



## FORMATION OF KNOWLEDGE INDEPENDENCE OF STUDENTS AS A PEDAGOGICAL PROBLEM

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### Abstract

Will closely familiarize ourselves with the scientific research and innovations of foreign scientists who have contributed to the formation of students' independence of knowledge through our research, the idea of educating an "independent and rationally thinking person", the "humanistic theory of personality" and methodical approaches to the formation of the idea. In our research, we considered the opinions of scientists about the role of human development.

**Keywords:** Cognitive independence, aesthetic education, reflection, reflexive, heuristic conversation, pragmatic pedagogy, existentialist theory, the idea of cognitive independence, motivation.

## ФОРМИРОВАНИЕ ЗНАТЕЛЬНОЙ САМОСТОЯТЕЛЬНОСТИ СТУДЕНТОВ КАК ПЕДАГОГИЧЕСКАЯ ПРОБЛЕМА

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**Аннотация:** В данной статье мы внимательно ознакомимся с научными исследованиями и инновациями зарубежных ученых, способствовавших формированию самостоятельности знаний учащихся через наши исследования, идеи воспитания «самостоятельной и рационально мыслящей личности», «гуманистическая теория личности» и методические подходы к формированию представления. В нашем исследовании мы рассмотрели мнения ученых о роли человеческого развития.

**Ключевые слова:** Познавательная самостоятельность, эстетическое воспитание, рефлексия, рефлексия, эвристическая беседа, прагматическая

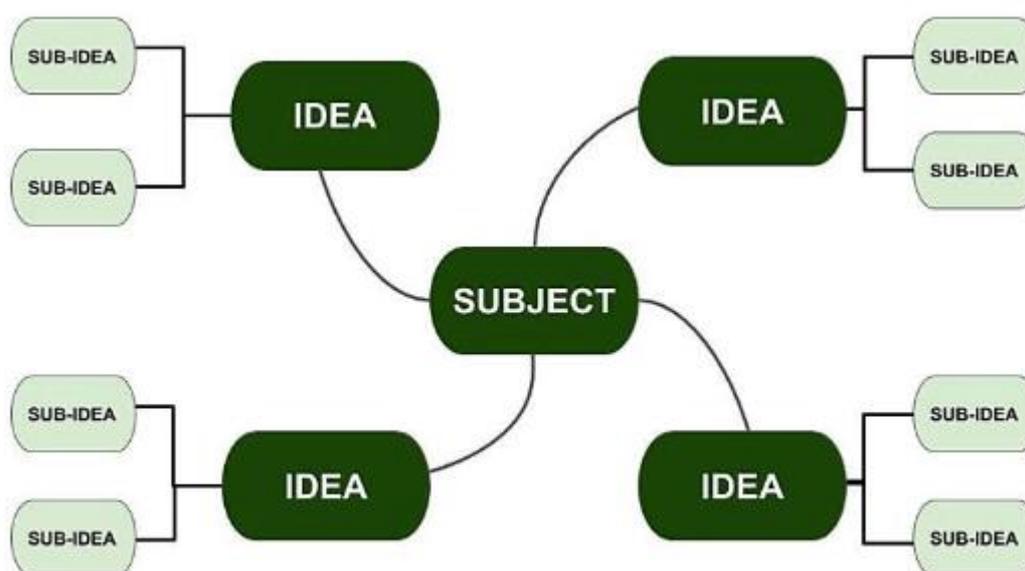




педагогика, экзистенциалистская теория, идея познавательной самостоятельности, мотивация.

## Introduction

Today, a number of our pedagogic scientists are conducting scientific research and research on the development of students' learning and independent exchange of ideas. If we look at the history of the development of the independence of knowledge among students, we can give an example of methodological and methodical manuals developed by a number of foreign scientists in order to further improve the learning of the young generation. For example, the work of the Swiss pedagogue-democrat IG Pestalossi (1746-1827) plays an important role in the development of teaching methods that help students develop their independence of knowledge. The scientist considers that the main goal of teaching is to stimulate the minds of students to active activities, to develop their cognitive abilities, and to develop the ability to think independently. He wrote: "My students do not learn new things from me; they discover these new things on their own. My main task is to help them open up and develop their ideas" [1].



