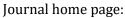


# Жамият ва инновациялар – Общество и инновации – Society and innovations







### Activation of educational activities of schoolchildren in the educational process through the use of information and communication technologies

#### Khusnida MELIEVA<sup>1</sup>

Kokand State Pedagogical Institute

#### **ARTICLE INFO**

#### Article history:

Received March 2023 Received in revised form 15 April 2023 Accepted 25 April 2023 Available online 15 May 2023

#### Keywords:

primary school teachers, competence, respondent, Information Communication Technology, professional competence, questionnaire survey, pedagogical observation, conversation.

#### **ABSTRACT**

The prospects for the development of modern society and the labor market are associated with the development of new technologies, among which information and communication technologies (ICT) are the most common. The use of modern technology and software tools in an informed society determines the requirements for the individual, which characterize the ability to act in the information space. As a result, the provision of schools with means of informatization: computers, software, etc. These measures are effective only if the teacher is qualified in the field of information and communication technology (ICT competence).

2181-1415/© 2023 in Science LLC.

DOI: https://doi.org/10.47689/2181-1415-vol4-iss3/S-pp64-69

This is an open access article under the Attribution 4.0 International (CC BY 4.0) license (https://creativecommons.org/licenses/by/4.0/deed.ru)

### Axborot-kommunikatsiya texnologiyalarini qoʻllash orqali oʻquv jarayonida maktab oʻquvchilarining oʻquv faoliyatini faollashtirish

#### Kalit soʻzlar:

boshlangʻich sinf oʻqituvchilari, kompetentlik, respondent, axborot kommunikatsiya texnologiyalari, kasbiy kompetentlik, anketa soʻrovi, pedagogik kuzatuv, suhbat.

#### **ANNOTATSIYA**

Zamonaviy jamiyat va mehnat bozorining rivojlanish istiqbollari yangi texnologiyalarni ishlab chiqish va oʻzlashtirish bilan bogʻliq boʻlib, ular orasida axborot-kommunikatsiya texnologiyalari (AKT) eng keng tarqalgan. Axborotlashgan iamivatda zamonaviv texnik va dasturiv vositalardan foydalanish, axborot makonida harakat qilish qobiliyatini tavsiflovchi shaxsga qoʻyiladigan talablarni belgilaydi. Ushbu chora-tadbirlar faqat oʻqituvchi axborot-kommunikatsiya texnologiyalari (AKT kompetensiyasi) sohasida malakaga ega boʻlsa samarali boʻladi.

<sup>&</sup>lt;sup>1</sup> Teacher, Kokand State Pedagogical Institute.



## Активизация учебной деятельности школьников в образовательном процессе посредством применения информационно-коммуникационных технологий

#### **АННОТАЦИЯ**

#### Ключевые слова:

учителя начальных классов, компетентность, респондент, информационно-коммуникационные технологии, профессиональная компетентность, анкетирование, педагогическое наблюдение, интервью.

Перспективы развития современного общества и рынка разработкой труда связаны И освоением С технологий, среди которых информационные коммуникационные технологии (ИКТ) являются наиболее распространенными. Использование современных технических и программных средств в информационном определяет требования обшестве личности. характеризующие ее способность ориентироваться в информационном пространстве. В результате обеспечение информатизации: компьютерами, средствами программным обеспечением и т.д. Эти меры эффективны преподаватель только TOM случае, если квалификацию области информационно-В коммуникационных технологий (ИКТ компетенция).

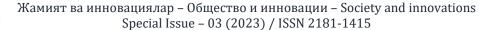
#### INTRODUCTION

Primary school teachers play a special role, they need to prepare elementary school students to learn a course of Informatics, which is constantly becoming more complex, and help the child in the process of socialization. ICT in the professional activity of an elementary school teacher is a means of increasing and optimizing the appearance of the educational process, allowing a high level of organization of educational and methodological activities. Unlike science teachers, the use of information and communication tools by an elementary school teacher has its own characteristics, which include, on the one hand, improving the effectiveness of the learning process and, on the other hand, taking into account a number of restrictions. As a rule, restrictions are associated with hygiene requirements, the peculiarities of the psychology of primary school students, and a lack of user skills.

An analysis of the pedagogical practices of 17 secondary schools in the Fergana region showed that 79.6% of the 167 primary school teachers surveyed did not show confidence in their abilities in organizing ICT-based training and needed methodological and technical support due to the lack of ICT skills at the required level.

#### METHODS AND MATERIALS.

In the conditions of the Pedagogical Institute, the training of a primary school teacher involves the study of an act aimed at mastering general knowledge, while the issues of the methodology for building the educational process are practically not considered. In the conditions of the educational process, the future teacher has the opportunity to use informatization tools in educational activities, but this is not enough to use the same tools in professional activities since the nature of the tasks to be solved has changed, has become more integrative (N.B. Moskvina). Thus, professional training should include solving problems related to the study of the issues of methodology for applying ICT in the educational process (E.V. Danilchuk, V.V. Kurshunova), this can be achieved only in the construction of a holistic system aimed at the formation of the ICT competence of a specialist.





