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# THE DEVELOPMENT OF STUDENTS' ABILITIES IN THE EDUCATIONAL ENVIRONMENT OF THE SCHOOL

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#### Abstract

The article discusses the psychological and pedagogical conditions for the development of students' abilities. The authors raise issues related to the problem of student attitudes towards their abilities and the productivity of their own activities. The features of motivation for educational activities, creative position and conditions for the development of the abilities of various groups of students of secondary schools are considered. The article presents the results of a survey of students in grades 6-11 of comprehensive schools in Vitebsk (Republic of Belarus). The study obtained data reflecting the views of students in the following areas: motivation and self-realization of the personality, emotional-volitional regulation, creative position and development of abilities, special conditions and material and technical base, social connections and pedagogical support in the educational environment of the school. The study showed that confidence in the presence of pronounced abilities allows students to build their educational path effectively together with teachers and parents, based on their own interests, growth prospects and self-realization. The lack of this confidence creates numerous problems associated with creative expression and satisfaction with activities. It is for these students that we need special psychological and pedagogical support in realizing their personal potential. The results obtained must be taken into account when building curricula and organizing the educational process.

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#### 1. Introduction

Modern requirements of the individual and society to the results of education are implemented in a system of continuous formation of creative thinking, the development of creative abilities for both schoolchildren and students. The main goal of the education system is to awaken and develop creative potential in a person.

Interest in the problem of the study and development of giftedness remains relevant throughout the post-Soviet space (Klimontova, 2003; Melik-Pashayev, 2014; Miller, 2006). It is proposed in the conditions of a comprehensive school to teach gifted children on the basis of the principles of differentiation and individualization (by identifying groups of students depending on their type of giftedness, organizing an individual curriculum, studying individual programs in individual academic subjects, etc.) (Bogoyavlenskaya, 2003). The study of the phenomenon of the so-called "hidden" giftedness and the support of students' abilities in the framework of correctional education is proposed. The authors distinguish some characteristic features of the behavior of "gifted students" with low academic performance, identify the causes of this phenomenon, and research the psychological and pedagogical conditions for the successful education of this category of children (Reis & Renzulli, 2004).

Scholars emphasize several important points, according to which the development of giftedness is considered only in the interaction of a developing personality with its social environment. Particular importance is attached to the influence of the immediate social environment, which includes the family, school class, student group, and peers (Bain & Bell, 2004; Sternberg & Grigorenko, 2004). Many researchers attach great importance to the influence on the development and realization of the creative potential of the personality of internal factors. These include personality traits, self-identity and its orientation (Kerr, Colangelo, & Gaeth, 1988). Studies emphasize that a positive attitude of gifted adolescents to their personality and abilities is an essential condition for realizing their intellectual potential (Melik-Pashayev, 2014; Zimmerman, Bandura, & Martinez-Pons, 1992).

Research devoted to this problem in the Republic of Belarus is carried out in accordance with the range of issues that are common to all modern concepts: general theoretical ideas about the phenomenon of giftedness; the foundations of the development of gifted children in the process of training and education, the construction of individual development strategies for them.

It should be noted that the main emphasis is made on practical approaches in the diagnosis and development of gifted children and youth (Shmurakova, 2018).

Research papers that focus on the study of giftedness emphasize that when working with gifted children, it is necessary to move from the diagnosis of overt or latent giftedness to creating the conditions for the manifestation of giftedness. This transition assumes the provision in the process of training and development of such conditions, such a developing educational environment, which would contribute to the disclosure and the most optimal manifestation of abilities (Bogoyavlenskaya, 2003; Klimontova, 2003).

Based on this, one of the most important areas of school activity is the creation of conditions for stimulating and developing the creative potential of the individual, and supporting students in the realization of their abilities. The transition from identifying students' abilities to supporting and developing gifted youth poses new challenges in organizing the educational process. Solving these problems will require the targeted development of the research competence of schoolchildren and the creative potential of the

individual. Research in this direction seems relevant in connection with the need to create the most favorable conditions for the development of the personal potential of pupils and students. It is advisable to

maintain a creative environment, to provide the possibility of self-realization of gifted students in each

secondary school.