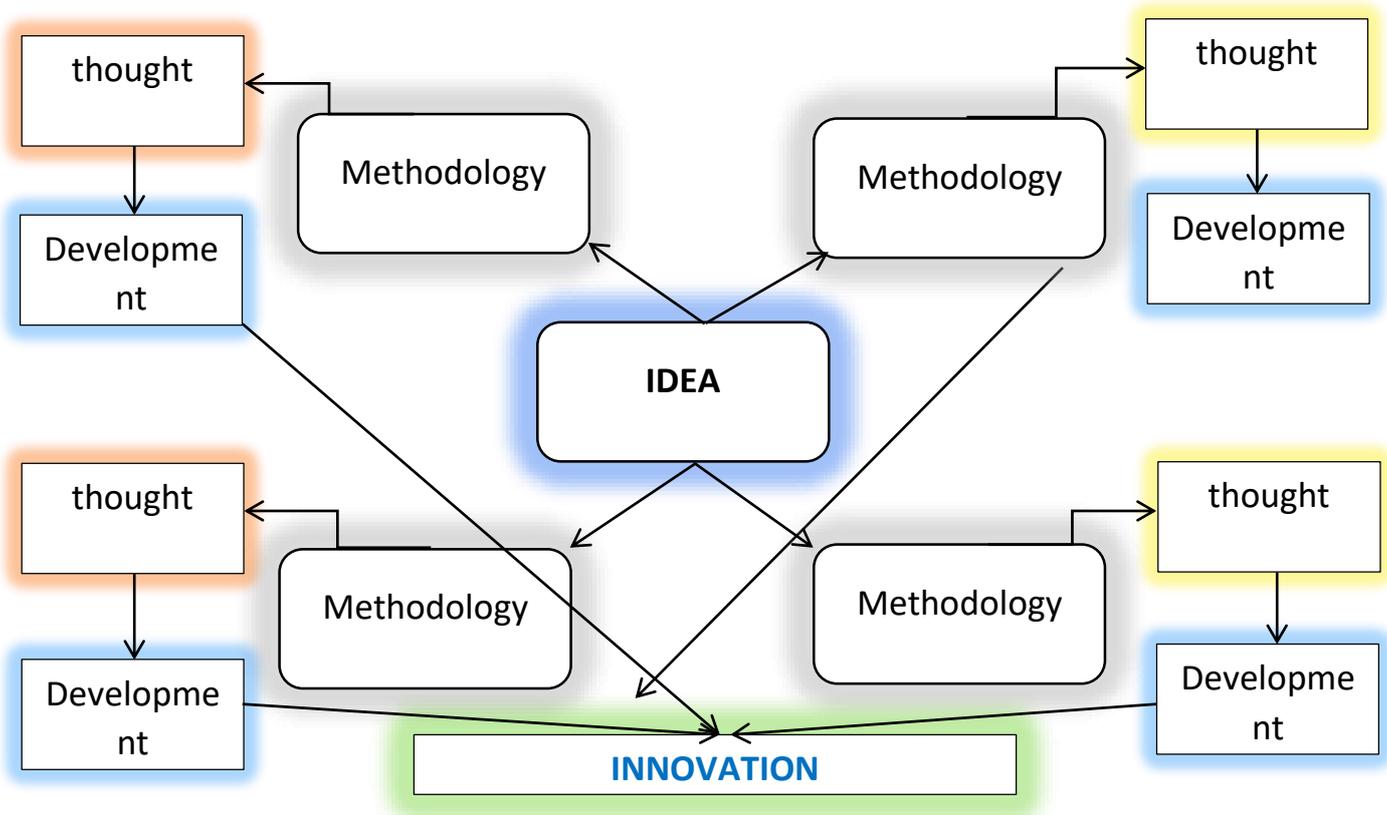


Figure 1: Schematic of the idea development approach

For example, through the "Brainstorming" method, you will come up with a lot of ideas. Here, one group suggests another possible solution to the problem.

For example, if you and some of your colleagues are trying to create an electronic textbook in a certain specialty. And each of you gives your opinion, which becomes a methodical approach to brainstorming whether we know it or not. Shortcomings of the problem are mentioned, opinions are exchanged, debated, and then the central idea is developed.

In the XVIII-XIX centuries. the development of pedagogy is associated with the emergence of the doctrine of utopian socialism. A. Saint-Simon, Sh. Fure, R. Owen put forward large-scale, genius projects of pedagogical reforms, in which the idea of educating an "independent and rational thinking person" is given a great place. For example, R. Owen in his book "On the Education of Human Character" developed the idea of the importance of combining the education of children with physical, aesthetic education, and the development of practical skills, which leads to their cognitive independence. , shows that it helps to improve the human personality.

BGAnanev, analyzing the formation process of human character. says that reflexive properties are formed much later than other qualities of a person. According to him: "a person passes through many objects of mutual relations during his life, as a result



of which his consciousness becomes an object of self-awareness. It is necessary to accumulate the experience of awareness many times as a subject of his behavior and to turn his attitude towards it into a character, which we call reflection. This idea gives an opportunity to conclude about the need to create certain conditions and situations that ensure the development of professional reflection and, as a result, the formation of reflexive aspects determined by the characteristics of a person's activity.

