Original Article

Artificial Intelligence: The Perspectives Of Undergraduate Level Second Language Learners

S. Dinesh Kumar[1], Dr. S. Sakthivel[2], Dr. P. Prabhavathy[3], Ms. K. Jhansi Rani[4], Ms. R. Subhashini[5], Dr. M. Rekha[6]

Assistant Professor, PG and Research Department of English, Thiagarajar College (Autonomous), Madurai. Madurai Kamaraj University. dineshkumar_engsf@tcarts.in
Assistant Professor of English, B.S. Abdur Rahman Crescent Institute of Science and Technology, Sakthivel@crescent.education
Associate Professor of English, Department of Science and Humanities, KGiSL Institute of Technology, Anna University, Coimbatore. prabhavathy.p@kgkite.ac.in
Senior Assistant Professor of English, Dept of Humanities and Social Sciences, Vasavi College of Engineering, Osmania University, Hyderabad
Assistant Professor, Saveetha Engineering College (Autonomous), Thandalam, Chennai, Anna University, subhashinir@saveetha.ac.in
Assistant Professor, Department of English, Sethu Institute of Technology, Virudhunagar, Anna University. rekhakrishnan7@gmail.com
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Abstract

The Artificial Intelligence (AI) has seen significant advancements in recent decades. As a result of the development of a diversity of platforms, it has been put to use in ways that have never been seen before in a variety of fields and disciplines, including the fields of data science, information science, online marketing, and data mining. Additionally, it has been utilised in the field of "connected" objects. Since the development of artificial intelligence, there has been a steady march towards widespread computing. Computing technology is becoming more "intelligent" and capable of anticipating our everyday need, with the ultimate objective of assisting us in being more fruitful in the lengthy time. This technology is utilised extensively in both our personal and professional life on a day-to-day basis. The installation of an app in a computing gadget, with or without the use of artificial intelligence, is what we mean when we talk about technology in this context. Despite this, the incorporation of AI into apps for language acquisition is still largely underutilised.

Keywords: Artificial Intelligence, Language Leaching, Undergraduate Level, Motivation, Second Language

INTRODUCTION

In the last few decades, artificial intelligence (AI) has been changed a lot. It has been used in ways that have never been done before in fields like data science, information science, online marketing, and data mining, as well as in the area of "connected" objects. Ever since, AI came along, we have been advancing towards computing everywhere. Computing technology is used in our personal and professional lives every day, and it is becoming more "smart" and able to predict our needs, with the aim of making our long term fruitfulness. In this case, "technology" refers to the installation of programme in a computer gadget, with or without the use of artificial intelligence. Nevertheless, AI is still not used as much as it could be in language learning applications.

In a recent study, researchers found out more about how AI can be used in language learning apps. Pikhart (2020) looks at the most popular language-learning apps and how they use AI in this circumstance. Pikhart says that almost none of the apps he looked at used machine learning, AI or deep learning in any way. The majority of these programs are based on preprogrammed algorithms that do not fully employ the computing power we have today, which can sometimes hurt the learning of the student.

Pikhart (2020) insists on and stresses how important it is for language learning applications to use more AI, deep learning, and machine learning. Still, his research shows that using any kind of AI, which is almost nonexistent right now, is hard and takes a lot of work, even though it is well known and used a lot in marketing and communication. Pikhart warns that institutions of higher education (HE) should be ready to help assisting in the development of AI enabled gadgets and apps to be used in classroom instruction. He says that this is required to make sure that language teaching can continue and to make education more competitive around the world.

AI AT THE SERVICE OF COLLEGE EDUCATION

According to scholars who agree with Schiff (2021), the introduction and implementation of AI based educational technologies pose a risk of upsetting the status quo that earlier educational innovations followed. Although sceptics warn of the potential excesses of globalisation, industrialisation, and the dependence on AI, proponents of AI emphasise its promise for efficiency and democracy. In contrast to the contentious uses of AI in robotics, the military, cybersecurity, or healthcare and the effects of AI on educational policy; practise have not so far captured the consumers' attention. Yet, research shows that AI usage has been decisively embraced in the context of education in recent decades, as seen by a large number of AI based educational practises and research initiatives globally.

In his research on Intelligent Tutoring Systems, Nwana (1990) looks at how they have changed over time and how they are used. He also looks at Computer Environments for Human Learning from a more simplified and non-expert point of view. Ettlinger's (2016) research is mostly about how people learn languages in both artificial and natural settings. Morgan-Short, Faretta-Stutenberg, and Wong (2016) look at how well adults learn Spanish in both natural and artificial settings.

