

Pedagogical Aspects of Formation of Cognitive Interest in Students as a Technology of Interactive Learning in Higher Educational Institutions

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ABSTRACT

The article reviews the method of activating cognitive activity in students. The characteristic is given to methods of stimulating interest in learning. Examples of using methods to stimulate interest in learning are given. The pedagogical significance of interactive teaching methods is justified, the need for continuous improvement of the system and practice of education is due to social changes in society. The issues of improving the quality of training and the level of upbringing of the student's personality were considered and remain priorities in the modern methodology of teaching technology.

Keywords: Interactive Learning Methods, Interest Stimulation Method, medical, Technology, Discipline, Pedagogy, Method.

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INTRODUCTION

A non-standard method of conducting a lesson is one of the forms of organizing interactive methods of teaching and educating students. The effectiveness of non-standard forms of training and development is well known. Such classes bring learning to life, reality. Students are willingly involved in such classes, because you need to show not only their knowledge, but also ingenuity, creativity. The decrease in the level of students' knowledge is largely due to the quality of classes: template, uniformity, formalism, boredom. Many teachers are looking for different ways to "revive" the lesson, attract students to active work, a variety of forms of explanation of new material.

Of course, in no case should one abandon the traditional occupation as the main form of training and education. But to give the lesson non-standard, original techniques is necessary to enhance the mental activity of students. This is not a replacement for the old methods of conducting classes, but their additions and processing, the introduction of animation, diversity, which increase interest, contributing to the improvement of the educational process. In such classes, students are passionate, their performance improves, and their effectiveness increases. The relevance of this topic is due to the pedagogical significance of interactive teaching methods. The need for continuous improvement of the system and practice of education is due to social changes in society. The issues of improving the quality of training and the level of upbringing of the student's personality have been and remain priorities in the modern methodology of teaching technology.

The purpose of the article is to review the methods of formation of cognitive activity in students, as interactive learning technology.

MAIN MATERIAL

Special studies on the problem of the formation of cognitive interest show that interest in all its forms and at all stages of development is characterized by at least three mandatory points: 1) a positive emotion in relation to activity, 2) the presence of the cognitive side of this emotion, 3) the presence of a direct motive coming from the activity itself (G.I.Schukin, N.G. Morozov) [7-12].

It follows that in the learning process it is important to ensure the emergence of positive emotions in relation to educational activities, to its content, forms and methods of implementation. The emotional state is always associated with the experience of emotional excitement: response, sympathy, joy, anger, surprise. That is why deep inner experiences of the personality are connected to the processes of attention, remembering, comprehension in this state, which make these processes intensely flowing and therefore more effective in the sense of the goals achieved.

One of the techniques included in the method of emotional stimulation of learning can be called the technique of creating entertaining situations in the classroom - introducing entertaining examples, experiences, paradoxical facts into the educational process. For example, in a physics course these may be examples such as "physics in everyday life," etc. The selection of such entertaining facts causes an unchanged response among students. Often, students themselves are instructed to select such examples [5,6,14]. Many teachers use an analysis of excerpts from fiction devoted to the life and work of prominent scientists and public figures to increase interest in learning. Successfully applied are also such methods of increasing the entertaining nature of learning as stories about the application in modern conditions of one or another predictions of science fiction writers, and the display of entertaining experiences.

To create emotional situations during classes, artistry, brightness, and emotionality of the teacher's speech are of great importance. Without all this, the teacher's speech, of course, remains informatively useful, but it does not adequately implement the function of stimulating the educational and cognitive activity of students. In this, by the way, the difference between the methods of organizing cognitive activity and the methods of stimulating it is manifested once again.