The famous pedagogue-democrat A. Disterweg put the principle of independence of students in education in the first place in his didactic views, and he played a major role in the fight against educational dogmatism in Germany at the beginning of the 19th century. He believes that it is the duty of man to take the initiative in the pursuit of rational goals. Therefore, in his opinion, the teacher should create the tendency of students to know. A. Disterweg distinguishes two methods of teaching: informative and developmental. In the first, dogmatic acquisition of knowledge takes place. In the second, it creates the initiative of students, the activity of their own thoughts. Also, the scientist divides the developing method into developing-questioning (heuristic conversation) and developing-explanatory (teacher's story) types. In the developmental education method, "thinking, and as a result, questions and answers, searching and finding the truth take flight" [2, p. 182].

In the industrialized countries of Europe and America at the beginning of the 20th century, the goals of education were determined by the tasks of increasing productivity. Therefore, education was mainly pragmatic in nature. In a number of Western countries, *pragmatic pedagogy formed the* theoretical basis of the education and training process, which set the task of educating an independent person who can adapt to life, giving him relevant life knowledge, skills and abilities. In this regard, the works of representatives of this direction (D.J. Dewey, W. Kilpatrick, H. Parkhurst, etc.) are of particular interest.

We will dwell on the main philosophical and pedagogical principles of J. Dewey's teaching related to the problem of independence of knowledge. These include the following rules:

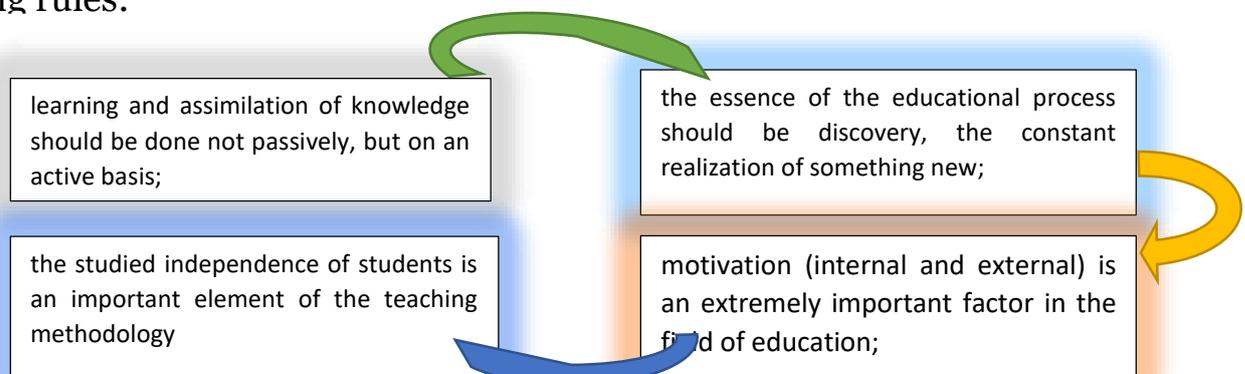


Figure 2: Knowledge related to the independence problem scheme of rules



Another representative of pragmatic pedagogy, U. Kilpatrick [ 3 ] describes the method of projects, according to which students' independence is formed in the process of choosing and designing their activities, and knowledge is formed through them. The material for learning is taken from everyday life. The students themselves chose what the content of the study would be, that is, the teacher only helped them to implement their plans.

In the same way, the problem of educating cognitive independence was solved according to the "Dalton Plan" developed by Helen Parkhurst in the early 20th century. Traditional activities in the form of lessons have been canceled. Students received written assignments and worked on them independently based on an individual plan after consulting with teachers. A similar system (appropriately adapted) is now used in many European universities.

Modern approaches to the formation of cognitive independence are inextricably linked with the names of the creators of the concept of humanistic education and personality development, which appeared in the 60s and 80s of the 20th century [4]. The basis of this concept was provided by Gordon Allport ("Dispositional Theory of Personality"), Abraham Maslow ("Humanistic Theory of Personality"), Carl Rogers ("Phenomenological Theory of Personality") and others. organizes work. In this, the authors of humanistic theories of personality are based on the existentialist principle of self-awareness of the individual. For example, A. Maslow states that the purpose of education is ultimately the manifestation of the individual [5]. K. Rodgers [6] suggests building education based on *initiative, self-regulation, and self-awareness* . The advantages of such teaching are the student's conscious, responsible and ultimately independent participation in education, his willingness to always be open to the perception of new experiences and to constantly change himself as the surrounding reality changes.