On October 6, 2020, the decision of the President of the Republic of Uzbekistan "On measures to improve further the educational system in the field of information technology, develop scientific research and integrate them with IT industry" was adopted. In accordance with it, in the previous year, specialized base schools were established and equipped, enterprises and organizations in the system were attached to them as sponsors and more than 10 billion rubles were allocated. The resolution also provides for the establishment of 82 specialized schools in 2021, 64 in 2022, and 45 in 2023. Such measures indicate the scale of reforms that began in the field.[1]

A number of pedagogical (B.C. Grekhnev, V.I. Pityukov) and psychological (G.M. Andreyeva, I.A. Zimnaya, I.V. Kuzmina, A.A. Leontyev) studies analyzed the theoretical foundations of communicative competence. From the point of view of information and cultural approaches, the problems of the formation of information competence are considered (I.S. Lyalyukhin, E.M. Mashbits, I.V. Robert, A.V. Sokolov, O.K. Tikhomirova et al.

Works dedicated to the methodological training of the teacher (T.A. Boronenko, V.P. Kosyrev, E.V. Pogodina, T.K. Smykov-skaya, M.G. Shalunova) are of great interest, whose analysis showed that the use of ICT in education can qualitatively affect the result, and at the same time represent the need to change the content of the activities of the teacher and the teacher. and students.

At the same time, the pedagogical college has not yet considered the issues of forming the act-competence of primary school teachers, which necessitates the need to look for scientifically based ways to solve them.

All of the above allows us to talk about the existence of contradictions between the following:

- the demand in society of a teacher with ICT skills and the absence of scientifically based recommendations for preparing a primary school teacher for the use of ICT in the pedagogical process;
- the presence of a general system of teacher training in the field of ICT and the specificity of the professional activities of primary school teachers;
- the fragmentation of the preparation of a primary school teacher in the field of ICT and the need for theoretical justification-and the design of a holistic process of the formation of its ICT competence.

Thus, the problem of research is the scientific justification and design of the holistic process of forming the act-competence of an elementary school teacher in the conditions of a pedagogical college.

The study is built on the assumption that it will be more effective to formulate the competencies of a primary school teacher in the field of teachers' information and Communication Technology (ICT competence).:

- the construction of the specified process is based on the teacher's model, ICT competence, which reflects the specifics of the elementary school teacher;
- the process of forming the ICT competence of the teacher, elementary grades is considered as a change in stages;
- the educational process is built on the basis of an interdisciplinary program, each module of which is aimed at the formation of a certain component (components) of the ICT competence of an elementary school teacher;
- the process of forming the ICT competence of an elementary school teacher continues with the fulfillment of the following conditions:



- 1) orientation to a holistic result;
- 2) modular block foundations for the construction of the composition of educational materials;
  - 3) individualization and process monitoring;
- 4) the use of active methods of training and forms of work on the basis of materials of future professional activity in the educational system.

The study was conducted in three stages.

The first stage (2019–2020) is a theoretical study. This stage was aimed at studying the theoretical philosophical, psychological and pedagogical literature on the problem of research, and the selection of research methods was carried out. A detection experiment was carried out, and the subject, hypothesis, methodology, methods, and conceptual apparatus of the study were determined.

The second stage (2020–2021) is an experimental work. At this stage: 1) the development of the model of the ICT competence of the teacher of the primary class was carried out; 2) the model of organizing the process of forming the ICT competence of the teacher in the conditions of the Pedagogical Institute was developed; 3) the formation of the ICT competence of teachers of the primary class and the initial analysis of

The third stage (2021–2022) is the final stage. It is characterized by the final analysis of the results obtained during experimental work, their systematization, and generalization. The formation of research conclusions, and the design of the study in the form of a dissertation is carried out.

The scientific novelty of the results of the study is that for the first time a model of ICT competence, consisting of components (cognitive-operational, motivational-reflexive, professional-methodological), has been developed and is theoretically based, the content of which reflects the peculiarities of the professional activity of an elementary school teacher;

– on the basis of creating a step-by-step model of this process for a primary school teacher in the conditions of a Pedagogical Institute, scientific knowledge about the process of forming ICT competence was replenished, the logic of which is determined by the sequential passage of stages: professional-indicative, professional-methodological, professional-organizational;

The theoretical significance of the study consists in the development of theoretical foundations and construction of an ICT competence model of an elementary school teacher at the stage of Higher Education.

The practical significance of the study is determined by the possibility of using its results: models of ICT competence of a primary school teacher and the process of its formation, as well as programs for the organization of teaching "Informatics", "Methodology for Teaching Informatics", "Information Technology in Primary Classes" in the pedagogical educational system in order to increase the effectiveness of this process and ICT is a reflection of the presence in the teacher of a system of characteristics (knowledge, skills, skills, motives, needs; experience activities, etc.) necessary for the effective design, construction, implementation, and monitoring of the educational process in primary school using ICT to improve the skills of the teacher. The ICT competence of the elementary school teacher includes three components.

