Artificial Intelligence (AI) in Language Learning: Its Benefits, Contradictions and Challenges

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Abstract

In this present Era, Artificial Intelligence has made its own specific place in human life. It has transformed the scenario of manual working as well as the perspective of people in considering the quality of best work. In the perspective of Language Learning, Artificial Intelligence has also showed its effect in this process without any exceptional. This text contains the effect of Artificial Intelligence in the process of Language Learning, how it is becoming beneficial for the aspirants of leaning different languages. And the forthcoming challenges of Artificial Intelligence for those who are interested in the learning of different types of languages. This paper also put up the question if artificial intelligence helps the children to learn languages whether it is their mother tongue or second or other languages. This paper also discusses if the Artificial Intelligence can be the replacement of human instructor. And how it works against the theories and concept of language learning given by various Psychologists.

Key Words: Artificial Intelligence and Human Language, Benefits of AI in Language learning, AI as a contradictor of the theories of Language learning, Challenges in using AI in Language Learning.

Introduction

Language has its unique and irreplaceable existence in human life. It can be considered as one of the most prominent weapon in the hand of human being which enable them to empower themselves and to rule over the other animal or species. Each and every living being in the world is availed with mind but except human being all the other use their mind to survive in this world. Human being has evolved and became powerful using their mind not only for their survival but also for their development and becoming powerful. But it was not possible for human being to bring this mind work successful if they would not be able to use language. It can be said that mind and language run together and proved as complementary for each other. With the help of language human being could be successful in applying their mind activities to invent new things and to be more successful and powerful. Present time has also become rich as the Artificial Intelligence has been introduced in our life. And this Artificial Intelligence besides other areas also make its entry in language learning process. Now a days it has open the door for those aspirants who have keen interest or who need to learn specific or various languages for their professional growth.

Benefits of AI in Language learning

In traditional language learning classroom, there was a tutor who gives regular classes at a particular time of a day. There were number of learners who were aspirants of learning a specific language. The goal of all the learners was exactly the same; to be fluent in speaking a particular language. Those classes were seem to be time consuming. In each session, each student had to perform speaking the language and each student has to be there until all the student's participation takes place. AI has transformed the hardest life into easiest one. Now, Teachers in the classroom are using AI to teach language to their students. Classroom are availed with smart boards in which teacher using language learning Application teaches their students language. These classroom seems to be more interesting and creative for the learners as they show keen interest in this process. Active participation of the learners are also seen. It give opportunity to each students to learn more in lesser time. Students also use these applications at their home and learn language fast and rapidly

Even some the Applications are there which does not need a human teacher to be conducted. It provides self-learning tool. People who wants to learn some specific language can learn with the help of these Applications. These applications are provided with the opportunities of learning any language existing in this word. As to the language learning people do not need to go any specific place to learn any specific language. AI teacher in such applications make sufficient practices to the learner of speaking language. It rectifies the learner's mistakes just like a click away. Learners

are free to learn language whenever they have time. No time boundation is there. Such facilities helps learner in saving their time. It is at their home. It is just to hold laptop or operating a computer, click a button and start a journey of learning at one's own pace. There are so many application who provides courses of teaching language. Even some of the applications provide artificial human being as a tutor there and teaches as professionally as it would be a human teacher. In this way it would not be wrong to accept AI as an extraordinary tool of learning language. Which minimizes the efforts of the learners and maximizes their learning of language.

AI as a contradictor of the theories of Language learning

More above if we go the various theories given by many psychologist with regard to the language learning. AI appears as contradictory of these theories as Psychologigst have proved their theories conducting case, longitudinal studies and social experiments on human being. B. F. Skinner said that children learn language with the help of Operant conditioning and Imitation. In which learner while learning language go through the process of getting reinforcement it is either positive or negative. They receive positive reinforcement when they uses language correctly it is given in the form of reward while negative reinforcement is given when they do not use correct language and it is given in the form of corrections and disapprovals. In this way, children also learn language by imitating the sentences and words they hear from their parents and people around him. And go ahead towards learning language. Operant conditioning was also applied by B. F, Skinner in his Programmed instruction. It became a process of self-learning as positive and negative reinforcement was availed in this instruction. But still it was not seem to give real life experience of learning language and Artificial Intelligence also do not provide each and every real life experience to the learners so that that they can imitate them as life is always unpredictable.

Jean Piaget, a renowned psychologist conducted a longitudinal study on their own children and concluded that to learn language child needs to be able of doing assimilation and accommodation. In the process of learning language learner firstly uses assimilation in which he adds new knowledge in his Schema or previous learning with regard to the language. And in the process of accommodation he changes his Schema or previous leanings related to the language. And for this process one must be mentally developed as per their mental age. If we observe the AI process of learning, as it was said before, it can be a tool of making language learning process more efficient but it does not measure the mental age of individual it works generally rather than specifically.

