DEVELOPMENT OF STUDENTS’ TALENTS IN UKRAINIAN HIGHER EDUCATION SCHOOLS

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РОЗВИТОК ОБДАРОВАНОСТІ
СТУДЕНТСЬКОЇ МОЛОДІ У ЗВО УКРАЇНИ

У статті здійснено комплексний аналіз вітчизняних і зарубіжних напрацювань з питань обдарованості в цілому та обдарованості студентської молоді зокрема; обґрунтовано поняття “обдарованість”; розкрито змістове наповнення провідних понять проблеми. Висвітлено і систематизовано ознаки, види, функції та узагальнено якості обдарованої особистості. Проаналізовано психолого-педагогічні підходи до процесу розвитку обдарованості студентської молоді та представлено результати дослідження стану розвитку обдарованості студентської молоді у закладі вищої освіти.

Досліджено й визначено зміст, форми та методи роботи з обдарованими студентами у закладах вищої освіти України. Охарактеризовано соціальні умови вирішення проблем особистісної соціальної самореалізації і професійного самовизначення обдарованих студентів у нових соціально-економічних умовах. Розкрито шляхи соціальної роботи, які налаштовані на сприяння виявленню та розвитку природних задатків молоді на професійному рівні, а також адресна підтримка кожного талановитої особистості і подальшого розвитку здібностей та обдарованості особистості, її успішної творчої самореалізації.

На основі проведеного дослідження було виявлено стан розвитку компонентів обдарованості у студентів вищих навчальних закладів та визначено, які саме форми роботи зі студентською молоддю найбільш сприяють розвитку здібностей. Акцентовано увагу на тому, що існує необхідність розробки комплексної методики діагностики обдарованості, зокрема визначення рівня загальних здібностей особистості, особливостей інтелекту і креативності (здатності до творчості), а також мотивації, що знаходять своє відображення у численних публікаціях вітчизняних та зарубіжних науковців.

Ключові слова: обдарованість; обдарована студентська молодь; заклади вищої освіти; Україна.

DEVELOPMENT OF STUDENTS’ TALENTS
IN UKRAINIAN HIGHER EDUCATION SCHOOLS

The article provides a comprehensive analysis of the national and foreign research on talents in general and the talents of university students in particular; the concept of “talent” have been substantiated; the semantic content of the leading concepts of the problem outlined. The features, types, functions and qualities of a gifted personality have been highlighted and systematized. Psychological and pedagogical approaches to the process of development of
gifted students have been analyzed and the results of the study of the development of gifted students in higher education institutions are presented.

The content, forms and methods of work with gifted students in higher education institutions of Ukraine have been researched and determined. The social conditions for solving the problems of personal social self-realization and professional self-determination of gifted students in the new socio-economic conditions are characterized. The types of social work are revealed, which are aimed at promoting the identification and development of natural talents of young people at the professional level, as well as targeted support of each gifted person and further development of the abilities and talents of an individual, his/her successful creative self-realization.

On the basis of the research the development of components of students’ talents has been revealed and the forms of work with student determined which promote development of abilities to the greatest extent. Emphasis is placed on the fact that there is a need to develop a comprehensive methodology for diagnosing giftedness, including determining the level of general personal abilities, intelligence and creativity, as well as motivation, which is reflected in numerous publications of domestic and foreign scholars.

Key words: talent; gifted students; institutions of higher education; Ukraine.

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Introduction
One of the most important resources of the society is its intellectual potential, represented by a community of people who have found their place in life, fully realized their own creative and professional capabilities, intellectual and organizational abilities. There is a growing need for people who have a non-standard mindset, are able to set and solve new complex tasks related to creating the future. They are the main driver of progress in all spheres of the society and the state.

The society needs energetic, talented people who can set and creatively solve not only current tasks, but also those related to the future. In the modern economy of Ukraine, which is aiming at European integration, the professional training and pedagogical activities should be aimed at forming the needs of professional growth, creative approach to work, active use of new achievements of science and technology in everyday work. Special attention is needed by students who have high intellectual potential and have significant technical, technological or organizational skills in both theoretical and vocational training (Wiley, 2020).

