



Developing the cognitive activity of students of technical universities using active methods of teaching

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ABSTRACT

This article focuses on the use of active learning methods to improve and enhance the learning process. It analyzes teaching methods that develop active cognitive activity of students of technical universities and assumes the use of such a system of methods, which is mainly aimed not at the presentation of ready-made knowledge by the teacher, their memorization and reproduction, but at the independent mastery of knowledge and skills by students in the process of active mental and practical activity.

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О'qitishning interfaol usullaridan foydalangan holda texnik universitetlar talabalarining kognitiv faolligini rivojlantirish

ANNOTATSIYA

Kalit so'zlar:

metod,
faol ta'lim,
interfaol usullar,
faoliyat,
dasturlashtirilgan ta'lim,
biznes usullari,
keys metodi.

Ushbu maqolada o'quv jarayonini takomillashtirish va yaxshilash uchun faol o'qitish usullaridan foydalanish to'g'risida fikr yuritiladi. Shuningdek, texnika oliy ta'lim muassasasi talabalarining faol o'quv faoliyatini rivojlantiruvchi metodlar tahlil qilinadi. Maqolada, shuningdek, o'qituvchi tomonidan tayyor bilimlarni taqdim etish, ularni yodlash va takrorlash uchun emas, balki o'quvchilar tomonidan faol tafakkur va amaliy faoliyat jarayonida bilim va ko'nikmalarni mustaqil qo'llashda bunday metodlar tizimidan foydalanish taklif etiladi.

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Развитие познавательной деятельности студентов технических вузов с использованием активных методов обучения

АННОТАЦИЯ

Ключевые слова:

метод,
активное обучение,
интерактивные методы,
активность,
программированное
обучение,
деловые методы,
кейс – метод.

В данной статье речь идёт об использовании активных методов обучения для совершенствования и активизации учебного процесса. А также анализируются методы обучения, развивающие активную познавательную деятельность студентов технических вузов. В статье также предполагается использование такой системы методов, которая направлена главным образом не на изложение преподавателем готовых знаний, их запоминание и воспроизведение, а на самостоятельное овладение студентами знаниями и умениями в процессе активной мыслительной и практической деятельности.

INTRODUCTION

The orientation towards active learning has become one of the significant components of the strategy for restructuring vocational education in higher education institutions. Active learning means, firstly, new forms, methods and means of learning, which are called active. The integrated and purposeful use of technical means is of great importance in the activation of learning processes, however, the main thing in the learning process is student activity. Active methods cover all types of classroom activities with students. To improve and intensify the educational process in higher education, it is crucial to take into account the peculiarities of university education, which requires students to restructure the stereotypes of educational work that has developed at school and equip them with new skills and abilities of educational and cognitive activity.

The purpose of the article is to achieve the development of students' cognitive thinking skills using interactive methods.

OBJECT AND METHOD OF RESEARCH

The object of the research the educational process in technical universities. The study were based on comparative-analytical and theoretical methods.

LITERATURE REVIEW

The formation of active learning of students is one of the means of developing cognitive activity. The practical application of problem-based and developmental learning led to the emergence of methods called "active", which were studied by A.M. Matyushkin, T.V. Kudryavtsev, M.I. Makhmutov, I.Ya. Lerner, M.M. Levy. However, due to the fact that these studies on active methods were carried out mainly on the material of school education, which made it difficult to introduce active methods in the university, since a certain adaptation was required for the theory of active methods to the university didactic process. It should be noted that A.M. Matyushkin in his works not only substantiated the need to use active methods in all types of students' educational work, but also introduced the concept of dialogical problem-based learning as the most

fully conveying the essence of the processes of joint activities of teachers and students, as well as their mutual activity within the framework of “subject-subjective” relations [1]. At the same time, the concept of “subject content of activity”, developed by academician A.N. Leontiev, it is precisely with this that cognition is defined as an activity aimed at mastering the objective world. Therefore, coming into contact with the objects of the external world, a person learns them and is enriched with practical experience both in knowing the world (learning and self-learning), and influencing it [2].

ANALYSIS AND DISCUSSIONS

Based on the foregoing and the approaches scientists have taken to the problem from the point of view of pedagogy, active learning methods, as a means of developing the cognitive activity of students, can be divided into three groups that are most interesting for use in order to control the formation of thinking.

These methods are programmed learning, problem learning, interactive (communicative) learning. It should only be prepared that during the lesson the teacher is required to be much more active and creative than when it is passive, in the form of retelling the truths read in books or long known truths. Interactive methods will have the greatest effect not only for students, but also for educational ones, when the teacher will influence the discussion not only of statements of a scientifically reasoned point of view, but also by expressing his personal attitude to the problem, his worldview and moral position. The forms of participation of the teacher in the discussion of students can be very diverse, but in no case should they impose their opinion. The best way to do this is through finely calculated management of the course of the discussion, through the posing of problematic questions that require productive thinking, a creative search for truth. This, as practice shows, is possible when the teacher expresses his point of view only in the order of drawing conclusions from the statements of students and a reasoned refutation of erroneous judgments. Of course, his position may coincide with the opinions of students, since they appear as a result of leading questions from the teacher. But it is precisely such techniques that can not only and not only direct the content, intellectual and cognitive side of the discussion of theoretical issues, but also design joint productive activities, thereby influencing the personal position of students, transforming their educational activities into educational and educational [3]. Active teaching methods encourage students to active mental and practical activities in the process of mastering the educational material. It is supposed to use such a system of methods, which mainly aims not at the presentation of ready-made knowledge by the teacher, their memorization and reproduction, but at the independent mastery of knowledge and skills by students in the process of active mental and practical activity. The features of active teaching methods are that they are based on the motivation for practical and mental activity, without which there is no progress in mastering knowledge. The emergence and development of active methods is due to the fact that new tasks have arisen for teaching: not only to give students knowledge, but also to ensure the formation and development of cognitive interests and abilities, creative thinking, skills and abilities of independent mental work. [4, 5] Active learning – is such an organization and conduct of the educational process, which is aimed at the full activation of the educational and cognitive activity of students through a wide, preferably complex, use of both pedagogical (didactic) and organizational and managerial means. The activation of learning can go both by improving the forms and methods of teaching, and by improving the organization

and management of the educational process as a whole. The possibilities of various teaching methods in terms of enhancing learning activities are different; they depend on the nature and content of the corresponding method, methods of their use, and the skill of the teacher. There are many active teaching methods in pedagogy. One of these is the interactive method [6].

“Inter” – it’s “mutual”, “act” – operate. Interactive – means the ability to interact or is in a conversation mode, a dialogue with something (for example, a computer) or someone (a person). Interactive learning is, first of all, learning, during which the teacher and the student interact [7]. The essence of interactive learning is that the learning process is organized in such a way that almost all learning process, but they have the ability to understand and reflect on what they know and think.

CONCLUSION

Thus, interactive learning methods can include heuristic conversation, discussion method, brainstorming, round table method, business game method, case method, practical work competitions with their discussion and some others used by individual teachers who are enthusiastic about active learning methods. Of course, each of them has not only value, but also its own characteristics.

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