The cognitive-operational component includes the knowledge and skills which are necessary to solve the specific problems of the activity of a primary school teacher: 1) the use of ICT in the preparation of didactic material, taking into account the personal and



age characteristics of primary school students; 2) the use of ICT in the absence of user skills of students; 3) the preparation of educational materials; 4) the use of ICT to increase the visibility of the educational process in conditions of optimizing the transition of primary school students to theoretical thinking; 5) solving the problems of education and socialization of primary school students through the use of ICT.

The motivational-reflexive component-combines the motives and needs of organizing the process of education of primary school students using ICT, which is associated with improving its effectiveness or, on this basis, solving the problems of educating, developing, socializing students.

Professional and methodological component-implies the presence in the primary school teacher of a number of methodological units of activity mediated by the use of ICT-these are:

- defines indicative-pedagogical conditions and factors, creates a state of need and expediency for the construction of an educational system:
  - process in elementary school using ICT;
- design-involves the selection of directions, methods for organizing the process of education of primary school students on the basis of ICT;
- activities-the implementation of the process developed in the previous stages of the process of training elementary school students using ICT, including the control and correction of this process;
- analytical-reflects the assessment of the effectiveness of the inclusion of ICT in the educational process of primary school students, the determination of the result obtained directly in the context of the use of ICT.
- 2. The process of forming the ICT competence of an elementary school teacher involves three stages:
- 1) professional guide-aimed at the formation of skills for the use of ICT to solve educational problems. This tool is used to develop an existing ICT based on the materials of the professional activity of an elementary school teacher, for example, preparation of study cards, visualization, calculation of the educational load, etc.;
- 2) professional and methodological-involves solving methodological problems with the help of ICT, formation of skills for applying ICT to the education of primary school students. This tool is intended for the use of ICT, pedagogical analysis of its effectiveness, the development of didactic materials using ICT, etc.;
- 3) professional and organizational-aimed at acquiring the skills of organizing the educational process in several subjects of different cycles in the context of the application of ICT, designing the professional activities of primary school teachers. The tool is to solve complex professional problems based on the use of ICT.

#### **CONCLUSION**

The first task of our study was to identify the peculiarities of the ICT competence of the elementary school teacher and create a model of it. The study showed that the process of preparing elementary teachers for the use of ICT in a college setting involves taking into account the peculiarities of the activities of a primary school teacher and a number of characteristics that arise from the organization of this process in a teacher's college.

The peculiarities of the professional activity of a primary school teacher are expressed in solving a number of problems: 1) the use of ICT in the preparation of didactic material, taking into account the personal and age characteristics of primary



school students; 2) the use of ICT in the absence of user skills of students; 3) the preparation of educational materials in several; 4) the use of ICT to increase visibility is an educational process in the conditions of optimizing the transition of primary school students to theoretical thinking; 5) solving the problems of education and socialization of primary school students through the use of ICT. Thus, the result of preparing primary school teachers for the use of ICT to improve the effectiveness of the educational process and solve the problems of informatization is the competence of the latter in the ICT field (ICT competence). The peculiarities of the ICT competence of an elementary school teacher are reflected in the meaningful composition of these qualitative components. The structural model of the ICT competence of an elementary school teacher consists of three interconnected components: cognitive-operational. motivational-reflexive. and professional-methodological.

#### **REFERENCE:**

- 1. U. Y., O'roqov, , O. S. Olimboyev, (2022). O'zbekistonda axborot-kommunikatsiya texnologiyalarini rivojlantirish va moliyalashtirish masalalari. Science and Education, 3(7), 317-325.
- 2. Abdug'aniyeva Xumora Baxtiyor qizi, O'roqov Uchqun Yunusovich. Davlat maqsadli jamg'armalarining iqtisodiy-ijtimoiy ahamiyati va so'ngi yillardagi o'zgarishlar. Journal of new century innovations. Volume 6\_Issue-7\_Iyun\_2022
- 3. Oʻroqov Uchqun Yunusovich, Abduazimova Farzona Axmadqul qizi,Davlat maqsadli jamgʻarmalarining mamlakatni ijtimoiy-iqtisodiy rivojlantirishdagi ahamiyati. "Science and Education", Scientific Journal / ISSN 2181-0842 June 2022 / Volume 3 Issue 6
- 4. H. H. Melieva, (2022). Contextual Approach to the Professional Training of Future Primary School Teachers in the Field of ICT, INTERNATIONAL JOURNAL OF INCLUSIVE AND SUSTAINABLE EDUCATION, 1(6), 247-249.
- 5. Х. Х. Мелиева, (2022). БОШЛАНҒИЧ СИНФ ЎҚИТУВЧИЛАРИНИНГ АХБОРОТ КОММУНИКАЦИОН КОМПЕТЕНТЛИГИНИ РИВОЖЛАНТИРИШ. ТА'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(12), 407-411.
- 6. HH, M., AA, N., GB, U., & UA, M. (2022). COMPETENCE-BASED APPROACH IN THE PROFESSIONAL TRAINING OF FUTURE PRIMARY SCHOOL TEACHERS IN THE FIELD OF ICT. International Journal of Early Childhood Special Education, 14(7)