

Role of Artificial Intelligence in Language Acquisition Process

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Abstract

Development of technologies foster debate about the role of technology in education and challenges the current perception of relation between technology and education. Creation of artificial intelligence questions stability of education system, while in longer perspective it questions the necessity of language teachers. The article discusses what is educational technology from the perspectives of teachers and practitioner educators and speaks about the role of artificial intelligence in education and in language acquisition process.

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Introduction

Rapid development of technologies, which the modern world faces has big influence on education and especially on language teaching process. Technologies are becoming more and more inevitable part of educational processes. Education process are becoming more and more depended on technology. Moreover, development of artificial intelligence (AI) puzzles some teachers about the future of education. It is argued that AI may overtake teachers position or learning and teaching process will not be required as AI will provide ready-made answers and solutions.

What is educational technology?

Technology is created for various types of purposes. Some are created in order to entertain people, to enable people to communicate or to move around and so on. Let us discuss what educational technology is. A lot of scholars have provided their ideas during the last century about the issue:

G.O.M. Leith (1969): *“Educational technology is the systematic application of scientific knowledge about teaching-learning and conditions of learning to improve the effectiveness of teaching and training.”*

S. S. Kulkarni (1986): *“Educational Technology may be defined as the application of the laws as well as recent discoveries of Science and Technology to the process of education.”*

Robert A Cox (1978): *“Educational Technology is the application of scientific process to man’s learning conditions.”*

Shiv K. Mitra (1968): *“Educational Technology can be conceived as a science of techniques and methods by which educational goals could be realized.”* (Venpakal, 2021)

According to the definitions provided by different scholar we can conclude that educational technologies were viewed as unity with science, use of science at certain terms in education and something that ease the process of teaching and learning. The most interesting would be the ideas of ordinary

teachers regarding the educational technologies. Today more and more teachers collaborate closely with the technology as every educator feels that we are at turning point in education and adjustment to modern demanding world is the only solution for further development in profession. My colleagues and I were asked to formulate our ideas about the technology in education. It turned out that teachers think about technology very frequently. Technology, beside the will of educator, is spreading and developing very rapidly, while traditional learning and studying process is becoming less and less attractive for new generations. Here are some ideas of the teacher about educational technologies:

Teacher 1 (2023) Educational technology *represents the use of technology to facilitate teaching and learning.*

Teacher 2 (2023) Educational technology *is a digital tool that is used in education or the learning process to improve efficiency and can be used by students and teachers.*

Teacher 3 (2023) Educational Technology *is the field of study that investigates the process of analyzing, developing, implementing, and evaluating the instructional environment and the learning process in order to improve teaching and learning.*

Teacher 4 (2023) Educational technology *refers to the use of technological tools to enhance and support the learning and teaching process. Ideally, it aims to foster the use of a wide range of tools, resources, and methods aimed at improving educational outcomes and creating more engaging, efficient, and inclusive learning environments.*

As we can see, the teachers’ definition and ideas about educational technology are mainly based on their practice and provides more specific onlook on the topic. They and I also perceive educational technology as some kinds of tools that will ease process of teaching and learning, that will make is more impressive and memorable for students and will enable students to experience a lot of things without actually encountering them in life. However, technologies are

developing at a very rapid speed. Perception of active educator may be actual estimation of the present situation. In order to assess something, we need to experience it, use it in practice and befriend with it, otherwise new changes may cause irritation and fear. Education is the process that changes not as fast as technologies and as a result joint action of technologies and education may be a bit slow. Due to that educator may not provide the full picture of educational technologies and I believe that definition of educational technology is depended on personal observations of relations between education and technologies. That's why there can be as many definitions of educational technologies as are function of technologies in education.

Impact of technology development on education

Currently technology in education is becoming an inevitable part of teaching and learning process, especially after pandemic. Pandemic made educator to use technology to reach to the targeted audience and give them knowledge. Gradually, the first shock of totally online teaching was replaced with the will of trying different tools in order to make teaching process more entertaining, impressive and less tiring. Entirely online education is very demanding for learners, as it requires total attention, patience and dedication to the process. Engagement of learners in teaching and learning process at the beginning of pandemic was really challenging as educators did not have sufficient skills and knowledge about the use of technology. Along this the learners did not have suitable skills for online learning process. The biggest challenge for language teachers was lack of interaction as students were not very willing to interact actively during the online sessions. According to discussion among English language teachers, the only solution was to share knowledge about the different technological tools, in order to make teaching and learning process more engaging, interactive and entertaining for the

students. We shared even short presentations and mini videos to help each other to understand some peculiarities of certain tools. That effort had positive impact and each semester during pandemic was better in terms of enabling students to get more quality education and be more productive as well.

