

EFFEECT OF ARTIFICIAL INTELLIGENCE APPLICATIONS ON LISTENING IN ENGLISH LANGUAGE LEARNING

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Abstract

The present paper focuses on to examine strategies for adapting artificial intelligence (AI) applications in learning English language. There are some basic language skills to be developed in every language such as LSRW (Listening, Speaking, Reading and Writing). There are many technologies that are available for the purpose of learning. One of them is Artificial Intelligence which is touching each and every domain of human life. It is to be noted that, in COVID-19 all the learning took place through various online platforms, some of them are AI powered. In any language, listening comes first before learning. The best learner can be a good speaker too, thus making impactful communication in front of class or community or any society. To explore how AI applications are leading in the field of learning English language particularly listening skills, the author has reviewed 32 sources include research papers, articles and other documents. The finding are thoroughly discussed and presented

Keywords; *Artificial Intelligence, Applications, Listening skills, English language, Comprehension*

Introduction

Artificial Intelligence (AI) may be defined as simulation of human minds into a device or any object or a computer. It a branch or field of computer science, statistics and mathematics. But, truly interdisciplinary in nature where we use AI technology for business purposes, banking, agriculture, automobiles. In simple, AI is expanding each and every domain of human life and making it easier. Likewise, it is also spreading it's way into education. Most of educational functions are being automatized. Educational applications of AI are being developed rapidly and even small kids are learning coding. To learn quickly, English language is the key. With the help of it, we easily gets into the technological applications and get some benefits out of it. Without smart photos, life is somewhat difficult in the current era though it has drawbacks. We depend on mobile phones foe our daily activities such online marketing, exploring educational resources which is again AI technology like Microsoft's cortona, Apple's Siri, Amazon's Alexa et...

Why to review AI applications in the field of Education?

AI is highly regarded as business intelligence, online shopping, online banking, robotics other key parts such as machine learning, deep learning and other technological aspects. But it has some educational relevance also

- To share with my teaching colleagues how important is the use of technology
- To explore various tools of AI that are available
- To collaborate and integrate various AI tools in teaching and learning
- To unlock the scope of AI applications
- To be techno-friendly in educational contexts.

Previous studies in the field of artificial Intelligence tools

Mukhallafil T.R (2020) studied on "Artificial Intelligence (AI): Its uses in Language Teaching and Learning" and reported that some strategies of smart and expert systems in AI applications may be used to teach or learning English language. The researcher found some deficiencies while applying AI applications in the teaching and learning process. He also suggested training programs for effective implementation of these strategies and AI applications. **Ribeiro R.(2020)** tried to explore "Artificial Intelligence in the ELT classroom" for English language teachers. He concluded that AI applications in the context of education are quite intimidating. Most of the teachers understand that AI as collecting and using the data. **Ali Z.(2020)** reviewed "Artificial Intelligence (AI) Uses in Language Teaching and Learning" and found AI seems to be relevant in many areas as it simulate human intelligence processes which are operated by

