by the teacher or by peers. **Designing storyboard** refers to the illustrations that represent the story's script as a whole, followed by the **digitization of the story**, that is, the inclusion of digital elements, such as images, script narration and background music, in the stories. Finally, **presentation to an audience** allows students to share their stories.

The study by Rodgers and Ní Dhonnchadha (2023), which focused on the production of digital stories with Biotechnology and foreign language students, aimed to discuss the extent to which these stories facilitated student learning in the context of Languages for Specific Purposes²⁴. More specifically, the students created digital stories based on forensic cases in which DNA (deoxyribonucleic acid) profiling was used. The results of the research highlighted the contribution of digital stories in relation to specialized linguistic skills, in this case, in Biotechnology. Although Rodgers and Ní Dhonnchadha (2023) emphasize the beneficial aspects of digital stories for today's globalized world, the results, which revealed mainly linguistic and academic contributions, did not address the extent to which such stories served as a promoter towards education for Global Citizenship. Indeed, my study aims to introduce the potential of digital stories for learning the English language, but also for Global Citizenship.

²⁴ Teaching languages for Specific Purposes, according to Rodgers and Ní Dhonnchadha (2023, p. 65), aims to "meet the specific needs of learners, to help them to enter specific discourse communities and as such draw on relevant activities, methodologies and practices".

Based on what was previously explained about the concepts that underpin the constitution of the proposed activities of this study, including Global Citizenship, integral education and internationalization, such activities will be presented in the following section.

4 A proposal of activities involving Duolingo to foster Global Citizenship in Professional and Technological Education

4.1 Some initial considerations

Before presenting the proposed activities, it is worth highlighting a few considerations. First, as already mentioned, this proposal includes digital storytelling and virtual exchange. Second, it was previously seen that Rodgers and Ní Dhonnchadha (2023) concentrated on a specific course, namely Biotechnology in the context of Languages for Specific Purposes. Similarly, as an example, this proposal can be applied to Professional and Technological Education²⁵ courses such as Integrated High School²⁶ (1st to 3rd Year) — Computer Technician / Chemistry / Agriculture, etc. —, or in Higher Education — Technology in Computer Networks, Degree in Mathematics / Chemistry and Veterinary Medicine, etc. —. In other words, while students learn technical content specific to their area of education, they will have the chance to develop, through learning English and activities suggested by the teacher, their integral formation (Schaefer; Heemann, 2024b).

Third, just as Harres *et al.* (2021) support the idea that language learning apps should be accessible to both students and teachers, Duolingo was chosen, since it can be used free of charge. The fourth consideration, in turn, is related to the use of the Duolingo for Schools platform (Melo, 2021). In my study, the need to include this platform can be justified by the fact that it "functions as a control panel, through which

²⁵ Although this proposal of activities is aimed at Professional and Technological Education, it is possible that, with some adaptations, it can be applied in other contexts, for example, universities, language schools, public and private schools.

²⁶ Ensino Médio Integrado.

educators can create and manage classes, in addition to delegating tasks [...] and monitoring learners' performance"²⁷ (Melo, 2021, p. 92).

The fifth consideration concerns the use of music. According to Silva (in press), music can pave the way for the development of Global Citizenship, while, according to Roiz (2017), it "conveys aesthetic, ideological, moral, religious, linguistic values, etc."²⁸. Precisely because music encompasses the values advocated by Roiz (2017, p. 11), it is suggested, in my study, that it has the potential to stimulate not only the learning of linguistic elements, such as lexical, grammatical, phonetic and pronunciation, but also critical thinking in relation to specific social issues, as will be seen later.

The sixth consideration implies the inclusion of CHAP (Compassion, Hope, Action and Positionality), that is, the Emotional Intelligence Model²⁹ for Global Citizens (Silva, in press), in the sense that, according to Silva (in press), through critical thinking and discussion related to global issues, it is possible to equip students with the skills to address these issues in a theoretical-practical context. Furthermore, although, as will be mentioned later, the proposed activities in this article cover two subjects in favor of critical thinking towards the development of Global Citizenship, namely, invasions of indigenous lands and issues related to the environment, the teacher can choose other topics, for example, discrimination and prejudice, immigration and unequal distribution of wealth.

