

**FORMATION OF INDEPENDENT LEARNING COMPETENCE OF
STUDENTS ON THE BASE OF DESIGNED EDUCATIONAL
TECHNOLOGY IN TEACHING PEDAGOGICAL TECHNOLOGY**

ANNOTATION

This article analyzes the issues of forming students' independent learning competence based on design educational technology in the higher education system. In the process of teaching pedagogical technology, the development of students' abilities to independently acquire knowledge, search for, analyze, process and apply information in practical activities is of great importance. The article discusses the content, structural components of independent learning competence, and the pedagogical possibilities of project education in its formation. The results of the study show that the educational process organized on the basis of project education is effective in increasing students' motivation for independent learning, strengthening cognitive activity, and developing professional competencies. The results of the article can be used as a methodological resource for improving the educational process in higher education institutions.

Key words: project education, independent education, independent education competence, pedagogical technology, higher education, competence approach, research skills, independent thinking, educational effectiveness.

Introduction. In the higher education system of Uzbekistan, special attention is paid to the widespread introduction of innovative pedagogical technologies and the improvement of students' independent educational activities. This requires the use of modern educational technologies in the educational process, along with traditional teaching methods, that represent students as active

subjects, stimulate their creative and independent activities. One of such technologies is design educational technology. Project-based educational technology is an innovative pedagogical approach that actively involves students in the processes of independent study of a specific problem, goal setting, planning, information collection, analysis, development of practical solutions and presentation of results. This technology creates a favorable didactic environment for the formation of independent learning competence in students. Because in the process of project activities, students not only master theoretical knowledge, but also develop the skills of applying it in practice, working together, making decisions and self-assessment. From this point of view, the study of pedagogical mechanisms for the formation of independent learning competence of students on the basis of project-based education is of great importance.

Research methodology. In the research methodology, the opportunity of pedagogical technology to use the purpose, content, forms of organization, methods and means of independent education of students in the educational environment was used. Designing the educational process is a process of developing a project (scheme) for the effective organization of a particular educational process, taking into account all factors.

Analysis of literature on the topic. Currently, the issue of forming independent creative activity of students through the introduction of pedagogical technologies into the educational process is of primary importance in the center of modern pedagogical research. In primary scientific sources, independent creative activity is interpreted as a factor that strengthens the student's subjective position in the educational process and as one of the main criteria for pedagogical technologies.

The problem of developing independent educational competence of future teachers through the use of design educational technology in teaching the discipline of pedagogical technology is one of the most studied topical areas of pedagogy. In order to systematically analyze this phenomenon, scientific sources

were conditionally analyzed, including studies by foreign, CIS and domestic scientists. In particular, in Western pedagogical schools, the concepts of design educational technology and independent education are studied in direct connection.

A scientist who systematically researched the problems of introducing new pedagogical technologies in education in our republic J.G'. Yo'ldoshev He considers the problem of students' independent thinking as the basis of pedagogical innovations. The scientist emphasizes: "Pedagogical technology can be considered as a set of consistent practical activities of learners and educators in the educational process, leading to the formation of predetermined qualities. Pedagogical technology (or educational technology) is, first and foremost, the extent to which a learner or student performs an activity in the educational process." [1].

The world's leading experts on standards for implementing project-based learning J. Larmer va J. Mergendoller they prioritize the issue of independence in their concept: "True project-based learning requires two important qualities in students: ownership of their own opinions and the right to choose. Students take responsibility by defining their own independent learning strategies within the lesson." [2]. German scholar who studied the historical and modern evolution of the project method M. Knoll puts forward a pragmatic approach to education as follows: "The project method transforms the learner from a passive recipient of theoretical knowledge into an independent planner and implementer of practical projects. This method allows you to turn the learning process into a laboratory for the student's independent professional development." [3].

From the founders of the competency approach I.A. Zimnyaya explains the competence of independent learning as a student's fundamental ability to acquire knowledge and states in his research: "The competence of independent learning is the ability of a subject to independently plan, organize and self-control his educational and learning activities based on internal motivation. Project work is the main didactic environment that forms this competence." [4]. A scientist who created a school to prepare future teachers for professional pedagogical work and

to develop pedagogical skills and technologies in them N.N. Azizxo‘jayeva regarding the issue of student independence in teaching pedagogical technologies, he explains: "The professional competence of a future teacher is directly related to his ability to independently learn and develop himself during his student years. Teaching based on the design of pedagogical technologies forms in students the skills of independent decision-making and overcoming problem situations." [5].

