RESEARCH ARTICLE

ARTIFICIAL INTELLIGENCE (AI) BASED INSTRUCTIONAL PROGRAMS IN TEACHING-LEARNING OF ENGLISH LANGUAGE

Dr. SANDIP P. GAWATE

Asst. Professor of English, JSPM's Jayawantrao Sawant College of Commerce and Science
Savitribai Phule Pune University, Hadapsar, Pune, MH, India - 411028.
Email Id – sandipgawate@gmail.com

ABSTRACT

The endeavor of this paper is to demonstrate effectiveness of AI based instructional programs in English language teaching-learning. Effectiveness of any strategy, electronic/technical gadgets and theories cannot be verified without practical experimentation of it. Digitization has become the crucial part of our life. Indeed, it is considered the inevitable aspect and the driving force of the world. The world has made tremendous progress in a variety of sectors due to technological innovations and its applications. Education, being one of the prominent sectors, has been adopting various methodologies all the time. Trial and error are always observable factors in teaching and learning. Education has already adopted ICT (Information and Communications Technology) based technologies and gadgets. All such gadgets, applications as well as instruments help to enhance effectiveness of English language teaching-learning. The researcher is trying to incorporate AI based virtual reality in association with physical reality to learn English language. The most significant and user friendly AI based techniques can be a great aid to teachers to make the teaching of English language interesting, interactive, dynamic and enjoyable. It is sure in future this Artificial Intelligence will change the entire outlook of the whole education system.

Keywords: Artificial intelligence, digitization, education, trial and error, ICT, virtual reality, etc.

I. Introduction

Teaching English, as a language, is a tough task in the non-native classrooms. It needs a lot of preparation, logical presentation, real life instances, actual practice, selection and gradation of the topics and sub-topics as well as actual exposure to the target language. Considering all these aspects lead this process to use a variety of teaching-learning aids to enrich its effectiveness. Quality of contents and the way of delivering the contents are to be focused and analyzed at each level by the teachers of English. Many methods have been adopted to teach English. Some of them are really fruitful but some of them have become monotonous due to its lacunas. The researcher is not evaluating any of the method here but trying to focus on the issues created due to such traditional ways of teaching-learning English. Meanwhile ICT is introduced and implemented to get

the breakthrough to the traditional methods. ICT assists the teachers of English and create interest among the students to learn English. Practicality of any teaching-learning activity is essential to have the targeted output. Talking about the use of new teaching-learning aids, and implementation has always been a curious thing.

Artificial Intelligence, being the most advanced technology, is machine based but humanized intelligence. It is completely automated and away from the interference of human. It has been acquiring in all the fields. Therefore its implementation in education and specifically in teaching-learning of English language is need of time. Thus, the present article aims at to explore the upcoming role of Artificial Intelligence in the field of teaching-learning of English language to make it pleasant and interactive activity.

II.   Present Scenario of English Language Teaching-learning in India

It is apparent that teachers have been facing a number of issues regarding teaching-learning of English language, administrative work as well as how to implement appropriate methods in teaching-learning of English language. It is also paramount to improve the quality of the teachers as they are playing a very crucial role in the development of the students and of the nation at the broader level. Analytical approach is necessary for every teacher to identify and rectify difficulties associated with the formal teaching-learning of English language. Teaching is the field of experimentation to achieve set goals therefore a number of methods are being practiced in the classroom. But they still have certain limitations. Teachers must have the adoptive approach to solve and minimize the difficulties in the teaching-learning of English language. The aim of teaching English should not be restricted as a subject but as a medium of communication in a variety of contexts. Teaching-learning strategies must be user friendly, enjoyable, interactive, dynamic and problem-solving.

Students are taking learning of English as a burden and fearful activity. It results in psychological phobia. Finally the outcome of this attitude is teaching-learning process remains lethargic and monotonous activity. Due to examination system and external force the students as well as teachers ignore the basic aim of education. It is rightly said that education needs to bring the change in the behavior. But unfortunately the complete opposite direction and detraction has become the ultimate goal of English language teaching-learning. Students are not willing to attend the classroom activities and learn English for practical purpose. It is only taught and studied as a subject and not as the inseparable part of day to day practical life. Students as well as teachers are forced with not to change this traditional scenario of education.

The aim of the researcher is focus the present scenario of the crucial as well as deeply rooted issues associated with English language teaching-learning process. If the view of teaching and learning of English is not modified, it will never become a fruitful activity. It is the humble attempt to make use of technical innovations and change the approach. As a result implementation of AI based may help to create skilled, knowledgeable and problem-solving students.

III.   Artificial Intelligence

Humans possess 'natural intelligence' whereas AI (Artificial Intelligence) is presented as the platform developed with machine intelligence. Technological growth with awesome technological innovations performs a vital function in shaping entire human life. AI is analytical, human inspired and the most important humanized artificial intelligence. AI is the branch with three sixty view in all the sectors with all the probabilities. Computer based systems, being the driving force, change the entire system with new vision. It can be demonstrated and controlled by humans at the back end. Constructive change is possible if the technical aids are employed aptly. Automation may lead us to do more research and make everything smooth.

