RESEARCH ARTICLE

The Use of Information and Communication Technologies in Azerbaijanian Language Lessons

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Abstract

The application of interactive methods in teaching the Azerbaijani language places new and higher demands on teachers' professional competencies. When selecting instructional methods, teachers must consider students' interests, enrich the technical infrastructure with appropriate materials to ensure high-level ICT proficiency, adopt a creative approach to lesson planning, define clear objectives based on content standards, and establish an interactive learning process that enables students to acquire knowledge through inquiry. ICT serves as an effective tool in fulfilling these tasks and requirements. Its advanced features allow for integration at every stage of the lesson.

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Introduction

It is no coincidence that the 21st century is called the "Computer Age," as the application of information and communication technologies (ICT) is being implemented across all spheres. It can be said that most countries in the world have adopted national strategies aimed at using ICT in various fields, including education. In many cases, the primary goal of these strategies is to provide students—and at the same time, teachers—with the necessary ICT knowledge. Another critical aspect is the equipping of schools with modern technology and infrastructure.

The process of ICT integration in education in Azerbaijan began with the approval of the "Program for the Provision of General Education Schools with Information and Communication Technologies in the Republic of Azerbaijan (2005–2007)" by the President of the Republic of Azerbaijan, Ilham Aliyev, on August 21, 2004. Later, on June 10, 2008, the President approved the "State Program on Informatization of the Education System in the Republic of Azerbaijan for 2008–2012." This program aimed to build a new, high-quality education model aligned with international standards through the use of ICT, to create a unified electronic education environment, and to ensure the integration of the national education system into the global education space.

Global experience shows that the modern educational model built on ICT use imposes new requirements and responsibilities on school pedagogical staff. In 2010, the Ministry of Education declared the year as the "Year of ICT in Education" in Azerbaijan. Within this campaign, numerous conferences, seminars, incentive activities, and competitions were held to promote ICT usage in education.

Furthermore, the "State Strategy for the Development of Education in the Republic of Azerbaijan," approved by the decree of the President of the Republic of Azerbaijan on October 24, 2013, emphasized the informatization of education as a key objective. All these initiatives reflect the state's deep commitment and care toward the development of the educational sector.

UNESCO recommendations outline three approaches for the informatization of schools. The first approach, known as "ICT in Education," demands that teachers enhance students' ICT skills effectively during the learning process. The second approach, called "Knowledge Acquisition," sets the expectation that teachers ensure students deeply comprehend educational subjects and apply this knowledge in solving real-world problems. The third approach, "Information Production," emphasizes that teachers should contribute to the creation of new knowledge essential for the harmonious development and prosperity of society by future citizens and workers.

The Role of ICT in the Educational Process

The use of information and communication technologies (ICT) in the educational process is one of the key methods for improving academic performance. ICT contributes not only to the learner's development but also aids the teacher in evolving as a creative individual. ICT facilitates communication, education, self-actualization, and helps meet an individual's growing need for knowledge.

The application of ICT in education increases the effectiveness of instruction, liberates teachers from outdated teaching methods, allows for the visualization of instructional material, enables the differentiation of tasks by difficulty levels, and improves feedback mechanisms.

During the visualization of educational material, ICT provides didactic opportunities by enabling the presentation of events and phenomena that cannot be demonstrated through traditional means. The multimedia system, in particular, allows for the presentation of didactic content in a more explicit and accessible way. This not only increases interest in education but also helps eliminate knowledge gaps.

A key method of monitoring and evaluating students' creative performance involves various forms of assessment—initial, intermediate, and final tests—which are effectively administered through ICT tools. These assessments enable more objective and structured evaluation of learning outcomes.

Appropriate and effective use of ICT in education, as well as the exploration of ways to enhance these skills, is of utmost importance. It should be emphasized that acquiring comprehensive ICT knowledge is most optimally achieved during secondary school years. Mastery of these technologies during school prepares students to actively participate in building an information society.

Today, ICT is not merely a tool for supporting the educational process—it opens new opportunities for fostering students' independent learning and comprehension. Accordingly, the role of the teacher is also transformed. The teacher becomes a consultant and coordinator in the learning process. Their goal is to support and develop stu-

dents' decision-making skills, assist them in understanding the purpose of the topics studied, and enable them to think critically. These are complex pedagogical tasks whose importance cannot be overstated.

In this context, ICT acts as a catalyst, helping to stimulate students' pursuit of new knowledge. Once a student clearly understands the content of a particular subject, they may begin to question: *What exactly do I need to learn, and why?* At the core of this inquiry lies a vital motivation—*Which knowledge is most useful to me? What methods can help me acquire it?*

Thus, ICT serves as a bridge between the pursuit of knowledge and the resolution of other essential life challenges. When a student realizes the role education plays in their life, their motivation to continue learning becomes significantly stronger.

Enhancing the Educational Process through ICT and Interactive Methods

The effective use of fundamental knowledge selected by teachers—beyond pedagogy and psychology, including new technologies—significantly simplifies the educational process and makes it more dynamic and flexible. The integration of computers into the traditional "teacher–student–textbook" teaching model enables the personalization of learning, stimulates students' interest and motivation, and allows for instruction based on individual learning paths. Lessons conducted using computers become highly engaging and memorable for students. Multimedia tools, automated teaching systems, educational software, animated graphics, and colorful illustrations positively influence students' cognitive activity and considerably improve their performance in Olympiads and various intellectual competitions.