Thus, in terms of the problem of independence of knowledge, the humanistic direction based on the existentialist theory focuses on learning in personal experience based on initiative, self-regulation and self-awareness. According to the humanistic concept, learning experience helps a person to identify his personal characteristics that distinguish him from others, to discover thoughts, actions and experiences that have a universal character. In this concept, teaching is essentially equated with the process of personality formation, and independence of knowledge becomes its main quality. It is this that constitutes the social aspect of the problem of independence of knowledge.

The humanistic concept of education has been implemented in European and American countries with the help of various technologies, most of which are of





interest to us because knowledge actively forms independence. We will dwell on them in more detail.

In the 1970s and early 1980s, the technology of cooperative education began to be developed simultaneously in different countries. This technology R. Slavin, R. Johnson, D. Johnson, Dj. Aronson, Sh. It is most fully expressed in the works of Sharan. Each of the technology design and implementation options has its own characteristics. For example, R. Slavin and his colleagues (John Hopkins University) paid special attention to "group goals" and the success of the whole group, which can be achieved only as a result of the independent cognitive activity of each member of the group (team) [7]. Thus, the task of each student is not only to do something together, but also to ensure that each member of the team independently acquires the necessary knowledge, develops the necessary skills, and at the same time ensures that the achievements of each are known to the whole team. .

The humanistic concept of education was implemented in European and American countries through various technologies, many of which are of interest to us because they actively form cognitive independence. Let's dwell on them in more detail.

Another author of collaborative technology Sh. Sharan (Tel Aviv University) emphasizes students' independent research work in groups. The student chooses a subtopic of the general topic that is planned to be studied by the whole class. Then, in small groups (up to 6 people), this topic is divided into separate tasks for each student [8]. Thus, each student must contribute to the overall task. Discussions, discussions in groups provide an opportunity to get acquainted with the work of each student. Based on the tasks completed by each student, a single report is made together, which is presented in front of the whole class in class. Individual independent activity - working together in groups, according to the author, helps to form cognitive independence of each student.

cognitive independence, cooperation technology in various variants is increasingly used in secondary and higher educational institutions. This is primarily due to educational reforms in many economically developed countries, as a result of which the mandatory audience (lesson) load of students and students has been significantly reduced and the time for their independent work has increased. In this case, the structure of the educational process undergoes the following changes in many cases [9]:

- students are given electronic and printed editions of teaching-methodical provision of the educational process;





- a well-organized system of weekly control of the quality of independent work performed, during which homework is checked and two or three small control tasks are carried out;
- implementation of constant communication of each student with a tutor or supervisor-professor [12] .

In Russia, the problem of cognitive independence began to develop actively in the second half of the XVIII-XIX centuries. and was reflected in the theory and practice of leading pedagogues of Russia in the 19th century [10]. The works of VG Belinsky, AI Gersen, NA Dobrolyubov have become manuals for self-education among young people.

The problem of developing cognitive independence has been studied by most pedagogues and psychologists. VM Bekhterev, LS Vygotsky; P. Ya. Galperin, NA Menchinskaya, SL Rubinstein, et al. In his works, the decisive role of independent cognitive activity in the development of the student's thinking and abilities was revealed, some directions of the formation of cognitive independence were studied (the theory of the gradual formation of mental actions, organizing the management of students' cognitive activity). The authors emphasize the importance of studying the problem of formation of cognitive independence, its solution helps to form an active creative personality [11].

The idea of cognitive independence changed with the development of science, production and socio-cultural sphere , and this, in turn, led to the emergence of new trends in didactics [13]:

The concept of independence of knowledge changed with the development of science, production and socio-cultural sphere, and this in turn led to the emergence of new trends in didactics:

- ✓ formation of study motivation (AKMarkova);
- ✓ problem education (MI Makhmutov, AM Matyushin);
- ✓ step-by-step formation of mental actions (P.Ya. Galperin, NF Tal i zina).

The need to rethink the concept of "independence of knowledge" is brought about by the concept of development of theoretical thinking presented in the works of DB Elkonin and VV Davidov. This concept considers not only the content of the acquired knowledge, but also the ways of organizing cognitive activities that ensure the expansion of opportunities for independent use of knowledge, changing the structure of thought processes. Introducing the object into new connections and relationships, highlighting important features and relationships, expanding initial knowledge; reveals their hidden features and relationships, turns them into a subject of special



analysis, allows to go beyond the established limits. This essentially means the formation of cognitive independence in students.

## Conclusion

In this article, scientists mainly discuss the effectiveness of pedagogical approaches and methodological tools in the development of the concept of "Knowledge independence". In addition to acquiring knowledge, a person has independent thoughts and lives on the basis of uncertainty, which leads to the formation of the ability to fully master the unexpected technologies of the future. In the process of our research, we have acquired new theoretical knowledge about the innovations we are looking for by analyzing the literature, and we have shed light on the effectiveness of some scientists' effective methodological tools in our work.

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