AI includes the recognition of gestures, faces, objects, handwriting and speech recognition. A number of AI based softwares are found in the market incorporating written and spoken language. Robo tutors are developed virtually and involved in teaching-learning of English language. Virtual reality and physical reality can be mixed up to get hand on experience and exposure to the learners of English language.

Implementation of AI is less in India as compared to other developed nations. If we expect the transitions in all the sectors specifically in education field, AI must be employed as a support system. This support system will

lead us to accuracy and it will remain all pervasive. English language teaching-learning has been considered the toughest job. In Indian scenario both the teachers of English and Students need to have platforms that invoke the exposure to the target language. AI based English language teaching-learning will enhance effectiveness.

IV.   Features of AI Based Instructional Programs of English Language Teaching-learning

1.   User Friendly Need Based Instructional Programs:

All AI based applications are user friendly. It is the most advanced user interface with easy access to its users. It solves any issues in a fraction with inbuilt artificial intelligence.   Consideration of learners' needs plays a significant role in AI system. Target learners and their contextual needs are incorporated in AI based instructional program. It is set with the specific objectives and exact requirements of the learners. Teaching-learning of English language mislead to no destination without analyzing needs of learners. AI based Instructional Programs is only the solution to work on specific aims and objectives. In brief, this will help learners to concentrate only on the target without any diversion.

2.   Qualitative Contents:

Development of qualitative teaching-learning material is possible with Artificial Intelligence. It works on all the aspects of language like listening, speaking, reading and writing. The problem with the question on the quality of contents is blocked as the teams working for AI instructional programs are the experts and the researchers in the field. Selection and gradation of the topics and sub-topics is also made in such a way where one can access as per the learners' demand. In short, the quality of the contents will be ensured with the Artificial intelligence based instructional programs.

3.   Additional Support System to Teachers and Students:

AI can play a crucial role as the additional support system for both the students and the teachers of English language. In teaching-learning process hundred percent transmission of knowledge is not done therefore the support system to reinforce and make the teaching-learning effective is necessary. AI as contains humanized intelligence can fulfill this with the exact support at anytime and anywhere. Though AI based programs are inbuilt, they do not deny the role of teachers. Only the role of the teachers is altered.

4.   Quick Feedback System:

AI based programs can be developed with a variety of ways to get the feedback. It can be utilized to measure and analyze the feedback as per the need of the students. Gradation, analysis, cross verification, in depth presentation, etc. are easily done in AI based instructional programs. Manual preparation of feedback is a hectic and monotonous task. It is time consuming. Progress of the students is measured in all the aspects. Hence AI softwares save time and saved time can be manipulated in constructive purpose.

5.   Changing the Role of Teacher as a guide and director

Removal of teacher from the system is highly impossible. AI based programs can alter only the role of teacher in the teaching-learning process of English language. Teacher can guide and support students. Teacher's role cannot be denied as the backend of every AI based instructional program is subject matter expert. After all managing as well as handling of such AI based softwares need a little bit manual alterations and teachers can do it. AI based instructional programs can only be an assistance in teaching-learning of English language. Teachers can be a great help to make the alterations in the program with the help of the development team of AI based softwares. It means the role of teachers is changed as a guide and they can direct the students regarding use of AI based softwares.

6.   Worldwide Access

Worldwide access is possible for any AI based instructional programs. It has really opened all the possibilities to the students. Spatial and time limitations are completely overcome due to Artificial Intelligence. Sharing information from the quality institutions as well as organization is easy. This is really awesome access of AI based instructional program. In short, it helps remote access with the help of face recognitions, speech recognitions as

well as gestures of the students. In brief, all the activities of the learners can be controlled with the AI based applications.

7. Personalization of Teaching-learning of English:

The course can be developed as per the demand and needs of the students. Its personalization can be student centered. Students must be at the center of every kind of education because change in their behavior is expected. AI based learning platform permits learners to learn at their own pace, repeating topics and emphasizing things they have trouble with, engaging them with the tasks, appealing to their interests, etc. This personalized statistical data is useful for teachers to analyze their students and calculate their future performance as well as line of action. AI based instructional programs are personalized for the betterment in the teaching-learning of English. It focuses on the need based development of the contents of the course.

8. Sky is the Limit for Learning

It is rightly said that there are no limitations for learning. Sky is the limit for learning English language as well as knowledge written and converted in English language. AI based instructional programs can open the doors to the world. Thus, it has given a wide view to the learners.

9. Chatbots or Language Bots:

These are the virtual interactive boards developed by incorporating Artificial Intelligence. Interactions as well as queries can be solved with the help of chatbots. It is interaction between the humanized machine intelligence and actual language users. Questions and answers sessions can be accelerated with the help of chatbots.

