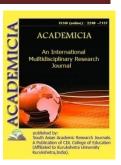




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# THE IMPORTANCE OF BIOLOGICAL AND PSYCHOPHYSIOLOGICAL FACTORS IN THE DEVELOPMENT OF EDUCATIONAL AND COGNITIVE ACTIVITIES

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# **ABSTRACT**

In the article, the further development of the educational system, the coordination of educational processes on the basis of an innovative approach, the importance of the activity of student learning and cognition, reading, the specific stage of preparation for labor activity, the calculation of the main activity of students, the development of educational and cognitive activity in students is manifested as a complex psychological phenomenon, to be socially and psychologically prepared for them the emergence of a wide range of opportunities for effective educational and cognitive activity, the activation of educational and cognitive activities of students in the organization of the educational process is carried out under the influence of a number of biological and psychophysiological factors, while parents and teachers should pay attention to the fact that there are, the essence of biological and psychophysiological factors affecting the activity of educational-cognitive activity, as well as the need to acquire modern professional knowledge, the content and important aspects of the organization of independent education, the activation of educational-cognitive activity of students in the educational system today are interpreted.

**KEYWORDS:** Education, Student, Process, Activity, Teacher, Influence, Necessity, Interest, Activity, Motivation, Quality, Demand, Result, Content, Approach, Essence, Formation.



#### INTRODUCTION

With new innovative ideas, proposals and initiatives for the development of the educational system, the formation of the necessary skills and knowledge for them to be holders of modern professions, the creation of a system of automation and comprehensive analysis of the management of education when using modern information and communication technologies, the issues of further development of electronic resources and distance education have been In particular, the development of the methodological system and conditions for the development of educational-cognitive activity and the level of professional training of students of professional education directions plays an important role. Legal-normative and educational-didactic provision of training of pedagogical personnel in accordance with the world requirements is being improved in the higher education system. The development of effective curricula based on innovative approaches to vocational training and the use of new effective didactic opportunities of individual-oriented education in this system will serve as an important factor in achieving educational effectiveness. Today, great attention is paid to the improvement of vocational training of students of vocational education on the basis of technological development of education, the use of innovative approaches, the development of innovative models of competitive, competence training in accordance with the requirements of the labor market. The issue of the development of educational and cognitive activities of students of the directions of vocational education is of great importance in the conditions of the credit-module system of higher education. A number of scientific researches are carried out to improve the evaluation criteria of the level of professional training of graduates of the higher educational institution, improve the electronic system of clarifying the results of educational and cognitive activities. In particular, the development of professional knowledge and skills necessary for the future professional activity of students of vocational education on the basis of innovative, creative potential, acquired pedagogical and psychological knowledge is one of the priority issues. The development of professional training of students by bringing advanced foreign experience into the process of higher education, active acquisition of professional knowledge in the process of training and independent education are considered as urgent tasks to achieve with the help of innovative technologies and methods.

# Main part

Further development of the educational system, coordination of educational processes on the basis of innovative approach, activation of educational-cognitive activities of students plays an important role. Study is a specific stage of preparation for labor activity and is the main activity of students. It is aimed at acquiring knowledge, as a result of which the necessary skills and skills are acquired, and the students understand the meaning and purpose of education.

Educational activity is a complex process, carried out in the didactic process from the stage of motivation, that is, after the initiation of internal action on knowledge. Acquisition of knowledge on the basis of stages of knowledge, understanding, analysis and generalization of the content of education indicates the effectiveness of educational-cognitive activity [1]. Exactly the effectiveness of education depends on the correct design of the didactic process by the educator, on the precise setting of the educational goals and the correct Organization of didactic operations in achieving them. In this situation, the correct selection of educational methods and the



determination of the types of Education based on them, the harmonization of didactic goals with social goals, the development of educational activities.

In the didactic process, didactic games, problematic education, technologies of cooperation education, modeling education play a key role in the organization of effective educational and cognitive activities. In general, depending on the indicators of the results of achieving the goal of educational-cognitive activity, two groups are divided into:

- 1) effective teaching-learning activities;
- 2) inefficient learning can be divided into cognitive activities.

Effective teaching and cognition activities if we interpret the peculiarities of didactic functions, then in the didactic process on the basis of problematic educational technology, the creative assimilation, interest and need for knowledge of the content of education by students increases. Consequently, one of the main tasks of the new module of education is the formation of the qualification of the student to acquire knowledge on the eve of his labor.

The organization of educational-cognitive activities on the basis of didactic play, problematic, controversial, collaborative technologies, the content of the characteristics of students 'cognitive activities, interest in science, the expansion of knowledge. In the educational-cognitive activity, the basis of the content of Education provides the basis for discussion, orientation to find the main ideas and solutions, the formation of creative, independent thinking. Free-thinking classes in educational and cognitive activities formulate the characteristics of students 'scientific outlook, need for knowledge, mastering the content of independent education.