The seventh and final consideration concerns intercultural contact, provided by the activities of the proposal, between high school and/or higher education students from a Brazilian institution of Professional and Technological Education and students

²⁷ Original quote: "funciona como um painel de controle, por meio do qual os educadores podem montar e gerenciar turmas, além de delegar tarefas [...] e acompanhar o desempenho dos aprendizes".

²⁸ Original quote: "veiculam valores estéticos, ideológicos, morais, religiosos, linguísticos, etc..".

²⁹ This model was presented in the second Section of this work (Professional and Technological Education, Internationalization and Global Citizenship).

from an Indian institution³⁰. According to Silva (2019), given the significant number of non-native speakers of English worldwide, the idea that the native speaker serves as the most intelligible reference for use in the international scenario must be questioned. In view of this, the author states that integrating only hegemonic models of English into classes, namely from England and the United States, is not in line with the reality of students, who are often in contact with other varieties of the language, including, by way of illustration, English in India, Singapore and the Philippines. Thus, Silva (2019) stresses that, through critical thinking, it is possible to facilitate a "less colonized"³¹ (p. 160) perspective in the context of teaching and learning English, to recognize and value the different varieties of English around the world.

In India, according to the article "What language is spoken in India?"³² ³³, available on the Lingua Language Center website, English is currently spoken by 12% of the population, which makes this country quite representative in terms of the number of speakers of the language. Furthermore, in line with this website, Hindi and English are the only languages that have official language status in India, despite the coexistence of other languages deemed to be co-official, including Assamese, Malabar and Sanskrit.

In view of the above, the choice of an Indian institution to establish a partnership with a Brazilian³⁴ institution can be justified (a) by the fact that English is the official language in India. In this way, Brazilian students will have the opportunity to have contact with speakers of another variety of English, in addition to, for example, the national variety of England or the United States; (b) by the possibility of exploring

³⁰ It is important to point out that, although the proposal includes a specific foreign country – India –, it can also be implemented, depending on the theoretical-methodological objectives of the teacher, with students from institutions in other English-speaking countries, for example, Australia, Jamaica, the United States, the Philippines, Singapore and England.

³¹ Original quote: "menos colonizado".

³² Original in Portuguese: "Que língua é falada na Índia?".

³³ Link to access the article: <u>https://lingua.edu/pt-br/que-lingua-e-falada-na-india/</u>

³⁴ It is suggested that, due to the nature of the proposed activities, the students from the Brazilian institution have prior knowledge of English, so that they can, for example, coherently understand simple speeches, interact with other people and express more abstract ideas.

characteristics of the English spoken in the aforementioned country, such as vocabulary, accent and pronunciation; (c) by the relevance of discussing linguistic and cultural aspects relevant to India and Brazil.

4.2 Duration, content and objectives

- Duration Sixteen forty-five-minute classes.
- Content **simple present**; **present perfect**; invasions of indigenous lands; vocabulary related to the environment.

• Objectives – To correctly use the **simple present** and **present perfect** verb forms, as well as to employ them in everyday situations; to position oneself critically towards a specific current social issue; to develop interaction skills with English speakers from India; to understand linguistic and cultural aspects concerning India.

4.3 Development

4.3.1 Explanation of the objectives of the proposed activities – classes 1, 2 and 3

First, the teacher from the Brazilian institution explains to their students that, over the following weeks, they will participate in activities aimed at learning grammatical content, expanding their range of knowledge about a specific social topic, and preparing them for virtual interaction with English speakers from India. These activities comprise the creation of digital stories, music, and the use of Duolingo. Below, Table 1 briefly presents the activities mentioned:

Tuble 1 - building of the delivities that will be undertaken in 10 elusies.	
Classes	Activity
1, 2 and 3	Explanation of the
	objectives regarding the
	proposal.
4, 5 and 6	Study of the simple present
	and the present perfect .

Table 1 – Summary of the activities that will be undertaken in 16 classes.

7, 8 and 9	Production of digital stories.
10, 11, 12 and 13	Presentation of the digital
	stories in a virtual exchange
	session.
14, 15 and 16	Completion of the activities.

Source: prepared by the author.