Leading scholar in the design of pedagogical technologies and learning objectives in higher education based on taxonomies N.H. Avliyakov emphasizes that the problem of technological design of lessons is to express educational goals in a diagnostic form and create an algorithm for the student's independent educational and cognitive activity that guarantees their achievement [6].

Analysis and results. The analysis of the studied literature revealed the need to justify the idea of directing students' independent learning hours in the discipline of pedagogical technologies to the formation of a project-based educational environment and the creation of practical projects, as an exception to the traditional educational environment. In the context of our research, the use of design educational technology in the formation of students' independent learning competence is one of the priority tasks. First, let's dwell on design educational technology.

The topic "Project-based educational technologies" within the discipline "Pedagogical technologies" is fundamentally different from other subjects of the discipline in that it directs students to an unconventional, independent and creative learning process.

The didactic purpose of project-based educational technology is not simply to provide students with ready-made theoretical knowledge or to memorize it, but to form in students the ability to systematically apply the knowledge gained to solve real practical issues and problems, and to develop their independent educational competence. Within the discipline "Pedagogical technologies", project-based educational technology is the most effective strategy for forming

students' independent educational competence by abandoning ready-made lesson outlines and turning them into subjects who work independently on themselves and can creatively solve problems. Project-based education is not just giving assignments in class, it has a clear algorithm that gradually develops the student's independent activity:

Stage 1: Project Planning (Goal Setting): The student analyzes the project problem, independently determines a strategy for solving it, and allocates time.

Stage 2: Information and analytical activities: The student independently searches, analyzes, and sorts scientific literature, electronic resources, and materials on the HEMIS platform on the topic.

Stage 3: Creating a project product (Practical activity): In the section of the subject "Pedagogical Technology", the student creates his own independent creative product (for example: innovative lesson model, technological map, interactive learning case).

Stage 4: Reflection and Defense: During the public presentation, the student evaluates his work, sees his shortcomings and self-corrects.

In the development of the study, the activities of students of the pedagogical direction on the types of independent educational tasks were evaluated using a comparative-experimental method. The criteria for assessing independent education were: independent search and analysis of information, completion of creative and project tasks, preparation of methodological materials and development of recommendations, and reflection and self-assessment.

The following 3 main criteria are used to assess the formation of independent educational competence in students:

Criteria	Indicators (What is formed in the student?)	Assessment tools
1. Motivational-valuable	An internal need for independent learning, professional interest, and a desire to solve problems.	Questionnaires, motivation tests.
2. Cognitive	Depth of theoretical and methodological	Problem tests, case

Criteria	Indicators (What is formed in the student?)	Assessment tools
(Educational)	knowledge to be able to design pedagogical technologies in practice.	solutions.

Project activities move students from merely reproducing ready-made information (reproductive level) to the stage of creating independent problem solutions (productive-creative level). This serves to develop in higher education graduates the most important life skill required by the modern labor market - the ability to engage in lifelong independent learning.

Conclusions and suggestions. Within the framework of the discipline "Pedagogical Technology", project-didactic tasks that gradually develop students' independent learning competence were identified and implemented in practice on the basis of methods and tools. It ensured the transformation of educational materials into the form of quasi-professional (close to the real school environment) problem-based project tasks and the management of the student's independent activity trajectory.

Optimization of competency criteria: Multifactorial criteria for assessing students' independent learning competence (motivational-value, cognitive, active-practical) and their indicators were identified. Unlike the traditional rating system, criterion-based rubrics measuring the student's level of independent work with information and self-assessment (reflection) during the design process were implemented in practice. Instead of traditional abstracts and summaries, which are mechanically copied by students in the field of pedagogy and are considered ineffective, it is advisable to introduce practical and pedagogical projects (creating innovative lesson plans, cases, electronic portfolios, and didactic games) that develop their independent thinking.

Used literature

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