ACTIVE LEARNING OF UNIVERSITY STUDENTS AND WAYS TO ORGANIZE IT

APRENDIZAGEN ATIVA DE ESTUDANTES UNIVERSITÁRIOS E FORMAS DE ORGANIZÁ-LA

APRENDIZAJE ACTIVO DE ESTUDIANTES UNIVERSITARIOS Y FORMAS DE ORGANIZARLO

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ABSTRACT: This article is devoted to the organization of active learning of students of higher educational institutions. The authors used works by T. I. Iliin, G. M. Kodzhaspirova, I. Ia. Lerner, I. F. Kharlamov and other researchers to clarify the concept of “active learning of university students”, analyzed its components, and systematized its domestic and foreign organization experience. The article also presents the author’s set of pedagogical conditions, which contributes to the organization of active learning for university students. This set includes the following components: correction of students’ set of values in the educational process of the university; the development of cognitive activity of students and the construction of the educational process at the university, subject to the requirements of a person-centered approach.


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RESUMO: Este artigo se dedica à organização da aprendizagem ativa de alunos de instituições de ensino superior. Os autores usaram trabalhos de T. I. Iliin, G. M. Kodzhaspirova, I. Ia. Lerner, I. F. Kharlamov e outros pesquisadores para esclarecer o conceito de “aprendizagem ativa de estudantes universitários”, analisaram seus componentes e sistematizaram sua experiência de organização nacional e estrangeira. O artigo também apresenta o conjunto de condições pedagógicas do autor, que contribui para a organização da aprendizagem ativa para estudantes universitários. Éste conjunto inclui os seguintes componentes: correção do conjunto de valores dos estudantes no processo educativo da universidade; o desenvolvimento da atividade cognitiva dos estudantes e a construção do processo educativo na universidade, sujeito às exigências de uma pessoa abordagem centrada.


RESUMEN: Este artículo está dedicado a la organización del aprendizaje activo de estudiantes de instituciones de educación superior. Los autores utilizaron obras de T.I. Iliin, G.M. Kodzhaspirova, I.Ia. Lerner, I.F. Kharlamov y otros investigadores para aclarar el concepto de “aprendizaje activo de los estudiantes universitarios”, analizaron sus componentes y sistematizaron su experiencia de organización nacional y extranjera. El artículo también presenta el conjunto de condiciones pedagógicas del autor, que contribuye a la organización del aprendizaje activo para estudiantes universitarios. Este conjunto incluye los siguientes componentes: corrección del conjunto de valores de los estudiantes en el proceso educativo de la universidad; el desarrollo de la actividad cognitiva de los estudiantes y la construcción del proceso educativo en la universidad, sujeto a los requerimientos de una persona enfoque centrado.


Introduction

Introduction to the problem

The organization of active learning of university students is one of the most pressing problems of modern pedagogical science and practice. Learning activities of students are the source of the diverse development of their personality, affecting not only a set of values, but also their attitude to society, work, people, and themselves. Under current transition to multi-level, varied education, in connection with the profiling of educational programs and the strengthening of the individualization of their choice, the educational opportunities for learning increase.

Relevance of the problem
The relevance of the problem of organizing active learning of university students is determined by several contradictions:

- First, educational tasks are often perceived by university teachers as an additional burden that distracts them from teaching specific subjects.
- Secondly, there is an erroneous opinion that the processes of education and upbringing are implemented in parallel, while in a holistic pedagogical process they appear together and simultaneously.
- Thirdly, there is a misunderstanding of the education process as a complex of special events that should be carried out by someone other than the teacher and separately from the educational process of the university.

Education promotes a gradual introduction of students to the panhuman and national culture and science, to the formation of their own personality as a subject of life. Awareness of the social value of education has a beneficial effect on the activity of the individual and its motivation.

**Study of the problem**

Historical and pedagogical analysis of various sources suggests that the problem of the ratio of education and training has long worried pedagogical thought. Even Plato in his "Laws" argued that the most important thing in training is proper education. In the following centuries, many attempts were made to define upbringing and education, to separate these processes and analyze their relationship.

Russian pedagogy of the second half of the XIX - early XX centuries considered active learning as the main means of educating the spiritual and moral personality (K. D. Ushinskii, V. P. Vakhterov, P. F. Kapterev, and others).

The provision on the indissolubility of upbringing and training was emphasized in the works by Russian scientists and educators in the second half of the XX century (Iu. K. Babanskii, T. I. Iliina, I. F. Kharlamov, and others). I. Ia. Lerner, V. V. Kraevskii, V. A. Petrovskii, B. M. Bim-Bad and others defined upbringing and education as the subsystems of a single process - education.

In our study, we rely on the ideas of I. Ia. Lerner, who defined education and upbringing as a single process, involving the assimilation by students of knowledge, skills, experience of creative activity, and emotional upbringing. Moreover, if the first three elements determine the
level of intellectual development of a person, then the set of these components makes up the content of the spiritual development of the personality as a whole.

The authors of the article note that modern foreign and domestic researchers of the pedagogical heritage of I. F. Herbart seek to return the idea of active learning to its true meaning, which does not imply reducing education to learning, but lies in the mechanism of their interaction in the holistic process of personality formation. The noted circumstance determined the choice of the topic of the article.

Hypothesis

Teaching of university students will be implemented through a set of the following pedagogical conditions:

1) Correction of student’s set of values in the educational process of the university.
2) Development of cognitive activity of students.
3) Building of the educational process at the university subject to the requirements of a person-centered approach.

Methods

The authors developed the idea of active learning for university students on the principles of systematicity, activity, humanization, individualization, feedback, integration at the level of interdisciplinary relations, reflective activity, and problematics. The work is based on the following methods: theoretical - analysis, generalization, systematization, synthesis, modeling; and empirical - conversation, observation, quantitative and qualitative analysis of research results, testing.