The teacher will also explain that students will be sent a code, through which they will access the classroom on the Duolingo for Schools platform. This platform will be important because, by using automatically generated report data regarding each student's individual performance, the teacher can monitor the number of times the students accessed Duolingo, which activities they carried out, their performance in each lesson, and so forth.

Since this is the first week, the teacher can address specific aspects of the country, city and institution of the Indian students with whom they will interact. As an example, it is possible to ask the students from the Brazilian institution, sitting in pairs or groups, to search the Internet, magazines or books on linguistic and cultural references of India, for instance, languages, climate, capital, characteristics of the English spoken in that country, population and system of government. Afterwards, the teacher can invite them to share what they have learned and, in addition, s/he can address the institution of the Indian students by showing images and videos.

At the end of the third class, the teacher will inform their students that, as an extracurricular activity, they will study the following grammatical topics on Duolingo: **simple present** and **present perfect**. It is important that the teacher indicates to them the section/lesson of Duolingo that covers the grammatical topics in question. The teacher should also make clear that the study of the **simple present** and **present perfect** will be relevant to the application of the activity involving a song in the next class, in the sense that the grammatical topics mentioned can help them in the process of understanding the lyrics of the song.

4.3.2 Study of the simple present and the present perfect – classes 4, 5 and 6

Initially, the teacher asks their students to get together in groups of up to four members, encouraging them to share comments based on their experience with the activities carried out on Duolingo, more specifically, about the **simple present** and the **present perfect**. Then, s/he asks if students would like to raise any questions regarding the forms and use of the verb tenses in question, in addition to asking them about the meaning of the words that made up the Duolingo sentences.

As a way of deepening the understanding of the **simple present** and the **present perfect** and complementing the exercises previously done on Duolingo, the teacher can highlight specific characteristics regarding the form and use of these verb tenses, as well as the semantic difference between one verb tense and another. Then, it is suggested that the teacher apply exercises, for example, from a book or printed sheet, to better assimilate the content.

After completing the exercises, the teacher explains to their students that they will listen to a song by the Australian band Midnight Oil, which is recognized worldwide for its environmental activism through lyrics that engage with political and social issues. In the song in this work, entitled "Beds are burning^{"35}, there is the occurrence of the grammatical content under study, namely, **simple present** and **present perfect**.

The teacher can now elucidate some information related to the group and the song. In short, "Beds are burning", released in 1987, discusses the situation of the Pintupi aboriginal group, originally from the Australian desert. The indigenous group was forced to leave their lands to make way for agricultural enterprises. The Pintupi people were subjected to processes of displacement and territorial resettlement throughout the first half of the 20th century, which also led to the loss of cultural and identity symbols. In a nutshell, "Beds are burning" falls within the sphere of

³⁵ Link to access the song lyrics: <u>https://www.letras.com/midnight-oil/26084/#google_vignette</u>

indigenous peoples' rights and environmental injustices, questioning, in line with Silva's (in press) study mentioned above, society's indifference to environmental destruction and the oppression of these people.

Soon after, the teacher shows the video clip³⁶ ³⁷ of the song, explores some images from it, words and the grammatical content of the **simple present** and **present perfect**, making intersections with the activities previously carried out on Duolingo and in the classroom. Furthermore, as a way of encouraging dialogue regarding the content of the song, the teacher can ask the students the following question: **what is the intention of the group Midnight Oil in the song "Beds are burning" when the question "How can we dance while our earth is turning; how do we sleep while our beds are burning?" is asked. The opportunity to deepen the reflection on the lyrics will be provided, as we will see, in classes 7, 8 and 9.**

As an extracurricular activity, with the aim of expanding students' vocabulary, the teacher can suggest practicing lessons on Duolingo that deal with vocabulary related to the environment or associated with the topic of the song.

4.3.3 Creating digital stories – classes 7, 8 and 9

It is worth emphasizing that the activities in classes 7, 8 and 9 were developed based on the steps concerning the process of creating digital stories according to Lambert (2006, 2007), as seen in the section that presented the theoretical framework of my study. Furthermore, the teacher makes it clear that the script for producing such stories, which will be described below, is articulated with the activities carried out in classes 4, 5 and 6.

