



## Ai-enabled adaptive learning systems for enhancing English language listening and speaking Skills in E-Learning environments

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### Abstract

Traditional classroom settings have changed into hybrid and completely online situations brought about by the proliferation of online education, providing students with both possibilities and problems educators. A key focus of the study is on the pedagogical shift from conventional classroom instruction to digital and blended learning environments. The study analyzes students' engagement levels the significance of technology hurdles on learning outcomes and the necessity of interaction in online education. It also looks at how self-paced learning affects student autonomy and retention rates. According to earlier research, well designed online courses may be just as successful as conventional in-person training when designed with quality standards in mind. However, factors such as accessibility, digital literacy, the key factors that determine success are student motivation and the course itself. This study adds to the continuing conversation on digital learning and how it has influenced contemporary teaching methods. For educators, legislators, and curriculum designers looking to maximize e-learning, it offers insightful information strategies for English language learners.

**Keywords:** English, E-Learning, language and digital

### Introduction

A student's learning performance may suffer if, despite the advantages of online learning, they encounter challenges in their online courses that they would not have encountered in a more conventional classroom setting. Learning styles and preferences, technical anxiety, thoughts and metacognition are the four main categories into which these problems fall. To overcome the cognitive hurdles of increasingly complex information and multi-dimensional learning activities, students need enhanced cognitive abilities. Interactive features including Many online courses include video, text downloads, and tasks that students do online.

Due to the lack of set class times and the elimination of mandatory attendance, online students have less constraints when it comes to metacognitive difficulties (Tsai, 2009). The next step is for students to establish a learning timetable that will allow them to control their own learning and complete all of the classes. Researchers found that students who used self-monitoring tools performed higher on a test of general English ability than those who did not (Chang, 2013). Anxieties about using computers and the Internet constitute the third obstacle. Learners' success is severely hindered by computer phobia, claims Aydin (2011). Students become agitated when they can't access their classes due to a malfunctioning computer or network infrastructure. According to Ekizoglu and Ozcinar (2010) and Saadé and Kira (2009), students with inferior Internet skills experience anxiety as a result of this.

According to Lee (2001), It will take students some time to adjust to the new surroundings and the difficulties they will encounter. learning environment, in terms of their preferred methods of learning. The need to use a different learning style may be the root cause of these difficulties for some students. Students without enough technological competence may struggle (Kearns, 2012; Lee, 2001).

According to Crim and Reio (2011) and Vonderwell (2003), In the lower age groups, most pupils favor and are better used to learning in groups with their classmates. In the absence of adults they may turn to for help, kids may feel anxious and upset when they need answers to questions that come up quickly. According to the research, students had a better chance of succeeding in online courses if their preferred learning styles and multimedia preferences were compatible with those offered.

Learners will succeed academically when they employ effective and suitable tactics for online learning, according to previous research. The implementation of efficient and effective online learning methodologies is crucial, according to Solak and Cakir (2015), as it allows students to learn more quickly, enjoyably, and successfully.

### Literature review

Joan Lim Ker Shin *et al* (2021) <sup>[1]</sup> This systematic review attempts to gather and synthesize studies on online learners' views on and experiences with e-learning, given the significance of teaching good communication skills at all educational levels. 32 full-text articles published between 2016 and 2020 in journals like ERIC and JURN served as the basis for this investigation. According to this research, users' perceptions regarding e-learning and its effects on oral communication skill training and acquisition were most often investigated using quantitative approaches. Most of the users (90.9%), according to this study, have a good outlook on e-learning. Additionally, all previous research has shown that, despite some limits, e-learning is effective in teaching and developing speaking skills.

Riah F. Elcullada Encarnacion *et al* (2021) <sup>[2]</sup> The researchers state that the availability of education may be expanded nationwide via the use of E-Learning solutions and distant learning, rather than being limited to just one

campus. To create a stronger knowledge-based approach to e-learning strategy creation, it is strongly advised that more research be undertaken to include other Oman Higher Education Institutions. As it expands the conventional classroom model into the digital realm, e-learning has the ability to influence how people learn in the years to come. Every member of the academic community has a responsibility to monitor the use of online education and ensure that the elements that make it successful are imparted properly.

