



Article

A Hybrid Methodology to Improve Speaking Skills in English Language Learning Using Mobile Applications

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Abstract: The main objective of this research is a working example of how a hybrid methodology combining traditional methodologies and mobile devices can be used to contribute to the literature on mobile learning in teaching English as a second language. This work was carried out because, in many Latin American countries, students are taught English as a second language throughout their primary and secondary education. However, at the end of their studies, most students are unable to communicate with other people in English, let alone with native speakers. Moreover, it must be taken into account that nowadays English is the most widely used language in international communications, business transactions, finance and science. The professional who knows how to communicate in English has a positive differentiator in his or her professional profile and can easily access more relevant positions in any institution. For this purpose, a review of different methodologies for teaching oral expression in English has been carried out. Metrics have also been used to choose an effective mobile application to reinforce English speaking. These analyzed methodologies have been combined with the use of a mobile application to propose a hybrid methodology that contemplates an eight-week class guide. Due to the characteristics of mobile learning, this work can help to motivate students in their learning and in improving their communicative skills in the English language. High school teachers can use this methodology as an innovation in their educational programs.

Keywords: active learning; English speaking; innovative learning; mobile learning



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1. Introduction

In many countries in Latin America, students are taught English as a second language (L2) throughout their primary, secondary, and higher education. However, at the end of their studies, the vast majority of students are unable to communicate with others in English, even less with native English speakers [1].

English is a universal language; it is the most learned language worldwide as an L2 [2]. Learning this language allows people to have access to more complete education and greater interaction with a huge amount of academic information [3]. In addition, it is fundamental to access new cultures, travel around the world and achieve personal and work goals [2]. It is for this reason that, nowadays, being able to communicate correctly in this language has become a necessary skill. Currently, there are multiple ways to learn English (courses, educational platforms, MOOCs, web apps, and mobile apps). However, the characteristics of mobile learning, the high penetration of mobile devices, and their use among students have allowed this tool to become one of the most used as a support for L2 teaching [4].

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The new generations of students live immersed in technology and grew up with access to mobile devices, the Internet, and social networks [5]. For them, the use of mobile devices is not only a tool to watch videos, play games, and have social contact with others, but it is also used as support in academic subjects [1]. Due to the lockdown caused by the pandemic in 2020, the need for a digital transformation in all aspects of society arose. In the educational field, many educational institutions opted for the use of emerging technologies for teaching practice [6]. That is why mobile learning, as an emerging technology, has become an important tool in the teaching–learning process. Currently, to improve motivation and interactivity in their classes, educators have used free applications offered by mobile technology. In the case of teaching English as an L2, there are innumerable applications to reinforce the knowledge that students receive in face-to-face or virtual classes [7].

The COVID-19 pandemic led the whole world to a new way of life where education had to adapt to the use of information technologies [8]. Teachers and students had to use emerging technologies to engage in this new teaching–learning model, which became the backbone and support of the entire educational system [9]. Education was forced to innovate through technological tools that facilitate the learning and teaching process in virtual classrooms [10]. Teachers were faced with the need to apply this new knowledge, using virtual classrooms, and embark on this new technology journey. Likewise, students had to develop new learning skills and start building critical and autonomous knowledge. It has always been said that education should be built by the students, but today, due to the pandemic, this is a reality [11].

Virtual interaction means that teachers cannot supervise their students in group and individual activities, as they did in face-to-face classes. Each student is responsible for his or her learning, and the teacher can send homework or activity to corroborate if the learning has been effective and acquired [6]. Although virtual classes have made life easier in terms of space, cost of transportation, infrastructure in educational institutions, and time, social interaction will always be essential and important [12].

Today's generation of students grew up fully exposed to digital and portable technology, and their skills and knowledge, in many cases, are even greater than that of their teachers [13]. Teachers face a great challenge. The tools used in class must be creative, innovative, and new, so they need to take advantage of the benefits that technology provides to teach classes. In addition, they must begin to cultivate autonomous students and motivate them to develop meaningful, responsible, and fun learning [8]. This research contributes to the literature on mobile learning and its use in teaching English as an L2. To do this, an example was used that specified a set of tasks designed for an educational setting with secondary school students.

This article presents how to use a hybrid methodology for the improvement of communicative skills in the English language. The introduction of the paper leads the reader to understand the need to learn the English language and the traditional ways of learning it. The rest of the article is organized as follows: Section 2 describes the mobile applications in the classroom and teaching models. Section 3 covers the selection of methodologies and the mobile application used for this research. Section 4 presents the findings of this methodological proposal. Section 5 presents the case study and the limitations of the research. Section 6 discusses the research conducted, Section 7 presents the conclusions, and finally, Section 8 proposes future work.

2. Mobile Learning in English as a Second Language Education

Mobile learning has become a tool used to capture the attention and motivate students. This section aims to define the characteristics that mobile technology brings to an innovative educational model for learning English as a second language. In addition, it is intended to define the teaching models of this language, with the objective of identifying which of them, working in conjunction with a mobile application, can be used to generate a hybrid model of English language teaching.

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To define mobile learning, it is important to consider the concepts of different authors, so that the information obtained will be much more complete and enriching. According to Choo, mobile learning is a learning process that uses and relies on mobile technologies [14]. Sharma defines mobile learning as a process of knowledge acquisition through the interaction of participants from different contexts who are related to each other using digital technology such as cell phones, smartphones, pads, pods, etc. [15]. Other authors consider mobile learning as the study of how the mobility of learners, augmented by personal and public technology, can contribute to the process of acquiring knowledge, skills and experience, etc. [16].

From the perspective of Persson and Nouri, the most important characteristics of mobile learning can be listed as follows [17]:

- **Portability**: The acquisition of knowledge can be moved to any place and time, facilitating the student's learning regardless of where he/she is.
- Availability: Access to all information.
- **Personalization:** The information can be adapted to the user's needs and style.
- Social Connectivity: Collaborative work among the same users of an application.
- Motivation: It motivates students to get involved in their education.

Based on these characteristics, mobile learning transforms traditional education into informal education, where learning is centered on the student, making him or her a constructor of his or her own learning [18].

In the last few years, learning using mobile devices (tablets and smartphones) has been extended to various activities related to education. Today, mobile technology has increased its growth and penetration worldwide. In a report developed by Cisco, it is predicted that cell phones will have an annual growth rate of 2%, which means that by 2023, more than 70% of the world's population will have a mobile device to use [19].

