



IMMERSIVE TECHNOLOGIES AS A POWERFUL AND PROMISING TOOL IN TEACHING RUSSIAN AS A SECOND LANGUAGE

Khasanova Vazirakhon Khamidjanovna^{1*}, Tolipova Dildora Sattikhonovna², Shoniyozova Sadokat Nazarovna³, Abduraxmonova Zebo Yuldoshevna⁴, Qodirova Gulnozaxon Saidakramxon qizi⁵

Annotation: The article discusses the latest alternatives to the technology of teaching Russian as a non-native language through immersive educational programs, as in the future it will become the basis of the concept of education. The increasingly popular technologies of virtual and augmented reality determine key positions in the near future, and the possibilities of using immersive technologies allow us to take a fresh look at the system of human-computer interaction. Particular attention in the article is devoted to the concept of immersion and its use in education, which allows for qualitative application and a different look at modern immersion technologies

Keywords: technology, immersion, training program, education, speech development

^{1*}Docent, Department of Foreign Languages, Tashkent state transport university, Tashkent, Uzbekistan;
<https://orcid.org/0000-0002-7042-105X>; vazira.khasanova@gmail.com

²Assistant, Department of Foreign Languages, Tashkent state transport university, Tashkent, Uzbekistan\$
<https://orcid.org/my-orcid?orcid=0009-0005-3199-7311>; tolipovadildora607@gmail.com

³Assistant, Department of Foreign Languages, Tashkent state transport university, Tashkent, Uzbekistan;
<https://orcid.org/0009-0008-1746-5871>;

⁴Assistant, Department of Foreign Languages, Tashkent state transport university, Tashkent, Uzbekistan

⁵Assistant, Department of Foreign Languages,
Tashkent state transport university, Tashkent, Uzbekistan kadyrova_gulnoza@mail.ru

***Corresponding Author:** Khasanova Vazirakhon Khamidjanovna

*Docent, Department of Foreign Languages, Tashkent state transport university, Tashkent, Uzbekistan;

DOI: 10.53555/ecb/2024.13.05.17

Immersion (from English immersive - “creating the effect of presence, immersion”) is a method of perception that determines the factor in changing consciousness; in the modern world it is an important and frequent object of study. We see various examples of the immersion effect in cinema, theatrical performances, and constant interaction with the virtual community via a PC. It is important to note that in education it is also possible to apply the technology of teaching Russian as a non-native language through immersive learning programs.

When considering the concept of immersion, it is usually defined as immersion in certain, artificially formed conditions. The phenomenon of immersion has been widely studied in various sources. The main emphasis in the context of the problem under consideration is on the technological factors of modeling consciousness through visualization of the artificial environment.

The concept of immersive technologies, the idea of creating a virtual world, originated in the 1930s and belongs to Stanley Weinbaum, who described a similar world in the story “Pygmalion’s Glasses.” It was then that VR technologies began to develop, but due to technical limitations and high costs, they did not open up wide opportunities. A new round of development occurred in 2014, when Facebook acquired the startup Oculus VR, a pioneer in digital technologies. An updated model of a virtual reality helmet was released, which created a real sensation in the technology market. Nowadays, VR is gaining momentum and belongs to the so-called immersive technologies - a collective name for all technologies that include human interaction with space, information, and content. They blur the lines between the real and fictional worlds, allowing you to interact and immerse yourself in information and products [1].

Virtual reality technologies, immersive technologies have become a powerful and promising tool in education due to their unique technological characteristics that distinguish them from other IT applications. A number of views indicate a fundamental change in the familiar world, an upcoming revolution that will affect learning. This major task is seen as changing pedagogical technologies, creating promising integrated learning systems, where the key role will be given to the immersive approach - a set of progressive techniques implemented in fundamentally new conditions.

It should be noted that the majority of teachers are not ready to implement new methods and technologies in practice, including innovative approaches, which can and should include the

immersive approach. This speaks to the urgent need to build new strategies for training personnel for education, whose work activity in the future will certainly be implemented in completely different conditions. Global trends in the transition of the educational process to the “digital” dictate different rules, providing an arsenal of modern virtual systems tools that are little studied in our country. Of course, we should not expect the complete dominance of the immersive approach in education, but the prospect of close interaction with the new “artificial” world is a very likely prospect in the coming years, stimulating the development of flexible information immersive environments [2].

The list of extended reality technologies includes virtual and augmented reality, as well as 360° video. They provide the effect of full or partial presence in an alternative space and thereby change the user experience in different areas.