Popenici and Kerr (2017) observe how AI is being employed in classroom instruction at the undergraduate level and what effects it is having. Their goal is to find out how new technologies affect education, how students learn, and how colleges teach and go forward. We look at recent technological advances and how quickly these technologies are being used in higher education (HE) in order to think about what challenges we might face in the future when AI is a big part of our universities. Popenici and Kerr (2017) say that the fast pace of technological change will cause a lot of people to lose their jobs. This is something that experts in the field agree on. This means that the mission and responsibilities of instructors and professors in HE need to be completely rethought or will need to be. The extremely serious discussion concerning the future potential position of instruction and learning in HE and the sorts of decisions institutions will have to make in this area will become practically hard to ignore due to the expanding usage of AI.

AI AND LANGUAGE TEACHING

AI-powered tools and platforms for learning a language give students a more personalised learning experience and let them to progress at their preferred speed by continuous training activities in a different order and focusing on a particular challenge. Simultaneously, AI is able to get the attention of students in the tasks they are already familiar by playing to their passions and taking into account things like cultural context or the specifics of the language being learned. There are now a lot of cheap AI technologies and methods to teach and learn English as a second language. These include the Google Docs word processor with voice identification, Google Assistant, and Google Maps, which can be used to practise giving and getting directions in English. The IBM Watson supercomputer is another tool that is new and useful. Pokrivcakova (2019) talks about eight other useful AI powered tools for teaching second languages, as well as the results of a few studies that look at how to make a framework for integrating AI powered tools into the planning of lessons for teaching a second language. So, the goal is to improve language teaching as a whole by making lesson planning simpler, quicker, and more efficient.

As an emerging technology, AI can be utilised as a supporter to the instructors in enhancing their teaching practises. This can help students learn more effectively. It enables teachers to generate more enhanced materials that are relevant to the students and more adaptable to the learners while guaranteeing individualised learning. This assists teachers in

improving their teaching practises. By automating formerly manual processes in this manner, educators will have more time to devote to the development of their pedagogical practises and classroom instruction. Since it involves the simulation of human thinking processes by machines, and more especially by computer systems, artificial intelligence (AI) has to be created and nurtured over time. Like the case with human intelligence, artificial intelligence must first be cultivated before it can 'learn,' 'develop,' and finally 'realize' it's total potential. Because of this, it is essential to 'train' an AI first, and in order to do so, it has to be 'fed' with significant amounts of information (or databases). Unfortunately, AI will never replace entirely the human instructors. It also cannot supply a kid or learner with all they need, including a grasp of emotional connections and non-verbal communication, for example. The connection that exists between instructors and students continues to be one that is both vital and crucial, and it must be maintained to ensure and attest to the overall performance of the learning and instructional practice.

Since it is incapable to invest in or give this sort of human involvement, AI continues to be vital for enhancing the quality of education while simultaneously speeding individual training based on a more responsive learning experience. AI systems have the potential to offer excellent assistance for online learning and teaching, including the personalization of education for students, the automation of mundane chores performed by instructors, and the creation of adaptive exams. In the backdrop of a classroom that was packed with students.

AI systems are then able to provide effectual and helpful support by memorising and analysing the frequency and production of various types of mistakes, providing practise the hands on training while modifying, repeating, or rephrasing statements, when and if necessary. This allows the AI systems to offer support that is both effective and beneficial. In contrast, human instructors are not particularly good at managing all of these different tasks at the same time. The learning experience may be enhanced with the help of AI by improving customised learning based on one of a kind diagnostic evaluations (Di Pardo Léon-Henri, 2008) and training cycles fed by adaptive assessments. This can enrich the overall learning experience for the learner. In this context, the goal of AI will be used to support and encourage the learners while simultaneously automating the duties that are the most mundane and redundant for instructors.

AI has the potential to become an important ingredient in the enhancement of language skills of the learners. It can do this by serving as an essential and promising supplement to more conventional methods of instruction. In addition to maximising the amount of progress made in one's studies, AI has the potential to considerably lessen the amount of anxiety that students used to feel when they were first introduced to a new language and its associated culture. This tool may give a finer separation of pupils and assist them overcome their anxieties of making mistakes, having subjective opinions, or the judgment of others, which is believed to be one of the most frequent problems learners experience while attempting to learn a second language. Learning a second language may become a much more cutting-edge and fascinating experience with the assistance of algorithms, one that is characterised by fascinating new technical breakthroughs.