According to Segev, teachers today have opted for the use of mobile applications to motivate students toward self-learning [20]. After choosing mobile applications according to the needs and purposes of the teacher and students, the process of self-learning is developed on each student's device in only a few minutes a day; teachers can develop in their students the meaningful construction of new knowledge. Godwin explains in his article how the creation of fascinating mobile applications has sparked interest, motivation, and curiosity in learners [21]. This has allowed mobile apps to become a reliable and useful tool when learning second languages such as English. Guo presents in his work the advantages of using mobile applications in the process of L2 teaching [22]. Among the applications available, many are friendly and innovative, and most are free and easily accessible to young audiences.

The advantages that mobile applications offer learners are endless and very useful for the process of acquiring a new language, given the current age of the pandemic and hybrid teaching in the classroom setting. Hossain lists some of them [23]:

- The apps consider the four core English language skills: reading, speaking, listening, and writing.
- Learners can access their apps anytime, anywhere.
- Learners can interact through the apps with their peers or with other people around the world.
- The apps are free of charge.
- They can reinforce knowledge and provide tips to perform better in different skills.
- The ubiquity of mobile apps undoubtedly provides learners with an autonomous and omnipresent education. They only need a smartphone, an app of their liking and the right motivation to start the process of responsible and dynamic learning.

2.1. Mobile Assisted Language Learning

The assistance provided by mobile devices in the process of L2 learning is called mobile assisted language learning (MALL) [24]. MALL is a very useful tool in L2 teaching. The advantages it offers to learners go beyond the expectations of computer-assisted

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learning [25]. MALL provides students with learning on small electronic devices, easy to acquire and access, with a wide range of options in terms of applications, and most importantly, students can be autonomous learners who can organize their schedules as they wish, i.e., learn at any time and in any place [17].

Another advantage of MALL is the interaction with other users and the learning of a new language in real contexts [24]. These features make the acquisition of knowledge much more innovative, exciting, and fun [26]. Collaborative learning allows a larger number of learners and teachers to interact in the construction of knowledge, and in this way, everyone can learn from the experiences of others [27]. Importantly, this tool allows users to choose the applications to learn a new language depending on their needs. Throughout their lives, learners can identify their weaknesses in learning a new language and focus on building their own knowledge in the skills that require it [17].

There are a variety of online stores that offer language learning apps (App Store and Google Play Store). Most apps are free but offer better service with an extra payment (freemium).

Mobile devices have become indispensable for the development of virtual or hybrid classes. Thanks to these tools, education is accessible to all, breaking the barrier of time and place [28]. Easy access to the Internet helps users to have technological interaction with other users through social networks, as well as downloading a variety of applications depending on the skill to be developed in the L2 [29]. In the classroom, the number of students and class hours is a constraint for students to have meaningful learning in real contexts that allow them to communicate in L2. For this reason, teachers have resorted to the use of these tools for students to reinforce and build their knowledge at any time and any place, always under the guidance of the teacher and with adequate feedback [30].

The use of mobile devices and their most important characteristic, which is their ubiquity, has notably changed the teaching and learning process and methodology [31]. Eshankulovna, in 2021, listed in her article three types of mobilities considered very important in the field of learning [32]:

- 1. **Mobility of technology.** It refers to all technological devices that have the wireless standard 802.11 (Wi-Fi). Through Wi-Fi, the teaching and learning material allows learners to acquire knowledge from anywhere and at any time; they choose the time and place where they want to learn, as well as the applications they want to use to interact with other users, create their own calendars, and relax from time to time.
- 2. Mobility of learning. It refers to student-focused autonomous learning, where the teaching process is a personalized, collaborative, omnipresent and permanent experience that considers the level of each student, helping them to realize their level of knowledge, their learning process, their growth, their achievements, and goals.
- 3. Mobility of learner. It refers to those free and independent learners who use teaching tools, leaving aside the barriers of age, time and learning ability. This avoids the comparison between students that usually causes shyness, fear and lack of confidence when expressing their ideas in a spoken way. In this way, mobile students personalize their learning activities based on their own interests and objectives, thus engaging in their continuous learning [33].

According to [34], the learning through mobile devices is a useful tool, as it allows L2 learners to practice their skills on their phones or tablets and promotes self-learning by using the apps as an added support to practice English speaking skills after class or reinforce learning acquired in class, without fear of being judged. It is important to emphasize that mobile devices now play a different role, as they are not only used for entertainment, but also for learning, and that is where the learner's responsibility comes in, to take the time to explore the applications and have the desire to learn. For this reason, it is important to select an application that captures the attention of students so that studying on its own is not tedious or boring but becomes a constant discovery that engages and invites the learner to converse in English [34,35].

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2.2. English Language Teaching-Learning Models

The main purpose of embarking on the journey of L2 learning is to be able to communicate with others in that language [3,36]. If the learner studies L2 and is not able to communicate and interact with others in that language, his or her learning has been in vain. For this reason, a research initiative mentions important points within the speech skills that should be taken into account when learning another language [37]:

- Effective interaction only occurs through speaking skills.
- Practicing speaking skills allows the learning space to become a socially dynamic place.
- Speaking with others immerses students in real contexts and social experiences when sharing a message with others.
- The skill of speaking enhances the relationships that exist in the classroom. It all
 depends on the methodology used by the teacher to create a trusting classroom
 environment that allows everyone to express his or her opinions in a spoken manner
 without fear.
- The ability to speak helps students develop metacognitive and creative thinking, because they involve other actors in communication, and learning takes on a collaborative role.

Speaking L2 allows learners to meet new people, new cultures, travel to different places and have greater opportunities in their professional lives [3].

According to [38], the components of speaking ability are directly related to communicating in L2 in a fluent and accurate manner. Based on this concept, they determine the following components in the field of speaking:

- Grammar: It enables L2 learners to order and structure sentences so that they contain
 the correct meaning and sense and gives them the ability to communicate effectively
 orally and in writing. Grammar allows them to combine words based on rules and
 structures to create sentences that can be understood by others.
- Vocabulary: Relates to the knowledge of words, their meaning, and their use in a real
 context. Knowing how to pronounce them within a conversation on a specific topic
 is what allows communication within the speaking discourse. To fulfill this purpose,
 vocabulary must be familiar and extensive so that the student is able to talk about any
 topic without the barrier of not knowing what it means or how to say certain words.
- **Pronunciation:** Considers the phonology of the words and their grammatical elements that mark the sounds of the words in each language. Pronunciation is one of the most important elements of speech ability, since it is difficult for a person who does not have good pronunciation to make himself understood and communicate even if he has the correct grammatical elements and vocabulary.
- Fluency: Allows communicating naturally and accurately. It is the goal of every L2 learner to be able to communicate with others using an appropriate speed and precise pauses when constructing a conversation. This rhythm of speech indicates that the learner is knowledgeable of the language and does not take too much time to structure sentences or search for precise vocabulary, but rather is able to use expressions that come to mind quickly and naturally.
- Comprehension Allows one to understand the message transmitted and to convey a message that is understood. This encompasses all of the above, since making good use of grammar, vocabulary, pronunciation, and fluency is when comprehension is effective and opens the way for students to engage in meaningful and efficient communication.