The main source of interest in the educational activity itself is primarily its content. In order for the content to have a particularly strong stimulating effect, it must meet a number of requirements formulated in the principles of training (scientific, connection with life, systematic and consistent, comprehensive educational, educational and developmental influence, etc.) However, there are some special techniques aimed at increasing the stimulating effect of the content of training. These include, first of all, the creation of a situation of novelty, relevance, approximation of content to the most important discoveries in science, technology, to the achievements of modern culture, art, literature, to the phenomena of socio-political domestic and international life. To this end, teachers select special examples, facts, illustrations, which are currently of particular interest to the entire public of the country, are published in print, broadcast on television and radio. In this case, students are much brighter and deeper aware of the importance and significance of the questions studied, and therefore they are of great interest to them.

A valuable method of stimulating interest in learning can be called the method of cognitive games, which relies on the creation of game situations in the educational process. The game has long been used as a means of stimulating interest in learning. In the practice of teachers, board games with cognitive content are used. To methods of stimulating and motivating learning, we also include the method of creating situations of cognitive dispute. It is known that truth is born in a dispute. But the dispute causes increased interest in the topic. Some teachers skillfully use this method of activating teaching. First, they skillfully use the historical facts of the struggle of various scientific points of view on a particular problem, for example, talk about the struggle of the supporters of the "fear of emptiness in nature" and the supporters of the doctrine of atmospheric pressure. As a result, the phenomenon of atmospheric pressure is studied by students with great interest. Scientific disputes are being conducted at the present stage of the development of science. That is why students compare different approaches to creating a table of elementary particles in physics, different concepts of the origin of the phenomenon of human acceleration, different opinions about the causes of climate change on Earth, etc. The inclusion of students in a situation of scientific disputes not only deepens their knowledge on relevant issues, but and involuntarily rivets their attention to the topic, and on this basis causes a new surge of interest in learning [13,16,17]. However, situations of a dispute, educational discussions of a teacher also create at the moment of studying ordinary educational issues in any lesson. For this, for example, students are specifically invited to express their views on the causes of a particular phenomenon, to substantiate a particular point of view. Here a traditional question has already become like: "And who thinks differently?" And if such a technique is controversial, then the students are involuntarily distributed among the supporters and

opponents of one or another explanation and are waiting with interest for the reasoned conclusion of the teacher. So the educational debate acts as a method of stimulating interest in learning [1-4].

One of the effective ways to stimulate interest in learning is to create success situations in students who have certain learning difficulties. It is known that without experiencing the joys of success, it is impossible to truly count on further successes in overcoming learning difficulties. That is why experienced teachers choose assignments for teachers so that those who need incentives receive at the appropriate stage an assignment available to them, and then move on to more complex exercises.

For example, for this purpose, special dual tasks are used, one of which is quite accessible for the student and creates the basis for subsequent efforts to solve a more complex problem. Situations of success are also created by differentiating student assistance in completing learning tasks of the same complexity. So, poorly performing students can be given counseling cards, plans for an upcoming response that allow them to cope with the appropriate task at a given level of preparedness, and then perform an exercise similar to the first one on their own.

Situations of success are organized by the teacher and by encouraging students to take intermediate actions, that is, by specially encouraging him to new efforts. An important role in creating a situation of success is played by the provision of a favorable moral and psychological atmosphere during the performance of certain tasks.

A favorable microclimate during study reduces the feeling of insecurity, fear. The state of anxiety in this case is replaced by a state of confidence [2,18].

The learning process is based not only on the motive of cognitive interest, but also on a number of other motives, among which the motives of students' duty and responsibility in learning are especially significant. These motives allow students to overcome the inevitable difficulties in learning, experience joy, a sense of satisfaction from overcoming difficulties in learning.

Motives of duty and responsibility are formed on the basis of applying a whole group of methods and techniques: explaining to students the social and personal significance of the doctrine; the presentation of requirements, the observance of which means the performance of their duty as trainees; training them to fulfill the requirements; encouraging them for the successful, conscientious fulfillment of their duties; operational control over the implementation of requirements and, if necessary, indications of deficiencies, censure, in order to cause a more responsible attitude to teaching. It is important to emphasize that the methods and techniques for the formation of debt and responsibility in learning are based on the methods of educating students, which in itself emphasizes the unity of the processes of training and education.

