

Estrategia para desarrollar competencias lingüísticas en inglés usando una aplicación virtual

Strategy to develop linguistic skills in English using a virtual application

Estratégia para desenvolver competências linguísticas em inglês através de uma aplicação virtual

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Resumen

Este artículo presenta una investigación que tiene como objetivo desarrollar una aplicación de asistente de voz para estudiantes de educación superior con el fin de potencializar sus habilidades lingüísticas en el idioma inglés para entrevistas laborales. Para ello, se realizó un estudio aplicando un instrumento tipo encuesta en una muestra de 63 estudiantes de la Facultad de Ciencias Políticas y Sociales de la Universidad Autónoma de Querétaro. Los resultados indican que para los estudiantes contar con el idioma inglés como habilidad para competir en el campo laboral es muy importante e impacta directamente en las oportunidades y el salario que podrían obtener como profesionistas. Asimismo, los alumnos no se sienten



seguros de su nivel de habilidad para hablar en el idioma inglés con fines profesionales y utilizarlo para una entrevista laboral. Por eso, se diseñó una estrategia para desarrollar las habilidades de la lengua inglesa a través de una aplicación para asistente de voz que provee a los estudiantes una práctica autónoma y constante, ubicua y atemporal. Luego de presentar el prototipo de la aplicación, como resultado, los estudiantes y docentes de la facultad opinan que la aplicación puede ser útil, innovadora y representa una herramienta que se puede utilizar dentro y fuera del salón de clase para practicar la conversación para una entrevista laboral.

Palabras clave: Tecnología educativa, inglés, innovación, aprendizaje autónomo, entrevista laboral.

Abstract

This article presents a research aimed at developing a voice assistant application for higher education students with the purpose of enhancing their language skills in the English language for job interviews. A study was carried out using a Survey-type instrument with a sample of 63 students from the Faculty of Political and Social Sciences of the Autonomous University of Queretaro. The results indicate that English language is a very important skill for the students to compete in the work market, and directly impacts the opportunities and salary they could obtain as professionals. Additionally, the results show that students do not feel confident about their English speaking abilities for professional purposes and using it for a job interview. Therefore, a strategy was designed to develop English language skills through a voice assistant application that provides students with autonomous and constant, ubiquitous, and timeless practice. After presenting the prototype of the application, as a result, students and faculty members believe that the application could be useful, innovative, and represents a tool that can be used inside and outside the classroom to practice conversation for a job interview.

Keywords: Educational technology, English, innovation, autonomous learning, job interview.

Resumo

Este artigo apresenta pesquisa que tem como objetivo desenvolver um aplicativo de assistente de voz para estudantes do ensino superior com o objetivo de aprimorar suas habilidades linguísticas na língua inglesa para entrevistas de emprego. Para tanto, foi realizado um estudo aplicando um instrumento do tipo pesquisa em uma amostra de 63 estudantes da Faculdade de Ciências Políticas e Sociais da Universidade Autónoma de Querétaro. Os resultados indicam que para os estudantes ter a língua inglesa como habilidade para competir no mercado de trabalho é muito importante e impacta diretamente nas oportunidades e no salário que poderiam obter como profissionais. Da mesma forma, os alunos não se sentem confiantes em seu nível de habilidade para falar a língua inglesa para fins profissionais e utilizá-la para uma entrevista de emprego. Por este motivo, foi desenhada uma estratégia para desenvolver competências na língua inglesa através de uma aplicação de assistente de voz que proporciona aos alunos uma prática autónoma e constante, omnipresente e intemporal. Após apresentar o protótipo do aplicativo, como resultado, os alunos e professores da faculdade acreditam que o aplicativo pode ser útil, inovador e representa uma ferramenta que pode ser utilizada dentro e fora da sala de aula para praticar conversação para um trabalho de entrevista.

Palavras-chave: Tecnologia educacional, inglês, inovação, aprendizagem autónoma, entrevista de emprego.

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Introduction

The English language has played a crucial role for decades, but currently occupies “a privileged position in the world”, as Torres-Cajas and Yepes-Oviedo (2018) point out, due to globalization and telecommunications and because it is essential to communicate in various areas, such as economic, technological, scientific, social and academic. However, despite this need to master English as a second language, many face difficulties in perfecting it, especially in oral expression, which is often a source of anxiety for students (Kalan, 2007).

Furthermore, oral practice of English in classes is often insufficient due to the large number of students in groups or the lack of confidence of some students in expressing themselves in that language, which can deprive them of the opportunity to improve.



Technological means, however, can help overcome the barrier of shyness and allow us to achieve goals that could not be achieved in face-to-face environments (Pacheco, 2021).

