

## OPTIMIZATION OF THE EDUCATIONAL PROCESS OF A HIGHER SCHOOL IN CONDITIONS OF MIXED LEARNING

### OPTIMIZAREA PROCESULUI EDUCAȚIONAL AL ȘCOLILOR SUPERIOARE ÎN CONDIȚII DE ÎNVĂȚARE MIXTĂ

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**Abstract.** The article describes the optimization of the educational process in the conditions of blended learning, in particular: digital tools for the organization of blended learning are outlined; basic forms and methods of learning in a mixed format. The practice of working in the conditions of mixed education in higher education proved the need for new ways of organizing the educational process, finding new forms of work, which consist in the coordination of education seekers in the cognitive process during lectures and practical classes, the implementation of educational projects, consulting and support in matters of the development of their educational trajectories. The main thing in this process is the result, namely the understanding of the importance of theoretical knowledge for students of higher education; the need for their updating; integration of the studied material; application in new situations and problem solving; development of critical and creative thinking; adaptation to professional activity; analysis and evaluation of the results of professional activity. That is why the article considers the main aspects of such lectures: lecture-dialogue, generalized, binary, with pre-planned mistakes, lecture-press-conference, lecture-consultation. The basis of these lectures is the motivation of students' educational and research activities; organization of activities and modeling of final work results, methods of their evaluation; encouragement to generate creative ideas; solving creative tasks. This was facilitated by the tasks proposed during the lectures, which were compiled with the aim of forming a positive attitude towards future pedagogical activities; oriented to the search for information about innovations in education; aimed at the development of creative and individual personality qualities, creative abilities, research skills, creative thinking of the future teacher; contribute to the development of the ability to control and evaluate the pedagogical process and its individual elements. The optimal educational methods were chosen to direct students to the activation of their independent creative activity, namely the application of real practical tasks in educational activities, analysis of pedagogical situations, modeling of practical situations, etc.

**Keywords:** Institutions of higher education, educational process, mixed education, forms of education, methods of education, educational tasks, results of education, lectures, students of higher education.

Modern educational practice has significant achievements in the implementation of mixed learning in higher education, which combines traditional face-to-face learning with modern forms of electronic learning, which enhance the advantages and compensate for the disadvantages of each of them. According to O. Boltyanskyi, N. Boltyanskyi "the possibilities of mixed learning allow to expand the psychological component of learning motivation, to ensure the mastery of methods of performing information and analytical activities within the framework of the learning process, obtaining knowledge in the chosen profession" [1, p.45]. Modern pedagogical theory and educational practice of the organization of blended learning

have gained significant development thanks to the advanced research of foreign and domestic scientists, in particular, E. Banados, A. Rosett, D. Painter, F. Vaughan, S. Berezenska, K. Bugaichuk, I. Vorotnikova, O. Korotun, V. Kuharenko, A. Litvinov, K. Lisetskyi, T. Oliynyk, and others.

However, the issues of optimizing the educational process of the higher school in conditions of mixed education remain unresolved in full. After all, it is the well-founded choice of innovative educational technologies, forms, methods and means of learning that allow you to realize the set goal and solve educational tasks in the shortest possible time, based on the observance of didactic laws and principles, taking into account the individual characteristics of those seeking education and the capabilities of teachers, which will allow you to demonstrate quality indicators of learning results.

Depending on the strategy of the educational institution in the implementation of mixed learning and the specifics of the tasks that are solved by the educational components in the preparation of future specialists, in the educational practice of the University of Grigory Skovoroda in Pereyaslav, different types of lectures are used, in particular:

- problematic – familiarizing students with the technological features of educational activities in higher education, with the features of performing individual actions and methods of work during the study of a separate discipline;
- lecture-dialogue - conducted on the basis of the Socratic method with the help of a direct dialogue between the teacher and students, it makes it possible to avoid passive perception of educational information;
- theoretical construction, which helps to teach students to systematize and generalize their educational results on the basis of mastering theoretical concepts, principles, rules, laws;
- methodological - reveals the nature, structure and methods of scientific knowledge (facts - hypothesis - model - conclusions - experiment - practical application);
- general subject – built on clarifying the connections of fundamental educational objects with various educational disciplines;
- summarizing demonstrates to students the results of systematization of their knowledge, achievements, problems;
- binary – a dialogue between two teachers (or representatives of different scientific schools, or a scientist and a practitioner) on an integrative scientific problem;
- a lecture with pre-planned errors, designed to stimulate students to constantly monitor information through the search for errors (content, methodological, methodical);
- a lecture-press-conference held as a scientific-practical session with a problem raised in advance and a discussion lasting 5-10 minutes;
- lecture-consultation follows different scenarios: either "question - answer" or "question - answer - discussion".