It should be noted that pandemic is never endless and at classrooms teachers after pandemic stated to use more technologies. However, there are subject which use technology more and others less. Let's focus on language acquisition process. This is the process that requires creation of real-life situations as language needs practice in order to be mastered well. Technologies that ease language acquisition process are a lot, especially after pandemic. Those are: educational TV programs and channels, special tools or websites that are platforms for creating resources and partly digital books. *"In other words, the use of educational technology in language teaching is the same folk concept of educational technology as the use of audiovisual devices, monitors, and computer keyboards. The public domain of its audiovisual equipment consists of two distinct parts: the hardware and the software. The hardware talking part deals with physical and real equipment, such as projectors, sound recorders, TV sets, microcomputers, etc., and the software part includes many items used in connection with such equipment and devices like slide, audiotapes, videotapes of computer programs, written languages, and more"* (Rahmati & Izadpanah, 2021, p. 4). As we can see from the descriptions above, technologies in classroom can be used only in case of existence of sufficient technological equipment and knowledge of software. Moreover, language teachers, and especially English language teachers are offered books that are partly digital with online labs and exercises. Those tools enable teachers to be more flexible and check answers instantly. While students can do homework or study language with digital application of the books on their smartphones. On the one hand, these kinds of books may ease teaching and learning process, on the other hand, accessibility of material everywhere may create

sense of easiness and student may not spend sufficient time for acquisition of the language. Due to the existence of the risk, teachers need to double-check students understanding of the material and make them do some quick revision at the actual process with the help of other educational technological tools. However, Al-Mahrooqi and Troudi argue that use of technology in language instruction is approved by the students as they “*are digital natives*” (Al-Mahrooqi & Troudi, 2014) and “*technology use reduces teacher-centeredness, it is capable of reducing student language learning anxiety as it gives them the chance to practice language comfortably without being embarrassed of making mistakes, which would reduce their “affective filter”*” (Al-Mahrooqi & Troudi, 2014, p. 2) The newly emerged process is very different from the traditional teaching and learning process and sometimes it is even different from already the traditional communicative approach of studying language as some new elements appear: focus on individual performance in relation with technology and language. Moreover, the role of teachers is changed, and they become more facilitators and helpers in process rather than teachers and moderators. They also may become creators of contents with the help of technologies. Along this, they are observers and assessor of the process with well-trained skill of giving feedback.

Due to the new reality and changing role of teachers, technological development makes educators worry. Nowadays, we have not only online tools that serve us as helpers or partners in learning process but development of AI questions the stability of education system. AI puzzles not only the teachers and educator but also education policy makers. AI created new challenges and aspiration towards the fundamental goals in education such as development of creativity, critical thinking, collaboration, tolerance, equality and other things are under threat (UNESCO, n.d.). UNESCO also considers that AI threatens human rights in education and revolution in education has to take place. AI deprives students’ opportunity to create things that needs reasoning, research and collaboration.

Education is not only the outcome, but it is the process, journey towards different destinations and the route is always individual.

AI may be one of the helpful tools in terms of language acquisition process. However, the productivity of the tool depends on its use. AI may enable some people to teach language without the help of actual teacher, whereas some basic knowledge of language will be necessary in order to use AI tools. Due to that necessity, language teachers are still needed but the question is how long the necessity will last, when will AI overtake language teachers positions and provide individually tailored program for every person interested in a certain language.

The development of AI may solve the problem of scarcity of language teachers in certain areas. It will also offer opportunity for students living in remote areas and interested in language to study the language. However, the development of the tools may hinder the interest towards language as it can be so developed that it can speak on various languages and communication among people may be possible with the help of some tools and devices rather than with the need of personal interaction.

Conclusion

In conclusion I can say that we are still at the turning point and we can only imagine development of AI at a certain level. Some above-described worries may become reality, while development of technology may create new one and challenges can be dealt with only with the help of human interaction and collaboration. Education and technologies have already started close cooperation, education creates base for development of technology and technology triggers evolution of education system and demands. On the one hand I think that education can never be perfect without a human touch but it can never serve its role fully in the modern developing world without involvement of technology in process. AI already exists, people, students and teacher use it as currently it creates more benefit than drawback. It sometimes makes people

even more curious to study and check information given by AI tools, although this is the initial stage of AI appearance and uses curiosity and urge for study and research is understandable. Educational technologies will no longer be a device, or a tool, or something else that is a helper or a partner for a teacher, but it will be something that can create education process adjusted to individual need especially in language acquisition process and the opportunity for self-development and self-regulation or possibility to communicate with outer world without actually having an interaction with a human teacher.

References

Al-Mahrooqi, R., & Troudi, S. (2014). *Using Technology in Foreign Language Teaching*. Newcastle: Cambridge Scholars Publishing.

Rahmati, J., & Izadpanah, S. S. (2021). A meta-analysis on educational technology in English language teaching. *Language Testing in Asia*, 1-20.

UNESCO. (n.d.). *Artificial Intelligence in Education*. Retrieved November 29, 2023, from unesco.org: <https://www.unesco.org/en/digital-education/artificial-intelligence>

Venpakal, P. (2021). *An Introduction to educational technology*. ALAGAPPA UNIVERSITY.