Indeed, the ability to speak a language is considered a key indicator of its proficiency, highlighting the importance of oral ability in language learning (Torres, 2019). For this reason, job interviews usually include a section in which communicative competence in English is evaluated, either to understand or express messages. As Vinueza (2017) mentions, “the ability to communicate by analyzing and processing the information that is heard, that is oral communication” (p. 23). In other words, since it is a skill, its mastery can be increased through regular practice.

Now, listening is the first skill that human beings develop and serves as the basis for the development of speech and then the process of acquiring reading and writing begins. Although the development of the four linguistic skills is crucial to understand and master a language, this work project focuses on reinforcing listening and oral skills to improve the communicative competence of students who will enter the professional field through the use of an application with voice assistant.

In this regard, there are various studies related to the research topic of this study, from which relevant information is extracted that influences the approach towards the desired result. For example, Gómez Barrios and Palma Velásquez (2020) carried out a study on the application of podcasts (an episodic audio file) as a teaching strategy to promote the development and improvement of speaking and listening skills in English. This study was based on theoretical criteria about the student podcast, mobile learning and learning mediated by mobile devices. The results showed an improvement in oral English skills among students who participated in the study through the creation and use of podcasts, which in turn promoted independence in their learning, highlighting the importance of engaging students in the practical application of the knowledge acquired through updated and dynamic technological resources.

For their part, Hsiao -Ling *et al.* (2021) noted the paucity of studies on the effects of using virtual voice assistants (IPAs). As researchers, they started from the assumption that a characteristic of IPAs is their ability to induce dialogue interactions, which could benefit second language learning, especially in terms of pronunciation and listening and speaking skills. Therefore, they decided to conduct a study to analyze the impact of using a popular IPA, the Amazon Echo Show, on English learners, as well as their perception of working with an IPA. The study was carried out with an experimental group and a control group. The

first group, in addition to regular classes, received 7 sessions of less than an hour with Alexa, the virtual assistant. After evaluating both groups, before and after the experiment, the study concluded that there was a significant improvement in the development of oral skill in the experimental group, suggesting an improvement after interacting with Alexa. Additionally, a survey was administered to this same group to find out their perception of the experiment, and the students reported that the IPA provided them with greater oral interaction and reduced their anxiety when speaking. That research suggests the need to continue exploring the potential of these virtual voice assistants.

In another study, Daniels (2021) points out that the difficulties in learning the English language, as well as in its teaching, are numerous, which are aggravated by the urgency of substantial changes in teaching methods that have arisen as a result of the pandemic. Consequently, virtual teaching has become indispensable and artificial intelligence can be a support for distance learning. In the words of the aforementioned author, " speech recognition has the potential to become a necessary part of teaching ELLs" ¹(p. 12).

Another study worth mentioning is that of Terzopoulos and Satratzemi (2020), which is very interesting, since it investigates three aspects related to virtual voice assistants, that is, the interaction of users (children, adults, elderly and people with disabilities) with smart speakers in their daily lives, how smart speakers and technology have been used in education (primary, secondary, special and language), and user concerns regarding safety. After carrying out their research, several results were found that reveal the potential of virtual voice assistants.

However, in the educational field, its use has not been fully exploited due to several factors, such as the fact that several Skills (programs for voice assistants) are in the development phase and some in testing, so they have not yet There are definitive conclusions. Regarding security concerns, the researchers suggest that developers and the company creating the technology should improve this condition in their products.

After reviewing the aforementioned articles, it is notable how novel and little researched the topic is, perhaps because its use is very recent and there are not yet enough studies to establish definitive conclusions. This may have an encouraging side, since as researchers there is a vast field to explore in terms of virtual voice assistants applied in

¹" Speech recognition has the potential to become a necessary part of teaching within English language learning" (own translation).

education and as a teaching strategy. In the case of practicing English language skills, the opportunity is even greater, although so is the technological challenge.

Therefore, this study seeks to contribute to the experimentation that is already taking place and provide professional benefits to English students who seek to improve their speaking and listening skills, since they should have all the necessary tools to practice said language effectively. sufficient and independent, at their own times and pace, in order not to lose their skill level and improve it.

This aspect is of vital importance, since as mentioned on the Labor Observatory (sf) page, regardless of the profession studied, three essential tools are required to obtain a better job: language proficiency, computer and technology knowledge. , and coordination and management capacity.

From the perspective of an English language teacher and educational institutions, the real need faced by students who are about to graduate and need to improve their communication skills in English for the workplace is evident. On the internationally recognized job board platform OCC Mundial (September 25, 2018), it is mentioned that according to data published by *El Financiero* (Mexican national newspaper), 65% of those who claim to “know English” lack the minimum knowledge to do a bilingual job, and only 5% of them can hold a conversation. Although this need is not recognized by all students, the reality is that most will eventually face job interviews and, therefore, must develop these linguistic skills, both in speaking and listening, to complement their knowledge and command of English. as a second language until reaching an advanced level.