2. Problem Statement

The main problem of this study is to determine the conditions for the development of the abilities of

various typological groups of schoolchildren in the educational environment of the school and to justify

promising areas for improving the educational environment through the use of a complex of modern

technologies of training and education.

The relevance of solving this problem is determined by a number of reasons:

• Social reasons, based on the demand of the modern economy for highly educated specialists

with a special "outstripping" mentality capable of drastic changes and transformations;

scientific reasons related to insufficient theoretical development of issues related to the

structure of creative potential and a systematic analysis of the conditions for the

development of creative abilities in the educational environment of a school;

practical reasons, allowing to generalize the experience of applying new technologies for

the direct development of students' abilities in the educational environment of the school

and to develop new methods of creative education.

3. Research Questions

In the course of this study, we were looking for answers to the following questions:

**3.1.** What is the attitude of students to their abilities and problems of their realization in a school

setting?

3.2. Are there differences in the educational needs of students with different attitudes towards their

own abilities and the productivity of their own learning activities?

**3.3.** What are the views of these groups of students about the possibilities of satisfying their

educational needs? These include the attitude towards coeducation, the types of possible pedagogical

support, expectations related to future education, etc.

**3.4.** How significant for various groups of students is the support and approval of others, the social

realization of their personal characteristics?

4. Purpose of the Study

The purpose of this study is to identify the conditions for the development of students' abilities in

the educational environment of the school and justify promising areas for improving the educational

environment through the use of a complex of modern technologies of training and education.

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### 5. Research Methods

To solve the tasks posed in the study, a questionnaire was developed and used that allows respondents to evaluate behavioral aspects related to creative expression and the conditions of effective activity. Mathematical and statistical processing of the results was carried out using the software MSExcel 2013 and Statistica 10.0 for Windows in the operating system Windows 10.0. Analysis of data by mathematical criteria was considered reliable at a significance level of no higher than 5% (p $\leq$ 0.05), however, they were also analyzed at the trend level (0.05 $\leq$ p $\leq$ 0.08).

The study involved 353 students: 197 boys and 156 girls. Among them: 36 students of the sixth grade, 32 students of the seventh grade, 96 students of the eighth grade, 36 students of the ninth grade, 60 students of the tenth grade, 93 students of the eleventh grade. Respondents were divided into three groups based on self-evaluation of creative expression and the realization of abilities in activities:

- students who believe that they have achieved outstanding success in one of the areas of activity
   and have pronounced abilities (mental, athletic, artistic, organizational, etc.);
- students who believe that they do not yet show pronounced successes in any of the areas of activity
   and do not have pronounced abilities;
- students who believe that they have achieved the same success as their peers and have abilities
  expressed in the same way as peers.

#### 6. Findings

The study obtained data reflecting the views of students in the following areas: motivation and self-realization of the personality, emotional-volitional regulation, special conditions and material and technical base, social connections and pedagogical support.

When researching the motivational direction, we proceeded from the fact that one of the leading needs is the need for quality education. This need is laid and begins to be realized at school. It is here that the cognitive motivation of the student and his desire to learn are formed. In this case, we used methods of direct assessment of the student's ideas about the causes or characteristics of behavior, interests, etc. (cognitive representation). Therefore, the question "Do you like to study at school?" was answered positively by 75% of students, 11% of students answered negatively. It should be noted that most of the negative answers were among students in the seventh (15%) and eleventh grades (13%), and least of all in students of the tenth grades (F = 2.83;  $p \le 0.01$ ).

