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ACTUALIZING THE ISSUE OF QUALITY INSTRUCTION OF PEDAGOGICAL DISCIPLINES IN AZERBAIJANI COLLEGES

The article examines the role of electro-computing technology in computerization efforts within teacher training schools in Azerbaijan, specifically focusing on the integration of technology in the pedagogical process. It underscores the importance of combining modern technological tools, such as computers, with non-electronic textbooks, highlighting that both elements should complement each other in enhancing the educational experience. The article draws attention to how students in Azerbaijani colleges should not only master computer-related technologies but also broader educational and psychological knowledge, ensuring a well-rounded approach to teaching.

The article draws on recent developments at College No. 7, where various programs have been implemented to support the educational transition to digital methods. However, it emphasizes that while computerization is an important innovation, it should be seen as one part of a broader spectrum of technological and educational advancements that students should be exposed to. The purpose of the article is to emphasize the necessity of fostering information culture among students in Azerbaijani pedagogical colleges. This is viewed as a core objective of education, contributing to the overall development of students' knowledge and their ability to engage with various fields in a connected and systematic way.

In conclusion, the article suggests that the integration of both modern electronic tools and traditional educational resources is vital for advancing the educational goals of Azerbaijani pedagogical colleges. By promoting a comprehensive understanding of information and its applications across disciplines, the aim is to advance students' readiness for the dynamic challenges of modern teaching.

Keywords: *pedagogy; education; educational process; education; colleges*

Introduction. The Ministry of Education of the Republic of Azerbaijan is making efforts to integrate information and communication technologies (ICT) into the educational process. ICT has become an integral part of the national education system and is reflected in various aspects of the country's education policy. This is evident in the relevant laws and regulations, such as the Law on Digital Electronic Signatures, the Law on Electronic Documents, and the Law on Telecommunications and Media Standards. Educational institutions in Azerbaijan rely on funding from the state budget to implement ICT initiatives. In recent years, Baku Scientific and Educational Centers have been actively engaging school teachers in training programs related to information technology (Paşayev, Rüstəmov, 2017).

Students of schools and colleges are taught how to operate cellular communication systems, and so-called educational films are shown in specially equipped classrooms. We will not discuss here the role of representatives of the Ministry of Education of the Republic of Azerbaijan in using the experience of advanced countries in the development of information and communication technologies, which sometimes receives financial support from several foreign companies (including Hewlett Packard, Microsoft, Intel, and others). While this is significant, because some of these developments are incorporated into textbooks. At the same time, we believe that the content of existing textbooks on our subject is particularly relevant for teaching pedagogical subjects.

In the course of human society's development, the "scientific understanding of the world" has also evolved, and simultaneously, the range of academic disciplines that seek to explain the universe has expanded. It is not practical to enumerate them here, as this would take us away from our primary objectives. Therefore, it is important to emphasize that computer science currently holds the most significant ideological importance, encompassing the concepts of information processing, collection, storage, and utilization.

With regard to the use of communication and information technology in Azerbaijani educational institutions, particularly colleges, there are several notable characteristics.

A) The use of these technologies contributes to the enhancement of students' overall level of information culture by engaging them in the processes of thinking, behavior, and activity, as well as expanding and deepening their understanding of the world.

B) It also promotes the development of communicative skills, enhancing students' understanding of different forms of information exchange, enriching their erudition

and facilitating direct and indirect communication with college teachers. In fact, without a strong communicative foundation, information technologies would lose their intended function.

C) Information processes in modern education are closely linked to intellectual activity, more specifically, the culture of scientific research. This involves students' preliminary and ongoing familiarization with information sources, as well as their ability to utilize search engines for information resources. Furthermore, it includes the analysis, structuring, processing, and presentation of data, taking into account the most recent technological developments.

The intensification of scientific research has an impact on the expansion of the information space, which in turn leads to the improvement of pedagogical methods and techniques for working with information.

Materials and methods of the research. This problem is devoted to many works. In the work we refer more to the studies of authors of the modern period. The methodological basis of the study was formed by the works of mainly domestic and foreign authors, scientists, philologists on the topic under study. The article uses the method of linguocultural analysis, comparative analysis, comparison and systematization of empirical and theoretical data.

