



DEVELOPMENT OF LOGICAL COMPETENCES OF FUTURE PRIMARY SCHOOL TEACHERS DEVELOPMENT OF ELECTRONIC METHODOLOGICAL SUPPORT

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ABSTRACT

This article is based on a creative approach development of logical competencies of future primary school teachers. Improving electronic methodological support. The methodology and, as a consequence, effective methods for developing logical competencies of future primary school teachers are described.

KEYWORDS

Creative, cognitive, logical competence, logical thinking, development, professional staff, ability to think, creativity.

INTRODUCTION

Today development of logical competencies of future primary school teachers. The main goal is to form from the young generation comprehensively developed individuals, necessary for the development of our society. A mature person embodies spiritual and physical maturity. Development of logical competencies of future primary school teachers. In this case, the key role is played primarily by oral folklore, folk tales, stories, legends, books reflecting visual expression. In addition, the program will be guided by the legacy of Eastern thinkers, poems and ghazals, examples of artistic creativity. If we turn to the socio-political, philosophical and educational views of such scholars as Ahmad Yasawi, Bahauddin Naqshbandi, Al-Bukhari, Abu Rayhan Beruni, Abu Ali ibn Sina, Muhammad al-Khwarizmi, Abulkasim Firdausi, Amur Temur, Alisher Navoi and Zakhiriddin Muhammad Babur, development of logical competencies of future primary school teachers. The work becomes more perfect[1].

Literature Review

For example, in the work of J. Raven, published in 2002: "competence consists of a large number of competencies, many of which are independent of each other. Some competencies relate more to the cognitive sphere, while others to the emotional sphere. These competencies effectively manage themselves and complement each other."¹ put forward the idea. Competency-based education is a topic that today causes various conflicts, contradictions and different opinions due to its insufficient scientific and methodological development. At present, a stable definition of competence has not been

¹4R Aven, J. Competence in modern society: identification, development and implementation [Text] - Moscow: Cogito Center, 2002. – 150 p. . – With . 18-27-28

developed. The terms "competence" and "competency-oriented" are interpreted differently. Including D.N. Ushakov "The Great Explanatory Dictionary of the Modern Russian Language" The dictionary defines competence as follows: "competence is the range of authority, the range of issues acquired through the knowledge and experience of a given person," that is, the totality of knowledge that a person can reason about and possesses in a particular field of activity.² In the dictionary of foreign languages, competence is defined as "the presence of knowledge that allows one to express an authoritative opinion about something and to conduct a discussion." The explanatory dictionary of foreign words gives a different definition of competence: "competence is awareness in a certain area of knowledge within the framework of certain issues", "competent is a state of awareness in a certain area, possession of awareness, that is, competence."³

According to M.M. Vakhobov, "education based on a competency-based approach is education aimed at developing students' competencies for the practical application of acquired knowledge, skills, abilities and competencies in personal, professional and social activities".

According to B.K. Khodjaev, "competence serves to integrate the student's efforts towards self-development and mastering new personal experience."

N.A. Muslimov [12] emphasizes that competence is not the acquisition of individual knowledge and skills, but the mastery of integrative knowledge and actions in each independent area.

- Research Methodology

The term "competence" was first mentioned in scientific literature in the 1950s and 1960s. American scientist N. Chomsky in his works "Syntactic Structures" and "Aspects of the Theory of Syntax" interpreted competence as a person's ability to perform some activity [2].

In the scientific literature there are different views on the definition of the concept of "competence" and the term "competence". F. Delamar and J. Winterton describe competence as standard behavior, behavior required by a certain activity, and competence as the degree of compliance with this requirement, that is, the final result of demonstrating competence [1]

This innovative environment includes a set of standard and non-standard educational and test tasks that reveal the level of development of the natural-scientific worldview of students in higher mathematics and the possibility of determining the effectiveness of this process. In the course of our research, the following methodological system for organizing independent studies in physics for undergraduate students was developed (see Table 1):

¹Ushakov D. N. Big reasonable dictionary modern Russian language / - M.: Alpha print, 2008. - 1239 With. -755- b .