Currently, there are several technological options that can provide solutions to support students in the face of this challenge, which are in the innovation and piloting phases. The proposal of this study addresses the problem from multiple perspectives, all focused on student learning. For example, the intention is to provide support that the student can use independently of classes, taking advantage of the ubiquity of technology. It also seeks to take advantage of privacy by practicing with a voice assistant that will not judge or mock the student if they make mistakes, unlike what often happens with classmates or even the teacher. Furthermore, it is approached from the playful aspect of interacting with artificial intelligence (AI), which is pleasant and encourages practicing more (Ángel Rueda *et al.* , 2018), since voice assistants, when interacting with the user, They develop a certain relationship with him in guidance and accompaniment (Cortázar Rodríguez , 2021).

Now, based on all the information previously presented and the analysis of the results obtained in the survey, the following hypothesis was formulated: if an application is designed for a voice assistant, then the linguistic skills of listening and speaking will be developed in the English language of higher education students through individual and autonomous practice to improve their performance in job interviews.

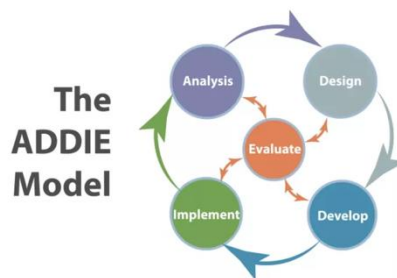
In order to explore possibilities in relation to this topic, the main objective of this study is to develop a voice assistant application aimed at higher education students with which it seeks to enhance their linguistic skills in English, specifically for job interview situations.

To achieve this objective, parameters have been established for the development of communication skills, with emphasis on speaking and listening in English for job interviews, through practice with a voice assistant. Once these parameters are defined, improvements can be identified in measurable test situations, using a matrix of categories based on the CEFR (Common European Framework of Reference for Languages).

Methodology

The ADDIE (acronym for analysis, design, development, implementation and evaluation) model of instructional design was used in this project as a framework for constructing the educational intervention. Although not a research method in itself, it does provide a systematic planning and objectives-based approach to the design and development of effective learning programs.

The primary purpose of the ADDIE model is to guide the process of designing and developing effective learning programs, with emphasis on identifying learning needs, designing teaching materials and activities, developing learning resources, implementing the program, and evaluating its effectiveness. The characteristics of this model, such as its systematic and goal-oriented approach, make it suitable to be adopted as a method to carry out this study.

Figure 1 . ADDIE model

Source: ceolevel.com

In the first stage (analysis), information was collected that was organized and interpreted to understand the student's situation and the identified problems. The second stage (design) focused on finding the best solution for the needs detected, so that the objectives and evaluation methods were defined. In the third stage (development) the prototype of the mobile application was designed. In the fourth stage (implementation), the prototype was presented to a pilot group selected for the convenience of teachers and students, followed by the application of five instruments (described later) to collect feedback from users. Because the ADDIE model is iterative, it allows you to return to any of the phases as necessary to review, correct, and improve the process before implementing it again. In the fifth stage (evaluation), the results obtained were analyzed and the study hypothesis was supported. Finally, the discussion and conclusions of the study were written.

The approach used in this study is mixed, since quantitative and qualitative elements were combined. The target population consisted of undergraduate students from the Faculty of Political and Social Sciences (FCP and S) of the Autonomous University of Querétaro, enrolled in an intermediate-advanced level English course. The sample, selected by convenience, was made up of 63 students enrolled in English subjects from levels 5 to 8, belonging to any semester and degree offered by the Faculty. In addition, 5 teachers from the English area participated, who gave their informed consent and declared that they had no conflicts of interest with the study.

To understand the problem, a quantitative approach was used by carrying out a field exploration. Likewise, a survey instrument based on the Likert scale was designed with the objective of measuring three criteria: the level of knowledge of the English language, their level of employability and the use of technology to improve linguistic skills in English. Cronbach's alpha coefficient was used to evaluate the reliability of the instrument. The survey

was designed with the purpose of investigating students' experience with the English language and its application in professional contexts. This information provided the fundamental parameters to justify and support the study.

Instead, the qualitative approach was used to investigate the causes and effects related to the identified problem, as well as to explore the perceptions and experiences of the actors involved. Interviews and observations were used to evaluate the students' and teachers' levels of security, motivation, and confidence in relation to English, as well as their experience with technological tools as pedagogical support. In addition, we sought to determine the current effectiveness of English as a study and work tool for students of the Faculty of Political and Social Sciences of the Autonomous University of Querétaro (UAQ). The interviews were validated through the judgment of experts in the area of English and were carried out at an initial stage of the research. It was concluded that the development of the aforementioned linguistic skills would have a positive impact on the students' security and self-esteem, essential aspects for their comprehensive personal development.