By conducting a systematic review, Bond and Gouverneur (2019) provide a summary of the research done on the uses of AI in undergraduate programme. Using a set of defined inclusion and exclusion criteria, 146 articles were selected from a total of 2656 publications that were originally found between 2007 and 2022. These articles were incorporated in the final synthesis. The descriptive findings reveal that the majority of the areas that contributed to this AI research were from the STEM and computer science sectors, and that quantitative techniques were the most commonly utilised in the empirical investigations. Also, the data demonstrate that AI started from computer science. The findings have been compiled into a synthesis that outlines four potential applications of AI in education within the realm of educational assistance services: 1. Profiling and prediction; 2. Assessment; 3. Adaptive systems and customization; and 4. Intelligent tutoring system technologies. In their concluding remarks, Zawacki-Richter et al. (2019) draw attention to the dearth of rigorous analysis of the difficulties and dangers posed by artificial intelligence, the tenuous connection between theoretical instructional viewpoints, and the concerns for more research into the ethical and pedagogical issues surrounding AI's use in higher education.

Teaching and learning in colleges have been completely transformed as a result of the introduction of technologies (ICT). The target language and the cultures of its speakers are now within reach and may be accessed at any time thanks to the Internet and specialist language software or programmes. This is significant from the standpoint of the teaching and learning of second (SL). As opposed to information and communication technologies which "have supported the coming out of highly advancement of language communication skills, by making it easier to process and gather information," target languages and cultures are easily accessible at any times so we have to thank the online specialised software programmes. In contrast to information and communication technologies, which "have made it possible to augment the processing capacity of data, their storage possibilities, their accessibility, and the speed at which they can be transmitted" (Office québécois de la langue française, 2008), artificial intelligence "childlike learning to comprehend language autonomously by monitoring its surroundings, without needing previous collected information" (Matheson, 2018). In future, AI technologies will eventually to provide platforms to learn a SL and (re)use their acquired understanding of the SL's structural components to mimic interactive interactions with students. It is crucial to note that AI will be able to adapt to the specific interests and requirements of ESL learners, hence making it possible to learn in a wider variety of contexts. Also, it will be able to communicate in an interactive manner with the learner. In a nutshell, the introduction of AI constitutes a substantial shift in terms of the learning environment that is present in the teaching and learning of FL. Nevertheless, in the context of learning a SL, to what degree do you think university students would want to be taught by AI? In addition, what fundamental causes are driving these decisions, and how can we better understand them?

