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Ted around the world in sounds: a digital platform for bilingual literacy development

Marion Costa **CRUZ***
Ubiratã Kickhöfel **ALVES****
Débora Nichele **ROSA*****

* M.A. in Languages Studies (PUCRS). Bilingual Curriculum Coordinator - Colégio Israelita Brasileiro marioncruzlivros@gmail.com
** Ph.D. in Languages Studies (PUCRS). Professor, Graduate Program in Language Studies – Federal University of Rio Grande do Sul (UFRGS) - ukalves@gmail.com
*** B.A. in Cyber Defense (FIAP) - Front-end Developer - Villela Brasil Bank - debora.nicheler@gmail.com

Abstract:

This article introduces a digital platform designed by the authors to support the development of English phonological awareness skills among Brazilian students in bilingual education contexts. *Ted Around the World in* Sounds incorporates gamified elements such as storytelling, repetition, graded task complexity, and playful engagement to enhance student motivation. The platform features ten phonological awareness tasks—six at the syllabic level and four at the segmental level—embedded within an interactive narrative led by the character Ted. Ted travels across English-speaking countries to discover new sounds and explore wordplay. This tool is particularly relevant for the Brazilian bilingual educational context as it offers tailored phonological tasks that address the specific linguistic repertoire of Brazilian learners, which differs from that of monolingual students. Additionally, the platform contributes to ongoing research in bilingual literacy development.

Keywords
bilingual literacy; phonological awareness; digital plataform.

Resumo:

Este artigo apresenta uma plataforma digital, desenvolvida pelos autores, como uma ferramenta voltada ao desenvolvimento das habilidades de consciência fonológica do inglês por estudantes brasileiros em um contexto educacional bilíngue. *Ted around the world in sounds* utiliza elementos de gamificação, como narração de histórias, repetição, níveis variados de complexidade e diversão para engajar os aprendizes. A plataforma apresenta 10 tarefas de consciência fonológica: seis no nível da sílaba e quatro no nível segmental. A plataforma digital é centrada no personagem Ted, que viaja por países de língua inglesa para descobrir sons e novas formas de brincar com palavras. Essa plataforma é particularmente relevante no contexto educacional bilíngue no Brasil, pois ajuda os alunos a aprimorar suas habilidades de consciência fonológica por meio de tarefas adaptadas para a realidade de estudantes brasileiros (que possuem um repertório linguístico distinto em comparação com alunos monolíngues), além de contribuir para pesquisas sobre estudos de alfabetização bilíngue.

Palavras-chave:
Alfabetização bilíngue; Consciência fonológica; Plataforma digital.

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Marion Costa Cruz
Ubiratã Kickhöfel Alves
Débora Nichele Rosa

INTRODUCTION

In Brazil, bilingual education has become an increasingly prominent topic in private schools, following the efforts of many institutions to expand the number of instructional hours in an additional language as part of implementing a bilingual curriculum. At the same time, universities have advanced research in bilingualism to better understand and support Brazilian students' learning processes in such contexts. García (2009) defines bilingual education as instruction in which an additional language is used to teach academic content, thus fostering student interaction, enhancing additional language learning, and promoting tolerance through linguistic diversity.

Brentano (2023) adopted the term "Bilingual Schooling" as an umbrella concept to encompass a variety of theoretical and methodological approaches within bilingual education. According to the author, these models may operate through integrated or separate curricula but are always rooted in formal schooling, which enables both academic and linguistic development through the languages of instruction. Models that do not involve an additional language as a medium for subject content are excluded from Brentano's definition of Bilingual Schooling.

Teaching English from this perspective requires attention to both the structural features and foundational skills of the first and additional languages, in order to ensure effective learning, especially during the literacy process. For example, knowledge of the phonological systems of both languages is essential for children to make sound connections with graphemes in each language and understand their differences. This phonological knowledge is essential to literacy (regardless of whether it occurs in one or two languages), as it supports the development of grapho-phonological correspondences - i.e., connections between letters and the sounds they represent. In bilingual literacy, such knowledge is even more critical because it fosters not only metaphonological awareness in both systems but also the ability to recognize the specific features of each sound system (and, consequently, each system's grapho-phonological patterns) (Alves, 2024; Alves; Finger, 2023).