Let's note the main provisions that determine the choice of the type of lecture (Table 1).

**Table 1. The main provisions that determine the choice of the lecture type**

No	Type of lecture	Orientation of lectures in solving educational tasks
1.	<i>A problematic lecture</i>	Presupposes, on the part of the teacher, the design of educational activities and educational results; creation of cognitive situations adapted to a specific topic; the ability of psychological and pedagogical management to solve the situations proposed by students. According to A. Lozenko, the problem lecture includes an analysis of the proposed situation from the point of view of information content, goals and conditions of the solution - for the formulation of the problem, its justification, modeling of the solution and actions, direct extraordinary solution of problem situations, and mandatory analysis of the obtained results [2].
2.	<i>Lecture with the help of students</i>	Helps activate students' cognitive abilities; provides feedback during the lecture session; the teacher can find out what difficulties arise in the process of perceiving information; provides correction of assimilation. The student becomes the main subject of educational interaction, taking an active part not only in the lecture, but also in its design. However, it is important to effectively organize preparation for the lecture, using methods of direct communication or combining them with forms of information and communication (e-mail, chat, forum).
3.	<i>Lecture-visualization or visualized lecture</i>	It ensures the implementation of the traditional principle of the education system - the principle of visibility, but the presentation of information or additional materials by technical means of education is innovative. Using this type of lecture class helps to turn oral information into visual; contributes to the individual trajectory of material perception and comprehension in accordance with the subjective experience of the student; ensures construction of knowledge by all participants of educational interaction. Such lectures are conducted with the aim of: effective formation of abstract thinking, activation of thinking processes (memory, attention, imagination, etc.); increasing motivation to learn educational information, which is presented in audio-visual form; formation of professional competence of future specialists [3].
4.	<i>Lectures with scheduled errors</i>	They provide an opportunity for the teacher to assess the quality of assimilation of the previous material, and for students to test themselves and demonstrate knowledge of the subject, the ability to navigate in it. Such a lecture encourages students to work throughout the entire lecture session, to actively participate in the process of discussing the essence and importance of the mistakes made by the teacher, which contributes to increasing the effectiveness of learning, maintaining interest in the educational component, allows to intensify and optimize the cognitive processes of students of education, to form professional skills and skills of future specialists.
5.	<i>Binary lectures</i>	The purpose of the binary lecture is to highlight didactically structured educational material that requires further independent mastering by students. According to a group of scientists O. Yurakh and others, binary lectures are used: 1) when there are different solutions to a debatable issue or different points of view on one scientific problem and each of the lecturers defends personal judgments - we called them binary lectures and disputes; 2) for the organization of intersubject continuity, when the first lecturer extrapolates the main data of one discipline to master another, and the second lecturer supplements and specifies this information [4]. However, in the process of mixed learning, when organizing such lectures, it is worth remembering the active and conscious participation of students in lectures, so the question arises: "How to involve all participants in the educational process in active participation?"
6.	<i>Lecture-conference</i>	They are held for the purpose of self-realization of each student of education, namely as a lecturer. After all, when organizing such lectures, the teacher must carry out systematic work on the selection, systematization and

		presentation of information (lecture material) by the students in front of the audience, on the other hand, the non-involved students must prepare correct questions on the topic of which such a lesson will be held, which in their turn requires thorough preparation and mastery of the material in its entirety. The skill of the teacher depends on: how such a lecture will be constructed; whether there will be a discussion; what the discussion will be like - specially created, spontaneous, controlled or uncontrolled; what conclusions will the students of education make; whether it is necessary to summarize the educational material.
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The main content of each type of lecture is the formation of professional competence on the basis of general pedagogical skills and abilities (Table 2).

