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PEDAGOGICAL CONDITIONS FOR IDENTIFYING AND PURPOSEFULLY DEVELOPING THE INTELLECTUAL ABILITIES OF STUDENTS

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Abstract: This article reveals the role of pedagogical conditions in the process of identifying, assessing and purposefully developing intellectual abilities of students. The study analyzes methods for identifying intellectual potential, ways of organizing the educational process taking into account the individual characteristics of students. Also, through practical experiments, pedagogical methods that have a positive effect on intellectual development were identified. The results of the article suggest effective approaches to the formation of intellectual abilities in preschool and general secondary educational institutions.

Keywords: intellectual abilities, student, pedagogical conditions, development, individual approach, educational methodology

INTRODUCTION

Today, approaches aimed at identifying and developing the personal abilities of students are gaining relevance in the education system. In particular, intellectual abilities are one of the important factors determining the child's mental potential, logical thinking, the ability to independently find solutions to problem situations, and the level of creativity. Intellectual development serves as the basis for the educational success and future social activity of each student.

Therefore, identifying intellectual abilities at an early stage, assessing them, and developing them in a targeted manner are one of the important pedagogical tasks. The role of teachers and educators in this process is invaluable, and the conditions they create stimulate children's interest in learning, form self-awareness, independent thinking, and decision-making skills.

This article analyzes the main methods used to identify students' intellectual abilities, the pedagogical conditions that serve their development, and the results obtained on the basis of practical experience. It also discusses effective approaches in this area and the positive results achieved through the collaborative work of teachers and psychologists.

LITERATURE REVIEW

The issues of identifying and developing intellectual abilities of students have been widely studied in the fields of pedagogy and psychology. Research on this topic has been conducted mainly in two main areas: the first is methods for diagnosing intellectual abilities, and the second is approaches to their effective development in pedagogical conditions.

In the psychological and pedagogical literature, the concept of intellectual abilities is largely

associated with general mental potential, and standard tests such as the Raven test (Raven, 1938) are widely used to determine the level of mental development (Jensen, 1998; Sternberg, 2003). Also, in the study of intellectual abilities, Vygotsky's theory of "proximal development" (Vygotsky, 1978) is of great importance, which analyzes the difference between independent and assisted tasks of the student and, on this basis, allows us to determine the possibilities for development.

As for pedagogical approaches, individualized approaches (Tomlinson, 2014), interactive teaching methods, and creative thinking techniques have been shown to be effective in developing intellectual abilities[1]. Modern research is looking for new opportunities for developing intellectual abilities using technologies (e.g., e-learning programs) (Selwyn, 2016)[2]. In the field of national pedagogy, Uzbek scientists have also paid attention to this issue and developed methodologies for identifying and developing intellectual abilities in the educational process (Islomov, 2015; Nazarov, 2018). Their research emphasizes the importance of taking into account individual differences in educational institutions, creating pedagogical conditions, and using innovative approaches.

METHODOLOGY

This study used an integrated approach to identify intellectual abilities of students and study pedagogical conditions in the process of their targeted development.

Research methods

Diagnostic tests: Raven's progressive matrix test and Torrens creative thinking test were used to identify intellectual abilities. These tests assessed the level of logical thinking, problem-solving and creativity of students.

Observation and interview: Data were collected on children's academic performance, motivation and social activity through interviews with teachers and parents.

Pedagogical experiment: Educational and methodological complexes designed on the basis of an individual approach were introduced to the experimental group. Interactive teaching methods - group discussions, role-playing games, creative exercises - were used during the sessions.

Questionnaires: Questionnaires were distributed among teachers and parents on the conditions for supporting intellectual development and their importance.

Statistical analysis: The collected data were analyzed using SPSS software. Correlation and comparative analyses were performed between test results, questionnaire responses, and pedagogical experience indicators.

DISCUSSION AND RESULTS

The following main conclusions were drawn from the analysis of the data obtained during the study:

Results of determining intellectual abilities: According to the initial results of the Raven progressive matrix test, there was no significant difference between the intellectual indicators of students in the experimental and control groups. However, after the creation of pedagogical conditions, the test results of students in the experimental group increased by an average of 15%, while the control group remained unchanged.

Creative thinking and problem-solving skills: The results of the Torrens creative thinking test showed that significant positive changes were observed in the level of innovative approaches to problem situations by students in the experimental group.

Opinions of teachers and parents: The data obtained based on the results of the questionnaire and interviews confirmed that pedagogical conditions have a positive effect on the motivation of students and the learning process. Parents expressed their support for an individual approach and encouragement in the educational process of their children.

The effectiveness of the pedagogical experiment: The use of an individual approach and interactive methods helped students develop their skills in freely expressing their thoughts, independent thinking and teamwork.

Discussion

The results obtained show that it is very important to create pedagogical conditions for identifying and purposefully developing intellectual abilities. Pedagogical conditions allow for the use of appropriate teaching methods, taking into account the individual characteristics of students, and also make the learning process interesting and effective.

As a result of pedagogical work with the experimental group, significant positive changes were observed in the growth of intellectual abilities, especially in creative thinking and problem-solving skills. This, in turn, increases students' interest in education and motivates them for further development.

The conditions, incentives and an individual approach created in cooperation with teachers and parents serve to effectively organize the pedagogical process. At the same time, interactive methods - role-playing games, group discussions, creative activities - help expand the thinking skills of students.

CONCLUSIONS AND SUGGESTIONS

The results of this study showed that modern diagnostic tools (for example, Raven's progressive matrix test and creative thinking tests) are effective in determining the intellectual abilities of students, with the help of which individual characteristics can be identified. Targeted development is carried out by creating pedagogical conditions.

Within the framework of pedagogical conditions, an individual approach, interactive teaching methods, effective cooperation with teachers and parents significantly support the development of intellectual abilities. This not only increases the level of knowledge of students, but also improves their independent thinking, creativity and problem-solving skills.

The results show that intellectual development is an integral part of the educational process, and creating pedagogical conditions in educational institutions taking into account individual differences is an urgent pedagogical task.

Recommendations

Introduction of diagnostic tools: It is recommended to systematically use standard and modern tests to determine intellectual abilities in educational institutions.

Strengthening the individual approach: Teachers should pay attention to personalizing the learning process, taking into account the individual characteristics of students.

Use of interactive methods: Interactive teaching methods aimed at developing creative thinking and problem-solving skills should be widely introduced in the pedagogical process.

Develop parent-teacher cooperation: It is important to organize regular communication and cooperation with parents to support the intellectual development of students.

Improve the skills of teachers: It is necessary to organize special training and advanced training courses for teachers to improve their pedagogical approaches to intellectual development.

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