The main role in the organization of educational and cognitive activities is played by the correct definition of the toxic range of goals, the correct selection of didactic goals based on the general objectives of the project. So, from the psychological point of view of effective educational and cognitive activities, we can interpret as follows:

- 1) planning of educational and cognitive activities;
- 2) self-control, extensive knowledge, systematization in historical methods;
- 3) master the methods of self-management and find a new one;
- 4) to master the methods of self-control of attention, which governs personal interest.

Educational-cognitive activity is associated with cognition and perception. If these processes do not participate, educational activities may not be manifested.

The organization of didactic process design on an algorithmic basis, that is, the implementation ofualual operations, which are carried out in stages in the mastering of educational content by students, is the basis of educational and cognitive activity. Module Program of the educational process in this direction increases the effectiveness of educational-cognitive activity, divide the elements of educational content educational-cognitive activity on the basis of the module lesson and set the objectives of the components associated with it. The effectiveness of educational and cognitive activities, cognitive characteristics in the student's personality are the following criteria.

1) active acceptance of the study material;



- 2) to master the methods of mastering the instructional material;
- 3) assignment and assignment of tasks in the mastering of educational content;
- 4) self-control and evaluation.

The formation of these criteria in the student personality is one of the main issues of educational and cognitive activity. So, based on the final results of the didactic process, we can conclude that any educational process will not be an educational activity either [2]. Consequently, the internal mental and external physical actions that a person performs on the basis of an perceived goal are called activities.

Raising the didactic process to the level of educational and cognitive activity is the main issue of innovative educational technologies. Namely, innovative educational technology is the basis for the organization of effective educational and cognitive activities. In the organization of each didactic process requires careful preparation from the educator, design on the basis of the established pedagogical system and implementation ofulual operations on the basis of selected educational technologies, tools and forms. This creates the basis for effective organization of educational activities. The organization of effective educational activities is of social importance. In his contemporaries, the student's worldview is composed, the acquired knowledge, skills, qualifications are transformed into the spirituality of the individual, personality is formed, attitude to society, social system, environmental existence arises, understands the essence of education, respect for it, features of respect are found. Consequently, we see the educational role of education as a priority, however, the content of the sense of respect for education in students is still neglected. It is no secret that as a result of this, negative trends have arisen, such as a careless attitude to the educational process, reading to the name, not understanding the essence of education. Of course, the occurrence of such a negative direction is bilateral, that is, the passive attitude of the student to the educational process, as well as the didactic process by the teacher, is not designed on the basis of pedagogical requirements. Such a professional approach to the didactic process leads to ineffective educational-cognitive activity. Neglect of the results of the educational process creates a ground for the formation of a mood in which students are fed, do not appreciate time. Consequently, the control phase, which is the main component of the didactic process, that is, the realization of the assimilation of students 'educational content, has an impact on the results of educational-cognitive activities. This demonstrates the effectiveness of Education, which is the basis of innovative educational technologies.

# **RESULTS AND DISCUSSIONS**

Now the principles of teaching are known, but the law is not known. Therefore, in the direction of determining the laws of teaching and learning and mastering, first of all, the study of a person, his psychological, physiologic and other characteristics continues. The main reason for the non – assimilation of educators is the fact that their literacy (reading, writing) is bad, and the pedagogical reason for this is the lack of fast memory in them. The basis of the technology for the development of students' general educational skills is diagnostics and self-diagnostics.

The more quickly the text is read, the worse it is mastered, but the effect of 50-75% of words in the text on the meaning is less. With the speed of reading, the speed of memorization is different. Remembering is a process that takes place more slowly. In fast reading, the eye stops after both words. In this case, special exercises are performed until you can not stop until the end of the



line, that is, you can see at first glance, and then walk upright in the middle of the line and see several lines at once. These are the following: let's not shake the lips, let's not read the words aloud. 250-500 words per minute, in exceptional cases, 700 and more words can be read.

The student's activity will be at more or less levels. Tiradi more than degrees actually decrease the quality of mastering, which is the excitability.

There is no direct immunity between the level of activity and mastering. Low activity, of course, low, while high activity, it can not be noted that it really provides solid knowledge.

Activity for effective reading is diverse, but it can be optimal for everyone. Motivation is of great importance for educational outcomes. Motivation is the sum of various reasons motivating a person to read or perform an action [3]. In students, such a reason is understood, so their assimilation is good. Since the students are older than the students, the motivation in them creates the right attitude towards reading. It will be known from this that the degree of memorization depends on the motivation. Also, to pass the test successfully, only memorization does not give a positive result. Reading, learning and remembering for active use of the acquired knowledge in the future is a positive motivation, and this goal itself is highly effective.