Sheema Liza Idris *et al* (2021) <sup>[3]</sup> The extensive use of various technologies and learning resources has produced a medium where students may participate, and online learning offers a more flexible and open atmosphere. This is a result of learner-centered learning. Conventional classrooms are still preferable, nevertheless, since many studies have shown that pupils would prefer to speak with their teachers face-to-face. So, the purpose of this research is to investigate how students of foreign languages view listening and speaking lessons delivered over the internet. Two hundred and ten first-year students from the UiTM Perak Campus took part in the study. They were requested to fill out many questionnaires that had been made using Google Docs. The results show that students do see online learning as having its advantages. On top of that, they appreciated that this interactive medium allowed them to study at their own speed and that it was engaging. Nonetheless, there are a number of reasons why this does not reflect the enthusiasm of the pupils. The goal of this research is to show how much better the internet can be than the old methods of teaching listening and speaking.

Biddika Sankar (2021) <sup>[4]</sup> The ways in which technology-mediated learning settings have influenced contemporary teaching strategies. The study's mixed-methods methodology consists of a large-scale mixture of qualitative interviews and quantitative surveys. To uncover correlations comparing the time spent studying online to the improvement of one's perspective on the importance of speaking and listening actively, statistical methods are used to quantitative data. Conversely, qualitative analysis sheds light on the underlying processes, shedding light on a variety of subjects, including learner agency, interaction, and instructional design. The results of this research provide insight into the many ways that online learning might affect students' perceptions of the value of improving their listening and speaking abilities. Anecdotal evidence indicates that exposure to e-learning is associated with more favorable attitudes, and that interactive and learner-centered e-learning modules positively affect students' opinions on the significance and use of such language abilities.

P. Rodrigues (2015) <sup>[5]</sup> This study compares the outcomes and feedback in order to compare the speaking performance of students in the English Proficiency in Conversation (EPiC) group to that of students in the non-EPiC group throughout a 12-week Intensive English Program (IEN). The research included 19 students ranging in proficiency from Lower Intermediate to Intermediate, and it used quantitative and qualitative methodologies to gather data. The EPiC assessment scores and the IEN speaking marks were quantitative methods used to show the results of the speaking comparison. To investigate how well EPiC online learning helped students improve their public speaking abilities, researchers employed semi-structured interviews and learning diaries. This study's findings suggest that ESL

students who participate in this online learning program improve their language competence and self-confidence as they work to hone their public speaking abilities. These consequences are further upon, and recommendations for more study are included.

### **The use and significance of English as a language in India**

Hi there, everyone! In this post, we will discover how the English language is vital to Indian languages and the function it plays in them. A nation's language is essential to its survival. Everyone needs a second language for everyday life: chatting with friends, going out with friends, dealing with the public, working in an office or factory, and, of course, getting a degree!

English is a very important language in India, therefore let's concentrate on it. In what follows, we will examine how the English language plays a part in our everyday lives, particularly in the realms of business and education. I'll tell you why it's crucial to know English. Come with us as we investigate the function of the English language in India!

### **Training in English: Communication and personal development**

Many different cultures, languages, and beliefs coexist in our nation, India. Imagine a massive pan that just vanishes! And your knowledge? Let people speak their native language about what they want for society, and we will find out what they really want! It appears to be second nature to learn using the language we used when we were kids. Having a shared language is essential for communicating with others, however. The English language comes into play here. Why is the English language so vital in India? Let's find out!

After we've covered the wide variety of American cultures, languages, and philosophies, let's zero in on why English is so crucial. The following part will examine how English becomes a language that fosters connections and communication. If you want to know how English has brought people together, you should keep reading!

### **Role of the English language in learning and success**

A very potent language, English! It has to do with commerce, riches, and industry. Of course! It fosters personal development, increases regard, and brings people together. For all future commercial and communicative needs, it is starting to assume the role of our universal future language. When we study English, we open ourselves up to incredible possibilities for growth and learning.

Plus, it's the language used at every school and college throughout the country. So, being able to speak English is a must for finding work in India. Just knowing your stuff isn't cutting it anymore. Having a large vocabulary and the ability to communicate in English are becoming more important for working and traveling throughout the country as a result of increased globalization.