For students to meet the challenges of L2 learning, methodologies must be learner-centered, and learners are the object of education. For this reason, teachers use different teaching methods and contextualize various approaches that guide the learning of a language. For example [2] shows the following approaches: traditional, natural, structural, communicative, and humanistic. Each of them encompasses a methodology for teaching:

• Traditional approach: Grammatical translation methodology

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- The natural approach: Direct learning methodology and Berlitz method
- Structural approach: Audio-oral method, situational method, and audio-visual method
- Communicative approach: Communicative method and nocio-functional method
- Humanistic approach: Total physical response method, silence method, suggestopedia method

On the other hand, a methodology is known as a system of ways of doing, teaching or studying something, according to characteristics that can describe concrete ways of teaching [39]. Another definition indicates that methodologies try to be as precise as possible by giving examples of how to teach following a given process. Thus, the different English language teaching methods used today, and their main characteristics, are:

- The Direct Method
- The Audio-lingual Method
- The Total Physical Response
- Communicative Language Teaching
- Task-based Language Learning
- Suggestopedia

All of the methodologies presented above may be used in an educational context and are useful for L2 teaching. However, none of them combines their benefits to extend their range of coverage in the educational environment, or to motivate students with new pedagogy. This research aims to guide the use of a new hybrid methodology that is innovative and involves the use of mobile devices for teaching English as a second language. Therefore, the research questions for this work are the following:

- Which mobile application can be used for teaching English language speaking skills?
- Is it possible to propose an innovative methodology that combines traditional methodologies and mobile learning to improve English language communication skills?

This methodology should capture the attention of students and motivate and involve them in the L2 learning process.

3. Selection of Methodologies and Mobile App for the Research Proposal

Once the different methods have been identified and analyzed, this research proposes a combination of the three most appropriate methodologies to help students improve their communication skills in English. These are:

- 1. The communicative language teaching method: This method is a combination of several methodologies that can allow the student to achieve the learning objective by himself. This method sets out thematic, functional, grammatical, and lexical lists as a starting point. The activities to be used can be very diverse (interactive, motivating, content-based, focused on the development of communicative functions, playful with the aim of releasing tension, escaping from daily routines and worries, and providing some pleasure, fun and entertainment). In addition, it tries to expose learners to a natural way of language based on daily communication, and gives much importance to grammatical, lexical, and phonological aspects that are integrated in the communicative process [2,3].
- 2. The direct method: This method is based on the following principle, namely that teaching an L2 does not require a translation into the mother tongue, but can be achieved through actions and demonstrations of what needs to be taught. This methodology proposes to give instructions for development of the class only in the foreign language, to teach vocabulary and certain everyday phrases. To achieve oral communicative skills, questions and answers between the teacher and the student can be established in a progressive way. In this educational environment, pronunciation and grammar are taught inductively. For this reason, vocabulary is taught with the visualization of objects and images, which allows access to new knowledge presented orally by the learner [2,3].

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3. Audio-lingual method (ALM): This method is based on behaviorism, which indicates that repetition can form habits. Therefore, this method proposes a learning process based on listening and oral repetition. The material to be developed may contain dialogues and imitative pronunciation exercises as the main learning techniques. This method does not recommend the use of the mother tongue in the classroom; however, since it is not as restrictive as the direct method, the mother tongue can be used to give instructions that are not understood by most students. The main objectives of this method are to develop L2 oral proficiency through a wide selection of vocabulary, and to expose learners to oral exercises that enable them to communicate using the language learned by constant repetition [2,3].

The hybrid methodology will contain the three methodologies combined and will include a mobile application that will support the goal of improving the English speaking skills of high school students.

Identification of a Mobile Application for Research

This intervention proposal seeks to strengthen English language speaking skills using mobile technologies and educational applications. These applications should focus on supporting and helping students develop their communicative and social skills in the English language. Considering all of the above, there exist seven elements, as shown in Table 1, that should be considered to evaluate a mobile application that focuses on L2 learning [40]:

- Quality of the content: The content of the application must allow students to grow in their knowledge in consideration of their level and their bases, i.e., the knowledge already acquired.
- **2. Pedagogical coherence of the linguistic skills:** There must be coherence between the goal to be achieved in the speaking skill and the content offered by the application to reach the goal.
- **3. Feedback and self-correction:** The feedback received by the student is very important, since it must evaluate and correct the student effectively.
- **4. Motivation:** The application must be attractive; it must capture the attention and interest of the learner to generate the need to visit it continuously.
- **5. Usability:** The application must be technologically friendly so that using it is easy for learners and they do not require training or face difficulties when using it.
- **6. Customization:** Mobile applications should be editable, in font size, contrast and presentation. This is to personalize learning for students and make it more individual and unique.
- 7. **Sharing:** The application must be interactive and collaborative. That is, learners should be able to share their progress, difficulties, and challenges during their learning process.

To carry out this research, we proceeded to search for applications oriented to the learning of English speaking skills through the query string "speaking English" in the Google Play Store. To choose the best application to use in this research, a four-step methodology was followed, as shown Figure 1.

- **First step:** The search was performed with the keyword and found about 250 applications for learning the English language and the development of communication skills.
- **Second step:** From this group only, we chose the apps that were top-rated in the Google Play Store (4.5–4.9) and that had been download between 50,000+ and 100,000,000+ times, as shown in Table 2.
- Third step: A smartphone was used to download all of the apps and choose those
 most suitable to the educational environment. These were chosen because they were
 free to use, easy to use, and had outstanding educational content.
- **Fourth step:** We applied an evaluation rubric, as shown in Table 3, which allowed us to quantitatively identify which application was the best to use in this research [40].

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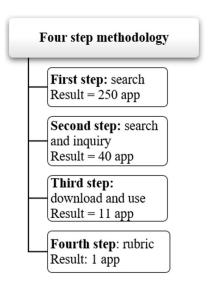


Figure 1. Results of four-step methodology.

Table 1. Language-learning Mobile Application Evaluation Rubric (Source [40]).

Category Least Suitable (1–3) Average (4–7) Most Suitable (8–10)

Quality: Content helps achieve the Content helps achieve the

Content Quality: Content should provide opportunities to advance learners' English skills, with connection to their prior knowledge.