The use of interactive whiteboards and virtual laboratory programs in the teaching process fulfills one of the essential principles of effective instruction—*visualization*. The electronic whiteboard's touch-sensitive surface allows users to perform any computer operation in interactive mode by simply touching it with a stylus or finger. The whiteboard can display magnified images from devices connected to the computer, such as microscopes, scanners, digital cameras, and video cameras. Through virtual laboratory programs, students can observe explanations of chemical reactions, as well as physical, biological, and geographical processes. This greatly enhances the learning process by integrating theoretical-methodological knowledge with practical skills and experience, while also fostering students' creative thinking, initiative, and deeper understanding of the material.

One significant advantage of the interactive whiteboard is its ability to record all actions performed on it in video format for repeated use. This feature is particularly valuable for students who miss lessons for various reasons or fall behind in training. Such students can watch the lesson material repeatedly on the computer until they fully understand it. In electronic education settings, all students are eager to approach the board and complete the teacher's tasks. Lessons conducted in interactive mode encourage active participation from all students, including those who are typically passive, shy, or who may have physical or psychological challenges.

As with all subjects, the application of interactive methods in teaching the Azerbaijani language places new and elevated demands on teachers' professional competencies. When planning lessons, teachers must consider student interest, possess high-level ICT skills, enrich the technical setup with appropriate materials, take a creative approach, define the lesson objectives based on content standards, and design an interactive learning process that enables students to acquire knowledge through inquiry.

The teacher must skillfully present problems to students, guide their cognitive and research activities, and foster a classroom environment that supports investigation, discovery, and the development of independent thinking.

The Application of ICT in Azerbaijani Language Teaching: Tools, Integration, and Pedagogical Impact

Ready-made multimedia tools and digital resources—including rich illustrations, tables, teacher-recorded audio dictation texts, animations, and video fragments—can be effectively used in Azerbaijani language lessons. Tasks based on these resources help enhance students' engagement and support more meaningful learning experiences.

Forming skills related to orthographic and orthoepic norms, literary language standards, vocabulary enrichment, aesthetic taste, and fostering love for the Azerbaijani language and literature are among the main objectives of teaching this subject. ICT serves as a highly effective tool in fulfilling these objectives. The versatile features of ICT allow for its integration at every stage of the lesson.

In the phonetics section of Azerbaijani language lessons, the study of sounds should not rely solely on linguistic theory. Instead, interdisciplinary knowledge from physiology, physics, and other sciences should be synthesized through ICT tools to form a comprehensive understanding. The teacher should create an environment where students are encouraged to make these interdisciplinary connections themselves. This approach helps students develop comparison, analytical thinking, and research skills.

During the study of topics such as "How to Explain the Meaning of a Word," using ICT tools increases the depth of comprehension. For example, students can explore how the concept of meaning is interpreted in logic, philosophy, semantics, and semasiology by using computer-based and online resources. Combining several tools in explaining complex concepts leads to more dynamic and engaging lessons.

Interdisciplinary integration is not limited to linking subjects. Teachers who use ICT often create a creative classroom environment that encourages conscious and meaningful learning. This means that interdisciplinary integration should not merely show how the same information is delivered across different subjects, but also establish an environment that guides students toward purposeful learning—reflected in the curriculum and lesson planning.

To achieve this, teachers must possess advanced ICT skills and approach their work with passion and creativity.

The integration of ICT in general education schools has numerous advantages. Lessons delivered with ICT tools increase students' interest and attention, enhance their visual memory, and promote the development of both subject-specific and digital competencies. The use of ICT tools in lesson preparation and delivery also improves students' collaboration skills. Furthermore, ICT-supported lessons help develop students' research and presentation skills, foster more productive thinking, and cultivate openness to new ideas and innovations.

Problem Relevance

The application of ICT in Azerbaijani language teaching enhances the effectiveness of instruction, frees teachers from outdated teaching methods, enables the visualization of learning content, allows differentiation of assignments based on difficulty level, and improves feedback mechanisms.

Scientific Innovation

The use of ICT tools in Azerbaijani language lessons increases the overall efficiency of the educational environment and introduces innovative approaches to language instruction.

Practical Significance

The issues and substantiated arguments presented in this article can be directly applied in the teaching process, providing educators with practical strategies for improving lesson effectiveness.

Conclusion

The integration of Information and Communication Technologies (ICT) into Azerbaijani language education marks a significant advancement in modernizing the teaching and learning process. As demonstrated, ICT not only enhances lesson effectiveness and student engagement but also transforms the teacher's role from a traditional instructor to a facilitator and guide in an interactive learning environment. Tools such as multimedia content, interac-

tive whiteboards, digital assessments, and virtual laboratories have proven to improve students' comprehension, critical thinking, and research skills.

The success of ICT implementation depends largely on the professional competencies of educators, including their technical proficiency, ability to design learner-centered activities, and creativity in using digital tools. Furthermore, ICT enables interdisciplinary learning, individualized instruction, and inclusive participation, offering equal opportunities for all learners, including those with special needs.

In the context of Azerbaijani language instruction, ICT supports the development of essential language skills, fosters a deeper appreciation for linguistic and literary heritage, and equips students with competencies necessary for the demands of the digital age. Therefore, the ongoing development and strategic application of ICT in education is not only beneficial but essential for raising the quality and global competitiveness of language education in Azerbaijan.

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