

Methodologic Proposal for teaching English Language through virtual learning environments.

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Abstract. The main goal of this investigating paper is to purpose an English interactive software to get better the speaking and listening skills in the students from the first terms from the career of Tecnología Superior en Desarrollo de Software of the Instituto Superior Tecnológico del Azuay. The learning process has become more and more desirable of good results, but that basically does not happen in the current education model because of a great diversity of circumstances during the teaching learning process. In this document it's going to be described about learning analytics and the huge help in the field of the education it provides, the way it can support teachers to create excellent environments of applying the most brand new-methodologies and collect data to purpose corrections to the things are made in a bad manner. Also, this state-of-the-art paper foregrounds how and where to collect the data, the process to follow to and how to use the data to get better the English speaking and listening skills. The purpose will be to develop an interactive augmented reality English speaking and listening software in order to use the language as it occurs in real life situation, avoiding grammar correction mistakes, permitting students to use it as much time as they desire it and motivating them to speak and listen to it in their own pace to acquire the English skills in an efficient and attractive way.

Keywords: Virtual learning environments, English learning, Augmented Reality.

1 Introduction

When you start a new term as teacher many thoughts come to your mind about the expectations of the students you will have, how good their English level will be and if your methodology will fit to all styles of learning. In the educative process Learning Analytics takes an important role because of having a wide knowledge of it through collecting meaningful information, analyzing it and detecting what things are made good and wrong to purpose early and accuracy solutions in the methodology strategies

and didactic material will help teacher's task and awake student's learning desire. According to Uhler and Hum [1] states learning analytics provides one of many methods to not only document student performance but also to provide tools that encourage the types of continuous improvement that accrediting bodies are seeking. In the same way Clow [2] educators have a professional responsibility to use tools and methods that can improve students' learning, and learning analytics offers potentially powerful ways of doing this. In the current time, the methodology, which is part of the programing in most of the instructional institutions is flexible, but it is not enough. When the innovation forms part in the instructional procedure, it will be possible to generate adequate environments to develop the student's capacity and necessities.

There is a fact in the Instituto Superior Tecnológico del Azuay (ISTA) due to learners have a long background of studying the foreign language in their formative scholar process, but it is a truth there's lacking a lot of work. There are two types of students, those who drop the course and ones, who are promoted to the next level but without the needed English proficiency. Students have studied around 12 years during school and high school before to get in to higher level of education. The level of English aptitude is barely acceptable. The speaking and listening skills are the weak points, therefore, they must be focused in a prospective manner, by considering the critical thinking, reflexing on the value of the language and letting students get better personal and professionally; in other words, the English language ought to be thought appropriately by means to get the right level of mastering and increasing opportunities of developing [1].

Nowadays, most of the students have internet access, free entry to it to interact with content and people using the social media applications and obtain a huge diversity of material in English language like, you tube videos, movies and thousands of unlimited pages to establish contact with the language. To link technology as a resource to overcome the limitations in the learning process makes education more dynamic, even though it is a really serious need to create an English Learning Interactive Software as a tool, which permits learners speak and listen to across from the augmented reality. To offer the chance to stay in contact with the language, just using a technological device as a cellphone and virtual reality goggles will increase the English speaking and listening acquisition as being in the real context where the language takes part.

2 Related Works

There are many researches about how to speak a language deep and fluently, but some had put emphasis in what resources make the English language acquisition better and accurate. Billinghurst [3] states the AR interfaces allow users to see the real world at the same time as virtual imagery attached to real locations and objects. The principal goal is to enhance the real world with Augmented Reality (AR) through computer interfaces. According to investigations when a student is under an augmented reality its learning might be overloaded, therefore the importance to build up a friendly software, which offers a great interaction to increase the best development of English language input, listening and speaking skills as most relevant points. In other researches the

positive significant correlation was found between academic achievement and the motivation in the use of AR technology in language classroom Solak and Cakir [4] and in the other hand, Yi-Cheng Chen [5] mentions establishes that to learn a second language through a technological device continues to impact students around the world, it is necessary to gain a better understanding of the influencing factors to improve teachers' instruction and students' learning activities, which it's beneficial for both because it implies self-preparation, a good planning and .

There are many questionable situations during teaching–learning interaction in class. So, why to use Augmented Reality to get better Listening and Speaking English Skills? The augmented reality technology basically in the field of the education is one of the tremendous key elements of future learning atmospheres. Hassani, Nahvi, and Ahmadi [6] contribute that to synchronize virtual reality equipment (visual, auditory, and haptic) and intelligent agents in order to elevate the experience help students to increase their English learning experience because of the interaction. It is also a promising educational tool that helps to enhance learning through motivation of language learning.