Pedagogical Coherence: The skills provided in the app should be consistent with the targeted learning goal.

Feedback and Self-correction: Learners should be provided with feedback to conduct self-evaluation.

Motivation: Elements are embedded to engage and motivate language learners to use the app.

Usability: Learners are provided with clearly indicated menus and icons to easily navigate through the app.

Customization: Learners have their individualized needs met including font size and customizable settings to personalize their learning.

Sharing: Learners can share their learning progress, issues, or concerns in learning.

Content fails to help achieve learning goals or autonomous learning.

Skills (especially listening and speaking skills) reinforced in the app were not consistent with the targeted skill or concept.

Feedback is limited to correct learner response.

No elements are embedded to encourage learners' self-directed learning.

Menus and icons are not clearly indicated, no onscreen help and/or tutorials are available, and learners need constant help to use the app.

Text size cannot be adjusted, and few customizations are provided.

Limited performance data, or learner's progress is not accessible.

Content helps achieve the learning goals but is neither autonomous learning nor related to prior knowledge.

Skills (especially listening and speaking skills) reinforced were prerequisite to foundation skills for the targeted skill or concept.

Feedback is specific and allows for learners to try again in order to improve learning performance.

Limited elements are embedded to encourage learners' self-directed learning.

Menus and icons are clearly indicated, but no on-screen help and/or tutorials are available. Learners need to have an instructor in order to review how to use the app.

Text size can be adjusted according to user's needs, and some customizations are provided.

Performance data or learner progress is available in the app, but exporting is limited.

Content helps achieve the learning goals, autonomous learning, and relates prior knowledge to new content.

Skills (especially listening and speaking skills) reinforced were strongly connected to the target skill or concept.

Feedback is specific, which results in improved learner performance; data are available to learners and instructors.

Elements are embedded to encourage learners' self-directed learning.

Menus and icons are clearly indicated, and on-screen help and/or tutorials are available so that learners can launch and navigate the app independently. Text size can be adjusted to suit diverse needs, and customizations and more individualized options are provided. Specific performance summary or learner progress is saved in the app and can be exported to a teacher or an audience.

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Table 2. Results of the second and third steps of the methodology.

Mobile App (Code *)	App Name	Google Play Store Rating	Downloads	Comment
A	Aba English—aprender inglés	4.6	10,000,000+	does not track progress
В	Andy English—habla en inglés	4.6	1,000,000+	poor content
C	Aprende a hablar inglés (talk englihs)	4.6	5,000,000+	little content, lots of ads
D	Aprende inglés—escuchando y hablando	4.7	1,000,000+	no levels
E	Aprende inglés, vocabulario	4.7	1,000,000+	focuses on vocabulary
F	Aprender a hablar inglés (hello)	4.7	1,000,000+	poor vocabulary and assessment
G	Aprender a hablar inglés (miracle full box)	4.7	1,000,000+	no levels
Н	Basic English for beginners	4.7	1,000,000+	low level
I	British council Englishscore	4.9	5,000,000+	good
J	Bytalk: speak English online	4.7	100,000+	not safe
K	Cake	4.8	50,000,000+	no specific themes
L	Conversación en inglés	4.6	1,000,000+	focuses on listening
M	Conversación en inglés (elearning)	4.9	500,000+	good
N	Curso de inglés para principiantes gratis	4.9	1,000,000+	low level
O	Duolingo	4.8	100,000,000+	good
P	Elsa speak	4.7	10,000,000+	good
Q	English 1500 conversation	4.7	1,000,000+	focuses on listening
R	English conversation	4.9	1,000,000+	lots of ads
S	English conversation practice	4.9	100,000+	good
T	English conversation practice case	4.9	100,000+	time consuming
U	English listening step by step	4.8	500,000+	good
V	English skills—practicar y aprender inglés	4.5	1,000,000+	lack of short dialogues
W	English speaking practice	4.8	5,000,000+	good
X	Habla inglés—comunicar	4.5	1,000,000+	no audios
Y	Hablar inglés americano	4.7	500,000+	complicated to use
Z	Hallo: hablar inglés	4.5	1,000,000+	not safe
AA	Hello English: learn English	4.6	10,000,000+	complicated to use
BB	Hello English: learn English skills	4.5	1,000,000+	audios do not work
CC	Ielts listening English—eli	4.9	1,000,000+	standardized test
DD	Learn English conversations	4.8	100,000+	good
EE	Listen English daily practice (AMA english)	4.8	500,000+	good
FF	Practica conversar en inglés (talk english)	4.5	5,000,000+	not eye-catching
GG	Práctica de conversación en inglés (CUDU)	4.6	1,000,000+	good
HH	Pronunciación correcta—aprende inglés	4.6	1,000,000+	focuses or pronunciation
II	Reallife	4.9	100,000+	focuses on listening
JJ	Redkiwi: escucha&habla inglés	4.7	100,000+	focuses on listening
KK	English pronunciation (yobimi group) Speak English pro: American	4.7	500,000+	focus on pronunciation
LL	pronunciation	4.7	100,000+	focuses or pronunciation
MM	Speak English!	4.5	1,000,000+	not safe
NN	Speaking TOEFL	4.5	50,000+	good

 $[\]ensuremath{^*}$ The applications highlighted in bold were the ones chosen in the third step.

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Cahagamy	Mobile App (Code *)										
Category	О	P	W	GG	NN	DD	S	M	EE	I	U
Content quality	8	7	7	6	8	8	3	8	8	8	3
Pedagogical coherence	9	8	7	7	6.5	9	5	8	8	8	4
Feedback and self-correction	8	8	5	7.5	7	3	7	5	7	5	7
Motivation	8	4	6	6	7	5	6	3	6	3	5
Usability	7	6	7	6	6	7	9	4	3	4	8
Customization	8	8	8	6	3	6	4	5	4	4	5
Sharing	7	7	7	6	6	3	7	7	4	4	3
Total score	55	48	47	44.5	43.5	41	41	40	40	36	35

^{*} Code: the codes used correspond to those listed in Table 2.

4. Findings

After the steps described above, the answer to the first research question was evident. The mobile application that had the best score, according to the established methodology, was Duolingo. Table 3 shows the reasons why the Duolingo application was chosen for use in the hybrid methodology and the development of the case study. However, it is important to know in depth the characteristics of this application and its functionality within the teaching–learning process [4].