Now that we know English plays a significant part, let's talk about how it helps with professional and personal development. From enhancing your educational opportunities to broadening your professional chances, we will delve into the many facets of English proficiency and its unparalleled influence on shaping our future. Acquiring proficiency in the English language opens up a world of

wonderful opportunities, so come along on this journey of language discovery with us.

### English language in Indian education

Now we will discuss the special function of English in our Indian school system. Strange as it may seem, but phrase packs quite a punch! Even after gaining independence, English remains a vital language for our culture.

Specifically, this section explains why English is important and how the requirements for studying English in India are always changing. Our educational system places a strong emphasis on the improvement of pupils' speaking and listening abilities in English.

A member of the most affluent family enrolling their children in English-medium schools to the poorest individuals yearning for a shot at a brighter future, everyone knows that studying English opens opportunities. Having shown that the English language is fundamental to our educational system, let us now examine its most salient characteristics.

### Features of the English language in the Indian educational system

- One of the languages that have the greatest impact on education is English.
- Develops become a significant member of society.
- Evolves continuously: adapts to meet evolving learning needs.
- Public speaking and listening skills are emphasized in the classroom.
- Results economic and social: Strategies for a better tomorrow.
- Whether you're wealthy or poor, you need to know English.

Now that we've discussed the merits of English in schools, let's examine some instances of its use in the workplace and classroom. Changing your job path or expanding your educational horizons are two of the many benefits of learning English.

### How English language skills improve: students & teachers

When learning a new language, it's crucial to focus on both hearing and speaking. Here are a few reasons why you might consider improving your English skills:

1. **Practical Tips for Development:** Giving you some advice that you can really use to become a better public speaker and listener. Students may enhance their skill levels via the use of these approaches, assignments, or resources.
2. **Real-life examples:** Put into action anecdotes or real-life examples that illustrate the challenges individuals have while speaking English and the positive effects that overcoming these challenges has had on their personal and professional lives.
3. **Technology and Tools:** Share any cutting-edge resources you've found for improving enhancing your linguistic abilities via the process of learning a new language. Resources for improving one's language skills, online materials, or interactive games could fall under this category.

4. **Importance in daily life:** In both professional Considering individual circumstances, it's critical to highlight the value of having strong listening and speaking skills.

5. **Interactive learning methods:** Language exchange classes, group conversations, and conversational meet-ups are all examples of interactive learning approaches that may help with spoken English.

Anyone may improve their English speaking and listening abilities by using all of the aforementioned learning strategies.

### Digital teaching and learning (E-learning)

#### ▪ E-Learning

Many scholars went ahead and defined e-learning. In 2003, Waterhouse provided a definition of it as a computer technology medium with the potential to be used for the advancement of educational applications. Furthermore, online education was described by the European Commission in 2001 as to "the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration." Rosenberg (2001) asserts that e-learning makes it possible to store, share, and update material, whereas Horton (2006) contends that it makes it easier to accumulate "learning experiences of information and computer technology." Both definitions, however, are a little constrictive. Also, remember that e-learning is generally considered to be the process of enhancing and encouraging learning via the use of computer technology. The term "e-learning" is used interchangeably here with the online LMS Moodle, which schools employ to improve classroom instruction and encourage students to study on their own time.

#### ▪ Forms of online education

According to the findings, there are five distinct forms of online education. You may classify these learning environments as either learner-led, in-structure-led, embedded, facilitated, or tele-mentored.

According to research mentioned in Esgi (2013), students actively participate in this activity using Instant messaging, video, or audio. Tele-mentored e-learning, which blends conventional classroom teaching with technology tools, is the last kind of online education. For example, under this paradigm, professors use online tools like video conferencing, instant messaging, and internet phones to augment the course materials that students get in paper form. In this article, "e-learning" refers only to Moodle. "MOODLE" "was originally an acronym for Modular Object-Oriented Dynamic Learning Environment" As stated by Nedeva and Dimova in 2010. It makes use of many e-learning strategies, such as learner-led, assisted, and embedded approaches, as will be detailed in the sections devoted to the Moodle platform.