In this article, we present the digital platform *Ted Around the World in Sounds*, designed for Brazilian students in early bilingual education settings. The platform consists of gamified tasks aiming to support the development of various levels of phonological awareness (PA) in English, ranging from the syllabic level to the segmental level.

THEORETICAL FRAMEWORK

[1] Reviewed by: Felipe Guedes Moreira Vieira.

The development of metaphonological skills is crucial for successful reading and writing acquisition. Phonological awareness (PA) falls under a broader domain known as ‘linguistic awareness,’ which Lorandi (2020) defines as the ability to perceive that words are composed of smaller units (syllables and phonemes), morphemes (roots and affixes), and combinations of words that form meaningful sentences. According to Alves (2012), the sound component of a language can become an object of analysis and reflection. Based on this premise, Alves defines phonological awareness as a set of skills that enable individuals to recognize and manipulate the sounds of a spoken language. These skills involve segmenting and manipulating words based on the understanding that they are made up of smaller components, shifting attention from meaning to structure.

Alves and Finger (2023) emphasize that sound reflection and manipulation are shaped by the phonological inventory of a given language, and thus are not random. The possible sound combinations are determined by the linguistic system itself and form part of the grammar of that language. Children may begin developing linguistic awareness even before formal literacy, when they start treating language as an object of reflection and are able to manipulate syllables and sub-syllabic units to varying degrees depending on their developmental stage. In bilingual contexts, Alves (2024) notes that 'reflection' and 'manipulation' take on additional dimensions, as learners must become aware of the differences and specificities between the language systems (L1 and L2) involved.

Phonological awareness skills exist on a continuum of complexity based on the structure of words and the manipulations they allow within each language context. This continuum begins with sensitivity to rhymes (e.g., ‘can<u>eca</u>’, ‘pet<u>eca</u>’, ‘biblio<u>teca</u>’), progresses through syllable awareness (e.g., ‘girafa’ → GI-RA-FA), intrasyllabic awareness (e.g., shared rimes in ‘caf<u>é</u>’, ‘Pel<u>é</u>’, ‘chul<u>é</u>’), and culminates in phonemic awareness, referred to in this paper as 'grapho-phonological awareness' (Alves; Finger, 2023). At this latter stage, learners can identify, manipulate, and recognize distinctions between discrete sound segments. For example, replacing [f] with [v] in the word ‘faca’ creates a new word ‘vaca’ with a different meaning.

Freitas (2004, p. 180) defines syllable-level awareness as “the ability to divide words into syllables, often the first and easiest form of sound segmentation for children.” Suggested tasks at this level include synthesis, segmentation, identification, production, deletion, and transposition. Intrasyllabic awareness involves recognizing rhymes and initial sound patterns such as alliterations (e.g., ‘**pr**ima’, ‘**pr**eço’).

In designing the platform, we applied gamification strategies such as storytelling, visually appealing elements, engagement techniques, and feedback (Herger, 2014; Kapp, 2012, 2014; Werbach; Hunter, 2012) to motivate users and encourage deeper involvement. Simões, Redondo and Vilas (2012) highlight other important game-based features in digital learning environments. Of their ten listed elements, we focused on repetition, varying levels of difficulty, achievement recognition, character-driven narrative and enjoyment. These were integrated to frame the digital platform as a game, following Kapp and Coné’s (2012) concept of games as systems where individuals engage through abstract challenges, clear rules, interactivity and feedback.

THE PLATFORM

The development of the platform began with the definition of the target user profile: first-grade elementary students (aged six to seven). Syllable-level tasks can also be used with children as young as five, while segmental-level phonological awareness tasks are recommended for children aged six and above, typically those beginning literacy. The platform may also be beneficial to learners up to ten years old who require additional support in understanding English

phonemes and developing PA skills. It is particularly suitable for students enrolled in bilingual programs who have had limited prior contact with English, offering a strong foundation in essential English PA skills.

Ted, the central character, guides users through the platform by using images, audio, and text. Ted is a parrot born in Porto Alegre on July 17, 2008, who loves to play with the sounds of words. In the game, Ted decides to travel the world in search of new sounds in English-speaking countries. In each country, he completes a PA task with the participant and shares cultural facts about that specific destination. The journey begins in Porto Alegre and ends in Brasília, the capital of Brazil. Along the way, Ted visits nine countries. Upon completing each task, users are prompted to feed Ted so he can continue his journey and learn more cultural facts. The countries visited include Brazil, Australia, New Zealand, England, Scotland, Ireland, Jamaica, Canada, and the United States.