Now, the intervention project was based on an applied methodology, since a technological innovation consisting of the development of a tool was proposed: an application for a voice assistant intended to help students practice speaking and listening linguistic skills. in English. To prepare the programming of the application, a prototype was designed in the Figma environment , called *Speech. Buddy* . The application screens were designed to guide the user through the different topics and menus in a clear and precise way with the intention of making it friendly and intuitive from the first use, so that the user is motivated to practice more.

During the implementation phase, the socialization of the prototype was carried out, initially to carry out a pilot survey and then to apply the evaluation instruments of usability, content organization, desirability, usefulness and credibility, as well as the quality evaluation of the *software*. . These evaluations were carried out through surveys, interviews and a card organization technique (*card sorting*) among the English students and teachers who were part of the sample.

This process combined empirical research work with theoretical development, which made it possible to identify dimensions and aspects necessary to comply with the relationship between professional ethics and educational research (López-Calva, 2019).

Likewise, and as already mentioned, the approach used was mixed, since both quantitative and qualitative techniques and strategies were required. Quantitative methods



were used to evaluate the problem from an external perspective, compare, interpret, establish precedents, determine causality and its implications (as suggested by Lester and Lester, cited by Hernández Sampieri et al., 2014), which also served to demonstrate the effectiveness of the project. To carry out the quantitative strategy, five instruments were designed and applied: four of them in the form of surveys using online forms, and one using the card organization method (*card sorting*) through the UX Optimal Workshop platform.

To determine the learning parameters in the sample, a quantitative method was used that consisted of a matrix of analytical categories related to the teaching and learning of linguistic skills of the English language. In the first stage, an oral exam type test was used to measure the students' level of mastery in terms of oral and listening skills. This will be applied again in a third stage of the project, once the learning intervention strategy proposed in this study has been programmed, implemented and evaluated with the aim of establishing a comparison and evaluating the effectiveness of the developed tool. The evaluation criteria for all cases were taken from the Common European Framework of Reference for Languages (CEFR or CEFR in English).

Results

The results of this project are divided into two phases : the first, aimed to understand the problem and validate the relevance of the project, while the second covers the results obtained after the intervention with the prototype of the mobile application.

Field research

An exploratory field investigation was carried out to address the identified problem. Specifically, a survey-type instrument was designed based on the Likert scale, which was answered by 63 students of the 87 enrolled in the advanced levels of English of the different undergraduate courses at the Faculty of Political and Social Sciences of the UAQ. The survey yielded a Cronbach's alpha coefficient of 0.80, indicating high reliability of the instrument.

The survey results revealed several areas of opportunity. For example, more than 60% of students reported having a good command of the English language in terms of listening and reading comprehension, as well as sufficient writing skills. However, only 27% of the students indicated that they had a good command of the oral expression skill (figure 2). These findings confirm the premise that there are few students who, despite having a good level of

reading and writing skills, can communicate effectively in English, which underlines the need to develop tools that support the practice of this skill.

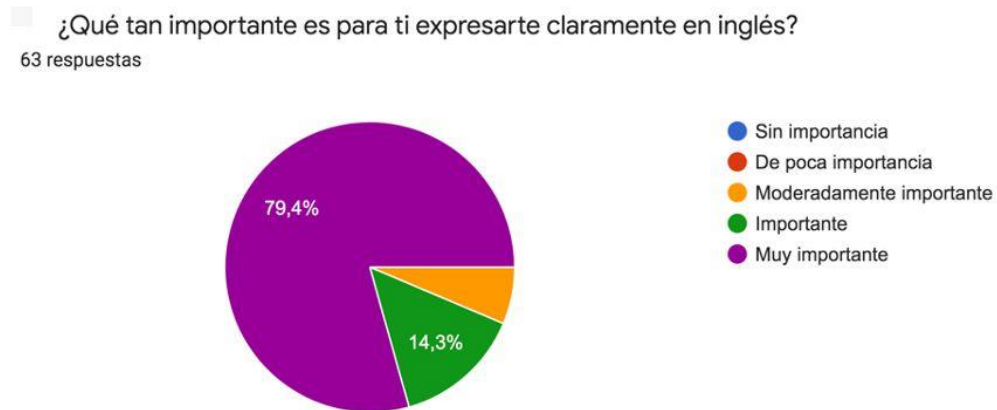
Figure 2 . Oral command of the English language