Duolingo was launched in 2012 as a language learning platform. The application provides its users with the option to learn 27 languages around the world. It is an application that is available for most mobile devices and laptops with an Android 8.0 or later operating system. It is also compatible with devices that have the iOS 9.0 operating system or higher. This application is considered as a private teacher that teaches its L2 learners through fun activities and games [41]. Apart from the personalized teaching offered by Duolingo, the application gives its users the opportunity to start learning considering their previous knowledge. To do so, it is necessary to create an account, since the application saves the students' progress. Before unlocking each learning level, the application performs a placement test to place users in the corresponding level according to their knowledge of L2. The learning process is divided into thematic blocks ranging from the most basic level, which includes vocabulary, to the most complex level consisting of elaborate grammatical structures such as past perfect tense, among others [42].

Duolingo is a MALL app focused on L2 learning. Recent studies in Indonesia and around the world showed that Duolingo can be used as an effective mobile application in teaching and reinforcement to improve English language speaking skills in high school and higher education [4]. It is also important that learners can focus on a single application, since, given the variety of possibilities, learners are very likely to be distracted by trying many applications and overlook the purpose of MALL support [43]. In this way, students acquire the skills for handling and working with the chosen application as a new tool to be used in classes to help improve their speaking skills. It is important to note that the application will be part of a hybrid methodology and that the teacher will be the one to supervise and orchestrate the learning process.

The new proposed methodology, which combines traditional methodologies and includes the use of digital technology to improve English speaking skills, is detailed in the case study in Section 5. This hybrid proposal combines three traditional methodologies (communicative language teaching, the direct method, and the audio-lingual method), and includes the use of a mobile application (Duolingo).

The hybrid methodology usage guide consists of 8 weeks of work in which both the mobile application and the best methodologies for learning English as a second language are used. Each week of class covers a specific topic and is approached with combined resources and methodologies. Tables 4–11 contain the details of each class session, each of which has a specific objective and proposes the necessary resources for learning. Likewise,

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at the end of each week of class, the user guide recommends feedback on the possible mistakes made by the students.

Professionals in the teaching of the English language designed this guide. The experts have more than eight years of experience working at the secondary education level. To achieve this work, we organized meetings in which the best practices that teachers have used in their classrooms and the best ways to approach the teaching of the English language as L2 were identified.

Table 4. Activity 1.

Week 1: Greetings	2		
		· · · · · ·	
	tify the different forms of greetings and apply them in conversations in different spaces, such as of medical centers, etc.	mces,	
	; students, flash cards, smartphones, Duolingo app		
SESSION 1	DEVELOPMENT	TIME	
323313111	The teacher will start the class with a game. Say "Hello". The teacher will ask the students to go out to the playground and form a circle. Then, the teacher will explain to the students the		
Warm up	dynamics of the game. The students should greet the classmates who meet the teacher's characteristics. For example, say "hello" to whoever is wearing green pants.	5 min	
Duolingo Time	The students have already created their accounts and profiles and will start with the first session. The teacher asks the students to choose a space on the playground and work on the "Greeting" session of the application. The students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down, and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme.	15 min	
	The students have 15 min to do so. At the end of the lesson, the students should show the teacher their crown, which signifies that they have successfully completed their session. While the students work on the application, the teacher observes the students for any questions or doubts. The teacher will ask students to enter the classroom. The teacher will hold in his/her hands		
Speaking in real context (Evaluation)	two bags containing flashcards about space and time. Each group of students will choose whether their conversation takes place in the morning, afternoon, evening, or night and in which space. The teacher will ask the students to record their conversations with their cell phones and then send them to his or her email.	15 min	
Feedback	The teacher will take notes on errors as the activity unfolds. At the end of the speaking activity, the teacher will give general feedback on and correct errors across the board. As homework, the students will have to complete the same level of Duolingo at home.	10 min	

Table 5. Activity 2.

Week 1: Making	Plans for the Weekend	
Objective: To kno	ow how to ask a friend what he/she would like to do on the weekend.	
Resources: teache	er, students, Sarah's, Lukas's and Jake's Photo, smartphones, Duolingo app	
SESSION 2	DEVELOPMENT	TIME
Warm up	The teacher will ask the students to go out to the playground and play in groups of the number she indicates. The student who is left out of a group will answer the following question: What would you like to do on the weekend? The teacher will play this game with the students several times so that different students can answer the question. The teacher will explain to the students that the theme of the class will be to talk about plans for the weekend.	5 min

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Table 5. Cont.

TICCK I. MIAKING I	Plans for the Weekend	
Duolingo Time	The teacher asks the students to choose a space on the playground and work on the "Plans" session of the application. Students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down, and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme. The students have 15 min to do so. At the end of the lesson, the students should show the	15 min
	teacher their crown, which signifies that they have successfully completed their session. While the students work on the application, the teacher observes the students for any questions or doubts.	
Speaking in real	The teacher will show the group a picture of Sara, Jake and Lukas, teenagers. The teacher will tell the students their story. Sara is a teenager who is going out with her friends for the weekend.	
context (Evaluation)	The teacher will ask the students to choose a character and ask their friends about their plans for the weekend.	15 min
	For this activity, students will work in pairs. Each pair will come to the front of the class and discuss their plans.	
Feedback	The teacher will take notes on errors as the activity unfolds. At the end of the speaking activity, the teacher will give general feedback on and correct errors across the board. As homework, the students will have to complete the same level of Duolingo at home.	10 min

Table 6. Activity 3.

Week 2: Compara	Week 2: Comparatives and Superlatives				
Objective: To iden	Objective: To identify how to use and express the comparative and superlative forms in a sentence. Vocabulary (adjectives)				
Resources: teacher	; students, students' family photos, smartphones, Duolingo app				
SESSION 3	DEVELOPMENT	TIME			
Warm up	The teacher will show the students a picture of his/her family. The teacher will describe each family member using comparative and superlative sentences. Example: This is my sister Karen. She is the youngest in the family. In this way the teacher will indicate to the students the topic of the activity.	5 min			
Duolingo Time	The teacher asks the students to choose a space on the playground and work on the "Comparatives and Superlatives" session of the application. Students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down, and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme. The students have 15 min to do so. At the end of the lesson, the students should show the teacher their crown, which signifies that they have successfully completed their session. While the students work on the application, the teacher observes the students for any questions or doubts.	15 min			
Speaking in real context (Evaluation)	The teacher will ask students to bring in a family photo. In each of the groups, the students will describe their family pictures. Example: This is my family. My brother Carlos is the youngest of all, my sister Laura is taller than my mom, but my dad is the tallest in the family. This time, students will come to the front of the class voluntarily. Only those who want to. This is to see if students have developed more confidence in public speaking in front of their peers.	15 min			
Feedback	The teacher will take notes on errors as the activity unfolds. At the end of the speaking activity, the teacher will give general feedback on and correct errors across the board. As homework, the students will have to complete the same level of Duolingo at home.	10 min			

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Table 7. Activity 4.