Each task features narrative texts, instructions, and cultural information, all supported by their corresponding audio. When the participant clicks on Ted's figure, the text is read aloud. This functionality supports young learners who are not yet fully literate. At the end of each task, users receive a stamp in Ted's passport. The tenth task adds the final stamp, indicating the completion of the journey. Each country is associated with a specific PA task required to progress through the platform. In the United States, Ted visits two cities—New York and Washington D.C.—each with a distinct task.

The tasks are divided into two stages of increasing complexity based on the degree of sound manipulation required. The first stage consists of six syllabic and intrasyllabic tasks, followed by four segmental tasks. Table 1 below summarizes the structure of tasks and the associated country or city in each one.

Table 1 – Task structure and associated locations

	TYPE OF TASK	**COUNTRY-CITY**
-	-	Porto Alegre - Brazil
Task 1	Syllable Syntesis	Sydney - Australia
Task 2	Syllable Segmentation	Wellington – New Zeland
Task 3	Initial Syllable Identification	London - England
Task 4	Rhyme Identification	Edinburgh - Scotland
Task 5	Initial Syllable Deletion	Dublin – Ireland
Task 6	Final Syllable Deletion	Kingston - Jamaica
Task 7	Initial Segment Identification	Toronto – Canada
Task 8	Final Segment Identification	New York – United States
Task 9	Initial Segment Deletion	Washington D.C. - United States
Task 10	Final Segment Deletion	Brasília - Brasil

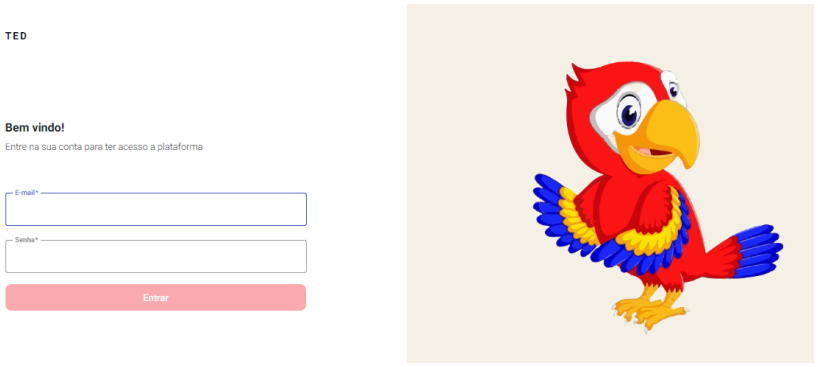
Source: by the authors (2024)

According to Table 1, the platform follows a fixed travel route undertaken by the main character. The journey begins in Porto Alegre, Ted's hometown, with the first international destination being Australia, followed by New Zealand, both located in Oceania. Next, Ted travels across Europe, visiting England, Scotland, and Ireland. His itinerary then takes him to the Americas, where he explores Jamaica, Canada, and the United States. Finally, he arrives in Brasília, the capital of Brazil, to complete the final task in the plataform and learn local cultural curiosities.

Regarding the audio and visual components, all resources were obtained from free repositories and generators. The voice files used throughout the platform were produced via the websites https://voicemaker.in/ and https://voicegenerator.io/. Image files, including those used for the character Ted, were selected from open-access platforms such as https://www.freeimages.com/pt and https://br.freepik.com/imagens.

The platform is accessible via a dedicated link and requires prior registration with an email and password to unlock all features. The initial screen displays Ted's image and name, along with the message "Welcome! Log in to access the platform," two input fields for email and password, and an "Enter" button to begin the tasks. Figure 1 illustrates this login interface.