³ Shaposhnikov, K. V. Contextual approach in the process of formation of professional competence of future linguists-translators: author's abstract. diss. ... candy. ped. science / – Yoshkar-Ola, 2006. – 26 p.

Table 1

Methodological system for organizing independent work of students		
No.	Components of the methodological system	Specific provisions of this component
1	Paradigm of the educational process	Principles of student-centered learning, differentiated learning, personal, competency-based approach
2	Identical goals	The tasks of independent work of students in physics include the development, monitoring and evaluation of learning objectives based on Bloom's taxonomy.
3	Didactic principles	Theory, Science, coherence, systematicity, unity of practice, logical sequence, consistency.
4	Educational content	Practical skills, experimental skills, theoretical knowledge, basic and physical competencies in the subject of mathematics
5	Learning tools	Natural-visual, hypermedia education, verbal exhibition tools and information
6	Learning technologies	problem-oriented, reproductive, partially research, independent work, assessment technologies
7	Forms of training	Lessons, extracurricular activities, laboratory work, practical work, excursions, physics workshop, extracurricular activities
8	Innovative educational technologies	Small group and pair work, collaborative integrative learning, problem-based learning and design technologies

The formation of educational tasks (tests, questions, laboratory tasks, a set of exercises for independent completion) presupposes the acquisition by students of a certain level of practical skills, theoretical knowledge and experimental qualifications, ensuring their independence in acquiring knowledge[2].

Thus, it can be said that the integration of information technologies in education allows for an individual approach to students and thus promotes differentiation of learning, and the integration of information technologies in the natural sciences in general and in higher mathematics in particular makes the learning process more effective.

- Analysis and results. The purpose of using research and creative project assignments is to prepare teachers for innovative activities by developing their intellectual, creative, research abilities and professional competencies. The use of research and creative project assignments in the process of advanced training gives students the opportunity to regularly and fully participate in classes, independently work with information sources, organize their activities based on an innovative approach, and develop a desire and interest in mastering educational material[3].

Research and creative project assignments form and develop the following competencies in students: Research competence: searching for information, its evaluation, analysis, comparison, establishing relationships between phenomena and conducting intellectual research;

professional competence: mastery of the methodology for the effective use of innovative technologies in the educational process when carrying out pedagogical activities;

communicative competence: expressing one's opinion, giving a presentation, proving, listening to the opinions of others, analyzing and responding;

social competence: teamwork, organization of joint activities, work in small groups (see Figure 1).

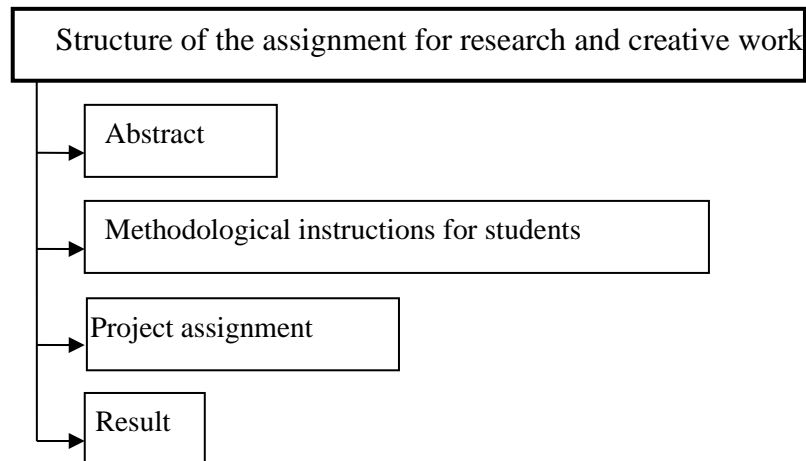


Figure 1. Structure of the assignment for completing a research and creative project

The system of research and creative project assignments should include assignments of various types, volumes and complexity, allowing students to acquire new knowledge and skills in a certain area, as well as theoretical information. It is important that research and creative project assignments are focused on independent learning and practical application of the acquired knowledge[4]. This will activate the pedagogical activity of students and, in turn, will improve the quality and efficiency of the process of advanced training.