machines/computers or devices. She used content analysis technique of various articles drew from the data bases. She notices three emerging themes of AI in the field of teaching and learning a language. Findings from the study reveal that there are three themes emerging in the uses of AI in relation to teaching and learning a language. The uses of AI for pedagogy, therefore, prove that its uses eases language teaching and learning. **UNESCO(2019)** Digital Library published a document on “Artificial intelligence in education: challenges and opportunities for sustainable development which suggested the method of Integrating AI to foster learner independence” where it tried to identify specific challenges to be addressed in order to integrate AI by teachers. UNESCO(2019) explained about how teachers can use AI in classes in the discussion named ‘Leveraging AI to enhance education and learning’. Teachers should take responsibility and trust students by giving them a task which is integrated with AI. The purpose of discussion was students’ independence and proactive attitude towards learning. **Wang R.(2019)** studied on “Artificial Intelligence Promoting English Learning” as he defines AI has the characteristics of machine learning and intelligent search. Machine learning primarily learns on the basis of past experiences and data that help them to analyses and predict the outcomes. It analyses and organizes the data with the help of algorithms. When it comes to the field of education, ML can easily understand and mines the data and predicts the future achievements of students. Learning situations and achievements of previous years are analyzed from corresponding written documents with the help of machine learning. ML can analyze valuable information and data of problems and causes related to students and teachers. It may help in organizing effective learning programs and promotions. On the basis of these ML characteristics, there will be continuous feed and improvement of performance in academics. **Dharmadhikari S.(2021)** studied on “Remote Proctoring is the new technology that can help to simplify the exam invigilation process”. Nowadays, companies like CISCO WEBEX are conducting and customizing these proctored online exams. With this technology, it is possible to take/ give exams from anywhere or any location with a device or a computer in hand. Albetu uses web cam for capturing recording of the the students for the purpose of invigilation. Warning messages can also be sent to the candidate and proctoring invigilator is free to take decisions on the basis of existing situations. Internet failures, switching to other device, noise or any suspecting examination behaviors are also caught in. Remote proctoring technology is being adapted by many universities, educational institute and other corporates to ease examination processes. In this, examiner can verify all the pages of answer sheets as it saves from manual handling of answer sheets, thus reducing logistical expenses. Automatic result processing is also possible with this technology. Therefore, it may be concluded that AI has protective and relaying algorithms in the field of education industry. **Amarawat A. (2021)** studied on “Role of Machine learning perception and emotion to enhance Students Learning Ability”. He used deep learning techniques with the help of four data sets are as follows CK+ , JAFFE, MMI and MUG. These data sets are put together to make into two data sets such as one static data set and one sequential dataset. They have shown in the below table

	AM-FED CK+	Action Units
Format	video	Image
Sample size	242	123

Jayalaxmi S.(2016) studied on “use of Artificial Intelligence for developing reading skills in English” in which she targeted on the sub-skills of reading necessary at the two levels(Secondary and Tertiary levels) that are different from one another; thereby teachers of English may offer two different programs to fulfill the requirements of two levels. She also has the opinion of AI helps in learning at more than one level. Pilot study was conducted focusing on two levels i.e seventh standard and 1st year B.E/B.Tech. students where use of AI would be applying on other levels also. Unfortunately, the researcher was unable to draw valid conclusions as the study was too vast covering various levels of education. However, she found AI helpful in developing inference making at tertiary level and mechanical skills of reading in secondary students also. But it was found to be a great effort in the field of Education relating AI.

Research Status on Listening Skills

Varghese N. (2013) developed Instructional Material and saw “Effectiveness in developing listening comprehension in English” at the high school level. The purposes of study were to develop Instructional Material to develop listening comprehension and study effectiveness of the Instructional Material and analyse the ratings of the pupils regarding the suitability of the Instructional Material in developing listening comprehension. The investigator used mixed methods such as pretest-posttest experimental design for assessing effect of instructional material for developing listening comprehension in English language and normative survey for collecting the views of various aspects of English language of English teachers. 50 high