Results and discussion. The use of modern technology in our educational institutions is essential and effective as a preliminary step towards providing higher education. Students are increasingly immersed in information streams. This is particularly significant for children and adolescents, as it allows them to acquire knowledge, and modern technologies aid in the better retention and further comprehension of the material they learn. For educators, technology serves as a reflection of social cognitive processes, which, in concentrated form, contributes to a shift in worldview.

The combined effect of technology on students and educators is that computer science, as an integral component of modern technology, promotes abstract thinking development. It teaches students to organize information, integrate it into an emotional space, connect logical and figurative elements of thought, and so on.

Let's try to justify our own point of view. Penetration into the deeper essence of new technologies can be carried out in different ways and methods. For example, for purely informational purposes, the mathematical or logographic parameters of technical devices are studied. In other words, the focus of the training is exclusively on information data from technical means.

Let us make a simple comparison. At the Baku Computer College, attention is currently focused on subjects such as "Informatics", "Computerization", "Computer software and automated systems" etc. It is not without reason that teachers and engineers in the field of computer science are trained there. Moreover, even a brief course in mathematical linguistics emphasizes the importance of the former. Linguistics plays a much smaller role. However, this is not the case with the teaching of pedagogical subjects in Azerbaijani colleges.

Computer science, the internet, online programs, multimedia, in short, computerization in its broadest sense, is not subordinate to a deep study of actual technological instruction, but rather to transferring pedagogical knowledge to students. Consider, or rather, consider the names of the pedagogical disciplines mentioned earlier. In each, the key term is "pedagogy". The only exception to this is the specific field of "Philosophy of Education", but education is also addressed within the context of any textbooks and teaching materials related to pedagogy (Paşayev, Rüstəmov, 2017).

In 2011, the third (and last to date) edition of "Computing Machinery and Technical Means of Education" was published, which by 2012 had been implemented in pedagogical Azerbaijani schools and colleges. The introduction of this document into the curricula has set a number of objectives. First of all, the teachers had to link its standards and rules with the definition of the content of technological teaching tools and computer science in pedagogical colleges. At the same time, students should also master specific technical tools within the framework of the curriculum in order to apply them in the classroom.

As far as we can ascertain, this program continues to be in effect in Azerbaijan and serves as the primary curriculum for all teacher training institutions. Given that the aim of the course is to prepare teachers for the effective use of technological tools in their educational institutions, it is crucial, in our view, to first focus on the positive aspects incorporated in the design of this curriculum (Məmmədova, və b., 2018).

The place of this course in the curriculum was determined in parallel with the study of courses not only in the core discipline of pedagogy, but also psychology. The need for such a course in Azerbaijani colleges (although shorter in comparison with the abovementioned pedagogical disciplines) was dictated primarily by the fact that, along with pointing out technical means to help learning, it was considered important to consider

some psychological features and peculiarities of information perception. In principle, from a pedagogical point of view, the calculation was correct: Technical training tools was studied in the first year of college, and then they began to study the basics of psychology. By the second year, students started practicing trial lessons, and the use of computing technology was based on the psychological and pedagogical basis they had passed. Without such a condition, the effectiveness of studying new technologies in general seems to be very low for European teachers.

We have deliberately chosen to begin this article by discussing computer technology, as we believe it has several advantages in conjunction with other technical tools. What are these advantages? The process of digitalization plays a significant role in the teaching of educational subjects in our colleges. In this process, teachers strive to incorporate various types of sound, visual, and numeric information. At the same time, it is essential to adopt a subtle pedagogical approach to ensure that students do not form the impression that computer technology is the only or almost exclusive means of learning when working with information and communication technologies (ICT).

This is what many teachers at Azerbaijani Pedagogical College No. 7 do, as mentioned in the title. Gulkhara Hamidova, head of the pedagogical practice department, shares her many years of experience in this work. The college staff, in addition to using personal computers in lessons on social psychology, educational psychology, and computer science, also examines the properties of various technical aids. These include, primarily, work with books and articles (specifically, by teachers at our educational institution) as well as audio and video tapes, codograms, slides, photographic film, codo-positives, records, and so on. Thus, concepts like units of information measurement and the specific capacities of different media extend beyond the limits of floppy disks, disks, or hard drives.