Negative motivation is a complex teaching, but the student's indifference to study negates all our efforts. Motivation factors are the reasons that motivate the student to acquire knowledge. The ability to read consists of many indicators. They change according to age. For example, children, adolescents read faster, keep in mind longer. "The knowledge learned in youth is like a pattern carved into a stone", it is not said in vain. If the motivation in the students is seriously perceived, then with increasing readiness in them, they can study very well.

The student's perception of his / her shortcomings and achievements in the educational process is a serious basis of a positive result [4]. In order to strengthen positive qualities and change their negative qualities, the student must know what is good, what is bad. It is necessary to praise his achievements, and in negative cases to reproach. In its place and the right Praise will help the student to be confident in his own strength. But if the praise is overstated, it causes negative States. Dissatisfaction also has a beneficial effect, especially on the high self-appraiser. But from regular failures the soul of the educator falls, it is necessary to take this into account.

Success in reading, the faster the good deed is stimulated, the more effective the effect [5]. The rebuke also gives the same result. As a result of delaying the rebuke, negative behavior quickly strengthens. This should be avoided. The danger of this is that the appearance of sudden negative behavior is considered to give a "positive" result. Such behavior can create negative skills in the student.

Only by praising or rebuking, it is not possible to strengthen good behavior or eliminate negative behavior. A person simply refuses a behavior that did not give a positive result to him. For example, if a student's immoral behavior is not assessed only by his peers only by laughter, and such students can not grab the attention of others by their undisciplined actions, then the desire for negative actions in them is lost.

If we open up the good qualities of the student and praise him often, then the chances of overcoming the negative qualities in him will increase. By putting a positive quality in a disciplined student in the center of attention of his classmates and group mates, the chances of



turning him on the good side increase. Everyone has positive qualities, but it is often acquired negative skills that close it. That is why it is vital for every student to find out the positive aspects that existed before and to develop at the right time.

Learning to read begins with infancy. In Bunda, the interaction of parents and their relationship with children is of serious importance. The first emotional impressions leave a significant mark in the later life of ospirin. It can be good or bad. When preparing a child for school, parental interaction with the organization of pre-school education is necessary. The organization of preschool education provides assistance to parents in the upbringing of children. The child is brought up mainly in the family. The attitude, readiness of the child to study depends on the environment in the family. Teaching children certain games, setting their constant tasks at home, contemplating a system of age-appropriate requirements will serve to prepare them for school and determine the path to further development.

The educational requirements for a teenager, if they are accepted by the child, will give a result. Therefore, these requirements must be purposeful and have meaning for the child. Otherwise, the child will actively resist. In overcoming difficulties in reading and eliminating many repetitive mistakes, relying on a positive quality in a teenager gives a good result. The more good qualities we find and stimulate in a teenager, the faster we can eliminate the negative qualities in them.

It is necessary for a teenager to be able to share his achievements in school, that is, to be happy together with him, to help him to cope with them if it is difficult. In this situation, parents should have regular contact with the school, even if the teenager is well educated. If a teenager is happy with everything he does, it becomes customary for him to perform tasks and tasks. It is necessary not to prohibit the adolescent's questions about serious matters. This is a matter that determines his future social, biological life. Therefore, it is necessary to answer his questions clearly and satisfactorily.

It is necessary to talk with adolescents on any topic. Free communication with them increases the confidence of the teenager in you. Do not pay attention to the conversation with him under various pretexts. Because over time, your delay can convince others that the teenager has absorbed the wrong thought.

Re-reading is always more complicated than re-reading. In this situation, the following objectives are envisaged in accordance with the need:

- mastering knowledge;
- to teach some skills.

The main basis for re-reading is to make sure that it is necessary. In this it is necessary to seriously enter into the implementation of the intended goals, to believe in the correctness and necessity of the changes that caused the retraining, to have a desire and desire to learn new ones. The need for re-reading is carried out differently under different conditions. For example, studying at home, the beginning of teaching the same in another way at school to a teenager who has learned to count, will also consist in re-reading. Such a situation is a specific challenge for a teenager. Reading to a new way of work, the use of new techniques or reading to a new profession are the main forms of retraining.



The acquisition of knowledge (in education) depends not only on the characteristics of memory, but also on personal abilities, concentration of thought, purpose and diligence [6].

Goal aspiration is one of the necessary conditions, in which the average abilities acquire even more and more robust [7]. The method of cost-effective mastering is different in everyone.

It is known that memory should always be practiced, otherwise it will begin to hurt. Mental and physical abilities for reading can make a huge difference in interaction between adults of equal age. The social, family situation, education, profession, the desire to increase their professional level, lifestyle, opportunities of the person in the Bunda will be important. It is more important than biological age characteristics. Therefore, it is more correct to conditionally divide the age phases.