Figure 1 – Opening screen

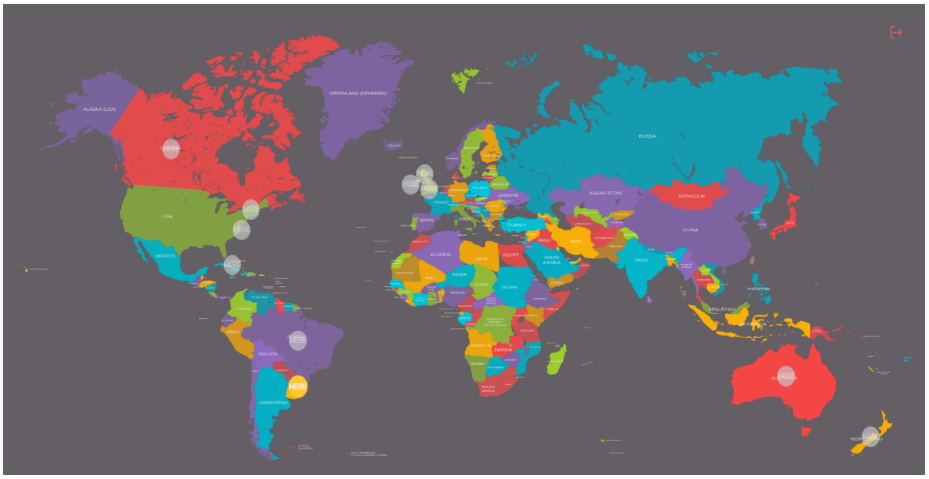


Source: *Ted Around the World in Sounds* (2024)

On the opening screen—accessed using the email and password provided by the platform developers—children are invited to begin the game through two interactive buttons featuring the character Ted. The green button displays the word *Yes*, and the red button displays *No*. By clicking *Yes*, the child initiates the game. The next screen introduces the character with the following text: *Ted lives in Porto Alegre, Brazil. He loves flying around the world. He also likes making new friends, eating typical food and speaking different languages. Discovering new sounds and words is his favorite hobby. He wants to visit more places. Let's help him!*. Children may click on Ted to hear the text read aloud or on the play icon to advance through the platform.

Following the character introduction, a colorful map appears displaying all the countries and destinations Ted will visit. Most of the destination circles are greyed out and inactive at this point. Only the circle marking the state of Rio Grande do Sul is highlighted in yellow and gently pulsating, indicating that it is clickable. Figure 2 shows this map screen and the countries Ted will explore throughout his journey.

Figure 2 – Screen showing a map - Porto Alegre/Brazil



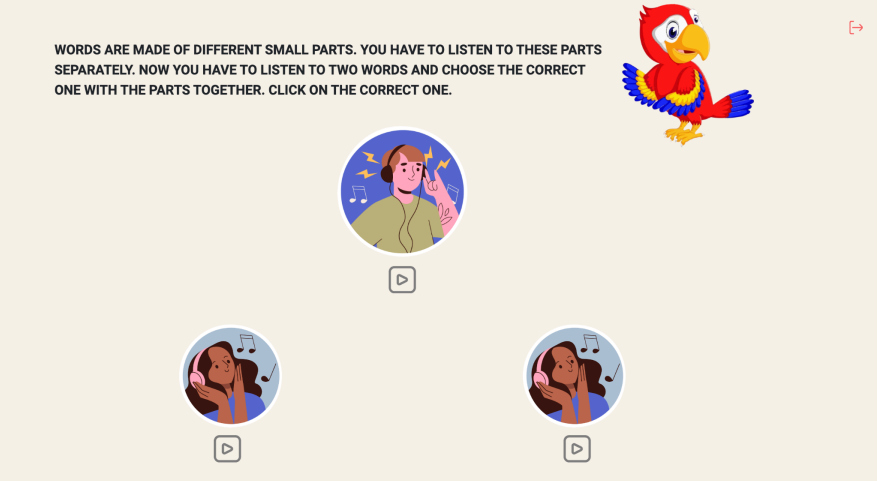
Source: *Ted Around the World in Sounds* (2024)

When the child clicks the yellow circle, a smaller window opens with a short text introducing Ted's background and inviting the player to learn some interesting facts about Porto Alegre. On this screen, the child can also click on Ted to hear the text read aloud or on the play icon to proceed through the platform. In the "Porto Alegre curiosities" screen, interactive image-text boxes appear and slowly grow and shrink, drawing attention to them. When clicked, each box plays an audio recording with information about the city where Ted was born. After listening to the content, a play button appears at the bottom of the screen, animated in the same way, allowing the child to move forward in the game.