We agree with G. Hamidova's view that the selection of a technical method of instruction should not be based on the availability of a particular technology, but rather on the nature of the educational objectives being pursued. In our opinion, there is no conflict between these two factors, as the use of technology can actually enhance student learning by providing additional information. Other prominent educators at this institution share this perspective (Quliyeva, Cəfərova, 2017, p. 4–5).

A brief explanation is necessary. The crux of the matter is that Basic is the introductory programming language. However, basic knowledge must be acquired through a course in pedagogy during the first year of studies. Furthermore, it is certainly necessary to enhance college students' knowledge in the field of information technology in general. Consequently, in order to improve the quality of pedagogical discipline teaching, it has been decided to move on to other, more advanced programming languages. Evidently, these, being the subsequent step after the basic language, should be introduced to our students in a tailored manner (especially if pedagogical studies are conducted not only on computers, but also in non-digital book format), subject to the psychological atmosphere in the classroom and students' age group. Nonetheless, this is a significant step forward, and teachers at the named college are taking this factor into consideration these days.

It goes without saying that a computer is the main indicator of a computer's performance. Mastering the latest technology in colleges and other educational institutions in the republic is one of the primary objectives.

In general, it should be noted that the concept of "computer user" has become widespread not only in education, but in many other areas of social activity as well. With regard to teaching pedagogical disciplines in colleges, it means one stage of professional mastery when a teacher, before starting work, is proficient in using a computer to solve professional tasks (Orta ixtisas təhsili, 2025).

The teacher should also take into account the following aspect: for students in the younger age groups of Azerbaijani colleges, the time allocated for computer-based training is limited in accordance with the curriculum approved by the Ministry of Education of the Republic of Azerbaijan. As a result, computer science classes can be considered propaedeutic or preparatory in nature, serving as an introduction to the basic course on information technology. However, there is a lack of clarity regarding the approaches and content of the initial training, as well as the sources used. A review of the published curricula for Azerbaijani colleges on the teaching of pedagogical subjects allows us, in our opinion, to identify several areas that could be improved.

Information and applied. This includes courses where the use of the latest information technologies is prioritized during the initial period of study. This orientation is manifested primarily in two ways: through the use of computer support in classroom teaching and through the use of multimedia technologies.

The first type of computer use sets a goal for teachers to improve the quality of teaching using this tool. The second type involves using computers to teach children with hearing, visual, and intellectual disabilities. At the same time, foreign and national software is also used, as demonstrated by the experience of teachers at School No. 7.

The introduction of such courses and their continued improvement, in our view, will significantly enhance the quality of instruction in certain pedagogical subjects. For instance, the use of computers in this format offers some support for literacy instruction, which will enable the introduction of important concepts in computer science, such as symbols, sounds, letters, numbers, and words, as an ordered collection of letters.

It should be noted that, regardless of the specific pedagogical subject, the ability to competently orally or in writing present material in Azerbaijani or any other language is essential. This is equally true for all colleges in Azerbaijan.

Another equally significant question is: What is the nature of the process of computerization in teacher training institutions within the context of the information and application fields? Specifically, it appears that courses in this area serve educational and developmental learning objectives. For example, the use of such courses and the associated software and methodological learning environments contribute to creating a stimulating environment for literacy instruction in any classroom, according to several Azerbaijani educators. The additional utilization of computer-based task materials, of course, supports educational goals. It should be acknowledged that among the younger generation of Azerbaijani educators, there are some who openly disregard the role and significance of educational objectives.

They are considered a remnant of the Soviet era, during which teachers were required to include educational goals in their lesson plans. However, we have a different view. Among the students (especially in the initial stages of college), these goals are still relevant today. As a part of the theoretical component of existing programs in our colleges, they are highly effective. Additionally, it should be noted that they do not conflict with overall pedagogical objectives, but rather contribute to their successful implementation (Məmmədova, və b., 2018).