Higher education institutions in the process of their activity try to work with such students in two directions. First, they try to develop creative thinking of students. Secondly, to recognize specific academic abilities of students already at the initial stage of learning and develop them (Lakin & Wai, 2020). In order
to be successful in these areas and find, support and stimulate intellectually and academically gifted children and youth, self-realization of creative personality, Ukraine has developed appropriate legislation aimed at changing attitudes towards gifted students who show extraordinary abilities (Lukashevych, 2002, p. 89).

Neither in legislative documents, nor in scientific literature is it possible to find a universal definition of the concept “talent”. It simply does not exist, but in various sources of information there are integrated definitions that try to cover a vast majority of manifestations of such human qualities as talent. Many researchers, both domestic and foreign, tried to provide their own definition of talent (Kulchytska, 2007; Molyako, 1998; Savenkov, 1998). According to scholars, talent is a general ability that determines the scope of human capabilities, level and originality of a person’s activities, mental potential, a holistic picture of a person, which provides a comprehensive description of the cognitive sphere, opportunities and abilities to learn. Talent implies a set of inclinations, natural data, i.e. it is a characteristic of the degree of expression and originality of natural preconditions of abilities.

**An analysis of recent research and publications.** The results of an analysis of the basic theoretical knowledge and the data of experimental research concerning the problem of talent in general and that of students in particular are covered in works of many scholars. Despite the considerable experience of working with gifted persons, in world science there is no single approach, firstly, to the definition of the concept of “talent”, and secondly, to the development of a common concept of talent. Nowadays there are more than a hundred definitions of “talent”.

J. Renzulli (1977), a well-known American expert on the gifted, has proposed an approach to solving this problem, which is perhaps the most popular among the Western concepts of talent. In his opinion, talent is the result of the interaction of three characteristics: intellectual abilities (which exceed the average level), creativity, and perseverance (motivation). In addition, his model takes into account knowledge (erudition) and a favorable environment. This concept is actively used to solve applied problems. The triad defined by J. Renzulli (1977, p. 46) in a more or less modified form is involved in most modern Western concepts of talent.

P. Torrance uses a similar triad: creative abilities, creative skills, creative motivation. The researcher notes that high levels of creativity do not guarantee great creative achievements, but only indicate a certain probability of their manifestation. The maximum level of creative achievements is possible only with a combination of all three factors (Torrance & Hall, 1980, p. 5).

The ideas of J. Renzulli largely coincide with F. Mönks’s “multifactor model of giftedness”, in which the author does not separate creativity and intellect. It offers other parameters: motivation, creativity and exceptional abilities. This model is versatile, as it allows explaining the partial manifestations of talent in different areas (special talent).
B. Teplov (1985) noted that certain abilities do not yet provide an opportunity for a particular job to be successfully performed by a particular person. By giftedness he meant “a qualitative peculiar combination of abilities, on which a possibility of achieving greater or lesser success during a particular activity depends”. According to the scholar, the activity approach is crucial for determining abilities and talents.

V. Kostiuk (Kostyuk, 1974) defines giftedness as an individual originality of human abilities, pointing to the importance of natural qualities of each individual as a force that is the initial internal motivation for the development of abilities. At the same time, he understands abilities as “essential properties of a personality that are manifested in their purposeful activity and determine their success”. He assumes inclinations as the natural opportunities for development, which create internal conditions for the development of a person’s abilities to certain activities, considering abilities as inclinations realized to some extent (Kostyuk, 1974, p. 35).

A. Matiushkin (Matyushkin, 1989) dealt with the problems of giftedness, believing that giftedness is a general prerequisite for creativity in any profession, science and art. For him, talent is a condition for the formation and development of a creative personality capable of self-expression, self-realization; its indicators, according to the scholar, being: the dominant role of cognitive motivation; creative research activity; opportunities to achieve original solutions; possibilities of forecasting and prediction; the ability to create ideal standards that provide high aesthetic, moral, intellectual assessments, constitute a single integrative structure of talent (Matyushkin, 1989, p. 30).

