



Building Information-Communication Competences in Students' Learning Activities

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ABSTRACT

This article introduces the problem of formation of ICT competence of future teachers. It discusses the process of educational informatization which relates to the ability of all participants of educational process to use modern information and communication technologies. The paper deals with the pedagogical potential of ICT, pedagogical methods, ICT means, pedagogical capabilities of ICT

Keywords:

ICT competence, students, future teachers, didactic tools, pedagogical capabilities.

Digital culture and digital literacy: Computer technologies and other aspects of digital culture have changed the ways people live, work, play, and learn, impacting the construction and distribution of knowledge and power around the world. Graduates who are less familiar with digital culture are increasingly at a disadvantage in the national and global economy. Digital literacy—the skills of searching for, discerning, and producing information, as well as the critical use of new media for full participation in society—has thus become an important consideration for curriculum frameworks. CT and Teacher Professional Development: Teachers need specific professional development opportunities in order to increase their ability to use ICT for formative learning assessments, individualized instruction, accessing online resources, and for fostering student interaction and collaboration. Such training in ICT should positively impact teachers' general attitudes towards ICT in the classroom, but it should also provide specific guidance on ICT teaching and learning within each discipline. Without this support, teachers tend to use ICT for skill-based applications, limiting student academic thinking. To support teachers as they change

their teaching, it is also essential for education managers, supervisors, teacher educators, and decision makers to be trained in ICT use.

Ensuring benefits of ICT investments: To ensure the investments made in ICT benefit students, additional conditions must be met. School policies need to provide schools with the minimum acceptable infrastructure for ICT, including stable and affordable internet connectivity and security measures such as filters and site blockers. Teacher policies need to target basic ICT literacy skills, ICT use in pedagogical settings, and discipline-specific uses. Successful implementation of ICT requires integration of ICT in the curriculum. Finally, digital content needs to be developed in local languages and reflect local culture. Ongoing technical, human, and organizational supports on all of these issues are needed to ensure access and effective use of ICT.

Resource Constrained Contexts: The total cost of ICT ownership is considerable: training of teachers and administrators, connectivity, technical support, and software, amongst others. When bringing ICT into classrooms, policies should use an incremental pathway, establishing infrastructure and bringing in sustainable and easily upgradable

ICT. Schools in some countries have begun allowing students to bring their own mobile technology (such as laptop, tablet, or smartphone) into class rather than providing such tools to all students—an approach called Bring Your Own Device. However, not all families can afford devices or service plans for their children. Schools must ensure all students have equitable access to ICT devices for learning.

Modern education cannot be mentioned apart from the processes of economic, technical, cultural and social development. At the end of the 20th century there emerged a phenomenon of ICT means within the educational process. It represents the interaction of teachers and pupils, while all the parts of the learning process are implemented using Internet technologies or other means of interactivity. The main direction of the development of modern education system is introduction of modern information and communication technologies into a wide educational practice. The use of information and communication technologies (ICT) plays a huge role in the training of future teachers. Modern information technologies are becoming one of the most important tools for school modernization. They facilitate the work of teachers and educators, make it possible to reduce the classroom burden on pupils, to diversify forms and ways of teaching to organize the learning process taking into account pupil's personal characteristics, and also to track the specific results of education. One of the most important competencies of future teachers is not only ability for self-development, self-education, but also teacher's readiness for pedagogical activity. Meanwhile, success of informatization and computerization of educational process as a whole depends on the information and computer competence of specialists in the field of education to a great extent. Teachers who are able to teach children the basic subjects of the school curriculum qualitatively, should apply new information technologies, and shape their information and computer culture. These specialists should also be well versed in children psychology, have a good command of teaching methods and be experts in the field of information technology.

Such teachers should possess the following knowledge and skills:

- To know the possibilities computer for training and development
- To master the methods of using a computer in organizing training of disciplines
- To use computer for organizing evaluation and self-control of pupils mastering the studied material
- To be able to combine computer and traditional learning technologies;
- To use new information technologies in order to organize pupil' creative activities in the classroom.

We include to the didactic properties of ICT tools such qualities as communication and information retrieval activities, mobility, interactivity, objectivity and impartiality of information, obtaining more information, modeling, etc. These properties allow ICT to ensure the implementation of an individual trajectory of professional development of the student:

- Adaptability of educational material (depending on the individual activities of the student);
- Multi-termination (simultaneous work of group of users)
- Interactive dialogue (interaction of technical means of learning and the student, imitating a certain degree of natural communication)
- Constant control of individual work of the student during an extracurricular time ICT allows not only to issue information but also to make its presentation more rational, easy to understand.