Information and training direction. The courses of this group, as well as the previously discussed area, are characterized by the development of educational content based on individual learning objectives. However, their scope has been expanded. Computer-aided courses in this field do not only provide theoretical knowledge, but also practical knowledge and skills in working with pre-developed software.

We consider it appropriate to address this topic, especially since it has been extensively and thoroughly discussed in the international (primarily European and American) media. As is well known, colleges in the United Kingdom and the United States, along with universities, constitute central educational institutions. Let us examine their best practices.

A leading academic and educational expert, B. Bray, dedicates an entire chapter in one of his publications to the issue of utilizing computers and peripheral devices as a primary tool in teaching. He states: “If a teacher is able to instruct students on how to operate media and video equipment, then they become engaged in the learning process. It should be emphasized that this course group in American colleges not only emphasizes the need for early acquisition of computer skills and software applications, but also affords an opportunity for younger students to gain knowledge in the field of computer science” (Bray, 2003, p. 81–82).

The developing direction. A notable aspect of this area within colleges is, above all, the development of educational content based on a broad pedagogical aim of learning. Within this framework, there are two distinct strands:

The first category is courses and programs that focus on the overall development of an individual’s creative abilities. An example of this is a course aimed at developing aesthetic abilities. Within these courses, the computer serves as a tool for musical or artistic expression.

To date, College Number 7, of which we are interested, has developed a project for an educational and methodological complex titled “Symbols of Graphics and Pseudographics”. Through the use of specific tools in computer programs, students at this college will learn how to create images.

As an instructive example, in the same publication, an American educator emphasized that this type of training, based on the latest technologies – a Pentium-5 computer, for example – using graphics and so-called “pseudographics” (i.e., speculative – associative images), enhances imagination, attention, and observation. Since the end of the 20th century, such educational and methodological materials have been actively used in English and American institutions of higher education. It is expected that the quality of pedagogical education in Azerbaijani institutions will improve further, taking into account the advanced international experience.

At present, the current educational and methodical complex is being developed at College No. 7. According to our information, the same approach is being pursued at the Oxford School in Baku.

The second trend in this area is the provision of courses and programs aimed at the overall intellectual development of college students. As an example, we can look at the current experience of European educational thought.

Despite the passage of 25 years, we believe that this approach remains relevant. Let us explain why. First, it focuses on the activities of educators in European schools and colleges. Second, after emphasizing the importance of adhering to formal logical principles in one's work, the scholar further emphasizes that algorithm development is impossible without considering artistic imagery in literature and, in language and education, without intuition and emotion (Quliyeva, Cəfərova, 2017).

Perhaps no one would dispute the relevance of such statements today. At the advent of the first computers in educational institutions of various kinds, a significant caveat was made regarding a creative approach to pedagogical subjects, while applying some of the technologies available at the time. And in several other European publications, there have been a number of calls for deliberate and careful use of computers. In such work, the aim is to create situations where the teacher acquires certain information skills and organizes children's activities in accordance with the objectives of teaching the subject in question, while not neglecting the development of students' creative abilities (Orta ixtisas təhsili, 2025).

To confirm these statements, let us turn to the opinions of domestic educators – the teachers of College No. 7. In particular, the developers of one of the computerization programs at this educational institution, G. Allahverdiyeva, L. Alakbarova, M. Mammadov, and S. Safarova, state: "The Internet is the most popular computer network today. The Internet is a global network of millions of connected computers and programs. Thanks to its extensive capabilities, including email, any user of a personal computer at an educational institution in our republic has broad access to various information resources available in the information society. As a result, every user can contribute to this global network. Through the use of ICT (information and communication technologies), connecting many computers into a single global network has become an important factor in creating widely used information databases. This, in turn, significantly expands the range of possibilities for obtaining virtually any type of information" (Quliyeva, Cəfərova, 2017, p. 7–8).