Main part

Based on works by G. M. Kodzhaspirova, I. A. Zimniaia, I. F. Kharlamov and other researchers, we consider active learning as one that organically combines acquisition of knowledge, skills, mastering of the experience of creative activity by students and the formation of an emotional and value attitude to the world, to each other, to the studied educational material. The authors of the article are convinced that a holistic approach to education in the learning process involves the unity of all components of the didactic process: goals and
objectives, content, methods and forms of organization of training and its results, and pedagogical guidance.

Let us clarify the characteristics of the components of active learning of university students

1. Objectives and tasks of developmental learning. The holistic construction of active learning is based on the integration of goals being addressed to the personality of the student and teacher. The convergence of the goals of both the teacher and students depends not only on the achieved level of education and training of students. The dynamics of the unity of upbringing and education, its procedural orientation is adjusted during the implementation of educational programs subject to the quality of innovative activity, considering subjective factors, in particular, the value attitude of teachers and students to cooperation and joint activities. Setting educational and developmental goals and objectives is a regulated process.

2. The content of active learning. The main purpose of the content of active learning is primarily to provide a cognitive basis for the development of the student’s personality, to master the system of integrated knowledge and skills, and to stimulate students to continuous self-education. Through the content of training, mastering the system of scientific knowledge, university students feel their involvement in social culture, progress, civilization, the development of science and technology. The future of social development is closely connected with what the higher generation teaches the younger generation. The content of education also provides the basis for the formation of a scientific worldview and students' beliefs.

3. Methods of active learning. The cognitive activity of students, which combines simultaneously occurring cognitive and educational actions, depends on the choice of teaching methods and the associated educational methods. The upbringing function of teaching methods is implemented through updating the students' professional knowledge; through the development of an active, creative, cognitively transforming position of students, through the application of skills. For example, the method of cognitive conversation develops into a method of discussion on ethical topics; a problem situation causes not only cognitive but also moral activity; the oncoming movement of questions from the teacher and students arouses mutual interest in cognition, strengthens research abilities and skills.

4. Forms of organization of active learning. The educational functions of the forms of organization of educational activity are entirely manifested if the teacher manages to recreate the rules of behavior in the experience of students' practical relationships, to combine the organization of learning with the formation of the experience of humanistic relationships both
between students and between students and teachers. For our study, it is important that a well-thought-out educational organization generates students' friendly relations to each other.

5. Pedagogical management of active learning. The effectiveness of pedagogical guidance of active learning depends on the teacher's professional and pedagogical preparedness for the implementation of educational and upbringing tasks, as well as on the style of relationship with students. The relations between the teacher and students, which make up the personal basis of pedagogical interaction, have external and internal sides.

6. Results of active learning. Regarding outcomes, it should be noted that active learning is closely related to the comprehensive development of the individual. Students learn poly-subject knowledge, master generalized cognitive skills, form a creative attitude towards future professional activities.

In our opinion, active learning at the university will be effective if the following pedagogical conditions are met:

- Correction of student’s set of values in the educational process of the university.
- Development of cognitive activity of students.
- Building of the educational process at the university subject to the requirements of a person-centered approach.

Let us consider them in more detail:

1) University education provides the student with a set of the most important values he reflects on, gives them evaluative insights, and then masters. From a pedagogical point of view, values should be considered that is useful for the student’s life, which contributes to the development and improvement of his personality. Value can be both a phenomenon of the external world (object, thing, event, act), and a fact of thought (idea, image, scientific concept). It is necessary to clearly imagine that each discipline is, in essence, only a part of the values from the whole set of scientific, artistic, ethical, aesthetic and other values that have already been created for humanity and proceed from working with a student precisely from this, not allowing hypertrophy of the significance of some and underestimation of other subjects.

2) Cognitive activity as a pedagogical phenomenon is a two-way interconnected process, where cognitive activity, on the one hand, is a form of self-organization and self-actualization of students; on the other hand, it is considered as the result of the teacher’s special efforts in organizing the cognitive activity of students. Different students are characterized by different intensities in active learning. The degree of manifestation of the activity of the future professional in the educational process is a dynamic, changing indicator. In this case, we can talk about different levels of cognitive activity of students in educational activities.
The authors of the article developed a typology of cognitive activity of university students, which includes levels as such relatively active level, performing and active level, and creative level.

3) However, it should be noted that the implementation of the above conditions is possible only with reliance on the personality of the trainees, on their worldview and subjective experience. Therefore, for the successful organization of active learning at the university, it is necessary to rely on the principles of a personality-oriented approach, since it provides for the creation of conditions for the development of a student in accordance with his natural competency and personal interests. We emphasize that the implementation of person-centered learning requires the development of such a content of education, which includes not only scientific knowledge, but also meta-knowledge, i.e., approaches and methods of scientific knowledge.

The experimental work aimed at checking the selected set of pedagogical conditions was carried out in vivo in the educational process of the university in 2018-2021. The participants were 1-4-year students of various specialties and areas. In total, about 345 people took part in the experiment, including 21 teachers.

Summary

Summing up the results of the study, we can state as follows. The novelty and theoretical significance of the study consists in clarifying the content of the concept of “active learning of university students” and analyzing its components. The practical significance of the presented study lies in the fact that it systematizes domestic and foreign experience in organizing active learning of university students, on the basis of which a set of measures has been developed to form and, if necessary, adjust a set of values and levels of students' cognitive activity based on the personal orientation of their learning activities.

Therefore, the learning process of university students will be active within the correction of the students' set of values during the university education; the development of cognitive activity of students and the construction of the educational process at the university subject to the requirements of a person-centered approach, which confirms the hypothesis put forward by the authors.
REFERENCES


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