**Table 2. General pedagogical skills and skills of formation of professional competence of future teachers**

No	Skills and abilities	The content of the optimization of pedagogical influence in conditions of mixed learning
1.	gnostic	encourage learning about educational innovations, in particular regarding the forms, methods and means of organizing the educational process of higher education in both psychological and pedagogical and methodological issues; to carry out an analysis of the experience of implementing innovations, a thorough study of such experience, and the identification of positive and negative consequences of such practice
2.	estimated	form: - the ability to determine the didactic factors of innovations; - the ability to analyze and make decisions, evaluate and predict the consequences of one's own actions (reflection)
3.	design	to create situations for education seekers to select optimal forms, methods and means of education
4.	communicative	encourage students to engage in written and oral communication, include constructive interaction in discussions, thus demonstrate the ability to conduct dialogue, demonstrate empathetic perception and the ability to understand others;
5.	organizational	stimulating the activities of each participant in the educational process in a positive emotional atmosphere, on the basis of subject-subject interaction, co-creation, cooperation, mutual support and goodwill
6.	self-development	to create in future teachers an internal need for constant enrichment of knowledge; general professional development and development of one's own pedagogical skills

The organization of lecture classes in a mixed format presupposes, in turn, compliance with the following requirements:

1. *procedural* – focus on the formation of thorough theoretical, factual, methodical knowledge; study of advanced pedagogical experience and ways of its implementation; search for new psychological-pedagogical and methodical materials and research;
2. *technological* - introduction of innovative educational technologies that make it possible to project, forecast and predict educational and pedagogical activity in a separate type of educational activity, in particular, methods of interaction of students in accordance with the type of educational and cognitive activity and the results of their activities and learning results based on individual and differentiated approaches; design new forms of education; develop criteria and tools for evaluating learning outcomes;

3. *cooperation* – encouragement to establish motivated positive contacts in the educational environment and regulate interpersonal relationships in the student body; value attitude to competent scientific speech, correct formulation of concepts; to encourage and motivate the real participation of each student in a specific situation and encourage him to master the educational material.

It should be noted that the optimization of the educational process, in particular, during lectures, involves the following sequence of its stages:

- awareness of the general goals of educational activity in general and its specific stage;
- identification of contradictions between requirements, goals and possibilities of their achievement;
- selection of methods and techniques of educational and cognitive activity in accordance with the laws, principles and goals of education;
- the optimal combination and sequence of using the forms and methods of learning in revealing the content;
- analysis of the consequences of training and taking into account the results during practical classes and performing tasks for independent work.

It should be remembered that the result of lectures is students' understanding of theoretical material and awareness of its importance for future professional activity. That is why the teacher in the process of blended learning needs to pay attention to aspects that reflect the content of key and professional competencies and, in general, the learning outcomes of the educational program, namely:

- knowledge, as intellectual results of the closest level, which are the easiest to achieve;
- understanding - meaning of the material (understanding) and using information in a certain way (application); the results of understanding require a certain novelty in the student's answers (for example, the ability to solve a new problem) and are related to interpretation, integration of the studied material, application in new situations, in solving new problems;
- the ability to think at a higher level is the analysis and evaluation of examples of professional activity (for example, in the course of outlining and analyzing a problem, evaluating the possibilities of overcoming it); creative thinking skills are needed in the process of creating something new (for example, a plan for solving problems); solving problems involves elements of critical and creative thinking;
- emotional perception – creation of an emotional image of future activity.

As evidenced by modern practice, the optimization of the educational process in institutions of higher education in conditions of mixed education requires compliance with the following rules:

- the planning of both lecture and practical classes should take into account the capabilities of students and remember that independent learning of educational material takes longer and requires greater efforts to master it, therefore it is necessary to consistently move from teaching the basics of knowledge to a higher level of mastery, remove non-essential fragments, and concentrate on more complex concepts and material;
- creation of conditions for the formation and development of students' professional skills, abilities and personality qualities of the future specialist, etc.;

– consistent and internally agreed distribution of educational material of the content component on the basis of previously acquired knowledge, skills and abilities and taking into account the peculiarities of preliminary training;

- clear selection of the main, essential in the studied material, efforts to systematize it, generalize it to students;

– skilfully taking into account the specifics of future activities for the realization of professional knowledge, skills and abilities;

- strict observance of both the scientific and methodical basis of educational activities, the discipline of the educational process;

- transition to studying the next educational material only after thoroughly mastering the previous one.

One of the main problems of introducing a mixed form of education is choosing the optimal ratio of the best traditions of the existing educational system, modern pedagogical innovations, digital tools and information and communication technologies.

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