Source: self made

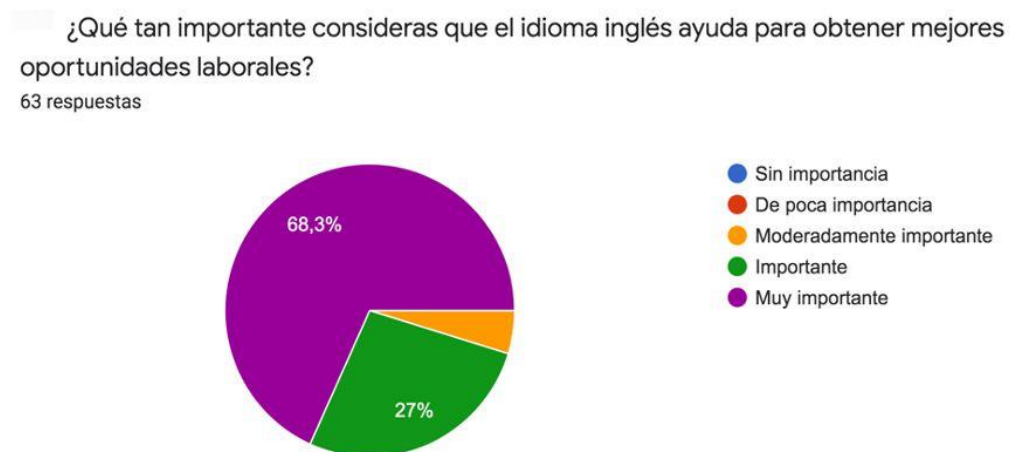
To acquire strong oral proficiency in the English language, it is crucial that a person has self-confidence and considerable motivation to practice regularly, so that he or she can progressively improve through constant practice. It is evident that part of the problem lies in the lack of security on the part of the student, in addition to poor exposure to oral practice. This skill is often the least developed among students, who, despite recognizing the importance of expressing themselves clearly in English, often lack confidence in their oral skills. Therefore, it is vital that students have strategies that encourage their interest in improving oral skills (see figures 3 and 4).

Figure 3 . Importance of speaking English



Source: self made

Figure 4 . Importance of speaking English for job development

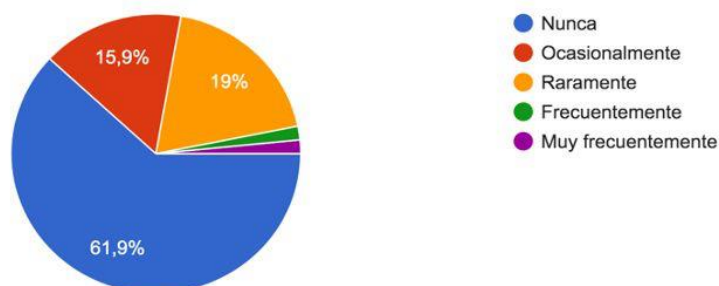


Source: self made

Likewise, it was identified that the main area of opportunity lies in the fact that the students stated that they had not used any application to practice job interviews in English. This highlights the lack of a tool that provides them with the verbal practice necessary to maintain fluent professional conversations in English for this specific purpose (figure 5).

Figure 5. Use of technology to practice English

■ ¿Qué tan frecuente has utilizado alguna “skill” de asistente personal que te ayude a practicar las habilidades de conversación para una entrevista laboral en inglés?
63 respuestas



Source: self made

Based on the analysis of the information collected through the previous instrument, the need to have an economical and adaptable tool to the student's time that complements classroom teaching is evident, and thus masters the linguistic skills of listening and speaking in the classroom. English language. This is essential for students to become professionals who are better prepared and equipped with one of the essential skills for the workplace: mastery of a second language.

Intervention with prototype

Regarding the results of the prototype presentation, the data collected through four different instruments reflect a positive overall acceptance of the application, while also pointing out areas of opportunity that should be considered during the application programming phase.

Usability evaluation of the App SpeechBuddy prototype

In the first instrument, the variables of efficiency, ease of learning and satisfaction were evaluated. According to the results obtained, 50% of users considered that the application is always efficient, while 64.5% thought that the ease of learning always occurs in the application. Additionally, 56% expressed being completely satisfied with the app.

Some low values obtained in the evaluation can be attributed to functions that are not yet enabled due to this being a prototype, such as sound. However, it is important to highlight

some relevant data, such as the possibility of choosing menu options by typing and the suggestion of including an undo *function*.

Studio Card Sorting for content organization

The second instrument allowed us to know how users expect the elements to be organized within the mobile application. Participants had to classify the cards with the names of the elements into the categories they considered most appropriate for better organization within the application. The results of this study show that the majority of students organized the content according to the categories presented, which coincides with the structure with which the application was designed. However, those results that were placed in other categories were considered as an alternative point of view for the organization when scheduling the application (Figure 6).