Week 2: Likes and	Week 2: Likes and Dislikes			
Objective: To iden	tify how to use and express likes and dislikes in a sentence.			
Resources: teacher	r, students, questions, smartphones, Duolingo app			
SESSION 4	DEVELOPMENT	TIME		
Warm up	The teacher will start the class with a "Speaking Telephone" game. The teacher will ask the students to form two lines. The teacher will say the phrase "I like fruits and candy, but I don't like soup, pizza and noodles" to the first student in each line. The students will have to relay the message to their classmates. At the end, the last student will say the message out loud. The students will compare their message with the original. The results will be a lot of fun.	5 min		
Duolingo Time	The teacher asks the students to choose a space on the playground and work on the "Likes and Dislikes" session of the application. Students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down, and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme. The students have 15 min to do so. At the end of the lesson the students should show the teacher their crown, which signifies that they have successfully completed their session. While the students work on the application, the teacher observes the students for any questions or doubts. The teacher will share with each group of students a list of questions.	15 min		
Speaking in real context (Evaluation)	The students will have to discuss these questions and discuss and present their points of view. This activity should be recorded and sent to the teacher's email. Questions: What food that you liked as a child do you not like now? What is your favorite food? Why? What is the food you can't stand? Why is that? What food that you haven't eaten yet would you like to try?	15 min		
Feedback	The teacher will take notes on errors as the activity unfolds. At the end of the speaking activity, the teacher will give general feedback on and correct errors across the board. As homework, the students will have complete the same level of Duolingo at home.	10 min		

Table 8. Activity 5.

Week 3: What Ki	nd of Friend Are You?	
Objective: To idea	ntify and use adjectives to describe themselves and others to express what kinds of friends they are	
Resources: teache	er, students, TikTok questions, smartphones, Duolingo app	
(https://www.tik	ctok.com/@oliver.dean/video/7030510466627636486?is_from_webapp=1&sender_device=pc&web	_id=709985
9761571628549 (a	ccessed on 1 March 2022))	
(https://www.yo	outube.com/watch?v=-PMAMUI-5r8 (accessed on 1 March 2022))	
SESSION 5	DEVELOPMENT	TIME
	Students will record a video about 14 questions with their friend.	
	The teacher will ask students to form pairs, then they should put a cell phone in front of their	
Warm up	faces.	5 min
_	Students should activate the questions, close their eyes and point to the friend who would be	
	the answer to the question. For example: Who is the funniest of the two?	

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Table 8. Cont.

THE ST WHAT THE	The teacher asks the students to choose a space on the playground and work on the "Friends"	
	session of the application.	
	Students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down,	
Duolingo Time	and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme.	15 min
	The students have 15 min to do so. At the end of the lesson, the students should show the	
	teacher their crown, which signifies that they have successfully completed their session.	
	While the students work on the application, the teacher observes the students for any questions or doubts.	
Speaking in real	The teacher will write the names of all the students on paper. Then ask each student to take a piece of paper,	15 .
context (Evaluation)	The student will read the name and describe the person to their classmates to guess who the person is.	15 min
	The teacher will take notes on errors as the activity unfolds. At the end of the speaking	
Feedback	activity, the teacher will give general feedback on and correct errors across the board.	10 min
	As homework, the students will have to complete the same level of Duolingo at home.	

Table 9. Activity 6.

Week 3: Emotions		
Objective: To iden	tify and use feelings to express how they feel about different actions or events.	
Resources: teacher	; students, Spider Man movie pictures, smartphones, Duolingo app	
SESSION 6	DEVELOPMENT	TIME
Warm up	The teacher will project in class pictures of famous actors from the latest Spider Man movie and ask the students about the emotions in each picture. If the actor or actress is happy, upset, excited and why.	5 min
	Students will respond to each question by expressing their point of view.	
	The teacher asks the students to choose a space on the playground and work on the	
	"Emotions" session of the application.	
D 1: TT:	Students will complete the following activities: complete sentences and questions to make a short conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, listen to sentences and repeat them or write them down,	1E .
Duolingo Time	and translate sentences from Spanish to English or from English to Spanish. All of these exercises are related to the theme.	15 min
	The students have 15 min to do so. At the end of the lesson, the students should show the teacher their crown, which signifies that they have successfully completed their session. While the students work on the application, the teacher observes the students for any questions or doubts.	
Speaking in real	The teacher will read short paragraphs to his/her students.	
context	Students should listen and then say how they feel about the situation.	15 min
(Evaluation)	For example: Pandemic, Animals in Danger of Extinction, The Premiere of a New Movie, etc. The teacher will take notes on errors as the activity unfolds. At the end of the speaking	
Feedback	activity, the teacher will give general feedback on and correct errors across the board. As homework, the students will have to complete the same level of Duolingo at home.	10 min

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Table 10. Activity 7.

Week 4: Nature							
	Objective: To identify nature-related vocabulary and use it in conversations.						
Resources: teacher	; students, nature audio, smartphone, Duolingo app						
https://www.you	tube.com/watch?v=eKFTSSKCzWA (accessed on 5 April 2022)						
SESSION 7	DEVELOPMENT	TIME					
	The teacher will play an audio of nature sounds.						
Warm up	The teacher will ask the students to use the sounds to describe a place.	5 min					
vvarm up	Students who wish to do so will raise their hand and give a brief description of a place based	Jiiiii					
	on the sounds they heard.						
	The teacher asks the students to choose a space on the playground and work on "Nature"						
	session of the application.						
	Students will complete the following activities: complete sentences and questions to make a						
	short conversation, match words with their meaning, read short paragraphs and choose the						
	correct answer, answer questions, listen to sentences and repeat them or write them down,						
Duolingo Time	and translate sentences from Spanish to English or from English to Spanish. All of these	15 min					
	exercises are related to the theme.						
	The students have 15 min to do so. At the end of the lesson, the students should show the						
	teacher their crown, which signifies that they have successfully completed their session.						
	While the students work on the application, the teacher observes the students for any						
	questions or doubts.						
Speaking in real	The teacher will ask the students to record with their phones a video advertising a company						
context	that organizes camping trips.	15 min					
(Evaluation)	Students should mention in their videos the activities that can be performed at the camp. Students should send their videos to the teacher's email address.						
	The teacher will take notes on errors as the activity unfolds. At the end of the speaking						
Feedback	activity, the teacher will give general feedback on and correct errors across the board.	10 min					
reeuback	As homework, the students will have to complete the same level of Duolingo at home.	10 111111					
	As nomework, the students will have to complete the same level of Dublingo at nome.						