After exploring the facts about Ted's hometown, the child sees the character's passport with a stamp from Brazil. This stamp becomes clickable, leading Ted to his next destination: Sydney, Australia. As the child completes each of the ten tasks, a different passport stamp is earned, one for each country visited.

Each task begins with an explanation of the activity followed by two training exercises, which help the child become familiar with the task structure and expectations. The initial instructions can be read aloud if the child clicks on Ted. To complete a task, the child typically clicks the play button to hear a target word and then listens to two or three possible response options. To select an answer, the child clicks on the image above the play icon that corresponds to the correct sound, based on the specific phonological awareness skill targeted. Figure 3 presents the instructions for Task 1, along with the visual elements and play icons.

Figure 3 – Instruction/training screen - Task 1



Source: *Ted Around the World in Sounds* (2024)

When a child selects an incorrect answer during the training or main activity, the platform displays a feedback screen featuring the phrase *Try again*, both in text and voice, alongside the character Ted. A red button with two left-pointing arrows allows the child to retry the task. Upon selecting the correct answer, the game proceeds normally. Once the training phase is completed, a new screen appears with the phrase *Great*, signaling that the task is about to begin. A green button with two right-pointing arrows indicates that the child should click to move forward in the game.

After the training phase, each task consists of ten interactive activities. In these activities, the child hears a target word and must manipulate syllables or phonemes accordingly. The task concludes when the child completes the final activity correctly. At that point, a screen appears with the message and audio cue *Well done*. On the same screen, a button labeled *Feed Ted* becomes available. The child must click this button to feed the character and give him energy to continue his journey. Only after this step does the green right-arrow button become active, allowing the child to move on to the next task. This sequence is intentionally structured to ensure that the child feeds Ted before progressing. Clicking the *Feed Ted* button also triggers the automatic generation of a performance report, including the child's identification data, date and time of task initiation and completion, and the number of attempts made. This report is saved so as teachers can review this information later.

The game is concluded when the child completes the final activity of Task 10 and receives cultural information about Brasília. After reading or listening to four fun facts about the capital of Brazil, the child may click the green right-arrow button once more. The final screen of the platform appears with the message: *Congratulations! You have just finished your trip around the world in sounds.* Ted's passport is displayed on the left side of the screen with all the stamps collected from visited countries. A red rectangular button labeled *Travel again* is also available, allowing the child to restart the game.

The platform was developed with the support of the third author, who was responsible for building the digital environment and monitoring results, enabling adjustments during the initial implementation phase. It is compatible with computers, including Chromebooks, and can be accessed using common web browsers such as Internet Explorer, Google Chrome, Safari, and others.

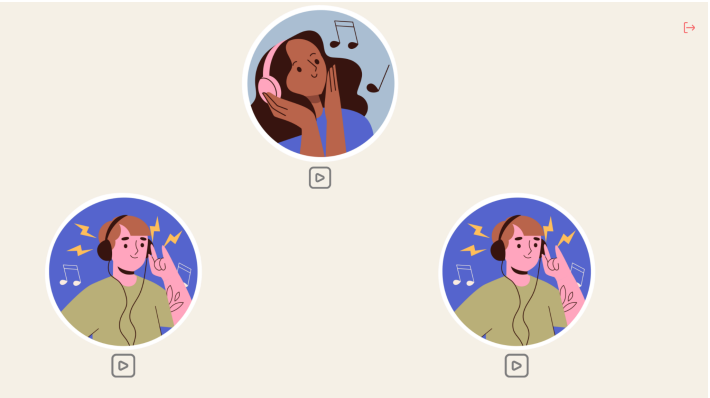
PHONOLOGICAL AWARENESS TASKS

Following the definition of the platform storyline, the selection of English-speaking countries, and the navigation interface, we began the process of selecting target words, collecting images, and producing audio files. The design of each task was based on a growing complexity of PA skills (Alves, 2012; Blanco-Dutra, 2012; Freitas, 2004;), progressing from syllabic to segmental levels. Previous phonological awareness tests (Alves, 2024; Aquino, 2010; Aquino; Zimmer, 2005; Kivistö-de Souza, 2015) contributed to the development of the tasks and their growing complexity, as described in Table 1.

