Methodology for Developing Information-Analytic Competency of Future Primary Class Teachers

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Article History	Abstract
	In modern conditions of the emergence of a global information society, the role of information in the training of a future specialist is significantly increasing. The idea is increasingly gaining ground in people's minds that the future strategic potential of society will not be energy resources, but information and scientific knowledge. Information becomes the main resource for the scientific, technical, and socio-economic development of society, significantly influences the accelerated development of science, technology, and various industries, and plays a significant role in the process of modernization of education.

1. Introduction

Features of the current stage of development of education in Russia are associated with the following global trends: the rapid development of modern computer technologies and the expansion of the scope of their application in the educational process by both schoolchildren and adults; saturation of educational institutions with technical means that ensure the implementation of information processes of storing, transmitting and processing information in a new, digital format; using the resources of the global information network Internet in the educational process.

The Main Results and Findings

However, at present, the higher pedagogical school has not developed a system that ensures the effective use of computer technology. This problem affects not only the learning process, it is directly related to the level of qualifications of teachers. In recent years, a system of training teachers in computer literacy has been widely deployed, however, not all teachers who have completed such a course can effectively use the acquired knowledge in professional teaching activities, since possession

of a personal computer at the user level is not accompanied by the development of pedagogical foundations for organizing training using computer technology and does not mean the ability to effectively use this technical tool in solving professional problems. Developing in future specialists those traits and qualities that would meet the requirements of real innovative practice, including the competent use of information flows and participation in mastering professional knowledge, is one of the directions for the development of vocational education. Research on theoretical issues of developing the competence of a specialist in the system of continuous education (A.S. Belkin, B.S. Gershunsky, E.F. Zeer, A.B. Khutorskoy, T.I. Shamova, N.M. Yakovleva) and problems of developing the professional competence of a teacher (O.A. Akulova, J.I.H. Zakharova, N.V. Kuzmina, J.I.M. Mitina, S.A. Pisareva, V.V. Sokolova, V.M. Sokolov) showed the possibility of a teacher achieving new professional and personal qualities through development structural components that make up the phenomenon of information competence.

The effectiveness of a teacher's solution to the tasks of pedagogical activity in the context of informatization of education depends on the development of his information competence, which directly affects his professional growth, since it presupposes the teacher's ability not only to master ways of working with a personal computer, but also with information in general. E.E. pays attention to this in his works. Vakhromov, B.S. Gershunsky, S.D. Karakozov, D.Sh. Sailor, E.S. Polat, J. Raven, I.V. Robert, M.A. Kholodnaya and others. However, an analysis of the scientific literature shows that to date, the issues of developing the information competence of the future teacher in the aspect of integrating its motivational, cognitive, operational, and reflexive components remain practically undeveloped, which does not allow achieving the level of the studied competence of the future teacher in the conditions of informatization of education. Thus, the relevance of this study is determined by: 1) increasing requirements for the level of information competence of the future teacher, associated with the rapid development of modern computer technologies and the expansion of the scope of their application in the educational process; 2) evolutionary trends in the system of higher pedagogical education related to the need to develop the information competence of the future teacher; 3) the unrealized potential of higher pedagogical educational institutions in preparing highly qualified teachers with the necessary level of information competence; 4) insufficient development of the problem of developing information competence in pedagogical theory and practice. Based on the analysis of regulatory documents of Russian education, the experience of a higher pedagogical school, philosophical, psychological-pedagogical, methodological literature, as well as our own work experience, the problem of this research was formulated, which is determined by the contradiction between the social order for the development of information competence of the future teacher and insufficient the level of theoretical and practical development of this problem. The theoretical and methodological basis of the study was: systems theory (V.G. Afanasyev, L. von Bertalanffy, I.V. Blauberg, A.I. Uemov, E.G. Yudin) and a systems approach in education (Yu.A. Konarzhevsky , N.V. Kuzmina, M.M. Potashnik, G.N. Serikov, E.V. Yakovlev, etc.); theory of activity (B.G. Ananyev, P.Ya. Galperin, S.JI. Rubinstein, etc.); provisions of the competency-based approach in education (A.S. Belkin, E.F. Zeer, D.A. Ivanov, K.G. Mitrofanov, A.B. Khutorskoy, T.I. Shamova, etc.); theory of informatization of vocational education (D.S. Matros, I.S. Melyukhin, E.S. Polat, I.V. Robert, B.E. Starichenko, etc.); theory of teacher professional competence (A.S. Belkin, A.K. Markova, V.A. Slastenin, N.E. Shchurkova, etc.); psychological theory of personality (A.G. Asmolov, J.I.C. Vygotsky, A.N. Leontiev, S.JI. Rubinstein, etc.); psychological and pedagogical studies of current problems of education (A.F. Amend, V.A. Belikov, V.A. Slastenin, A.B. Usova, N.M. Yakovleva, etc.); theory and methodology of pedagogical research (Yu.K. Babansky, V.I. Zagvyazinsky, V.V. Kraevsky, M.N. Skatkin, etc.); theory of constructing pedagogical technologies (V.P. Bespalko, M.V. Clarin, JI.M. Kustov, G.K. Selevko and others.-) The study was conducted using a complex of theoretical and empirical methods.