L. Slobodeniuk (Slobodenyuk, 2000, 2003) believes that talent is not only a kind of combination of human abilities, but also a set of personal characteristics. V. Chudnovsky and V. Yurkevych (Chudnovskyy & Yurkevych, 2005, p. 2) define giftedness as a high level of development of general and special abilities. V. Voitko defines giftedness as “a high level of disposition and inclinations, the result and evidence of high intellectual development of the person” (Voitko, 1982, p. 97). Thus, he, together with many other scholars, considered intelligence to be the main indicator of giftedness, narrowing the concept of “giftedness” to the concept of “intellectual giftedness”. D. Bogoyavlenska (D. Bogoyavlenskaya & M. Bogoyavlenskaya, 2013) notes that the concept of “giftedness” can be revealed only within a systemic approach, understanding it as a systemic quality of the psyche that has the ability to develop throughout human life. At the same time, based on the opinion of B. Teplov, D. Bogoyavlenska notes that talent cannot be perceived as a simple sum of abilities: compared to abilities, it appears as a new quality.

O. Kulchytska (2007, p. 145) characterizes giftedness as a complex phenomenon that includes a set of cognitive, sensory and personal qualities of a person. According to the scholar, the concept of “giftedness” contains the following main components: a high level of intelligence, creativity, diligence and perseve-
rance, which, in her opinion, is the main quality of a person; it is a kind of “alloy” of desire to succeed, emotional passion and interest in the field of knowledge, the person is engaged in.

V. Moliako (Molyako, 2002) is a well-known researcher of the structure of creative talent, who characterizes the six main parameters of this structure. The first parameter includes the sphere of realization of giftedness, its predominant type; the second parameter outlines the sphere of expression of creativity; parameter III indicates intelligence; IV – the method and dynamics of activity; V – the spheres and levels of achievements; VI – the emotional coloring of the talent.

Therefore, solving the problem of the socio-pedagogical support of gifted students, identifying the socio-pedagogical factors, creating a social environment conducive to the development of creative talents of a person capable of independent creative activity, determine the relevance of our study.

The purpose of the article is to clarify the relationship between giftedness of an individual with certain features and personal characteristics, to outline ways to evoke giftedness in students.

In order to solve certain problems we used a set of research methods, which included: theoretical methods (analysis of philosophical, sociological, psychological and pedagogical literature, synthesis, comparison, systematization, generalization to substantiate the initial provisions of the study, identifying the nature and specifics of gifted students); empirical methods: purposeful pedagogical observation, questionnaire (using the method of R. Ovcharova), survey (diagnosis by the method of “Motivation of professional activity” by K. Zamfir modified by A. Rean; a method that studies satisfaction with the profession, developed by V. Yadov), conversation, generalization of pedagogical experience, quantitative and qualitative analysis of the obtained results, which contributed to the study of the real state of the problem.

Presentation of the main material. An issue of special important in modern socio-pedagogical space is creating conditions for the development and self-realization of young people, releasing their creative potential and talents, based on social challenges and the prospects of our country entering the European Community. Having analyzed the achievements of the psychological and pedagogical sciences, we will consider it appropriate to define the talent of students as a holistic multifactorial model, which combines intellectual, creative abilities and personal qualities. Based on the results of a theoretical analysis of the research problem, we made a questionnaire, which included questions that provided an opportunity to find out the level of development of certain components of giftedness of university students.

The empirical study covered first- and fourth-year students of the Department of Psychology, Pedagogy and Social Work of Ivan Franko State Pedagogical University, Drohobych (total number of students 157).
The questionnaire contained 4 blocks of characteristics that were to be evaluated by students at different stages of the experiment.

The first block of the questionnaire contained general and personal questions (items 1–9), which are aimed at studying the prerequisites for the development of the relevant abilities of students.

The second block – motivation and value – (items 10–13) is aimed at studying the attitude to the profession, as well as the motives for its choice.

The third block of the questionnaire is aimed at studying the qualities and characteristics of the individual, which directly characterize the level of development of the giftedness components. A comparison of the initial data and the level of assessment and self-assessment of students at the end of the experiment allow us to draw conclusions about the presence (or absence) of dynamics in the development of these components of giftedness.