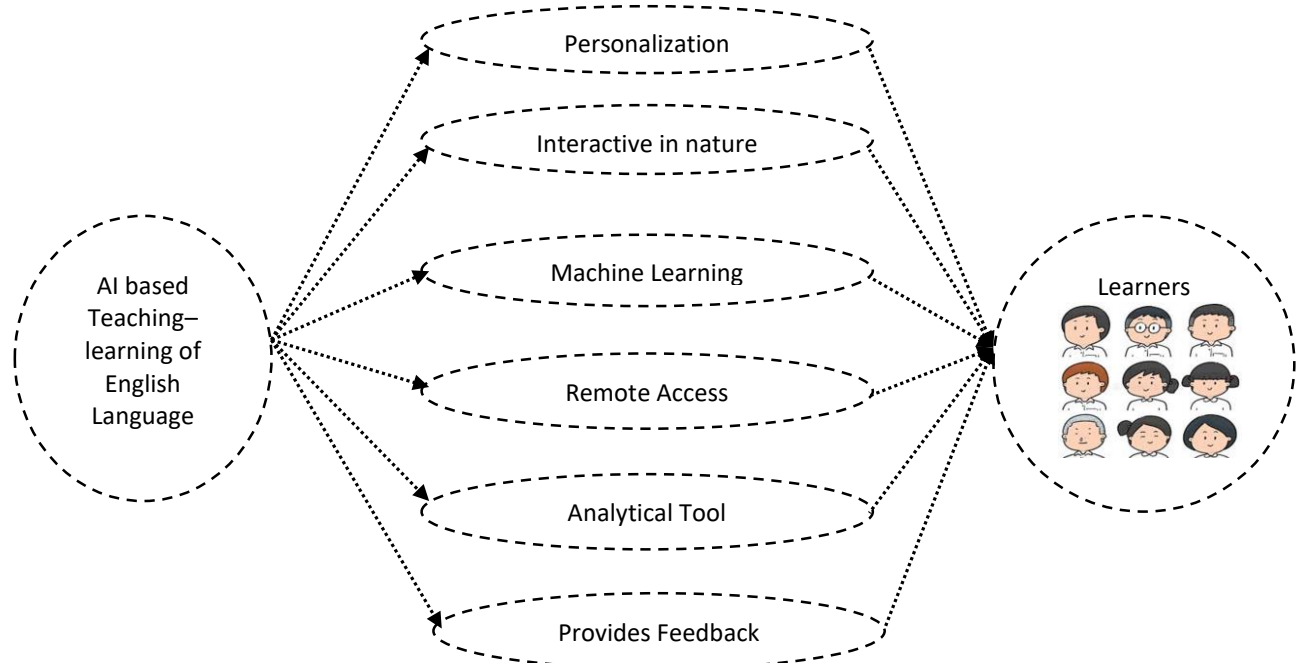### V.   Graphical Presentation of AI Tools

Fig. 1.1 Features of AI based Instructional Programs

VI.   Conclusion

Significant modifications are expected due to the implementation of Artificial Intelligence in the field of English language Teaching-learning. It has always been observed that technology is considered as a great support system in teaching-learning English language. However, no method of teaching English is proved to be all inclusive. Experimentation is always welcome in the field of education. Incorporation of AI based instruction programs can become an effective aid as well as self-paced teaching-learning tool. The world has been brought

Dr. SANDIP P. GAWATE

to much close due to the technological innovations. As a result teaching-learning of English has gained significance at national as well as international level. Therefore errorless, versatile, adequate, and trustworthy instructional programs are needed in English language teaching-learning. In short, Artificial Intelligence is clearly seen as a new tool and as asset to teachers and students for enriching English language.

References

1. Bernard Marr and Matt Ward, *Artificial Intelligence in Practice,* UK, 2019, Print.

2. Marina Dodigovic, *Artificial Intelligence in Second Language Learning- Raising Error Awareness*, Cromwell Press Ltd. UK, 2005, Print.

3. Lakshmi Gogate and George Hollich, *Theoretical and Computational Models of Word Learning: Trends in Psychology and Artificial Intelligence*, Information Science Reference, The United States of America, 1962, Print.

4. M. L. Swartz and M. Yazdani, *Intelligent Tutoring Systems for Foreign Language Learning,* Springer Science and Business Media, 1992, Print.

Websites

1. https://www.teachthought.com/the-future-of-learning/10-roles-for-artificial-intelligence-in-education/

2. https://ltsig.iatefl.org/the-role-of-ai-in-english-language-teaching-learning-and-assessment/

3. https://www.telc.net/en/about-telc/news/detail/is-artificial-intelligence-the-future-of-language-learning.html

4. https://www.intellias.com/how-ai-helps-crack-a-new-language/