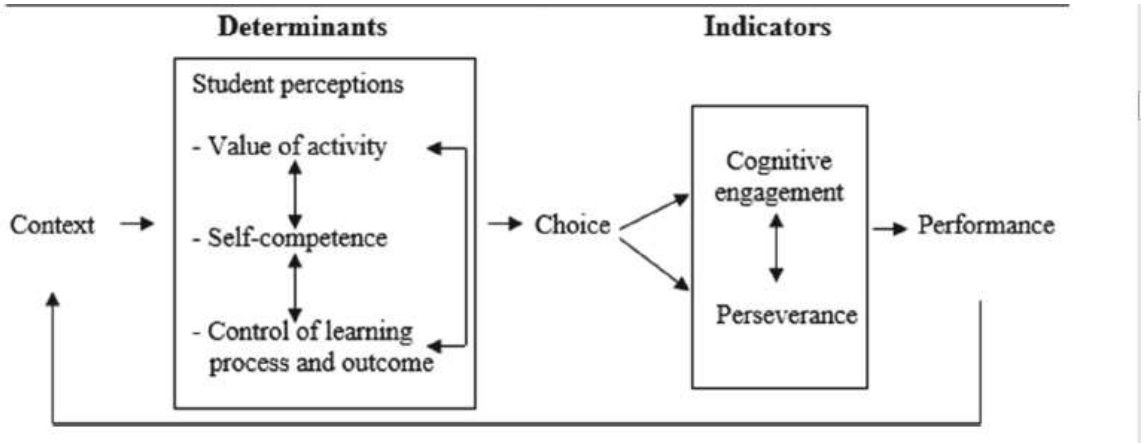
ENCOURAGEMENT TO ENHANCE A SECOND LANGUAGE

Learners' motivation is the most important factor in FL learning in monolingual settings (Colletta, Clement, & Edwards, 1983). SL are not meant to be used outside of the classroom. Because of this, student motivation should be seen as one of the most important, if not the most important, factors in learning the target SL. Learners' motivation to learn an SL depends on how they see the course, how much they want to learn the SL, and how interested they are in the language itself (Gardner & Lambert, 1972). The instructor should encourage students "to enjoy the activity of learning the language" while simultaneously encouraging them to put in the necessary amount of effort to acquire the language. This will help get students interested in studying (Gardner, 2001). The idea of effort is similar to that of persistence and cognitive engagement. Effort is a sign of how motivated a learner is (Gardner, 1985). In ICT settings (e.g. Karsenti, 2001), learning with a new medium also helps to keep people interested. The same is true for SL learning (e.g. Gazaille, 2001; Hamers, Huot, Lemonnier, & Parks, 2001).

THE DYNAMICS OF MOTIVATION IN THE UNDERGRADUATE PROGRAMME

"Motivation in the framework of a undergraduate level setting is a energetic condition that has its beginnings in study samples' views of themselves and surroundings and that causes them to pick a task, to participate in it, and to persist in its achievement to accomplish the goal" (Viau, 1994, p. 7). With the help of this definition, one is able to approach the idea of Second Language drive in terms of specific undergraduates and related elements that instructors have the ability to directly impact. The learning environment is a significant factor in college based education, and as such, it plays a vital role in the motivational process (Viau, 1994). The teaching and learning activities that students are engaged in over the course of their education make up the "learning context" from the students' point of view. Viau and Louis (1997) created a dynamic model of motivation in the college environment that views motivation through the lens of teaching-learning activities rather than researching motivation in general. This concept was developed in response to the finding that the vast majority of instructors believe the activities they provide in class are uninteresting to their pupils.

Figure 1



According to Viau's model, the components of motivation are as follows: perceived competence, perceived task value and perceived controllability over the activity and indicators are cognitive engagement, perseverance and performance. The perceptions of the students about the different types of teaching and learning activities are the determining factors. Barbeau (1993) states that determinants are what condition and decide the conduct of students; determinants may be impacted by and (may) fluctuate in function of it (Viau, 1994). There are a variety of indicators are available to evaluate and quantify the level of study samples' motivation (Barbeau, 1993; Viau, 1994). Indicators have an effect on learner behaviour and participation in the learning activity, which in turn has an effect on learner performance. These indicators are influenced by learner perceptions.

Gazaille (2001) applies Viau's motivation model to study the effects of implementing a multimedia laboratory in second language learning at the CEGEP. He then details and cautions about the promises of information and communication technologies (ICTs) – and, by extension, about the promises of artificial intelligence (AI) – in second language teaching-learning. This investigation on the impacts of studying SL in a CEGEP setting was carried out in order to get more information. Her research showed that the incorporation of a multimedia laboratory had either a little or nonexistent impact on the overall motivation of the participants. In point of fact, there was an instant boost in student interest after the installation of a multimedia lab in the SL classroom; however, this gain turned out to be fleeting, proving that the impact of novelty on interest is also increasing. In terms of the learning environment, the activities and instructional practises should encourage learner self-competence in order to prevent the language learner from developing a feeling of incompetence or incapacity in the target language (SL). In addition to that, the shift in context has to be observable and authentic. To put it another way, just substituting a paper-and-pencil e-activity is not sufficient. In this regard, an author emphasises that highly conventional, behaviourist, or non-strategic educational uses of ICT technologies would lead to boredom as well as a decline in SL learners' interest in the subject matter. In conclusion, given the central role that instructors play in the educational environment, it is essential that students "make out their teacher's love for the topic [...] else they [the students] may feel lost, abandoned in their study" (Gazaille, 2001: 94).