Table 11. Activity 8.

Week 4: Hobbies		
Objective: To ident	rify nature-related vocabulary and use it in conversations.	
Resources: teacher,	, students, fancy hat, smartphones, Duolingo app	
SESSION 8	DEVELOPMENT	TIME
	The teacher will bring a fancy hat to class.	
Marra	The teacher will sit at the front of the class and ask one of the students to be the interviewer	5 min
Warm up	and wear the fancy hat; the topic will be hobbies.	эшш
	Students can take turns wearing the hat and interviewing the teacher.	
	The teacher asks the students to choose a space on the playground and work on the	
	"Hobbies" session of the application.	
	Students will complete the following activities: complete sentences and questions to make a	
	short conversation, match words with their meaning, read short paragraphs and choose the	
	correct answer, answer questions, listen to sentences and repeat them or write them down,	
Duolingo Time	and translate sentences from Spanish to English or from English to Spanish. All of these	15 min
	exercises are related to the theme.	
	The students have 20 min to do so. At the end of the lesson, the students should show the	
	teacher their crown, which signifies that they have successfully completed their session.	
	While the students work on the application, the teacher observes the students for any	
	questions or doubts.	
Speaking in real	This time, the teacher will put on the fancy hat and interview the students briefly.	
context	Students will choose to be a superhero like Wonderwoman or Aquaman, wear their masks	15 min
(Evaluation)	and answer questions about their hobbies.	
	The teacher will take notes on errors as the activity unfolds. At the end of the speaking	
Feedback	activity, the teacher will give general feedback on and correct errors across the board.	10 min
	As homework, the students will have to complete the same level of Duolingo at home.	

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5. Case Study

This guide for the use of hybrid methodology seeks to improve the speaking skills of high school students who are native Spanish speakers. It is recommended that the age range of the students be between 17 and 19 years old. It is recommended to use the Cambridge Institute certification scale; these are A1, A2, B1, B2, C1, and C2 [44]. This guide was developed so that students can attain the B2 level, and for this, the only requirement is that they already have the B1 level of the Cambridge Institute certification scale.

5.1. Timing

The proposed schedule for this work is distributed on a weekly basis. Speaking skills will be worked on twice a week, in two 45-min classes. The proposal is designed for eight classes spanning two months, as shown Table 4. After this time, an evaluation will be conducted to determine whether the use of the hybrid methodology has improved the students' speaking skills.

To implement this work, it is recommended that teachers work with groups of students that have the same level of English skill. Based on the experience of the researchers, it is recommended to use groups with an even number of students (2, 4, 6, etc.). The fewer students in the group, the more personalized the work becomes, and the better it involves all members of the group. Therefore, it is recommended to use a group with a maximum of 4 students to implement this proposal. To assign students to the groups, a test that the mobile application proposes can be used to classify each student by their level of knowledge of the language. This hybrid methodology does not include students with special educational needs or students with disabilities.

The students will work with the Duolingo app two days a week. For this work, the students must bring their smartphones to school for pedagogical purposes, and the teacher will control the use of the devices in the classroom. To start the work, the teacher will ask the students to download the application, create an account, and perform a diagnostic test to place them in a specific level and divide them into the recommended groups. Each day, students will work on one level, which will take about 15 min.

During the class, the students will launch the application and choose the section designated by the teacher. Each section contains vocabulary exercises, grammar, complete sentences and questions to make a small conversation, match words with their meaning, read short paragraphs and choose the correct answer, answer questions, list sentences and repeat or write them, and translate Spanish to English or vice versa.

5.2. Learning Methodology

The proposed methodology is designed to develop a topic each week; that is, the time required to complete this work is around two months. The themes in Table 4 must be carried out with the templates proposed in Tables 5–12. Each of these templates has an objective for the assigned theme, and the necessary resources to achieve the objectives. In addition, so that the students lose their fear of participating and feel motivated to learn, all of the topics include a warm-up, which consists of carrying out a dynamic and an initial game with the students. This takes about 5 min. Students should then use their mobile device to start using the Duolingo app. Each session is defined so that students will use the application in its entirety. This activity should last between 10 and 15 min. This time is used to control the learning activity supported by mobile devices. In addition, the time was established so that the use of digital technology is not a distracting element in the classroom.

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Table 12. Methodology timeline.

	Intervention Proposal Project Timeframe Activity		Improve Speaking Skills in English Language Teaching Process through the Use of Duolingo App.						
			2 Months W1 W2 W3 W4 W5 W6 W7						W8
1.	Greetings	x	***	****	***	****	****	***	****
2.	Making plans for the weekend		х						
3.	Comparatives and superlatives			x					
4.	Likes and dislikes				x				
5.	What kind of friend are you?					x			
6.	Emotions						x		
7.	Nature							x	
8.	Hobbies								x

After all of this, the teacher will involve the groups of students in an activity in which they will be asked to explain certain scenarios that motivate the practice of speaking in the students. Finally, there is the feedback that the teacher gives to all of the students. While the activities are carried out, the teacher will take note of the errors that the students make to correct them. Feedback is important so that students know which topics they have flaws in and can correct them in time. In addition, to motivate self-directed learning, the teacher proposes autonomous work with the use of the mobile application.

Because the Duolingo approach is based on ALM, which reinforces communication in real and meaningful contexts that allow students to communicate naturally and interact linguistically in real life, this work combines the communicative methodology and direct learning methodology together with the Duolingo application. This innovative hybrid methodology aims to help students learn the details of the English language to know how to use them when they want to communicate or express their ideas to other people. In addition, this methodology allows students to acquire communicative competence in two areas: knowledge and use in real contexts. For this, the communicative competence was divided into three parts to address it directly:

- **Grammar:** Structuring sentences that use tenses, phrases, and grammatical rules correctly.
- Sociolinguistics: Refers to the function of communication and interaction with other actors within different social and cultural contexts.
- Strategy: Having the ability to understand and be understood when presenting ideas
 and overcome difficulties and misunderstandings that may arise in communication.

Finally, based on all of the above, the templates developed to improve English speaking skills are proposed.

Before starting to use the proposed methodology, students are encouraged to complete a self-assessment test on their speaking skills, as shown Table 13. This test is designed to determine in a general way the main difficulties that students face when they do not feel confident when speaking and, therefore, do not want to share their ideas with others in the English language.

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Table 13. Self-assessment test.

Name: Where I Am? SPEAKING ALWAYS SOMETIMES NOT AT ALL

I speak fluently, clearly and loudly.

I understand what my friends are talking about.

