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Research Article

INNOVATION-PEDAGOGICAL SYSTEM FOR THE DEVELOPMENT OF ANALYTICAL THINKING IN FUTURE EDUCATORS THROUGH THE HYPOTHETICAL-DEDUCTIVE **METHOD**

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ABSTRACT

In this article, the theoretical-methodological foundations of the development of analytical thinking in future pedagogues through the hypothetical-deductive method, and the effectiveness of the dialectical method in the development of analytical thinking are considered high. In the pedagogical process, it is important to teach the common use of thinking styles.

Keywords

Hypothetical-deductive, new development, thinking skills, innovative ideas, logical thinking, individual qualities, perfect person, educational standards, type of mental activity, scientific-methodical.

INTRODUCTION

Today, the main goal of developing the analytical thinking of future pedagogues is to make the young generation mature in all aspects, wellrounded people necessary for the development of our society. A perfect person embodies spiritual and physical maturity.

Analytical thinking differs from other mental processes in that it emphasizes the existence of a problem situation, which, by solving it, distinguishes person from emotional experience and decides to draw certain practical or theoretical conclusions and expand the boundaries of knowledge. Thinking is often considered as a product of historical development

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of social practice, a separate theoretical form of human activity. Thinking reflects reality not only as simple images, but also as various connections and laws obtained theoretically. In this regard, A. V. Brushlinsky wrote: "the true nature of thinking is that it always discovers something new independently, always openly. First of all, thinking, as an unknown product of conscious activity, cannot be reached immediately. On the other hand, it is very necessary for further Contradictions activities. between these situations are expressed in the process of formation of new mental formations that seek a certain task or problem and then show the discovery of ways to solve them. That is why thinking is considered as a process, not ready and presented in advance, but a formative process.[1]

Analytical thinking is characterized by an organic relationship with the things and information received and felt through human perception, with direct connections; directly related manipulated objects; in fact, it consists of solving the tasks set forward without practical actions that are impossible. This form of thinking is primarily focused on performing practical tasks. Actions performed gradually according to its manifested complexity are in external demonstration conditions. In this, the creation of the internal environment of the movement takes place, the relations between the elements take on a schematic appearance.

In our study, the methodological justification of the diagnostic principles of the development of analytical thinking of future teachers is based on:

- 1) to consider the development of analytical thinking as a personality quality that reflects a high-level integrated psychological system;
- 2) substantiating its connection with the dynamic theory of the development of analytical thinking in the form of personality-developing qualities.

Based on these principles, we identified the following most important approaches to diagnosing the development of analytical thinking of future teachers:

- 1) person-oriented approach. The investigation is aimed at studying the integrated system of interrelated qualities that serve for the development of the individual in connection with the uniqueness of self-awareness, the levels of development of emotional-volitional and communicative spheres;
- dynamic approach (long-term learning, periodic observations to study the behavior of the test subjects in different situations, studying the dynamics of its development, identifying psychological barriers and means of overcoming them). The dynamic approach is based on the dynamic theory of the development of analytical thinking conditioned by the replacement of the paraligma of the transition from diagnostic selection to diagnostic development;
- 3) a prognostic approach based on the research of not only the level of general and mental development of a person, the development of general and special abilities, the level of development of analytical thinking, but also the prognostic approach based on the research of the

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issue of forecasting the personal development aimed at determining his potential opportunities.

It is possible to correctly assess the development of analytical thinking of students based on the fact that the development of analytical thinking is a multidimensional phenomenon classification criteria of the types of analytical thinking development, which allow to confirm the complexity of its assessment.

The results of the research show that the selection of students for the development of analytical thinking based on the indicators of psychodiagnostic tests is not fully justified from a scientific point of view, because the tests for determining intelligence and creativity do not serve as an acceptable tool for diagnosing the development of analytical thinking.

It is from the pedagogical point of view that the selection of students with developed analytical thinking should be considered in harmony with the ethical aspect. The strict division of a student "developed analytical thinking" into "underdeveloped analytical thinking" will not fail to have a negative effect on his future work. For this reason, based on the results of the research, it was concluded that it is necessary to monitor the above-mentioned criteria in order to determine which field of activity students should develop their analytical thinking.