METHODOLOGY

This research comprises the responses of 100 undergraduate students who took part in a short questionnaire that was distributed at Thiagarajar College (Madurai Kamaraj University), B.S. Abdur Rahman Crescent Institute of Science and Technology (Deemed to be University), KGiSL Institute of Technology (Anna University), Vasavi College of Engineering (Osmania University), Saveetha Engineering College (Anna University) and Sethu Institute of Technology (Anna University). The vast majority of the students are enrolled in either Sciences or Arts and Engineering and they have taken English as a second language. The ages of the participants are from 17 to 25 years old, on average. The goal of the study is to gauge the level of enthusiasm among UG students that are conducted by AI. The survey consists of two questions, which are as follows: 1) If you were given the option, would you prefer

study a second language SWAYAM online course? Yes, no, or maybe? 2) For what reason? Explain your choice of answer? There was no collection of socio-demographic data. Both qualitative and quantitative data are gathered in an Excel sheet. At the first step of the coding process, three of the writers will first determine which things are important, and then they will place those items into the appropriate categories. It was decided to leave certain categories undefined in order to provide room for the development of brand new ones. Rest of the authors conducts a comparison and analysis of the key elements and categories that have been discovered. Categories that had less than five people who supported them were merged into a similar category that was intended to be more inclusive thematically. For instance, the more interesting instructor and course items were reorganised into the motivation category since interest is a factor in motivation.

RESULTS

Everyone's enthusiasm about learning a new language was clear right from the beginning, which was to be anticipated considering the courses that were being taken by the participants. There were a total of 13 important factors that were recognised as reasons for joining courses or not joining, an AI for enhancing a second language, and 10 categories formed from the explanations provided by the participants. The Table 1, explains the findings of the survey, which shows that the vast majority of undergraduate students (82% of those who responded for SWAYAM) course, while others (12% of those who responded) might, and only a very small percentage (6%) would be not interested in taking such a course. The categories that were discovered during the classification step are detailed in Table 2.

Five participants expressed interest in enrolling in an AI course. Nineth participant made the comment that "you would learn better" and "the course would be better matched to each person" Participant 13 is only interested in attending an AI-driven course for professional reasons. Participant 4 wants to "explore with this method" as a prospective SL instructor in order to "find ways to employ AI in the lessons to aid learners' learning."

Table 1: Undergraduate students' Interest in AI- SWAYAM Online Courses to enhance the Second Language

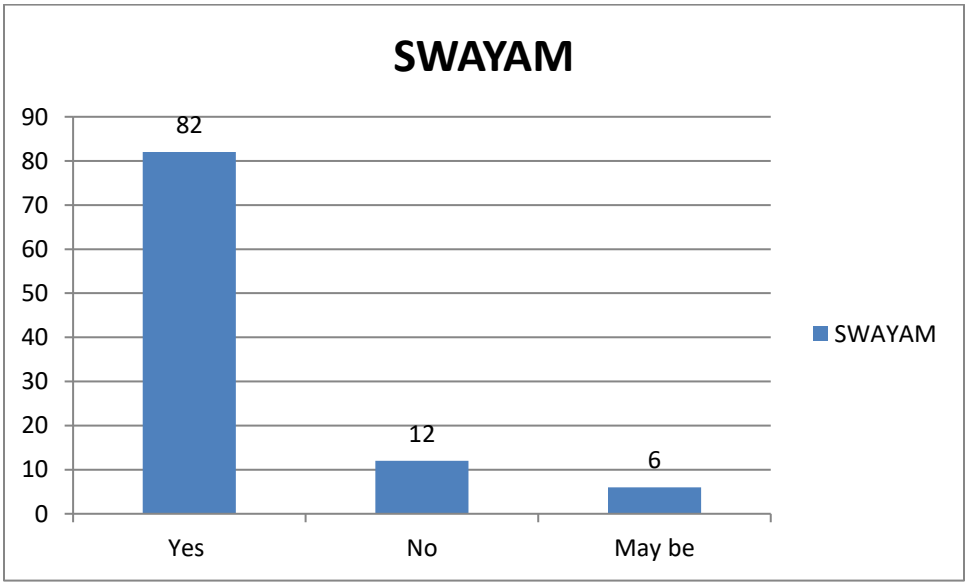
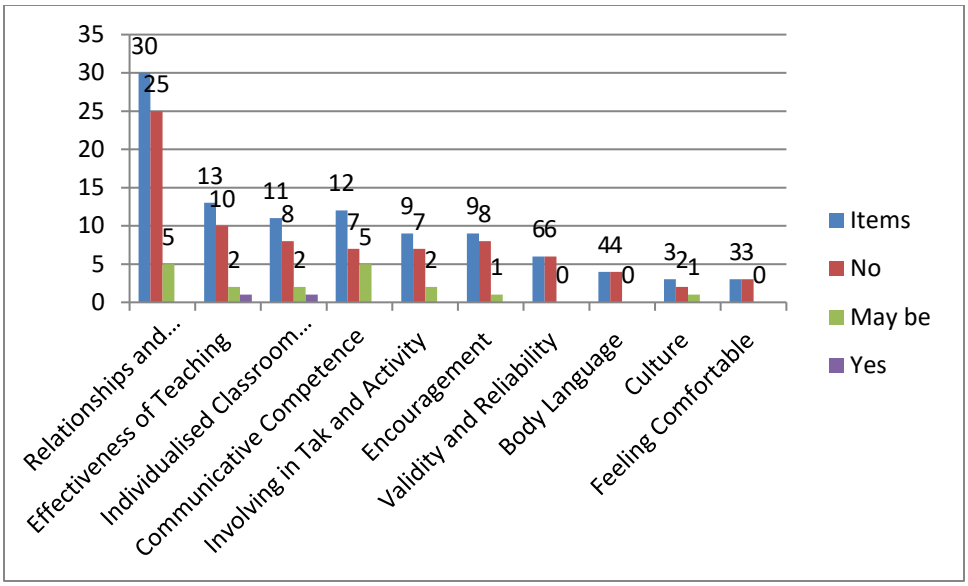