Basically, the teacher from the Brazilian institution explains that, in these classes, their students will work in pairs, with each pair producing a digital story about

³⁶ Link to access the official music video: <u>https://www.youtube.com/watch?v=ejorQVy3m8E</u>

³⁷ It is worth noting that it is extremely important that students from the Indian institution also watch the video clip, and before the start of class 10.

the topic of the song "**Beds are Burning**", in addition to using, when necessary, the verb tenses worked on in Duolingo and in the classroom. S/he can inform in advance that the digital stories will later be presented to the students from the Indian institution in a virtual exchange session.

Afterwards, the teacher will direct students to the website **Educational uses of digital storytelling**³⁸. The website in question, in addition to containing numerous examples of digital stories already created, includes suggestions of resources that students can use in the process of producing their stories, such as software, materials and explanatory videos. Taking advantage of the opportunity, the teacher can present two videos available on YouTube – **What is digital storytelling**?³⁹ and **Create a digital story**⁴⁰ – which deal, in an objective and concise manner, with definitions of digital stories and how to create them.

The teacher suggests that students do the following for the script writing purposes: (1) briefly introduce themselves⁴¹ (of each member of the pair), for instance, name, where they live, profession, where they study, hobbies, etc.; (2) prepare a general introduction to the topic of the song "Beds are burning"; (3) present a specific social problem related to this topic; (4) search for sources, quotes, explanations, data, statistics, among other possibilities consistent with the theme in question; (5) prepare an intervention proposal to solve or mitigate the mentioned social problem. It should be noted that the students must address features involving the local, regional and global scope surrounding the problem explored in the script.

Once the script writing process is complete, storyboards will be created to help the students visualize the "blueprint" in advance, namely the construction planning regarding their videos. In view of this, they will see this step as an "a priori/anticipated

⁴¹ The importance of personal presentation in the videos is explained by the fact that the students from the Brazilian institution and those from the Indian institution do not know each other beforehand.

³⁸ Link to access the website: <u>https://digitalstorytelling.coe.uh.edu/index.cfm</u>

³⁹ Link to access the website: <u>https://www.youtube.com/watch?v=Jlix-yVzheM&feature=youtu.be</u>

⁴⁰ Link to access the website: <u>https://www.youtube.com/watch?v=LVKeO5IIR_A&t=9s</u>

visualization" of the result of the digital story, that is, the digitized video, ready. To do this, they can draw the storyboards with a pencil (an interesting and more traditional method), or look for websites/applications, i.e, *makeStoryboard*⁴².

Soon after, the students will digitize the stories, in which they will include various digital resources, such as photos, background music, images, soundtrack, among others. In other words, they will narrate (with their own voice) the story, i.e. they will literally read and record the text of the script as the video progresses, and to this they will add, as already mentioned, different digital resources.

4.3.4 Presentation of the digital stories in a virtual exchange session – classes 10, 11, 12 and 13

Each pair from the Brazilian institution will have the opportunity to present their digital story, via Zoo, Skype, or Google Meet, to the students from the Indian institution. After the presentation of all the digital stories, there will be a proposal for dialogue, conducted, naturally, in English, between the students from the Brazilian institution and those from the Indian institution.

By way of illustration, the students from the Indian institution, guided by their class teacher, could ask the students from the Brazilian institution the following questions: 1) did you like the song "Beds are burning" and participating in the production of digital stories?; (2) in your opinion, did the process of creating the videos help you develop writing skills in English, as well as learn grammatical content?; (3) to what extent do you consider that this activity contributed to your familiarization with the topic of the song "Beds are burning", that is, the situation of the Pintupi people?; (4) what did you learn from the topic?

The students from the Brazilian institution, in turn, can promote a dialogue raised by the following questions directed to the students from the Indian institution: (1) as the situation described in the song "Beds are Burning" took place in the first

⁴² Link to access this storyboard creator: <u>https://makestoryboard.com/</u>

half of the 20th century, do you think that this topic is still relevant today? Why?; (2) what possible implications and social challenges arise from invasions of indigenous lands not only in Australia, but also in Brazil and other countries around the world?; (3) what environmental problems may emerge from the invasion of indigenous lands? Explain; (4) what are your future expectations regarding this issue?