Each period has its own characteristic of memory, the ability to think, these periods are conditionally defined as follows:

Adolescence is from 18-20 to 25-30 years old.

The middle age is from 25-30 to 45-50 years.

The older age is from 45-50 to 65-70 years.

Old age is higher than 65-70.

2 factors of successful education: interest in learning and preparation for it are well-formed in adults compared to children [8].

In pedagogical practice, the material, objective aspect of the pedagogical process is always present with the addition of mental processes, one can not exist without the other [9]. This applies to any activity, but more relevant especially to the activities of educators, educators and educators.

The pedagogical process can not be carried out without psychological consequences [10]. The ratio of information received and developed by means of 5 intuition members, which forms knowledge in a person, is as follows::

Through the viewing member-83 %;

Through the auditory member -11%;

Through the smell cognition member-3,5 %;

By skin sensation-1,5 %;

Through taste knower -1 %;

Total - 100 %.

The information received with the participation of our members of different senses will be remembered two weeks later in the following quantities:

10 percent of what we read.

20 percent of what we hear.

30 percent of what we see.



50 percent of what we see and hear.

80 percent when we talk.

90 percent when we do practice.

From this it becomes known that the ability of a person to remember depends on what methods he has mastered information and in what ways of intuition members. The most recently learned thing is forgotten sooner. So it is necessary to repeat the last learned more. This should be known, especially by young adults who are studying.

To activate the process of memorization, it is useful to read the material aloud [11]. The sound should be neither too low nor too loud. Reason: in a low voice the student can be distracted from the text, while in a loud voice he can focus on his own voice and move away from the meaning. The acoustic perception of the text in a moderately loud voice and the movement activity of the language help to remember.

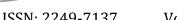
So, it is necessary to read aloud, to say words moderately loud (not deliberately hard or in a low voice). Scheme (systematic) memorization will help to draw up a plan of the material read. In this it is necessary to distinguish the Basic Rules, facts. It is necessary to write the main one either in memory or in the system in which it developed itself. Very well helps to distinguish the Basic Rules in different colors. But it is necessary to distinguish the main one correctly, for this it is necessary to learn how to work correctly with the book. Then the material under study is divided into small pieces, the repetition (and not the whole section) gives a good result, saves more time, improves the quality of mastering. Step-by-step study and repetition of the read material not at once will give better results. The teaching science material should be repeated not for one day, but for several days. For example, repeating the task, consisting of 24 exercises, not on 3 day, for 12 days, will certainly give a good result.

It can be concluded that youth forgetfulness is sometimes caused by a slow (passive) fading of memory, and sometimes by an active braking due to an abundance of impressions [12]. It is necessary to control the content, volume of TV shows, which deeply excites young people. Then the imagination of young people can ensure the preservation of their spiritual strength for reading, without spending it on unnecessary things.

Any feature of the psyche requires regular exercise, only then it will be reliable enough [13]. This applies to memory, speech skills, logical thinking, concentration of attention, etc.

Special exercises for memory accumulation exercises:

- the agenda is relatively moderate (stable) be unchangeable;
- to have a clear time to study and rest during the day;
- to teach the beginning work to the end without distractions, to ensure that the bunda teenager is not distracted by both other young people and adults;
- control over the performance of household tasks;
- strengthening any achievement with timely stimulation;
- more complicated lessons in the morning, the passage of teenage fatigue;



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– give rest to the teenager when fatigue is evident.

It is necessary to carefully teach the student to self-control. To do this, the educator, the parent must be calm, give up. This is a serious condition, when they get tired of work and come in an unpleasant mood, it becomes light to press on their feelings if they want to educate the teenager well. Bunda's own behavior, with her behavior, motivates the teenager to be orderly.

#### **CONCLUSION**

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It is necessary to arm the students with important knowledge in general and specialty areas, to achieve speed in this regard. A thorough mastering of the fundamentals of general and professional disciplines by students allows them to withstand the strong competition in the labor market. The full-fledged formation of students as a specialist depends not only on the teacher and his activities, but also on the development of the student's educational and cognitive activities in the process of training. The development of educational and cognitive activity in students is a complex psychological phenomenon, which manifests its own peculiarities. Their physical, social and psychological readiness for this process creates a wide range of opportunities for them to effectively achieve educational and cognitive activity. Therefore, when organizing the educational process, attention should be paid to this aspect of the issue. In the educational process, the activation of the student's educational and cognitive activities does not take place on its own. This is achieved under the influence of a number of factors. It would be desirable for parents and teachers to pay attention to the fact that there are factors that have a positive impact on the performance of students' learning.

Reliance on psychological factors, both in improving the quality of education and in improving its effectiveness in modern conditions, guarantees a positive result of pedagogical activity [14]. Accordingly, psychological factors play an incomparable role in the development of educational and cognitive activity of students in the higher education system.

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