My friends understand when I say something.

I am not afraid to express my ideas out loud.

When I work in a group, we all listen to each other.

I am more confident to speak when I work in a group than when I work alone.

During the execution of the methodology, each of the eight activities should be evaluated to follow up and identify that the work being performed is related to real and continuous learning. Since informal assessment can sometimes be subjective, it is recommended to use the rubric shown in Table 14. This is a rubric used in the Cambridge exams [44]. It serves to increase the objectivity of the results, as it allows providing students with much more accurate feedback on the errors made.

Table 14. Cambridge exam rubric to B2 Level.

B2	Grammar and Vocabulary	Discourse Management	Pronunciation	Interactive Communication
5	 Show a good degree of control of a range of simple and some complex grammatical forms. Uses a range of appropriate vocabulary to give and exchange views on a wide range of familiar topics. 	 Produces extended stretches of language with very little hesitation. Contributions are relevant, and there is a clear organization of ideas. Uses a range of cohesive devices and discourse markers. 	 Is intelligible. Intonation is appropriate. Sentences and word stress are accurately placed. Individual sounds are articulated clearly. 	 Initiates and responds appropriately, linking contribution to those of other speakers. Maintains and develops the interaction and negotiates towards an outcome.
4 *		Performance shares fea	tures of Bands 3 and 5	
3	 Shows a good degree of control of simple grammatical forms, and attempts some complex grammatical forms. Uses a range of appropriate vocabulary to give and exchange views on a range of familiar topics. 	 Produces extended stretches of language despite some hesitation. Contributions are relevant, and there is very little repetition. Uses a range of cohesive devices. 	 Is intelligible. Intonation is generally appropriate. Sentence and word stress are generally accurately placed. Individual sounds are generally articulated clearly. 	 Initiates and responds appropriately. Maintains and develops the interaction and negotiates towards an outcome with very little support.
2 *		Performance shares fea	tures of Bands 1 and 3	

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Table 14. Cont.

B2	Grammar and Vocabulary	Discourse Management	Pronunciation	Interactive Communication
1	 Shows a good degree of control of simple grammatical forms. Uses a range of appropriate vocabulary when talking about everyday situations. 	 Produces responses that are extended beyond short phrases, despite hesitation. Contributions are mostly relevant, despite some repetition. Uses basic cohesive devices. 	 Is mostly intelligible, and has some control of phonological features at both utterance and word levels. 	 Initiates and responds appropriately. Keeps the interaction going with very little prompting and support.

0 *: The student has B1 level of knowledge; 2 *: The student has the knowledge of the initial B2 level, and is in two bands, the lowest one (1), and an intermediate one (3); 4 *: The student has the knowledge of the intermediate B2 level, and is in two bands, one intermediate (3), and the highest (5).

5.3. Limitations

It is important to point out that not all methodologies work properly; it all depends on the group of students and their way of learning. It is for this reason that this hybrid methodology, despite being innovative and including mobile applications, has certain limitations. One of them is that it is not accessible, i.e., it is not prepared for educational environments for people with disabilities. On the other hand, the tasks were designed based on the experience and good practices applied by expert teachers in the teaching area, which may mean that it may not have the same positive teaching effect in heterogeneous groups of students.

6. Discussion

To ensure that students understand a given educational content, teachers must use teaching strategies or methods to improve their performance, motivate students and shape knowledge. This research work provides a guide and a teaching model that combines several traditional methodologies and involves technology (mobile devices) to motivate learning. It is important to note that there is no one methodology that is more effective than another. It all depends on the context where it is implemented and the characteristics of each student.

That is why this work contributes with new literature on learning using mobile devices for teaching English as a second language. It uses a well-developed guide on how to use a hybrid methodology, which is new and innovative for the teaching process.

7. Conclusions

Studies, research, and this proposal provide information on how MALL apps can be used, in this case Duolingo, as a digital tool that contributes significantly to the improvement of oral proficiency in the English language.

There are a variety of applications for L2 learning. However, using educational content as a basis, when choosing an educational application, it is important to consider the following points:

- Pedagogical coherence
- Feedback and self-correction
- Motivation
- Usability
- Customization
- Sharing

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In addition, due to the needs of our students and the experience of the teachers, it was concluded that Duolingo is the exact application to meet the proposed objective. There are multiple factors that can affect English language learning in high school students. That is why this proposal aims to help students improve oral communication without the barriers of fear and shyness, including a good command of vocabulary, pronunciation, fluency and comprehension of the English language. In recent years, multiple initiatives have been generated using mobile applications for education. Duolingo has been one of the most downloaded applications for this purpose. However, the work presented here defines a methodological guide that involves traditional teaching and mobile technology to improve and motivate learning in high school students.

One of the benefits of MALL is the flexibility of use, learning anywhere and anytime. This benefit was very useful for students as it allowed them, in activities 5 and 7, to use applications such as Duolingo, TikTok or YouTube outside the classroom, in the courtyard or other places of the institution where students appeared more relaxed and to enjoy the use of this methodology.

The design of Duolingo is quite attractive since it is elaborated as a game application that advances through levels. Lives are won, there is competition with other classmates, and the app has the option to record audios and repeat them, which is an option that the students liked the most due to their lack of confidence in speaking English. This option gave the students security when practicing everything they learned in the Speaking exercises in the classroom within real contexts.

The proposed methodology combines traditional methodologies and an innovation that uses digital technologies. This combination allows the methodologies to complement each other and work together with a better approach that focuses on the student's needs. By using mobile learning, personalized learning can be generated, i.e., one teacher can use this methodology for a high school class, and another can use it for higher education. The only thing to do is to define the level at which the students are and apply the methodology for each case.

8. Future Work

Although it was specified from the beginning that the application would be used in classes as support material to improve students' oral expression, from this point of view the application met expectations and obtained favorable results. Despite this, intervention by the teacher is necessary and important to achieve the educational objectives. Although research shows that the Duolingo app, on its own, improves L2 learning in terms of grammatical structures and vocabulary, it was found to lack components to engage learners in real communication contexts [42,45,46]. For this reason, other researchers are encouraged to apply this proposal to a group of students and check whether the use of this hybrid methodology can improve learning outcomes. It is recommended that the influence of these methodologies be statistically analyzed to determine whether they can elicit an improvement in English speaking skills. Furthermore, the use of mobile devices in the classroom and the sociodemographic characteristics of the participants should be analyzed to identify the access that students have to this technology.

On the other hand, it would be interesting, for personalized learning, to create a mobile application for the specific needs of a group of students. In addition, the proposal should be improved and made more inclusive, in order to include learning for groups of students with disabilities.

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