For this reason, in the process of research, identifying students with developed analytical thinking should not be defined as a goal, but should be done in connection with the development of analytical thinking in students and their education. As the main goal of the experimental work process, it was based on the method of determining the development of analytical thinking and creating necessary pedagogical conditions for the intellect and personal development of future pedagogues.

The results of the study showed that there is no absolute single method of identifying students with developed analytical thinking, and it is necessary to carry out observation-study work in a number of directions:

At the initial stage, it is necessary to conduct a survey with a professor and tutor who have known the students well for a long time. It is worth noting that, in the initial stage of identifying students with developed analytical thinking, relying on the opinions of professors as a mandatory component of the evaluation system has had a good effect in countries such as England, the USA, and Singapore.[2]

- 1) Also, at the initial stage of identifying students with developed analytical thinking, it is appropriate to use psychological methods, control-evaluation methods that allow identifying the needs of students:
- 2) The use of intellectual tests can also be effective in identifying students with developed analytical thinking. Only intellectual tests should be conducted by highly qualified pedagogues and psychologists;
- 3) In determining the development of analytical thinking of students, educational projects also allow to achieve the expected result. Only when

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preparing educational projects, it is required to fully ensure the individuality of students, to work carefully and responsibly:

4) The results of our studies showed that it is expedient to conduct a survey among parents to identify students with developed analytical thinking. Although in some cases the opinions of parents about their children have a subjective description, this method allows to determine what students like to do in the family environment.

Based on the analysis, it was concluded that students with developed analytical thinking should be identified in several stages and different pedagogical and psychological diagnostic methods should be used at each stage. However, when it comes to improving the system of working with students with developed analytical thinking and improving the quality of teaching, special attention should be paid to the issue of supporting and guiding them.

According to British experts, "creativity is the most important element in the development of analytical thinking, and all types of development of analytical thinking cannot be considered separately from the creative component".[3] There are two types of educational stratification in England - internal and external. They serve to ensure the high efficiency of the educational process in harmony with each other.[4] External differentiation is reflected in various special forms of organizing the educational process: dividing students into streams based on the level of ability based on tests and interviews; at a

certain stage of education, dividing students into groups according to their ability in academic subjects; teaching in "mixed" ability groups, etc. Internal differentiation is reflected in the temporary grouping of students in separate subjects according to the methods of cognitive on the analysis activity. Based of the implementation of internal and external differentiation, this process allows to increase the cognitive activity of students, to monitor each other and realize responsibility, to ensure the diversity of independent education based on the use of elements of cooperative education. concluded.

Today, the development of innovative mechanisms for the development of analytical thinking in future pedagogues is one of the urgent problems of pedagogy, they are required to have mastered the basics, to have mastered technologies that provide in-depth knowledge of their subjects. For this purpose, future teachers should thoroughly master the content of training courses aimed at providing accelerated education in their subjects and acquire the skills to enrich it.

The development of analytical thinking of future pedagogues requires the creation of conditions for the effective implementation of a personoriented approach to education, the realization of their talents and abilities. In this process, it is important for pedagogues to deviate from traditional approaches to the teaching process.

To form future personnel as independent, responsible, socially mobilized individuals, in order to successfully socialize them and prepare

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them to find a suitable place in the labor market, it is necessary to develop social skills in them, to define and develop their own activities. To implement such an approach, comprehensive support of students in the learning process is of great pedagogical value. In this, the study of students' attitude towards material existence, surrounding people and oneself takes an important place.

Conclusion

In conclusion, in order to pedagogically support the process of intellectual development of future pedagogues, it is necessary to carefully study, correct, restore and develop their relationships. The main goal of supporting students in the educational process is to ensure their intellectual, physical, spiritual, cultural and social development at the same time. and for this, it is appropriate to organize didactic activities that regularly develop in order to improve the activity of students in the learning process.

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