When studying the direction associated with students' self-realization, we evaluated the ability to develop and realize their creative potential through the desire to participate in building their own educational trajectory, to study according to an in-depth individual plan, etc. It should be noted that the ability to independently decide what to study and at what level is noted by 35.4% of students, sometimes 42.7% of students manage to do it, 12% of students do not see such an opportunity and 10% were not able to answer this question. An interesting fact is that only 44% of students would like to study according to an in-depth individual plan, if such an opportunity were available, and 30% would reject such an opportunity for themselves, with 26% of students still undecided. Moreover, the gender aspect is clearly traced in this

issue. Girls would like to be engaged to a greater extent according to the in-depth plan (F = 3.96;  $p \le 0.04$ ), but boys would not want to be engaged (F = 5.64;  $p \le 0.01$ ). An important condition for the development of abilities is the opportunity to study academic disciplines at a deeper level than is provided for by the curriculum and to engage (consult) with teachers individually on issues of interest. When conducting a study in schools, 48% of students indicated the availability of such an opportunity, 31% of students deny this possibility, and 21% cannot answer. Moreover, the presence of such an opportunity is significantly more often noted by students of the seventh and tenth grades (F = 4.52;  $p \le 0.005$ ), and the absence by students of the sixth and eleventh grades (F = 2.08;  $p \le 0.06$ ).

The direction of the study of special conditions and pedagogical support included studying the needs of students in special educational conditions (in manuals, special programs and courses), in the material and technical support of the educational process, in the pedagogical support of the student. An important factor in the development of abilities of students is the support and assistance of the teacher in the development of complex educational material (Table 01).

**Table 01**. The role of the teacher in the acquisition of educational material.

Degree of contacting a teacher for help	Number of students, %
Often seek the support and help of a teacher	30
Tried to contact, but did not receive support	12.3
Tried to solve their problem on their own	41.8
Did not decide on the answer	12.7

It should be noted that students of the eighth and ninth grades more often seek help, and least of all students of the sixth and seventh grades (F = 2.90;  $p \le 0.01$ ). At the same time, 29.4% of students believe that teachers always take into account their individual characteristics, needs and interests; 46.6% of students believe that teachers do not always consider their individuality, and 15.1% of students believe that teachers do not consider their abilities. About 11% of respondents did not decide on the answer. To create optimal conditions for the development of cognitive activity, the formation of abilities, teachers engage most students to participate in various contests and competitions. Almost 83% of students indicate this fact (27.8% - often, 55.4% - sometimes).

Students' social connections were considered in terms of the degree of satisfaction of the need for approval, recognition, social status, and psychological support from family and friends. Thus, the study showed that most students are confident that the people around them (teachers, parents, relatives, friends, classmates) note that they have outstanding abilities. 29% of respondents are fully confident in this, to some extent - 57%, and only 14% believe that this is not so. However, the picture changes significantly if we consider the answers to this question depending on the age of the respondents. Therefore, the confidence that others believe in the student having outstanding abilities from the sixth to the eleventh grade is gradually decreasing, reaching its minimum in the ninth grade (F = 2.22;  $p \le 0.05$ ). The study found that most respondents are confident that others are interested in the ideas they put forward (55.33%). A small percentage of respondents say that others criticize (15.4%) or do not notice their ideas (7.8%). It is noteworthy that 21.3% of respondents say that they do not put forward original ideas. At the same time, differences in the students' assessment of the attitude of others towards the ideas put forward by them, depending on the year of schooling (class), were not revealed. Most students are faced with situations when

no one around them understands them. Often such situations arise in 15% of students, and sometimes in 64% of students. Only 15% of students say that they do not have such situations. Statistically significant differences in this indicator, depending on the year of schooling (age), and gender were not identified. 32.5% of students say that they often are not interested in peers, 45.5% - sometimes, and only 17.1% say that this does not happen. Moreover, the lack of interest in interacting with peers decreases from the sixth to eleventh grade (F = 2.79;  $p \le 0.01$ ). The highest rate is recorded in seventh graders, and the lowest in tenth graders.

Only 29.4% of students note emotional stability in relationships with peers, 13.2% believe that they often cannot control their feelings and emotions in communicating with peers, and 45.7% sometimes. 11% of respondents were not able to assess their emotional stability in relationships with peers. 21.6% of respondents believe they should always excel in everything, for 61.5% of students this is not the goal, 16.9% have not decided. It should be noted that the desire for leadership has a pronounced gender aspect (F = 3.960;  $p \le 0.04$ ). Boys are significantly more likely than girls to note that they should always be the first (in 27% and 18%, respectively). At the same time, the aspiration for leadership reaches the highest indicators among students in the sixth and eleventh grades, and the lowest result is recorded in seventh graders (F = 2.77;  $p \le 0.01$ ).