The word selection criteria included: (i) alignment with the PA skill targeted; (ii) relevance to early childhood contexts; (iii) preference for concrete nouns; and (iv) inclusion in the high-frequency vocabulary lists of the Cambridge Young Learners tests (STARTERS, MOVERS and FLYERS). Audio files featured both male and female voices of American English pronunciation.

As noted earlier, the platform is divided into two distinct levels of PA complexity. The first level addresses syllabic and intrasyllabic tasks and consists of six activities requiring manipulation and reflection on syllables and subsyllabic elements. For instance, **Task 1 – Syllable Synthesis** – asks children to listen to a word presented in syllabic chunks and then select the correct complete word. Instructions are provided in English and available in audio form when users click on Ted. An example screen from **Task 1** is shown below:

Figure 4 – Task 1 screen



Source: *Ted Around the World in Sounds* (2024)

The activities in **Task 1** are designed with visual indicators that specify whether the audio is spoken by a female or male voice. Play icons located below each image signal that the child should click to listen to the syllables and the response options. To register a response, the child must click on the image positioned above the correct audio. If the selection is correct, the activity progresses normally; if the child clicks on an incorrect image, a feedback screen is displayed indicating the error, and the platform returns to the activity for another attempt.

Table 2 presents the list of words used in both the training phase and the main activities for **Task 1**.

Table 2 – Word list – Task 1

	Training	**Activities**

Syllable synthesis	[ˈtʰaɪ.gɚ][2] = tiger [ˈpʰen.səl] = pencil	[ˈtʰiː.ʧɚ] = teacher / [ˈpʰɪk.nɪk] = picnic [ˈpæn.də] = panda / [ˈnoʊt.bʊk] = notebook [ˈfɪŋ.gɚ] = finger / [ˈhænd.bæg] = handbag [ˈgɑːr.dən] = garden / [ˈbed.rʊm] = bedroom [ˈsɪs.tɚ] = sister / [ˈɑːrm.ʧer/] = armchair

Source: by authors (2024)

As shown in Table 2, during the training phase of **Task 1**, the child hears the two syllables of the word [ˈtʰaɪ.gɚ], and the response options are [ˈtʰaɪgɚ] and [gɚˈtʰaɪ], with the correct choice being the first—*tiger*. All words used in this task follow a similar disyllabic structure and were selected based on the previously established criteria: alignment with the target PA skill, inclusion in children's school routines, and presence in English vocabulary lists.

Task 2 – Syllable Segmentation also focuses on the syllabic level and requires children to reflect on the number of syllables in a target word. After hearing the word, the child must click on one of the numbers that appear below: one – two – three. These options appear in a random order for each new activity. For example, the child hears *sunset* [ˈsʌn.set] and must click on "two" to respond correctly.

Continuing with syllabic-level PA skills, **Task 3 – Initial Syllable Identification** involves recognizing and reflecting on the initial syllable of the target word. On each screen—whether during training or the main task—the child sees the image of the target word with a play icon underneath. After hearing the word, the child listens to three audio response options, while the images remain semi-transparent to prevent premature clicking. Once all three options have been played, the images become visible, allowing the child to select a response. For instance, when the word *airport* [ˈer.pɔːrt] is heard, the corresponding options are *chocolate* [ˈʧɑːk.lət], *notebook* [ˈnoʊt.bʊk], and *airplane* [ˈer.pleɪn], with their respective images. In this case, *airplane* is the correct choice.

Task 4 – Rhyme Identification builds upon the skills in **Task 3**, requiring the child to reflect on syllabic and intrasyllabic elements. However, this time the focus is on the end of the word. The goal is to recognize and match the target word with another that shares the same ending. The task includes full rhymes based on the stressed syllable of paroxytone words (e.g., *flower* and *power*), as well as intrasyllabic rhymes found in monosyllabic words (e.g., *ten* and *pen*).