And then, based on general theoretical considerations, the program authors directly proceed to the necessity for a harmonious integration of work with a computer within the framework of this college and the development of students' creative abilities. Therefore, "The Curriculum on Internet and Global Networks" is a conceptual document that outlines all measures to achieve overall learning objectives by defining the primary goals of computer science education in high schools, colleges, and universities. At the same time, educators always focus on individual abilities and needs of each student. This document is intended not only for educators, but also for school administrators, textbook authors, parents, and students, that is, various community members (Quliyeva, Cəfərova, 2017, p. 9–10). Please be advised that if this program focuses on the development of critical thinking skills and the needs of college students, it implies that theoretical knowledge of computerization will be combined with practical skills in Internet networking, while also encouraging the manifestation of creative potential.

Regarding the training of teachers in Azerbaijani colleges with regard to the development of modern information culture, experienced instructors often emphasize the significance of providing materials that enable future educators to teach students in a creative and current or potential future curriculum-aligned manner.

Primary education should lay the groundwork for fundamental concepts that can be further expanded and enhanced at secondary and post-secondary levels.

In our article, we primarily aim to improve the quality of education. However, given the nature of our work, we also consider the importance of a teacher's personal qualities in various educational settings, including higher education. In today's information-driven and global society, the expectations for professionals have undoubtedly risen.

Conclusions. Thus, it is easy to come to the conclusion that the expediency of introducing modern computing technology into the pedagogical process should still be discussed with caution. Of course, a computer is the foundation of all technology. Otherwise, scientists would not consider it the basis of all computer science. But, as it turns out, computing is the object of study only when mastering basic (i.e. initial) computer science courses. However, the computer does not negate the development of students' independent creative initiative even without the

intervention of modern information technologies. If we are talking about a consistent and steady improvement in the quality of teaching pedagogical disciplines in colleges, then we must take into account the constant trend towards improving the software for the user. Here it is necessary to put into practice other technologies that are modified annually. Therefore, we believe that when designing programs for basic pedagogical courses, it is important not to get too caught up in programming issues while organizing practical work. Instead, the focus should be on the methodological aspects of the software.

Based on the above, it is possible to conclude that college students' thinking should be prepared to understand basic computer science courses. Furthermore, the success of the work depends on the methods chosen by teachers for its implementation, considering the specificities and age characteristics of students. To achieve this, all necessary conditions should be provided in our colleges, including regulating the schedule for using the latest technologies in teaching classes, and correctly designing the content of educational subjects to better reveal the creative potential of children's development through working with specific technologies.

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АКТУАЛІЗАЦІЯ ПРОБЛЕМИ КВАЛІФІКОВАНОГО ВИКЛАДАННЯ ПЕДАГОГІЧНИХ ДИСЦИПЛІН В АЗЕРБАЙДЖАНСЬКИХ КОЛЕДЖАХ

Анотація. *Статтю присвячено проблемі використання сучасних цифрових інструментів як основи комп'ютеризації в педагогічних училищах Азербайджану. Зокрема, наголошується на необхідності поєднання роботи з сучасними цифровими ресурсами та неелектронними підручниками.*

Досвід дає підстави вважати, що традиційні підручники є важливим доповненням до курсу інформатики та логічним продовженням роботи студентів із комп'ютерними засобами задля розбудови збалансованого освітнього середовища.

Особливу увагу приділено цифровізації навчального процесу, до якої мають долучатися студенти азербайджанських коледжів. Наголошується також на важливості комплексного підходу, який передбачає не лише опрацювання педагогічних, а й психологічних дисциплін, важливих для гармонійного розвитку студентів в умовах сучасних освітніх стандартів.

Метою дослідження є висвітлення вищезазначених питань на основі досвіду викладання кількох взаємопов'язаних дисциплін у педагогічному процесі. Важливим завданням є розвиток інформаційної культури у студентів педагогічних коледжів Азербайджану, що відіграє ключову роль у їх підготовці до майбутньої освітньої діяльності.

У роботі приділяється увага сучасному тлумаченню сутності інформаційної культури, яка на сучасному етапі суспільного розвитку передбачає не лише знання окремих наукових дисциплін, а й системне накопичення знань з широкого кола взаємопов'язаних тем, які стають основою для формування у студентів цілісної картини світу.

Ключові слова: *педагогіка; освіта; освітній процес; виховання; коледжі.*

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