Particular attention should be paid to the last parameter – “efficiency”, which is measured through motivational, educational, cognitive and other criteria, which, in turn, are measured by the following indicators:

motivational criterion (stable cognitive motives, extracurricular and academic cognitive interests, conscious professional interests related to cognitive interests; value of knowledge);

“intellectual and cognitive criteria (independently set goals and objectives; make assumptions about the connections and patterns of one's actions when designing the possibility of independent learning; form conclusions based on reasoning; possess logical thought processes; use various methods of cognition; gradually introduce thinking techniques)” [5].

"information and communication" criterion (own capabilities and education) realizing the possibilities of space to be; speech words build; information work with);

emotional-volitional and regulatory criteria (from the conditions of organizing training) satisfaction, relationship satisfaction, enough positive self-esteem and level of assertiveness, with training related feelings, independent educational opportunities Cognitive reflection of actions to solve design problems, general anxiety level, personal learning The fact that he chose his own actions responsibility for the process and results control do);

in the learning process student subjectivity criteria (goals and ways to achieve them) when determining initiative, independence the desire for knowledge, the development of one's own

personality importance and significance, independent experience in design, research, business management [13]experience)" (see Figure 2):.

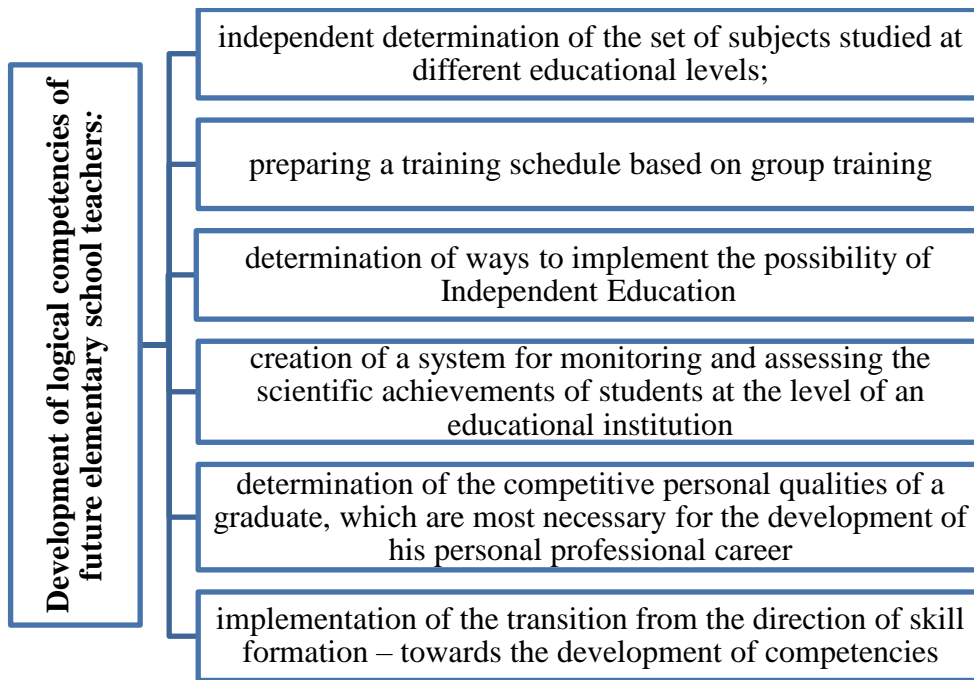


Figure 2. BDevelopment of logical competencies of future primary school teachers

Enhanced by us Self-paced learning model functionality opportunity to get education within the framework The following factors influence the effectiveness of training using the credit-modular system:

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