Theoretical methods: a) analysis of regulatory documents on higher pedagogical education was used to substantiate the relevance of the problem and determine the legal possibilities for its solution; b) theoretical and methodological analysis made it possible to formulate the initial positions of the study; c) conceptual and terminological analysis was used to describe the conceptual field of the problem; d) system analysis served as the basis for a holistic consideration of the problem; e) modeling was used

to construct a model for the development of information competence of a future teacher and the technology for its effective implementation.

Empirical methods: a) study, analysis and generalization of effective experience in preparing a future teacher; b) ascertaining experiment to assess the information competence of the future teacher; c) a formative experiment on practical testing of a model for the development of information competence of a future teacher and the technology for its effective implementation; d) observation, questioning, testing, self-assessment, examination; e) statistical methods of data processing and testing of hypotheses.

In the new scientific, technical and socio-economic conditions of society, the relevance of the problem of this research is determined by the existing contradiction between the social order for the development of the information competence of the future teacher and the insufficient level of theoretical and practical development of this problem.

2. Conclusion

Analysis of philosophical, psychological, pedagogical, and methodological literature, the study of the experience of higher education, and research based on the analysis of the essence and causes of the problem of developing the information competence of the future teacher in pedagogical theory and practice made it possible to formulate the goal of the study, which was to develop and theoretically substantiate a model for the development of information competence of the future teacher and technology for its effective implementation. The subject of our research is the process of developing the information competence of the future teacher. To develop and implement a model for the development of information competence of a future teacher, a feature of which is the integration of its structural and functional components, which is the leading factor in the development of the competence under study; To design a technology for the effective implementation of a model for the development of information competence of a future teacher, aimed at developing the knowledge, skills and personal qualities necessary to solve professional problems in the conditions of students' holistic immersion in information activities; participatory management of students' information activities; application of active learning methods based on information and communication technologies.

3. References

1. Adolf, V.A. Methodological approaches to the formation of a teacher's information culture Text. /V.A.Adolf, I.Yu.Stepanova //Informatics and education. - 2006. - No. 1.
2. Afanasyev, V.G. Design of educational technologies Text. /V.G. Afanasyev //Higher education in Russia. 2001. - No. 4.
3. Gaponova, S.A. Dependence of the dynamics of mental states of adult students on the methods of presenting information. Text. /S.A. Gaponova, N.A. Martynova //Psychological journal. 2004. - No. 3.
4. Elizarov, A.A. Basic competence as the basis for online teacher education Electronic resource. /A.A. Elizarov //Proceedings of the RELARN-2004 conference. Abstracts of the report. Access mode: http://www.relarn.ru:8080/conf/conf2004/section3/3 11.html, free.
5. Ivanova, L.F. Innovative conditions for the development of teacher professional competence Text. /L.F. Ivanova // Innovations in education. -2003.-No.4.
6. Klemeshova, N.V. Multimedia as a didactic tool for higher education Text: Candidate's dissertation. ped. Sciences: 13.00.01 /N.V. Klemeshova. Kaliningrad, 1999.-210 p.
7. Markova, A.K. Psychology of professionalism Text. /A.K. Markova. M.: International. Humanitarian Foundation "Knowledge", 1996. - 312 p.
8. Pedagogy of vocational education: Proc. allowance for students. higher ped. textbook establishments Text. /E.P. Belozertsev, A.D. Goneev, A.G. Pashkov and others; Ed. V.A. Slastenin. M.: Publishing center "Academy", 2004. -368 p.
9. Safontsev, S.A. Educational qualimetry in the system of advanced training Text. /S.A. Safontsev. Rostov n/d: Publishing house Rost. Univ., 2003. -160 p.

10. Federal component of the state standard of general secondary education. Informatics and ICT Text./Collection of normative documents under the general editorship. E.D. Dneprova, A.G. Arkadyeva M.: Bustard, 2004.- 360 p.