THE FORMATION AND DEFINITION OF THE INTELLECTUAL POTENTIAL IN EDUCATION

Abstract: In this article, the leading conditions of intellectual development of students in the process of forming mathematical representations that are in relationship and interaction are the presence of clearly justified goals and content of the educational process in schools aimed at the intellectual development of students in the process of forming mathematical representations, creating a developing environment that takes into account the features of mental development of children and promotes the manifestation of creative activity. Continuity in the work of the school is carried out in many aspects. The theoretical justification and methodological development of the foundations of continuity for each of them should be the subject of special attention of teachers working with school-age children. It seems appropriate to include in the curriculum of the faculties of pedagogy and methods of primary education, school pedagogy and psychology an academic discipline or special course: "Continuity in the work of the school".

Key words: education, profession, statistics, research, intelligence, methodological skills.

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Introduction

The intellect of development and transformation of socio-economic processes in the Uzbek society in the conditions of market and institutional transformation, increasing competition and scientific and technological progress have caused new needs and fundamentally new ways to meet them. In turn, this requires changes in both the teaching methods and the resources used. At the same time, the information and intellectual potential of the organization, knowledge, skills, high technologies, organizational culture and other elements of intellectual property, comes to the fore. Organizing the use of intellectual potential belongs to the category of the most complex tasks of the modern subject, the solution of which requires the formation of specific approaches to management that contribute to the creation, dissemination and productive use of knowledge. The appearance of a new function and a new type of management activity is a confirmation of the relevance of the chosen topic. Intellectual potential has a number of features, such as innovative technologies, development of human competencies and abilities, innovative activity, integrated use of information technologies, effective communications, and so on. All these features are reflected in organizational systems that create conditions for the accumulation and implementation of knowledge, for entering knowledge markets and providing competitive advantages. A key role is played by the formation of a single information space and communication systems in the organization that allow integrating knowledge and then using it. Effective use of knowledge requires purposeful management actions based on the application of science-based strategies, approaches, methods, techniques, mechanisms, forms of organization, incentives and motivations. Management practice must necessarily take into account that organizational knowledge is based on people's knowledge, which is divided into explicit and implicit knowledge. The abstract and intangible nature of hidden knowledge makes it much...
more difficult to store and transmit, but it is this type of knowledge that forms the basis of the intellectual potential of the entire organization. In turn, intellectual potential is necessary for the development of new knowledge, skills, and production of new intellectual products, as well as for achieving results in the implementation of the set strategic goals.

Discussion.

Students' intellectual potential can be seen as their readiness to generate and master innovations. It consists of the accumulated amount of knowledge, the intellectual level of students, and the experience of innovation. The composition of indicators for assessing the intellectual level of students takes into account the novelty, the novelty of the technology of pedagogical activity, the educational level, and much more. The concept of "intellectual potential" is widely used in modern scientific literature. One of the most important distinctive features of intellectual potential is that it is a set of opportunities that are often not yet disclosed, not formally fixed, but actually exist to perform actions, including those of a production nature. In addition, the mechanisms for using and managing intellectual potential in General require, in our opinion, a deeper theoretical understanding and methodological formalization, this is an additional argument for the relevance of the topic and the chosen direction of analysis. The strategic resource of modern post-industrial society is increasingly becoming human capital, which includes the accounting and evaluation of its intellectual potential. The formation of an intellectual nation is one of the strategic goals of development. The main focus is on the formation of the industrial and innovative economy of the country. Its result is a qualitatively new intellectual nation. Modern society needs a smart, competent, creative-minded person who manages their own intellectual activities in interaction with members of society. The problem of its development is assigned to priority areas. Intellectual potential is an integrative concept that combines all types of intellectual activity and its subjects, science, education, and innovation. This phenomenon is created primarily by the system of continuous education (preschool education and training, General secondary, technical and professional, post-secondary, higher, and postgraduate education), which is the basis of society's intellectual resources. An intellectual person is a person with developed intellectual abilities who is prepared for innovative and creative self-educational activities and communication throughout life. It is characterized by a high level of national consciousness, developed moral and spiritual qualities. Purposeful formation of students' intellectual potential should become one of the main tasks of continuous education modernization. Despite the need for its development, until now there has been no clear concept in the scientific literature to justify the strategy and tactics of this activity. The development and formation of the intellectual potential of the student's personality requires the identification of leading ideas, approaches, theoretical foundations and principles that determine its strategic orientation. They should correspond to the ideas of modernization. The concept of "intelligence" is one of the most pressing problems, which has been studied by scientists from many countries of the world for many centuries. In the history of mankind, there are many examples of outstanding individuals who have left an indelible mark on the development of science through their intellectual work for the benefit of society. There are different points of view and concepts in the definition of "intelligence". First, it should be noted that this concept belongs to the category of inter-scientific concepts. In this regard, the variety of definitions of the concept of "intelligence" from the point of view of various scientific fields is an indicator of the complexity and multidimensional nature of this phenomenon. In General, in encyclopedic dictionaries, intelligence is characterized, in most cases, from a psychological point of view. From a scientific point of view, "intelligence" is considered in the following meanings:

1) A relatively stable structure of the individual's mental abilities;
2) The General ability to learn and solve problems, which is the basis of other abilities and is determined by the system of cognitive processes of the individual (thinking, feeling, perception, memory, imagination, representation, etc.), which determines the success of any activity and adaptation to new life conditions, tasks (as a generalization of behavioral characteristics in solving problems);
3) The totality of all the cognitive functions of the individual: from motivation and perception to thinking and imagination, the main form of cognitive activity.