#### ▪ The elements of Moodle E-learning and how they affect language ability and self-study

Activities and resources are the two primary parts of the online learning platform Moodle. Assignments, discussions, discussions, databases, external tools, forums, glossaries, hotspots, lessons, quizzes, SCORM packages, surveys,

wikis, and workshops are all part of the activities. Based on the BUE E-Learning Moodle, here is a rundown of all the components of each activity and resource:

#### ▪ E-Learning activities

At the conclusion of each of these e-learning exercises, you'll find an explanation of how to utilize it to assist your pupils in improving their language skills and more capable of working independently.

Chat: Participants may conduct text-based, real-time synchronous conversations thanks to the chat activity module. Fluency of students and the opportunity to share their own experiences are both fostered by these conversations. The ability to study on one's own, without the constant supervision of teachers, grows in children when they actively seek out new knowledge.

#### Online vs. traditional learning affects English as a foreign language listening skills

Research on ELT practitioners have been interested in the implications of online vs traditional learning on EFL students' academic performance, particularly in the last 20 years. This study aims to clarify the possible impacts Examining the effects of online vs conventional learning on the academic accomplishment of EFL students in a listening skills classroom. Very little is known about the effects of online vs. conventional learning on EFL listening skills, especially in the context of higher education. Thirty people took part in the research, with half serving as controls and half as experimental subjects. Pretest and posttest data were collected from these subjects. The two groups were instructed via online learning and traditional classroom methods, respectively. This research sought to assess how online and conventional training impacted the academic performance of English as a foreign language (EFL) students in a listening classroom, determine if there were any disparities in performance based on gender, and analyze the good and negative aspects in which the two pedagogical approaches differ.

The rapid expansion Combining digitization, multimedia content, and communication technologies, together with the Internet's widespread use in more traditional fields, is driving advancement and change in every aspect of life. Numerous methods exist for educating and training the three most popular approaches to teaching English in the classroom have developed over time: the traditional model, the online-only model, and the hybrid model that combines the two. In 2009, Larson and Yang. This study just used these instructional modalities were online learning and conventional classroom education. Even though understanding spoken English is crucial, many Learning to listen is the most challenging aspect of learning English for those who are studying the language as a second or foreign language (EFL). Most universities and colleges only have one professor that teaches both oral and written communication and listening communication. But because the teacher considers listening to be a secondary talent, he places an exclusive emphasis on the former.

Listening comprehension is as important as speaking fluency when teaching English as a second language. A further consideration is the acquisition of comprehensible input, an essential component of language acquisition. Students who excel at understanding what others are saying in class are more likely to participate actively. Teachers of

languages should therefore make more of an effort to help their students improve their listening comprehension.

#### The benefits of online education

Some of the many benefits that online education provides are as follows,

- E-Learning is accessible around the clock, so students may benefit from it whenever they need it.
- The accessibility of knowledge and information allows students to study from any place thanks to the internet.
- Online courses cover more ground in less time than more conventional classroom settings.
- Students take an active role in electronic learning.
- The learner is provided with a broader scope via e-learning.
- The student may tailor their access to material based on their needs and goals using e-learning.
- Since neither the students nor the learner need to travel, e-learning is a cost-effective option.
- E-Learning takes into account that every student is unique.
- A video conferencing platform is available for use as a discussion forum.
- Because they do not have to rely on a teacher as much with online courses, students gain more autonomy.
- Through online education, students have access to the expertise of teachers from all across the globe.
- Experts may assist others all around the globe by sharing their knowledge and experience via e-learning.

#### Conclusion

Most urban students, regardless of gender, have a good attitude toward utilizing e-learning to learn English because of the language's relevance in everyday life for communicative reasons, according to the study's results, which test the premise. The students' desire to communicate and their pursuit of chances to practice the language successfully are both enhanced when they are encouraged to engage in classroom discussions based on real-life experiences. For several reasons, fewer students have had the opportunity to engage in online learning. In order to foster attention, seriousness, and improved learning habits in their students, instructors should encourage them to explore a range of real online resources that enhance the English language.

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