school English teachers of Kerala were participated and distributed Questionnaire (for Teachers) in the survey. By clustering, 94 students of Standard VIII from Pathanamthitta District were including Instructional Material to develop listening comprehension in English at high school level. The following two tools were supplied to students for data collection such as Listening Comprehension Test and Rating Scale regarding the suitability of Instructional Material (for pupils). She reported that the majority of teachers (60%) say listening comprehension was not given importance. Another finding was that listening activities are not mentioned in the course book and non-availability of materials to develop listening comprehension. Therefore, instructional material in the present study was highly effective in developing listening comprehension in English at secondary level, he added. **Hamouda K. (2012)** in his paper titled “study on Listening Comprehension Problems - Voices from the Classroom” on 60 first-year English language students at Qassim University. A questionnaire and a semi structured interview were used as tools for collecting data. He reported that the students were facing many listening problems such as lengthy text, rate of speed, unfamiliar words, pronunciation, accents and lack of concentration. He conclude that listening proficiency was overshadowed wrong pronunciation, less vocabulary, lack of listening resources. He suggested some techniques to overcome listening comprehension problems that include developing and employing listening materials and improving classroom teaching techniques. **Custar H. (2011)** conducted a qualitative correlational study on “The association between receptive oral language proficiency (listening comprehension) and academic achievement” . he selected 802 high school students of ELL (English Language Learners) conveniently. To explore the relationship between second language listening comprehension ability and academic achievement, linear regression analysis is done and positive association between academic achievement and receptive oral language proficiency. **Ishler B. (2010)** studied “The reason for difficulty in understanding oral English Transactional texts in Tunisian EFL learners”. He did qualitative research and a cognitive, strategy based theoretical framework. Questionnaire, interviews, listening diaries and Think-aloud protocols with the learners were used as a means of collecting data. He found students were unable to use their default strategies. Therefore, they did not understand the text by encountering listening obstacles. **Parthiban K. (2011)** measured the “Effectiveness of task based language teaching in improving listening skills of secondary school students”. The purpose of the study was to prepare and to find out the effectiveness Task-Based Language Teaching activities to improve listening skills in English in secondary school students. Under the present study different variables such as gender, income, parents’ education, community and locality were covered. 50 students of IX class of Government higher secondary school from Annasal, Pudukottai were participated on the basis of pretest scores in the study as control and experimental groups. Task-Based Language Teaching Approach was used for experiment group for a period of 45 days at the rate of one and half hours per day. Achievement test was used as a tool for assessing the knowledge , understanding of English with features like vocabulary, pronunciation, stress, syllabification, grammar and meaning. Pretest and posttest compared by t-test for both the groups. He concluded that there is a Mean gain in experimental group in listening than control group that indicated Task-Based Language Teaching Approach found helpful in improving performance of the Experimental Group students.

Mathew A.(2001) studied on “Enhancing the Listening Skills of Regional Medium Learners to Improve Reading Skills”and tried to establish a link between listening and reading comprehension. The purpose of study was to determine how listening skill influences reading skill. The learner were given enough exposure for 18 tasks of listening in Hyderabad local school in Andhra Pradesh, now Telangans. Interview and classroom observations were used for data collection. He reported LSRW were weak in the beginning, as the experiment progresses the students were able to recognize words in context due to exposure to listening task. He also found that learners with printed text while identifying and listening a word does well. In absence of their active vocabulary, learners were able to recognize words though.

Conclusion

On the basis of long discussion in the light of past researches, we may be able to understand that listening comprehension in any language becomes primary in order to perform better in language learning. This is most important when it comes to English language as the trend towards English learning is increasing and explosion of English medium schools already in place. Every teacher should understand what technologies are coming up that may help in teaching LSRW better. So that, proper listening skills are learnt by students. Particularly, every English teacher should be aware of AI technology and it’s applications. There are many AI applications existing and education system scenario likely to change each and every sphere of learning. 21st century English teacher should be ready to take challenge and make use of AI application in their classroom.

References

- Ageh, K. (2019). When Artificial Intelligence Met Public Procurement: Improving the World Bank’s Suspension and Debarment System with Machine Learning. Public Contract Law Journal, 48(3), 565–595.<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=138330777&site>

= ehost-live.

- Al-Far, I. A. W., & Shahin, Y. M. M. (2019). The effectiveness of interactive chat robots to convey and instill the language concepts in first prep year students. *The Arab Association of Education Technology*, 38, 541–571.
- Walker, M., Stent, A., Mairesse, F., & Prasad, R. (2007). Individual and Domain Adaptation in Sentence Planning for Dialogue. *Journal of Artificial Intelligence Research*
- Manns, UNESCO, (2017) Artificial Intelligence: Opportunities, threats and the future of learning.
- Other internet sources(2010-2021):Regarding AI technology were taken.
- Rui Wang (2019) Research on Artificial Intelligence Promoting English Learning Change- Proceedings of the 3rd International Conference on Economics and Management, Education, Humanities and Social Sciences (EMEHSS 2019) <https://doi.org/10.2991/emehss-19.2019.79>
- UNESCO(2019) Digital Library published a document on “Artificial intelligence in education: challenges and opportunities for sustainable development which suggested the method of Integrating AI to foster learner independence
- Z. Ali (2020) Artificial Intelligence (AI): A Review of its Uses in Language Teaching and Learning, Published 9 June 2020, Computer Science, IOP Conference Series: Materials Science and Engineering