Table 2: Reason for Using AI learning a ESL



On the one hand, the reasons why 12% of the participants may be learn AI online SL course are comparable to the reasons why the participants who would not learn in such a course. They do, however, need only teachers or humans in the process of teaching SL. The participant No. 29 believes that AI has the potential to be helpful, but I don't see how it could ever replace human educators. The only participant to deviate from the norm was number 86, who, because to her reserved nature, said that she would feel more comfortable having a conversation with either teacher or peers. This observation raises the possibility that preferences about the mode of delivery and presentation of SL courses are influenced by personality attributes. According to the findings, the reasons why students (82 8% of them) would rather study a SL with a teacher rather than choose for AI classes are either directly or indirectly associated with the instructors themselves or with teacher interaction. Some participants may find the impersonal nature of the instruction led by AI to be irritating. These participants feel that AI might adapt to the particular requirements of SL learners; yet, they also believe that the potential of AI to help one's learning is restricted to certain kinds of material. Participants, for instance, do not feel that AI is capable of teaching culture and speech to the same standard as human educators. Participants 52 explains that AI with humans teacher will be more effective in enhancing the second language.

CONCLUSIONS

In conclusion, students attending undergraduate courses do not have a negative attitude towards the incorporation of AI into SL classes. On the other hand, they do not support the notion of removing the SL instructor from the class setting. The college students who were questioned for this research are well knowledgeable of the possibilities that AI has for facilitating the teaching and learning of SLs. In particular, they call to mind the opportunities for personalised instruction and study offered by IA. Further, they are more likely to choose a class taught by a human instructor with AI. This is mostly due of the participatory, cultural, and relational components that students identify with learning an SL. In addition, they are aware of the benefits that might result from the coexistence of humans and machines in the context of the training and learning of SL. The survey subjects referred to AI apps gadgets as "coach-exercisers," which operate under the direction and supervision of the instructor, who, in turn, directs the students along their path of language acquisition. Nevertheless, at this moment, we are of the view that this results should give the floor over to the samples of survey who have already indicated, through their novel concepts and observations, how they envision the future scope of ESL training and learning.

"Participant 17 views that it could be oK to use AI in conjunction with human instructors in the classroom, but under no circumstances should a computer be used to teach alone." Sample 51 states that AI has the potential to be beneficial for language study. It could be intriguing to consider it as a supplement to human instruction."

"Participant 97 believes that the teachings would lose their human warmth." A dynamic instructor who understands how to breathe life into the material being taught in order to convey their enthusiasm for the topic being covered is essential to the success of any educational endeavour.

"The sample No.55 explains that the interaction between teacher and student is one of the aspects of language study that appeals to me the most. If languages were taught by artificial intelligence, I don't see how the warmth, inviting atmosphere, and understanding that second language instructors bring to the classroom could be replicated.

There is no shadow of a doubt that AI will be a component of the language-learning and teaching landscape of the future. Since using AI to teach second language could represent a significant change in the context of learning for many students, it will be important for current teachers and those who are considering becoming teachers to gain a deeper understanding of AI's potential. This will allow them to modify their instructional strategies to better address the challenge of encouraging; motivating and engaging students in AI based second language classrooms.

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