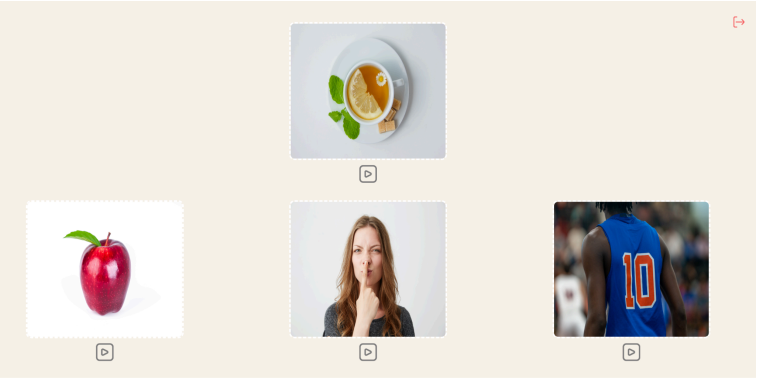
Tasks 5 and 6—Initial Syllable Deletion and Final Syllable Deletion—continue at the syllabic level but increase in complexity. These tasks require the child to identify the correct response after removing either the first or last syllable of a given word. Both involve analyzing syllable structure, applying sound suppression, and making a decision based on the resulting word. These actions demand not only reflection but also manipulation of the sounds. For example, in **Task 5**, the child hears *downstairs* [ˌdaʊnˈsterz] and must identify the correct response among *stairs* [sterz], *down* [daʊn], and *floor* [flɔːr], with *stairs* being the correct answer. In **Task 6**, the child hears *sunshine* [ˈsʌn.ʃaɪn] and must choose between *shine* [ʃaɪn], *sun* [sʌn], and *day* [deɪ]; the correct answer here is *sun*.

The segmental-level PA tasks begin immediately after **Task 6** to ensure the continuity of the game, though they present a higher degree of difficulty and cognitive demand. At this level, the child must manipulate and reflect on individual sound segments. For example, in **Task 7 – Initial Segment Identification**, the child must recognize the initial sound in a target word and identify which of the available options begins with the same sound. This task requires careful attention, as segment boundaries often blur within the flow of speech. Recognizing the first sound of a word

[2] The phonetic transcription in the tables was collected from the website https://dictionary.cambridge.org/dictionary/. We added the symbol ^{h} to indicate when the plosive segments /p t k/ are produced with aspiration.

requires an understanding that syllables are made up of multiple distinct phonemes—and only by analyzing those components can the child determine which one comes first. Figure 5 illustrates the visual and auditory structure of this task.

Figure 5 – Task 7 screen



Source: *Ted Around the World in Sounds* (2024)

In Figure 5, four images are displayed to compose the activity, along with corresponding play icons. The image at the top represents the target word *tea*, and the play icon beneath it plays the audio of the word. The response options—*apple*, *nose*, and *ten*—are illustrated with images, each accompanied by a separate play button below.

As in previous tasks, **Task 7** also features a mechanism that prevents children from clicking on the images until all three audio files have been played. This ensures that learners engage with the auditory stimuli before selecting their response. The use of images in this task is intended to support comprehension of the vocabulary required. The list of selected words for this task is presented in Table 3.

Table 3 – Word list -Task 7

	Training	**Activities**
Task 7 Initial Segment Identification	**sun [sʌn]** bike - tree - sea [baɪk] - [triː] - [siː] **book [bʊk]** flower - bee - cloud	**nose [noʊz]** spoon - night - life [spuːn] - [naɪt] -[laɪf] **life [laɪf]** note - letter - rose [noʊt] - [ˈleɾ.ɚ] - [roʊz] **mail [meɪl]** bike - may - pay [baɪk] - [meɪ] - [pʰeɪ] **way [weɪ]** water - roof - bear [ˈwɑː.ɾɚ] - [ruːf] - [ber] **tea [tiː]** apple - nose - ten [ˈæp.ᵊl] - [noʊz] - [tʰen]

	[ˈflaʊ.ɚ] - [biː] - [klaʊd]	**parrot [ˈper.ət]** dog - pig - horse [dɑːg] - [pʰɪg] - [hɔːrs] **cake [keɪk]** ball - date - cat [bɑːl] - [deɪt] - [kʰæt] **teacher [ˈtiː.tʃɚ]** car - pen - two [kʰɑːr] - [pʰen] - [tʰuː] **five [faɪv]** lake - city - fork [leɪk] - [ˈsɪt̬.i] - [fɔːrk] **goat [goʊt]** garden - duck - pet [ˈgɑːr.dᵊn] - [dʌk] - [pʰet]

Fonte: Elaborado pelo(a/s) autor(a/es). (2024)

In **Task 7**, the position of the correct answer among the three response options varied, as indicated by the underlined correct word appearing in different positions. This variation also occurred throughout the other tasks on the platform. Male and female voices alternated across activities, and children who answered incorrectly were able to return to the activity and listen to the stimuli as many times as needed. Care was taken to ensure that the vowel following the initial segment differed from that in the target word, so that the child's focus would remain on identifying only the initial sound.