Despite the fact that human intelligence and mental activity are different concepts, they are very closely related to each other. Therefore, it is important to understand these concepts in their differentiation. The structure of the concept of "intelligence" is complex and consists of many levels, and its integrity is expressed on the basis of the interaction of mental abilities. Based on the above, we can say that an intellectual person is characterized by a high level of intellectual abilities, national consciousness, patriotism, citizenship, and readiness for creative and innovative activities. No less interesting is the consideration of individual features of intelligence, which is in a dynamic change due to age, health, and the human environment. This is confirmed by many psychological studies. As it turned out, as a result of many studies, the peak of intelligence development is very well observed in 17-19 years of age. In some
studies, the peak of intelligence development is observed in 12 years, but due to lack of life experience and lack of fundamental knowledge, they cannot fully demonstrate their intellectual abilities. According to Piaget, by the age of 15, human intelligence is completely at the stage of development. The object of the study is the educational process in school institutions, and its subject is the pedagogical conditions of intellectual development of students in the process of forming primary mathematical representations.

In accordance with the problem, object and purpose of the study, we solved the following tasks:
1. To reveal the essence of intellectual development of schoolchildren in the process of forming primary mathematical representations.
2. To substantiate the technology of the process in school educational institutions for the formation of mathematical representations in older students based on the relationship of psychological, technological and communicative components of the pedagogical process.
3. Determine the possibilities of the developing environment as a means of activating the mental activity of students.
4. Identify ways to improve the scientific and methodological training of teachers to work on the intellectual development of students in the process of forming primary mathematical representations.

The hypothesis of the study. Getting to the study, we proceeded from the proposition that the leading intelligent development of schoolchildren in the process of forming mathematical concepts in relationship and interaction, are:

- Having well-grounded goals and content of educational process in the OU, aimed at the intellectual development of students in the process of forming mathematical concepts;
- The creation of the developing environment, taking into account the peculiarities of mental development of children and facilitating creative activity;
- Variability in the use of OU programs that stimulate the intellectual development of schoolchildren;
- Humanization of the educational process as a condition for the intellectual development of schoolchildren;
- Increasing the scientific and theoretical level and methodological skills of educators as a leading condition for the intellectual development of school-age children and this problem implies the need for information orientation of the higher education system. In this regard, the Informatization of the education system should be considered as a process of transformation of the content, methods and forms of preparation of the individual at the stage of transition of the educational system to existence in the conditions of Informatization of society.

Important task of education is to teach how to live and work in the information society. This means that a person is required to be creative, and the main bet is on his intellectual potential.

The study showed that an important condition for success in intellectual development is continuity in the training of school students, in the work of school teachers. Continuity in the work of the school is carried out in many aspects. The theoretical justification and methodological development of the foundations of continuity for each of them should be the subject of special attention of teachers working with school-age children. It seems appropriate to include in the curriculum of the faculties of pedagogy and methods of primary education, school pedagogy and psychology an academic discipline or special course: “Continuity in the work of the school”.

We recommend including the topic of intellectual and personal development of children in the professional development program for teachers, especially educators. Without knowing the laws and principles of mental development, the ratio of learning and development processes (and about 50% of respondents do not know them), it is impossible to realize the inclinations of children given to them by nature.

The effectiveness of work to improve the scientific and methodological level of educators is provided by the use of a system of diverse forms and methods of professional activity that enrich their pedagogical instrumentation.

Criteria of effectiveness in improving the scientific and theoretical level and methodological skills of teachers as the leading terms of the intellectual development of preschool children we believe:

- The level of development of children, determined by the indicators of psycho-diagnostics of intellectual readiness of children for learning activities and their level of education, which is characterized by the results of the integrated use of a number of methods: “Cross”, “ladder”, the “Two houses”, etc.;
- A complete rejection of the disciplinary model of the communication of adults with children;
- Creating an atmosphere of creative activity in the team of educators (use of advanced pedagogical technologies, organization of mentoring, generalization of advanced pedagogical experience, preparation of methodological recommendations, production of visual AIDS, didactic games, etc.).

Evaluation of the educator’s activity on these aspects is a leading indicator of his/her pedagogical maturity and ability to show a research approach to the child and to his/her own pedagogical activity aimed at finding optimal ways to manage the mathematical development of schoolchildren.

Our research confirmed the hypotheses put forward in the hypothesis and was carried out in the
logic of the concept of intellectual development of schoolchildren developed by us. It does not claim to be an exhaustive theoretical justification of the problem considered in it. Many aspects of this problem need more in-depth theoretical study and methodological support.

**Conclusion.**

The problem of intellectual development of school children in the classes of activity, literacy, physical education and other activities of children is considered to be relevant. The subject of special attention of researchers may be the problem of forming students’ cognitive interest, which will contribute to their intellectual development. We consider it appropriate to conduct a study of this problem taking into account the age characteristics of school-age children. All this will contribute to the disclosure of the creative potential of each child and the search for optimal ways of intellectual development of students.

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**References:**