To go to the other language learning theory, Lev Vygotsky has a prominent place in this respect. He has given such an authentic theory which was accepted with the open hands as it gave society and culture foremost place in learning language. Vygotsky stated that child learn language when he comes in the contact of his society. It starts when social and cultural interaction was held between him and the member of his society. From birth up to 3 years this interaction takes place between him and his care giver or parents. In this phase he learns language by communicating with the people of his family member and here he applies his external speech. Thereafter he uses his egocentric speech and it starts from 3 to 7 years of his age. Here he comes in the contact of his society and schools. After external speech when he reaches at his older childhood he starts using inner speech where he learn using language in his mind he rather than speaking loudly solve his problems in his mind which plays an important role of learning language in his life.

This theory also talks about the Zone of Proximal development Abbreviated ZPD. Zone of Proximal development refers to the learner's ability of learning language to their proximal level with the assistance of any person who is considered as more knowledgeable person as per the theory. Here this assistance is called scaffolding which is a help in general. In this process the more knowledgeable person as per learners ability provides help them to learn language. And if we see Artificial Intelligence, it does not take individual ability in its concern to teach them language to their proximal level. A teacher as a more knowledgeable person may use Artificial intelligence in the form of scaffolding to make their language learning reach to their proximal level but still such act cannot be beneficial for each learner at the same time.

Lev Vygotsky also said in his socio cultural theory that learning a language is not an independent journey it is social and cultural process as a person has to live in his society and has to follow some culture. He said a child internalize his experience and beliefs and faiths of the people surroundings him by interacting and communicating them. Then applies these beliefs and faiths in the form of language himself. It is a fact that if there is no society there is no language. Without society language cannot exist so to survive in the word one needs language and to learn language one needs to come in his social and cultural interaction. In this context of talking about artificial Intelligence it does not seem to give the experience of language learning in learner's social and cultural environment. It is just like a room having computer machine teaching language to the human machine. Such mechanical environment might help learner to speak in a

specific place but how it will combine the language of learner with the social and cultural aspects. AI learning of Language can also be fruitful in surviving in some particular area but also will make them week enough to survive in their social and cultural context.

Still the significance of AI cannot be avoided as per the demand of time. But if we do deep study in this perspective, we will find there are so many challenges in learning languages through Artificial Intelligence whether it is about teaching students in classroom or people using AI to learn language themselves at their own pace. Challenges coming forth in this process may be; Sometimes these AI are not provided with reliability. Content provided must give reliable information as learner are tend to trust completely. Even the scenario of the present time is seen that learners cross check the information given by their teachers using Artificial Intelligence. They have more trust in AI rather than their teachers or can be said on human being. Hence, it is important that AI teaching language must be reliable and trustworthy. So that learner do not learn wrong and incorrect language. On the Other hand, it is also one of the most important thing the data of the learner must be safe and secure. AI has the power to contain all the information given by the learner while learning language in its data. As AI is also generated by human being it has several chances to leak personal information of the learner which can be misused by others in other conditions.

Challenges in using AI in Language Learning

One of the challenges in learning language with the use of Artificial Intelligence includes the availability of Internet access or computers. People earning sufficient money have easiest access to the internet and computers even their children are enrolled in a well infrastructure schools with well-equipped classroom. But people who have no access to such facilities due to less income do not able to enroll their children in such school due to which obstacles may take place not only in obtaining equality in development opportunities but also can come across on the way of equity. Whether in the school level of learning or personal level of learning with regard to the language. Therefore it is a thing to bring in concern for giving equal opportunity of learning.

Further, which cannot be neglect as the challenge with regard to the learning language using AI is Emotional fact. Teachers as per the requirement are taught child Psychology. It let the teachers know and understand the truth of Individual differences. Using AI in the classroom students learn language in a same way. It considers all students having similar understanding level. Even if they do understand it gives knowledge in a very technical way which might help them to learn language and to use language technically but it will make them lag behind in expressing themselves emotionally as the communication in such learning takes place between human and AI not between human to human. And emotional expression has a prominent place in the overall development of the learner.

As far as the question of learning mother tongue, Artificial Intelligence should be trustworthy enough as mother tongue is a language that a child learn through her mother and family member. Artificial Intelligence cannot take that initiative to teach a child his mother tongue as it is learned at the very initial stage of a child when he comes to the contact of his family. However, children are learning language rapidly watching smart phones still to understand its language they need to learn their language first. Artificial Intelligence is also not able to instruct itself. It needs a person there who can instruct it. This is also a challenge of AI in language learning that if it is used it cannot operate itself. Hence, this challenges must be taken in concern to make Artificial Intelligence more helpful in language learning.

Conclusion

Therefore it can be concluded that Artificial has become the need of time to work with it. As to be updated is important to make one's existence in the contemporary life. It has made life easier to learn maximum things in a minimum time. But along with this it cannot be neglected that artificial intelligence can't make learning to live with emotions. As Emotion is an irreplaceable attribute of human being and these emotions can only be expressed through language. So, we need to make use of Artificial Intelligence integrating it with real life experiences and emotions of humans with regard to the learning language. As these emotions make the difference between the human and machine.

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