When pupils are motivated, pushed to work individually and in teams, things become easier and more exciting. Not only the students are the main part of the educational procedure; teachers must have a vast training in this such technologic areas, Kozlova and Priven [7] contributes that the learning of foreign language requires much perseverance, dedication, practice, interaction, and support; teacher guidance to be internalized and gotten in a communicative usage must be mandatory.

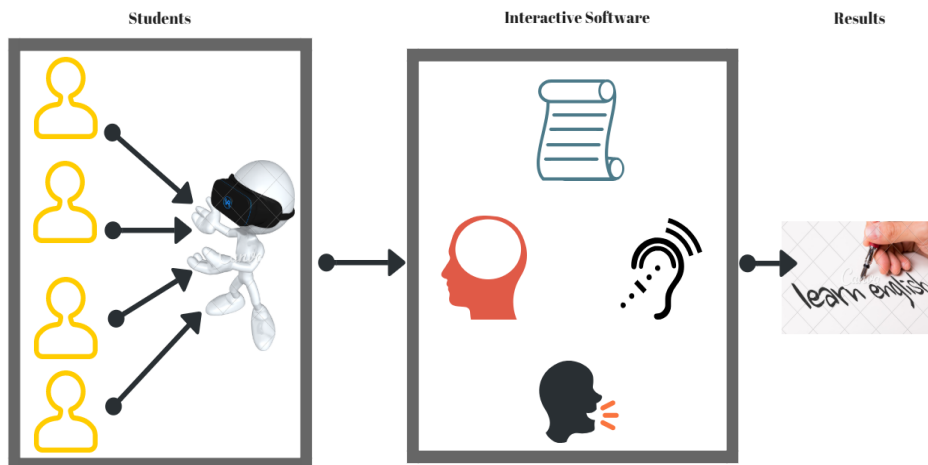
It's known that to be able to speak and understand the English language it's very necessary to be in contact with it, according what Perry states [8] the learning does not just happen inside of the classroom, at the contrary, if using outside it of the classroom, with the goal of providing a contextual and immersive learning experience: one that is meaningful and more relevant for the learner. But when the circumstances do not let it happens, it is possible to use a communicative interactive software. It's true that the most of students from the Instituto Superior Tecnológico de Azuay work to afford its studies and unfortunately, that does not give them enough time for going a place to find English speakers to talk to and practice the language in real situations. For that reason, the importance of the technology by developing an augmented reality software, which will help students to create environments across from the interface of desktops computers and mobile devices. This option is suitable and regardless to Li, Chen, Cheng, and Tsai [9] establishes that an AR classroom tends to create the similar short-term immersive learning scene like English village without the costly facilities and additionally, Diegmann and Schmidt-Kraepelin [10] express that it's possible to learn the Augmented reality as a game, like a video game because it provides educators with highly interactive and visual forms of learning. To travel anywhere it is possible, interaction in real situation, use of authentic English language in a diversity of contents will open the breach between accurate English Learning acquisition and enrichment of capacity of having some massive communicative skills, Listening and Speaking.

3 Methodologic proposal

The main goal of this searching paper is to purpose an English interactive software to get better the speaking and listening skills in the students from the first terms from the career of Tecnología Superior en Desarrollo de Software of the Instituto Superior Tecnológico del Azuay. The way it will be possible to get it by through the software because the students could interact with it in real time, in which they will have to use their own language to practice. Moreover, there are numerous kinds of ways of teaching directed to students who don't have a total access to English speaking and listening real situations. In this research is going to be utilized a mixed methodology, it will be quantitative and qualitative one, due to the information is going to be collected, analyzed, and reported in different manner. Stosic, Rizov, and Rizova [11] state that one characteristic finding of quantitative studies is almost a unanimous emphasis on altruistic reasons, in other words to look for the best road to improve student's English speaking and listening proficiency. In the other hand, Alasheeri [12] expresses that a designed software based on Augmented Reality (AR) was effective enough to help students gain the learning competences required for learning English. So, to motivate to learn, practice and defeat the afraid of talking in a foreign language will accommodate students for their obtaining pace and timing learning.

In this way, in the Figure 1, we can see our proposal:

Fig. 1. English Software Proposal



Basically, it has three principal components: Participants (in our case, they will be students), the AR Interactive English Software and finally, the results that allow us to verify if the participant could get the objective that it is to learn English.

a. Participants

The main involved in the research is going to be the first level students from the career of Tecnología Superior en Desarrollo de Software. In the research will be used

the information about software usage, time of use and if they utilize it as a mean of increasing their English Speaking and Listening skills learning. The sample, which permits to obtain the quantitative information will be the first terms from the Tecnología Superior en Desarrollo de Software career. What this exploration tries is by determining how much students could get better the speaking and listening skills through the application of a good pedagogic approach, methodology and didactic resources without the interactive English-speaking software and also to know when the software was used, what the student's improvement was using it in order to make an analysis the capacity of enhancing language into their empowerment and the influence of the application in different language learning contexts.