Figure 6. Graph of Card sorting study results in the OW Optimal workshop program

	Home	Pantalla final	En ninguna pant...	menu gene...	tabla de nive...	Pantalla de log...	pantalla de ejer...	Pantalla e...	unsorted
Perfil de usuario	60%			20%				20%	
Registro de usuario	60%			20%	10%			10%	
búsqueda	60%		10%	10%	10%		10%		
frase del día	50%	10%	10%	10%		20%			
notificaciones	50%		10%	20%				20%	
foto de usuario	40%		10%	10%		10%	10%	20%	
inicio de usuario	40%			40%	10%			10%	
integracionistas de redes soci...	10%	60%	10%	10%				10%	
comentarios y calificaciones		50%				30%	20%		
botón de salida		40%		20%		10%	30%		
link a bolsa de trabajo	10%	30%	20%	30%				10%	
velocidad	20%		40%	10%			20%	10%	
ajustes de sonido	10%		30%	30%			10%	20%	
categorías generales y filtros				60%	10%		10%	20%	
botón configuración	30%			50%				20%	
info sobre la app	20%	20%		40%				20%	
Niveles o submenús				20%	60%		10%	10%	
mapa de avance					10%	90%			
cuadro de logros y avances		20%				80%			
barra de avance	10%			10%	20%	30%	30%		
registro de uso de la app por d...	10%	20%		20%		30%		20%	
Escuchar							90%	10%	
repetir grabación							90%	10%	
borrar		10%	10%				70%	10%	
botón back				20%	10%		70%		
grabar							70%	30%	
revisiones de vocabulario		30%				10%	50%	10%	
volumen			30%	10%	10%		40%	10%	
mensajería	30%			10%	10%			50%	
historial de actividad	10%	20%		20%		20%		30%	

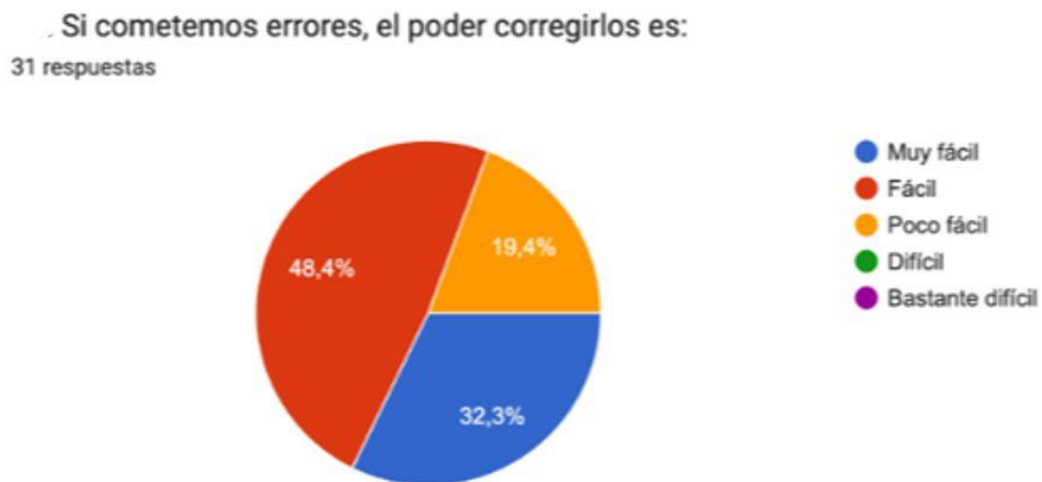
Source: self made



Evaluation of desirability, usefulness and credibility of the Speech application Buddy

In the third instrument, the variables of desirability, usefulness and credibility were evaluated. Most users expressed that the characters, elements, and organization of the interface are clear and easy to read. Likewise, the majority considered that the terminology and information in the system are clear enough. In terms of learning how to use the system, 90 % stated that it is easy to use. However, approximately 20% felt that it is not easy to correct errors, which will be taken into consideration to improve desirability (Figure 7).

Figure 7. Evaluation item showing lack of option to correct errors in the application



Source: self made

Software quality assessment Speech Buddy

The fourth instrument used was the Educational Software Quality Assessment developed by Medel (2020), which includes variables such as motivation, versatility, pedagogy and evaluation. The majority of users (more than 95%) thought that the application is interactive and motivates them to continue in the learning process. However, about 30% were neutral regarding the versatility of the app. In terms of pedagogy, more than 95% felt that the course content is presented clearly and simply in the app. Finally, the evaluation clearly represented an area of opportunity and improvement in the application, with almost 40% of respondents showing a neutral stance regarding the clarity of the feedback. At this point, consideration will be given to returning to the prototype design to include more detailed descriptions.