Let us examine in more detail what is hidden under the basic concepts closest to the software and hardware implementation of the simulation:

These are sequential sets of images stitched using algorithms; they can be taken either with one camera or with special 360° cameras that film the surrounding space, after which the resulting videos are stitched together in special programs. There are also seamless solutions, but they are more expensive; sometimes additional graphics are added to the finished video. Nowadays, “panoramic” online broadcasts are also common, when you have several points with a panoramic view, giving the viewer the opportunity to “be present in the moment” [3].

Immersive technologies in teaching Russian as a non-native language enhance the importance of visualization in the process of mastering the Russian language due to deep immersion in the virtual environment; its role is very important - enriching students with a complex sensory cognitive experience necessary for the development and mastery of Russian speech. Human sensory modalities, as the first stage of cognition, must be strengthened through deeper immersion, a complex impact on the senses, which contributes to the acquisition of knowledge in the form of concepts, rules, and the development of speech, which are laid down at the next stage. Providing knowledge with objectively existing reality must continuously accompany the learning process based on sensations. To increase the effectiveness of learning, the principle of immersion requires, first of all, to use immersion tools and rely on the visual modality. [4]

It must be said that the desire for integration in the field of education, as one of the most clearly manifested trends, dictates the need to enter a single global educational space. Hence the interest in all countries of the world in new information technologies and, in particular, in computer telecommunications, which open a window into this global space. [5] The essence of virtual reality is considered in a traditional software sense and is similar to the definition given by S.V. Karelov. It has the following characteristics: 1) three-dimensional images of objects, as close as possible to real ones, created by programming tools; 2) the presence of the possibility of animation (the subject has the ability to change position in virtual space, perform certain actions, select the viewing area); 3) the process of network data processing occurs in real time (the actions of the subject, for example, his movements of the limbs, changes in the tilt of the head, make it possible to change the nature of the display of virtual reality, etc.); 4) the effect of presence (presence), created by programming tools (the subject feels the illusion of cooperation with objects or other subjects in an artificially created information reality).

There is also a need to conduct scientific research in the field of methods of teaching the Russian language, the system for developing students' linguistic competencies, determining the foundations of linguodidactic support, strengthening reproductive and receptive skills in teaching the Russian language using digital technologies. One of the main problems in higher education is the lack of software for universal authored teaching methods using modern mobile devices, gadgets, interactive equipment, podcasting, screen casting, streaming and advanced real-world technologies, as well as web services, mobile applications and alternatives using digital technologies. [5]

Let's take a closer look at the immersion effect. L.M. Andryukhina, characterizing telepresence technologies, identifies such an indicator of effectiveness as immersion (immersion effect). The immersion effect creates a feeling of being in another additionally real, situational place (exhibition hall, law office, etc.), this is significant in itself and can open up great opportunities in education [6].

In this case, the role of the teacher increases. "Its main function becomes the modeling of various routes and educational scenarios for the student and together with the student, supporting the processes of goals and meaning formation in the learning process, which is impossible without "eye to eye" communication [7].

A vocational training teacher has new tasks, one of which is designing the most complete virtual environment and creating new and varied scenarios [8].

Theoretically, virtual reality technology can be used in teaching Russian as a second language in university programs for the study of humanities or technical specialties. Examples of group scenarios with an immersive effect would be work in technical production, various expeditions, work in a law office, etc. The traditional education system lags somewhat behind the needs of society. The concept of modern education has determined the goal of a teacher's professional activity - to develop in students the ability to successfully socialize in society and actively adapt to the labor market. The consequence of this is the development of innovative technologies in teaching. Innovative methods are characterized by a new style of organizing students' educational and cognitive activities. [9]

In this regard, it is necessary to be able to create correct and at the same time varied simulation of virtual situations for high-quality professional training of future specialists. The contradictions between the practical need for effective teaching of Russian as a foreign language in pedagogical universities and the lack of development of its methodology is a problem that manifests itself in the desire and desire of future specialists to master sociocultural competencies and the laws of interpersonal cognition. Accordingly, improving communicative technologies, including teaching students Russian as a foreign language through immersive training programs in line with the ability to adequately perceive and understand standard Russian vocabulary, as well as relevant literature for mastering knowledge in their future specialty, is important for future specialists. [10]

Interaction with the group in and outside of lessons, ensuring cooperation of students in the lesson, the humanities teacher is obliged to create an atmosphere of trust, mutual respect between the teacher and students, and to involve students in active independent activities.

In the modern information society, one of the rapidly developing techniques that is of great interest to students is the use of Internet resources as an innovative approach to learning.

The idea of using the Internet in education is not new. Since the beginning of the 1990s, national and international computer networks have become widely used for educational purposes within the framework of various educational approaches. Both students and teachers were able to exchange information in a manner independent of time and

place. New digital technologies have freed up the human mind for more creative tasks, which contributes to personal development. This allows students to interact creatively with both peers and the teacher [11].