To assess the model in the researching will be apply different kinds of techniques and instruments. One of the most used techniques is the survey, since it lets the research obtain useful data to be analyzed and represented statistic graphics. The questionnaire will be the instrument. This is not going to be the only one though, the interview will be part of this work, too. To abstract the ideas and thoughts about the other professional experts from the field of education is a great support to afford this job, so what the English teachers will tell during this process is going to be very valuable, because in that way it's going to be possible to contrast somehow the information and say some founding criteria about teaching learning process is been applied and what it's necessary to contribute to make it stronger. Finally, one of the most important part of the investigation, to obtain data from students, but how is it going to be gotten? Vate-U-Lan [13] specifies that to get to know if the software is really useful, it must be applied a questionnaire about the satisfaction to the users, in this case the student; to add some features and increase of the software development.

b. Proposal

According to the exposed before, what it is pretended to purpose in this state-of-art paper is to create an interactive software to practice English language in real situations as normal way it occurs in real life. There are strong enough reasons which AR in education is vital, because it motives students, wakes their attention and makes them to be more focused in the content and the class pace. The interface through the mobile devices will improve the interaction and reduce the load and sometimes such stress of content. It is just not about to watch a video and answer some questions, read a complex text and infer the main idea, listen to a dialogue and repeat the most difficult words and underline the new words. At the contrary, the primary objective is to gift the application the most wonderful display, with plenty of colors, real sounds, situations that could happen in a random encounter with known or unknown people and the most relevant part to speak normally as people do in English speaking countries. It is really relevant to add there's going to be Ecuadorian sceneries to make the encounter with the software more familiar and relaxing.

There is one main aspect in the Instituto Superior del Azuay to be considered in the career of Tecnología Superior en Desarrollo de Software, during the term, students have five hours per week only and according to the Common European Framework of Reference cited by Europarat [14,15] states it's needed an average of 480 hours to acquire the B1 level of English proficiency, therefore their level of English is not good enough

because during the term students receive about 360 hours. What the interactive software intends is to provide learners to enhance what they receive during their classes and put it in practice using the software at any place as many times they want to. Another aspect to be considered, the software is going to give to the learner confidence due to he can speak in his own pace, no corrections by anyone and self – learning through listening to in the interaction with the technological tool for education.

Finally, as many times the learners interact with the software as better will be their communication, in other words, they will get fluency, expand their vocabulary, improve their pronunciation, embed listening skill in context, understand more complex sentences, develop the inference capacity, get enough idioms and become a more sociable person because of the ability to speak a second language.

For this reason, we propose an interactive software that allows students to practice English through activities oriented to reasoning and understanding, so that they are able to both understand and express themselves in English.

c. Evaluation

There's no doubt that the evaluation in education is fundamental to get better the English teaching learning process. The evaluation of the results obtained through the application will be evaluated by means of analytical learning techniques, where the level of management of the English language will be evaluated before, during and after the use of the proposed software.

For the evaluation during and after, the databases used by the system would be used to obtain a more coherent judgment using parameters such as students' time of use of the software, age, gender, socioeconomic level, qualifications obtained, activities completed, etc.

In this way, they can apply educational data mining techniques, which allow us to answer various questions such as: How does the use of the application affect students? How much time did the best-evaluated students spend the software? How to improve the application based on the average of the grades obtained? What percentage of students improved their performance in English language learning using the platform? Are the activities attractive enough for students to complete? etc. This process would be carried out in order to improve the proposed software, orienting it more and more to a software customized to the needs of the student: level of studies, learning style, speed of assimilation, etc.

4 Conclusions

The proposal of an interactive software that uses augmented reality to improve the skills of the students of the Higher Technological Institute of Azuay in the learning of the English language is an innovative option that uses technology to improve educational processes, considering that English is a subject in which the vast majority of students lose or drop out.

On the other hand, the use of the software will allow evaluating with real data how has its influence on the students and how to improve the different pedagogical processes that have been developed in the Institute, providing a statistical analysis of the results obtained in order that Teachers take this knowledge and transform it into learning that allows to create predictive models generated by methods and techniques of educational data mining, for the improvement of the software to individualize the learning experiences of the students.

It should be noted, that the software has a great advantage that is the fact that it can be used 24 hours a day on any of the 7 days of the week, which becomes a great advantage for students since they would not be tied to a schedule and they can develop the activities according to their time and their rhythm of learning.

Finally, to contribute to the English teaching learning process in the Instituto Superior Tecnológico del Azuay with an innovating and potential technological tool to ease and guide the English speaking and listening language learning as a mean of improvement and self-development of English language proficiency.

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