The study showed that students who consider themselves to be in a group with pronounced abilities and who believe that they demonstrate outstanding success in learning activities more often give answers  $(F = 4.59; p \le 0.03)$ , indicating a pronounced interest in schooling. The same group of schoolchildren is more interested in teaching according to an in-depth individual plan  $(F = 14.54; p \le 0.0001)$ . On the opposite, students who believe that they do not show pronounced successes in any of the areas of activity and do not have pronounced abilities, don't want to delve deeply into learning and do not seek to deepen their knowledge  $(F = 20.28; p \le 0.0001)$ . It has been established that students who consider themselves to be in a group with pronounced abilities more often indicate an individual's ability to engage (consult) with teachers especially on questions of interest  $(F = 7.75; p \le 0.005)$ . Moreover, they try to make the most of this opportunity and more often seek help from a teacher in mastering complex issues  $(F = 8.93; p \le 0.002)$ , and almost never try to cope with problems on their own  $(F = 6.21; p \le 0.01)$ .

It should be noted that students who indicate the presence of outstanding abilities reliably more often seek leadership (F = 8.36;  $p \le 0.004$ ) in all areas of activity. More often they take part in various competitions (F = 12.51;  $p \le 0.0004$ ), trying to come into the spotlight. At the same time, they more often note that their individual characteristics, needs and interests in the school are taken into account (F = 6.31, P < 0.01).

It was established that students who believe that they do not have vivid abilities in any of the fields of activity and do not demonstrate outstanding successes, note the lack of the ability to more deeply study the subjects of interest to them (F = 3.69; p $\le$ 0.05) and do not aspire to participate in competitions (F = 3.90; p $\le$ 0.04).

The study showed that the assessment of the presence / absence of outstanding abilities by students is closely related to the assessment of the presence / absence of these abilities by the people around them. Therefore, students who indicate the presence of outstanding abilities, significantly more often note that the people around them (teachers, parents, friends, etc.) emphasize their bright abilities (F = 10.38, p <0.001). The study shows that students' assessment of the attitude of others to the ideas put forward by

them depends on their own assessment of the presence / absence of outstanding abilities. It was found that students who indicate the presence of outstanding abilities, significantly more often note that others are interested in the ideas they put forward (F = 10.10, p < 0.001).

#### 7. Conclusion

Thus, students who believe that they have achieved outstanding success in one of the areas of activity and have pronounced abilities are statistically significantly different from others in motivation, readiness for development, self-monitoring of activities, and features of interaction with others. The results obtained suggest that confidence in the presence of pronounced abilities (regardless of how much this corresponds to reality) allows you to confidently build your educational path together with teachers and parents, based on their own interests, growth prospects and self-realization. Moreover, confidence in one's abilities gives rise to the belief that those around them perceive these students as capable, talented. Evaluation of the attitude of others to their own abilities and the ideas put forward by them generates an attitude towards future achievements / problems in various fields of activity. As a result, the internal barriers that restrict the freedom to search for a creative solution to any problem are removed, which, in turn, leads to an increase in self-esteem of the individual.

Students who have not yet proven themselves in any field are characterized by a weak interest in learning and problems associated with seemingly unfair assessments of their activities by parents, teachers, and peers. Obviously, it is precisely for these students that special psychological and pedagogical support is needed in realizing personal potential and using the potential of the educational environment of the school.

It is indicative of the fact that the school environment is organized in such a way that most students do not encounter difficulties in realizing their abilities. Students say that schools have created comfortable conditions to accompany and support the further development of abilities. Moreover, the higher the level of students' achievement, the more positively they assess their own development opportunities, including using the support of teachers, parents, and peers.

The revealed patterns indicate that the attitude of students to their abilities determines various involvement in the educational process and require the consideration of these patterns in building curricula and organizing the learning process for different groups of students. It is about the awakening, stimulation and development of specific interests and talents in a special pedagogical form, which focuses on the individual trajectory of learning. Research in this direction seems relevant in connection with the need to create the most favorable conditions for the development of students' personal potential.

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