Clarification of the social significance of the doctrine.

The conviction of students in the social significance of learning involves the disclosure of the role of science. It is especially important to clarify the role of science as a direct productive force in modern society. Showing to students on convincing examples of the fact that with the growth of the general educational outlook, productivity increases significantly, opportunities are created for a wide manifestation of rationalization and invention, for mechanization and automation of production, and on this basis to facilitate labor processes, that the application of

science leads to revolutionary changes in production - all these are the most important elements in the formation of an understanding of the social significance of labor.

Stories, discussions, lectures in this case acquire the character of methods of stimulating debt in learning.

Clarification of the personal significance of the doctrine. Teachers have particular difficulties in forming students' understanding of the personal significance of successful learning in all subjects. If students quickly understand the importance of mastering the subjects of specialization, then they still have to explain the importance of mastering other subjects. At the same time, they need to show that in modern production teams an important place is occupied by the social activity of workers and employees, that cultural outlook becomes the most important condition for the successful entry of a person into a team, its participation in all areas of activity. Lack of proper cultural and moral horizons puts the person at a disadvantage. An even greater degree is the need to study the cycle of social sciences, which creates the conditions for successful participation in the socio-political life of society, allows you to understand the events of domestic and international life. All of these, seemingly self-evident provisions for an adult, need a special reasoned explanation for students [1-4,18].

Presentation of training requirements.

The method of presenting requirements for students is determined by the rules of conduct, criteria for assessing knowledge in all subjects, internal rules, etc. It should be borne in mind that the stimulation of duty and responsibility in learning should be combined with the methods of teaching students to do academic work, training requirements, since the absence of such skills can cause students to lag behind in their studies, and, accordingly, discipline violations. An important role here is played by the example of other students and the teachers themselves. Encouragement and censure in teaching. The method of encouraging students is used to maintain and develop good beginnings in their behavior, in educational activities. The range of rewards at the university is diverse. In the educational process - this is the praise of the teacher, giving high marks, etc.

The use of censure and other forms of punishment is an exception in the formation of motives for teaching, and, as a rule, this method is used only in forced situations. Only a skillful combination of diverse methods of stimulation in their unity can ensure the success of student learning [1,3,4].

CONCLUSION

An analysis is made of the existing method for the development of students' cognitive interest in the study of disciplines as an integral part of interactive learning in general. Indeed, the idea of interactive learning requires "thinking through" and theoretical refinement. Today, active learning is blamed for the lack of a clear theoretical concept, for mixing under one name different approaches and methods (in particular, there is no generally accepted classification of methods).

Thus, interactive methods do not allow presenting a large amount of material in the classroom, possibly, with the exception of some options for an active lecture. But is it necessary? If we adhere to the values of traditional education, then, of course, the amount of information in the lesson is important, and from the point of view of

interactive learning, something else is more valuable - how the students gained knowledge of how they use it. After all, information can always be found in books and on the Internet yourself. Here, it is important for the teacher to decide for what purpose he uses the methods of interactive learning: so that students better remember the teaching material, but then this is an ordinary process of optimizing the traditional educational process, or is he ready for a serious and consistent change in his thinking and his activity, which in turn will lead to a change in the learning activities of students.

You can also agree that there are not always enough materials and sources, but this is not only a problem of interactive learning, because sources and materials are often not enough for traditional classes. Many methods of interactive learning do not require much material support, and, for example, the availability of textbooks and arrangements with students partially remove the problem of the lack of opportunities for copying materials [1-8].

To summarize, I would like to emphasize once again that the idea of interactive learning is not relatively new. However, there is a danger of drowning in words and illusions, repeating the path of numerous fashionable pedagogical innovations that slightly "embellished", modernized traditional teaching, and then they forgot, without seriously changing anything.