4.3.5 Completion of the activities – classes 14, 15 and 16

To conclude the activities, the students from the Brazilian institution will write, in class, a text containing their opinions and impressions concerning their participation in the aforementioned activities.

The text can be constructed based on the following questions: (1) overall, did you enjoy participating in the activities? Why?; (2) how was your experience with Duolingo linked to the classroom activities proposed by the teacher? And in relation to the Duolingo for Schools platform?; (3) do you think the activities helped you to become familiar with the simple present and present perfect verb tenses and to expand your vocabulary related to environmental issues?; (4) what is your opinion about the opportunity to have interacted with students from India?; (5) how would you describe the students from the Indian institution?; (6) What do you have to say about the way Indian students express themselves in English?; (7) what cultural and linguistic aspects (of English) did you notice when communicating with students from India?; (8) what did you learn from the topic related to the Pintupi people?; (9) in your opinion, what is the relationship between the invasion of indigenous lands and environmental degradation? What are the consequences resulting from this problem?

After the teacher has read the text written by their students from the Brazilian institution, and based on the information in the report automatically generated for the teacher regarding the individual performance of the students on the Duolingo for Schools platform, s/he can prepare information material to mention in class the most salient linguistic and cultural characteristics resulting from this reading. Additionally, the teacher can discuss specific characteristics of the English spoken in India, such as pronunciation and syntactic organization, and propose a comparison exercise concerning different dialects and registers in English from India and other countries, for example, Singapore, England and the Philippines.

Finally, the teacher can suggest that their students study other grammatical content on Duolingo outside of class, including past and future tenses of verbs, comparison of adjectives, vocabulary about nature in general, culture and other countries. However, it is important that this work is constantly mediated by the teacher in the classroom (Melo, 2021).

5 Final remarks

According to Copiano and Batista (2021), technical education institutions are designed to foster the generation of technology, knowledge, and culture. In this endeavor, when educating students, it is necessary to consider the challenges arising from the globalized, international, and increasingly competitive job market (Copiano; Batista, 2021). In this regard, Hanna (2024) suggests that teachers set aside time in class for discussion on local, regional, and global issues, implement activities aimed at developing students' critical thinking, encourage the development of proposed solutions to problems that affect humanity, and, finally, highlight the importance of respecting cultural diversity.

In tune with the considerations provided by Copiano and Batista (2021) and Hanna (2024), this study aimed to present a proposal of activities, comprising a total of sixteen classes and integrating the use of Duolingo, as a strategy for learning English and developing Global Citizenship in the context of Professional and Technological Education. In summary, the teacher explains that students from the Brazilian institution will participate in activities that will familiarize them, through the Duolingo app, with grammatical content – **simple present** and **present perfect** – and with a particular social topic, namely, the situation of the Pintupi aboriginal group. Then, the students will produce digital stories about the topic in question, which will later be presented, in a virtual exchange session, to the students from an Indian institution. They will also can correctly use, in these stories, the verb tenses and vocabulary practiced both on Duolingo and in the classroom. Finally, the students from the Brazilian institution will write a text, through which they will reflect on their experience in the activities that were carried out.

Belli and Luna (2024) and Hanna (2024) recommend that educational institutions should not only prepare students for the acquisition of academic knowledge but also foster encounters between students from different cultures. In view of this, in the context of teaching and learning English in Professional and Technological Education, proposals that involve not only Duolingo, but also virtual exchange and the creation of digital stories, such as the activities proposed in this article, can promote, in addition to learning the language itself, internationalization processes through the discussion of issues related to contemporary societies, namely ethnic-racial differences, gender and sexuality, inclusion, discrimination and prejudice. Such discussion, consequently, has the potential to foster education for Global Citizenship.

In short, as stated by Guimarães and Silva (2022), languages play a central role in the internationalization context, considering that social relations occur through language practices. As such, the authors go on to say that the lack of in-depth linguistic knowledge and proficiency in foreign languages is one of the obstacles to the development of internationalization processes. Seen in this light, it can be said that suggestions for upcoming activity proposals including Duolingo - but also other language learning apps - can facilitate, in addition to linguistic-cultural knowledge, critical thinking in Brazilian schools - and in other countries where English is spoken as an official language or second language - which can consequently foster education for Global Citizenship.

Text translated by the author.

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