The interview

To complement the evaluation of the prototype with the opinion of the teachers in the area, an intervention was carried out using a qualitative interview-type instrument, which was applied due to the concern to know if the English teachers felt threatened by the use of technology to reinforce the learning of that language. The questions for the teacher interview were the following (five teachers from an academy of ten were interviewed, selecting those who teach advanced levels):

1.- What do you think of the use of mobile technology for students to practice the English language?

2.- For you as an English teacher, does the use of technological applications to practice English represent a threat to your performance and professional growth?

3.- What do you think of a mobile application for practicing the English language focused on job interviews for students who are close to graduating?

From the interviews the following could be concluded:

- A. The majority thought that the use of applications on cell phones is very good because it helps, complements the practice of English and they can do it at any time.
- B. No teacher interviewed said they felt threatened in their work because students used mobile applications.
- C. They all thought that it would be very good to have an application to practice the job interview in English and that they would use it as a resource in their classes.

The results of the interviews were highly gratifying, since not only was the possibility that teachers felt threatened or limited by the technology ruled out, but 100% of those interviewed agreed on the advantages that the proposed technology offers. In addition, they were willing to incorporate it inside and outside the classroom to promote the learning and practice of knowledge of English as a completely necessary communication tool in the professional and work environments.

Speech Buddy Mobile App

For the design of the prototype, various aspects related to the design of mobile applications were taken into consideration with the aim of making it attractive, effective and useful. To do this, the learning objectives (what for), the target audience (for whom) , as well as the educational content and design necessary to achieve the objectives (what and how) were taken into account .



The application was designed with an interactive interface that allows the user to read, listen and answer job interview questions in a simple way. These questions are divided into categories clearly distinguishable by colors and labels. As for the interface design, recognizable buttons that are common in mobile applications were selected, but given a coherent visual style to ensure a nice and uniform appearance. Additionally, a distinctive logo was created to brand the app, allowing it to stand out among other apps on users' devices.

Likewise, in the main menu of the application, buttons were included that allow the user to access different functions, such as viewing their personal information, exploring the available topics and reviewing their achievements. In the topics section, identified with the letters A, B and C, general areas relevant to a job interview are presented, such as personal information, work experience and professional expectations. In addition, option D provides access to specific questions by degree or academic program, adapted for areas such as political science, sociology, communication and journalism, and international relations.

The questions included in the application were selected after extensive research and analysis, in conjunction with the students, to ensure that they reflect the skills, areas of specialization and knowledge specific to each educational program. The application allows the user to read and listen to questions, as well as write and dictate their answers using voice recognition. Additionally, it highlights unrecognized words and offers support to practice their pronunciation, ensuring clear and accurate answers.

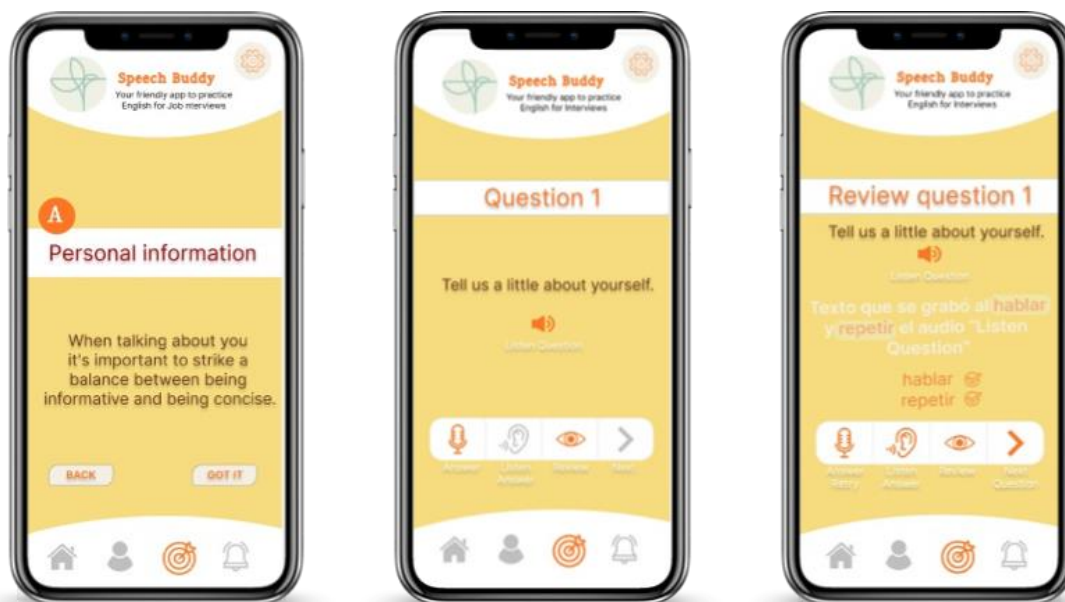
To illustrate the results, some screenshots of the Speech app prototype are included. Buddy , developed as part of this research (figures 9 and 10).