REFERENCES

1. Alekseeva L.I. Modern interactive teaching methods in a comprehensive school. http://maratak.m.narod.ru/alekseeva_li.
2. Shishkina M.S., Filimonova Z.A. (2012). Organization of active, interactive and traditional forms of conducting classes. *Volgograd*, pp. 55.
3. Vetoshkina T.A., Schneider N.V. (2011). Active and interactive teaching methods: method. allowance. *Yekaterinburg: Publishing House of the Ural State Mining University*, pp.156.
4. Sorokina A.G. (2013). The methodology of using interactive informational 66 technologies in pedagogical activity, "Interactive and multimedia tools in subject teaching" *Sat. Proceedings of V All-Russia. scientific-practical Conf., Belgorod*, pp. 66.
5. Salikhova M.N., Schneider N.V. (2012). Application of interactive forms of learning in a modern university, *Agricultural education and science, No. 1*, pp. 12-15.
6. Maksimova M.V. (2010). Methods of interactive communication in the educational process, *Almanac of modern science and education, No. 6 (37)*, pp.97-99.
7. Privalova G.F. (2014). Active and interactive teaching methods as a factor in improving the educational-cognitive process, *Pedagogical Sciences, No. 3*, pp. 1-7.
8. Khilchenko TV, Olar Yu.V. (2014). Use of interactive methods and techniques in the modern English lesson, *Bulletin of the Shadrinsk State Pedagogical Institute, No. 1*, T.21.
9. Doronicheva E.V. (2014). The formation of communicative competence of high school students using role-playing game, *VI Intern. scientific conf. Student Scientific Forum*.
10. Solodukhina, O.A. (2011). Classification of innovative processes in education, *Secondary 6. vocational education, No. 10*, pp.12 -13.
11. Letin A.I. (2014). Didactic properties and functions of interactive teaching and upbringing

- methods in the development of multicultural skills of students in teaching a foreign language, *Bulletin of Moscow State University for the Humanities M.A. Sholokhov. Philological sciences*, No. 3, pp. 108-114.
12. Fayzullina, A. R., & Saglam, F. A. (2015). History and social sciences teacher's professional activity in the context of IT-development of education. *Journal of Sustainable Development*, 8(7), pp.107.
 13. Bayanova, A. R., Kuznetsov, V. V., Merculova, L. V., Gorbunova, L. N., Pervozvanskaya, O. A., Shalamova, O. O., & Vorobyova, C. I. (2019). Student Performance Interrelation with Gadget Use at Lessons. *Journal of Environmental Treatment Techniques*, 7(3), pp. 432-437.
 14. Kovaleva T.M. (2009). Innovation school: axioms and hypotheses, *Pedagogical community of Russia*, pp.170.
 15. Clarin M.V. (2010). Innovation in Learning: Metaphors and Models: An Analysis of Foreign Experience, pp. 300.
 16. Iasechko M., Larin V., Maksiuta D., Bazilo S., Sharapa I. (2020) The Method Of Determining The Probability Of Affection Of The Semiconductor Elements Under The Influence Of The Multifrequency Space-Time Signals. *Journal of Critical Reviews*, 7 (9), 569-571. [doi:10.31838/jcr.07.09.113](https://doi.org/10.31838/jcr.07.09.113)
 17. Iasechko M., Sachaniuk-Kavets'ka N., Kostrytsia V., Nikitchenko V., Iasechko S. (2020) The Results Of Simulation Of The Process Of Occurrence Of Damages To The Semiconductor Elements Under The Influence Of Multi-Frequency Signals Of Short Duration. *Journal of Critical Reviews*, 7 (13), 109-112. [doi:10.31838/jcr.07.13.18](https://doi.org/10.31838/jcr.07.13.18)
 18. Fitsula M. M. (2002). Pedagogy: Scientific manual for students of higher pedagogical educational institutions, *Publishing Center "Academy"*.