The Internet can be considered as a “means of production,” including in the educational process. It is used both as an inexhaustible source of information and as a new communication environment in which educational work can be organized in a new way.

The Internet allows you to organize a real, mobile information environment in which you can not only obtain information, but also solve many other communication problems. Its use helps to increase student motivation, since when the Internet is used during classroom and individual lessons, modern students have the opportunity to immerse themselves in the information environment that is familiar to them. On the Internet, resources of various sizes are used for educational purposes - from web pages with interesting educational materials (often tests) to voluminous projects for full-fledged, from the point of view of the compilers, distance learning.

The Internet allows you to implement various techniques, provide methodological developments, diversify the educational process, make it more attractive, take into account the needs and interests of the subject of learning, the level of his training, promptly and purposefully monitor the work of students, and effectively manage it.

When talking about the disadvantages of working using the Internet, researchers mention as the main one that educational materials are self-contained (the inability to access a live network). This disadvantage can be overcome by directing students to specific segments of the Internet related to the topics being studied.

This problem can be solved in the following way. It is necessary that traditional and innovative teaching methods be in constant relationship and complement each other. These two concepts must exist on the same level.

Using the technology of developing critical thinking in my work, I consider the most acceptable techniques for myself to be discussion (from Latin - research, analysis, discussion of an issue) [12].

The educational and educational value of the seminars is undeniable. It lies, first of all, in the fact that schoolchildren learn to work independently with scientific literature, structure their presentations in accordance with the proposed plan, and this prepares students for studying at a university.

One of the modern requirements for a Russian language lesson is working with text. In this regard, I use in my work such a form of lesson as research. The very name “lesson - research” reveals the main task - the study of language material based on texts. When preparing for such a lesson, special attention should be paid to the choice of text. The text must be highly artistic, and it is necessary to take into account both the age characteristics of the students and the volume of material being studied. It is advisable to use for analysis texts from different authors, united by a common theme, texts of different styles and types of speech, in order to subsequently conduct a comparative analysis.

The rapidly changing world situation dictates its conditions in every area of human life, including education. Education is changing: methods and approaches are being developed, new research is appearing, achievements of scientific and technological progress are becoming part of education.

And pedagogical technologies that were once innovative and have become the basis of activity are already becoming familiar: developmental education; multi-level differentiation; problem-based learning; technologies for developing key competencies; technologies of critical thinking; ICT (information and communication technologies); distance learning forms and methods.

The traditional education system lags somewhat behind the needs of society. The concept of modern education has determined the goal of a teacher’s professional activity - to develop in students the ability to successfully socialize in society and actively adapt to the labor market. The consequence of this is the development of innovative technologies in teaching. Innovative methods are characterized by a new style of organizing students' educational and cognitive activities.

Literature:

1. Иммерсивные технологии в образовании и искусстве [Электронный ресурс]: URL: <https://cocodobrando.com/vr> (дата обращения: 12.09.2020)
2. Авербух Н. В. Психологические аспекты феномена присутствия в виртуальной среде / Н. В. Авербух // Вопросы психологии. 2010.
3. Лукашин С. Куда нас погружают иммерсивные технологии / С. Лукашин. 2019
4. Sirakaya M. Trends in educational AR studies: a systematic review / M. Sirakaya, D. A.

- Sirakaya // Malaysian Online Journal of Educational Technology, vol. 6, no. 2, 2018.
5. Khamidjanovna, K. V., Nazarovna, S. S., Sattikhanovna, T. D., & Sabirzhanovna, A. G. (2022). Formation And Improvement Of Word Usage Skills In The Technical Field. *Journal of Positive School Psychology*, 6(10), 4318-4322.
 6. Sattixanovna, T. D., & Telmanovna, X. N. (2021). Actual Problems Of Teaching Russian. *The American Journal of Applied sciences*, 3(01), 167-169.
 7. Khamidjanovna, K. V., Nazarovna, S. S., Sattikhanovna, T. D., & Sabirzhanovna, A. G. (2022). Formation And Improvement Of Word Usage Skills In The Technical Field. *Journal of Positive School Psychology*, 6(10), 4318-4322.
 8. Шониезова, С. Н. (2022). РЕЧЬ И МЫШЛЕНИЕ В МЕТОДИКЕ ПРЕПОДАВАНИЯ РУССКОГО ЯЗЫКА. *Academic research in educational sciences*, 3(2), 264-267.
 9. Nazarovna, S. S. (2022). THE IMPORTANCE OF USING INTERACTIVE METHODS IN TEACHING THE RUSSIAN LANGUAGE IN THE HIGHER EDUCATION SYSTEM. *Galaxy International Interdisciplinary Research Journal*, 10(11), 285-288.