Task 8 – Final Segment Identification requires the child to recognize and identify the final segment of a given word. The structure of this task mirrors that of the previous one, with the focus shifting from the beginning to the end of the word. For example, the child hears the word *clock* [klɑːk] and sees an accompanying image to support comprehension. The response options are *leg* [leg], *arm* [ɑːrm], and *duck* [dʌk], each presented with a corresponding image. The correct answer in this case is the third option, *duck*.

Tasks 9 and 10—Initial Segment Deletion and Final Segment Deletion—present greater complexity due to the high demand for both phonemic manipulation and reflective thinking about smaller linguistic units. These tasks use monosyllabic words during training and activities. In both, the word set was selected so that when the initial or final segment is removed, the resulting item is still a known and meaningful word. For instance, in **Task 9**, if the child removes /l/ from *leg* [leg], the correct answer is *egg* [eg]; similarly, removing /b/ from *bus* [bʌs] produces *us* [ʌs].

We considered the semantic relationship between distractors and target words to assess whether a child might choose an option based on meaning rather than phonemic structure. For example, *head* appears as a distractor in the activity based on *leg*, and *car* is used in the activity based on *bus*. These alternatives help researchers evaluate whether a child lacks the specific phonological awareness skill or is relying on semantic association instead.

Task 10 requires deletion of the final segment. The skills involved are the same as in **Task 9** but applied to the word-final position. The organization of screen elements follows the same pattern. For example, in one training item, the child is asked to remove the final segment /k/ from *make* [meɪk]; the correct answer is *may* [meɪ], while *hand* [hænd] is a distractor. In another example, the target word is *goat* [goʊt], from which the final /t/ must be removed to yield *go* [goʊ]; the distractor *farm* [fɑːrm] is semantically related to the target, but phonologically incorrect.

After completing **Task 10**, as previously described, the child sees a summary screen with Ted's passport and an icon in the lower-right corner that allows the game to be restarted. Performance reports for each activity and each child are stored in a Google Drive folder for teacher access.

Ted Around the World in Sounds is currently available in a finalized version at https://ted-game-project.web.app, although minor adjustments may be made based on feedback from students, teachers, and researchers involved in the project. In 2024, we conducted pilot studies demonstrating the platform's feasibility for use with Brazilian students in the early stages of literacy development. These studies are currently being prepared for publication. Participants responded enthusiastically to the character Ted and the task dynamics. Children completed the activities with excitement, engaging deeply in the exploration of English sounds and the various locations featured in the game. They showed particular enthusiasm for feeding Ted after visiting each country and receiving a new passport stamp. Once final refinements are completed, the platform will be made publicly available.

CONCLUSION

The growing use of digital tools in educational settings allows for detailed monitoring of student learning and personalized support tailored to each child's needs. In bilingual education contexts, teachers require specific digital resources to understand language acquisition processes and strengthen essential linguistic skills. *Ted Around the World in Sounds* is a gamified educational tool for bilingual classrooms that supports the development of phonological awareness (PA) in English. These skills are essential to literacy in both monolingual and bilingual settings, directly influencing reading and writing outcomes in later school years (Alves; Finger, 2023; Alves; Finger; Brentano, 2025).

In short, this digital platform enables teachers to target PA skills at the syllabic, intrasyllabic, and segmental levels, following a progression of increasing complexity. The vocabulary is child-centered, and gamification elements make the experience playful and engaging. Teachers can monitor children's performance by tracking time spent and number of attempts per task, allowing them to intervene precisely where support is needed.

Effective literacy development requires attention to PA from the earliest years of schooling (Alves; Finger, 2023). This demands investment in teacher training and the creation of resources designed to teach these skills. *Ted Around the World in Sounds* aligns with emerging efforts to innovate bilingual schooling (Brentano, 2023). We hope the platform serves as a meaningful tool for teachers and learners in exploring early sounds and letters in both languages and contributes to future research on PA development in public and private education systems.

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