Various methods of providing educational information are used in this case. Demonstration capabilities of ICT can expand and strengthen the impact on the ways of audio presentation of the studied material. They include speech, music, demonstration commentary, sounds, technological signals, etc. Complex presentation of the content of the educational material with the help of multimedia technologies (graphics, animation, video and audio support), threedimensional graphics, virtual reality technology makes it more accessible for understanding. Programs

based on multimedia technologies are considered as a multicomponent information environment, allowing to combine text, sound, video, graphic and animation within computer system. As a result, several sensory organs of audio and video information are immediately affected, that significantly improves the accuracy and strength of memorization of the studied material. Multimedia demonstrations with the use of three-dimensional (3D) graphics provide possibility of creating complete illusion of three-dimensional, holographic image of objects or processes being studied. They are becoming widespread increasingly. ICT provide opportunities for individualization and differentiation of training. Maximum possible individualization and differentiation of the learning process is achievable when computer technologies and educational technologies are used. ICT provide a variety of educational process, which will give the students the ways to choose his / her trajectory of professional development and the individual rate of mastering knowledge, taking into account his / her physical, personal and other characteristics. Opportunities to develop skills of group work, its organization, decision-making are realized with the help of software for working groups, communication, projection and multi-terminal equipment. These opportunities form the ability to initial organizational skills.

Dynamic changes in the modern world dictate the need to find new approaches to the theory and practice of forming ICT competence in all areas of human activity and especially in formation of ICT competence of future teachers. Informatization of education is declared as one of the priority directions of the state policy in the field of education. ICT plays a unique role in improving the quality of education. It simplifies the integration of the national education system into the world one and facilitates an access to international sources of information in the field of education, science and culture. Information and resource learning opportunities increase the amount of access to educational information to previously unthinkable limits. At the same time, teachers and students have the opportunity to make an extensive use of e-mail, electronic conferences and various Internet

resources within traditional full-time education. Modern communication technologies allow to individualize and activate educational process even within the framework of group information intervention. Methods of the traditional educational system can be realized with the help of the opportunities of communication technologies. Thus, lectures contain material, the perception of which is not required, can arise in electronic form, display on a local network, at Internet or an electronic conference. Lecture notes can be supplemented with the collections of articles, additional materials which are addressed to the specific students. Training can be realized with such technologies as ICQ, e-mail, that provide communication of teacher and pupil in individual form. The need of formation of ICT of future teachers relates to the changing of structure of educational information interaction between teachers and pupils. This interaction becomes active, it uses educational information, which transfers the learning process from the level of "passive information consumption" to the level of "active information transformation". It also relates to the changing structure of presentation of educational material and methodological support of the educational process, which leads to the choice of an individual "learning path", a student-centered mode of learning activities, independent presentation and extraction of knowledge, implementation of information activities and information interaction with an interactive source of educational information.

References

1. Ardıç, Ö. (2019). ICT competence and needs of turkish EFL instructors: The role of gender, institution and experience. *Eurasian Journal of Applied Linguistics*, 5(1), 153-173. <https://doi.org/10.32601/ejal.543791>
2. Arrosagaray, M., González-Peiteado, M., Pino-Juste, M., & Rodríguez-López, B. (2019). A comparative study of Spanish adult students' attitudes to ICT in classroom, blended and distance language learning modes. *Computers and Education*, 134, 31-40.

- <https://doi.org/10.1016/j.compedu.2019.01.016>
3. Sari, A., Abdelbasset, W. K., Sharma, H., Opulencia, M. J. C., Feyzbaxsh, M., Abed, A. M., ... & Uktamov, K. F. (2022). A novel combined power generation and argon liquefaction system; investigation and optimization of energy, exergy, and entransy phenomena. *Journal of Energy Storage*, 50, 104613. https://www.sciencedirect.com/science/article/pii/S2352152X22006296?casa_token=o6i8mjDsD2AAAAAA:AUidZL2zHWf1_KYPQwe3UBw4NXT119Kfs08N-h_Yfw046Sl2mVB8tooG6o4WS6MD7ImnuFIAAiEn
 4. Uktamov, X. (2021). WAYS TO ENSURE ECONOMIC SECURITY OF ENTERPRISES. *Архив научных исследований*. <https://tsue.scienceweb.uz/index.php/archive/article/view/3945>
 5. Da Silva, V., Omar, N. (2017). Model of measurement of meaningful learning in distance learning environments. *Iberian Conference on Information Systems and Technologies, CISTI*. <https://doi.org/10.23919/cisti.2017.7975696>
 6. Baratova, D. A., Khasanov, K. N., Musakhonzoda, I. S. O., Tukhtarova, M. Y. Q., & Uktamov, K. F. (2021). Econometric Assessment of Factors Affecting the Development of Life Insurance in Uzbekistan. *REVISTA GEINTEC-GESTAO INOVACAO E TECNOLOGIAS*, 11(2), 1123-1138. <https://revistageintec.net/wp-content/uploads/2022/02/1741.pdf>
 7. Уктамов, Х. (2020). Способы обеспечения экономической безопасности промышленных предприятий. *Общество и инновации*, 1(1/S), 405-412. <https://cyberleninka.ru/article/n/sposoby-obespecheniya-ekonomicheskoy-bezopasnosti-promyshlennyh-predpriyatiy/viewer>
 8. Khodjamuratova, G., & Uktamov, F. (2022). The Role of Economic Security in

The Company Management System. *Asian Journal of Technology & Management Research (AJTMR)* ISSN, 2249(0892).