Figure 9 . Speech Buddy mobile app prototype home screens and menus



Source: self made

Figure 10. Exercise screens of the Speech Buddy mobile application prototype



Source: self made

Discussion

The results derived from this study have several angles that can contribute to the study of information technologies. On the one hand, the research delves into a topic that is recent with respect to the specific use of a virtual application with the objective of practicing communication in English in the workplace, to which a higher level student will be exposed. On the other hand, it serves to analyze the real statistics of the performance of students from the Faculty of Political and Social Sciences in a possible job interview with the level of English they obtain as graduates of this school. This can provide information to make pedagogical proposals in the restructuring of programs that improve the graduation level of students. According to Chica -Salvatierra and García-Farfán (2022), learning the English language “contributes to the development of cognitive skills, promoting greater access to opportunities both personally and at work” (p. 6).

Likewise, as Rodríguez (2010) mentions, “oral expression has many functions; Through it, people can establish personal relationships, find information, compare their points of view with others” (p. 7). Furthermore, regarding the formation of this skill, the aforementioned author states that it is a dual process that includes the speaker, who is the one who encodes the message (oral expression), and the listener, who decodes the message (hearing). Likewise, it is interactive, and roles are dynamically exchanged to create communication.

On the other hand, it should be noted that virtual voice assistants are used to practice listening skills rather than oral skills, since they do not yet recognize accents or provide feedback on the qualities of oral skills in the English language. This feature is not favorable to enhance this project, and due to this condition, specific speeches are created to practice in the mobile application while a more advanced and affordable technology is developed in terms of voice recognition for language learning through voice assistants.

Regarding the practice of the English language through a voice assistant, González (cited by Bustillo *et al.* 2017) recognizes that in a study to show the integration of technology as a significant tool for teaching English, it was demonstrated that the use of Technology significantly improves the quality of classes, in addition to promoting motivation towards learning the language. Although it is difficult to find a theoretical model, there is already talk of how virtual simulators can help achieve educational objectives , so that they can be a valid educational tool for students to learn different types of content and objectives (Cabero - Almenara and Costas , 2016).



Conclusion

In conclusion, the need for training is highlighted, through a professional instructional design, for both students and teachers so that they can take full advantage of the advantages offered by ICT in line with pedagogical objectives.

Likewise, the positive impact of this project transcends the students of the Faculty of Political and Social Sciences, since it can benefit all higher education students who seek not only disciplinary training, but also autonomous personal development and the ability to express themselves professionally in another language.

On the other hand, practicing the English language through a mobile application has numerous advantages inherent to ICT, such as the flexibility of being able to practice at your own pace, at any time and from any geographical location. Although this study concludes that it is feasible to design and program a mobile application for practicing English focused on job interviews, it is recognized that, with technological advances and the growing popularity of voice assistants, their cost will be more affordable in the future. Therefore, it is possible that each student can have a voice assistant, which opens the door to new possibilities for language practice. In fact, with the constant advancement of artificial intelligence and the sophistication of voice recognition programs, a future is envisioned in which this technology can be applied in similar projects with a similar pedagogical approach, but with more advanced technology.

Teaching and learning a language other than the native language presents a variety of mechanisms, many of which are adapted to the individual needs of the student. The strategy proposed in this study is just one more that takes advantage of the advantages of technology, but with a practical focus on improving job interview skills in English. These interviews not only represent an exchange of communication between the interviewer and the interviewee, but also an opportunity for the candidate to introduce themselves as a person.

In short, the Speech application Buddy can serve to reinforce the user's knowledge of the English language and practice it used in job interviews, acting as a virtual interviewer, the application offers a friendly and neutral experience that offers recommendations and feedback to improve oral skills, confidence and user motivation.

Future lines of research

If practice through the application supports the development of linguistic skills in English for students of the Faculty of Political and Social Sciences of the UAQ, it can be inferred that it could also benefit and support students from other majors at the same university, based on two fundamental premises. Firstly, we live in a globalized world where English remains the most used universal language. Secondly, information technologies applied to education are essential tools with unlimited potential.

Furthermore, as Macías (2021) suggests, artificial intelligence promises to improve education on a large scale, with the main characteristic of personalization . according to the needs of each student . Therefore, as a proposal for future development, the personalization of the questions is proposed depending on the work field of each educational program offered at the Autonomous University of Querétaro, which would allow adapting the practice of job interviews in English of the students according to your area of specialization.

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