The fourth block – technological – (items 16–17) is aimed at studying the possibilities of the educational process in the university in the aspect of the development of the relevant components of gifted students.

A significant place in our study is dedicated to diagnosing the development level of motivation and professional orientation, by which we ascribed the students to different levels (creative, constructive, reproductive) and identified the group of students who could be called gifted. According to the researchers of giftedness, an important aspect of working with a gifted person is to determine the hierarchy of his motives, which is a relatively stable mental formation. Formed in childhood, it changes little. From the point of view of giftedness, the dominance of motives related to the content of education is most desirable (focus on mastering new knowledge, facts, phenomena, patterns; focus on mastering the ways of acquiring knowledge, etc.). Therefore, when developing our questionnaire, we decided to choose the method of R. Ovcharova (2003), which is aimed at identifying the dominant type of motivation in choosing a profession. Table 1 presents the different types of this motivation depending on their significance for the respondents.

We used a level approach to assess the identification of the dominant type of motivation for choosing a profession. For this purpose 5 levels were defined: “5” – very strong influence; “4” – strong influence; “3” – medium influence, “2” – weak influence, “1” – no influence. Symbols: “I” – internal individually significant motives; “C” – internal socially significant motives, “+” – external positive motives, “–” – external negative motives.

As you can see, the most important factors were related to the content of education (the profession is close to a favorite school subject – 0.78–0.74), as well as opportunities to realize themselves in creative activities – 0.70–0.75. At the same time, the motivation for opportunities to show their creativity grows with the learning process and acquires the greatest manifestation in the final year.
### Table 1. Dominant types of motivation in choosing a profession by students of the Department of Psychology, Pedagogy and Social Work

<table>
<thead>
<tr>
<th>Item</th>
<th>Factors influencing the choice of teaching profession</th>
<th>Factor value</th>
<th>Ranging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Close to the favorite school subject</td>
<td>+</td>
<td>0.70</td>
</tr>
<tr>
<td>2.</td>
<td>Provides great opportunities to show creativity</td>
<td>I</td>
<td>0.67</td>
</tr>
<tr>
<td>3.</td>
<td>Corresponds to my abilities</td>
<td>I</td>
<td>0.66</td>
</tr>
<tr>
<td>4.</td>
<td>Usage of professional skills outside of work possible</td>
<td>+</td>
<td>0.64</td>
</tr>
<tr>
<td>5.</td>
<td>Benefits people</td>
<td>C</td>
<td>0.63</td>
</tr>
<tr>
<td>6.</td>
<td>Promotes mental and physical development</td>
<td>I</td>
<td>0.62</td>
</tr>
<tr>
<td>7.</td>
<td>Requires communication with various people</td>
<td>I</td>
<td>0.61</td>
</tr>
<tr>
<td>8.</td>
<td>Provides conditions for improving professional skills</td>
<td>C</td>
<td>0.61</td>
</tr>
<tr>
<td>9.</td>
<td>Using my abilities to rule people</td>
<td>C</td>
<td>0.60</td>
</tr>
<tr>
<td>10.</td>
<td>Provides a developed sense of responsibility</td>
<td>C</td>
<td>0.59</td>
</tr>
<tr>
<td>11.</td>
<td>Attractive</td>
<td>I</td>
<td>0.57</td>
</tr>
<tr>
<td>12.</td>
<td>Allows getting a good result at once</td>
<td>C</td>
<td>0.52</td>
</tr>
<tr>
<td>13.</td>
<td>Prestigious, with a fairly high social status</td>
<td>–</td>
<td>0.50</td>
</tr>
<tr>
<td>14.</td>
<td>Can work close to home</td>
<td>+</td>
<td>0.44</td>
</tr>
<tr>
<td>15.</td>
<td>Parents like it</td>
<td>–</td>
<td>0.41</td>
</tr>
<tr>
<td>16.</td>
<td>The only job possible under the circumstances</td>
<td>–</td>
<td>0.40</td>
</tr>
<tr>
<td>17.</td>
<td>High pay</td>
<td>+</td>
<td>0.32</td>
</tr>
<tr>
<td>18.</td>
<td>Limited to the available facilities</td>
<td>–</td>
<td>0.30</td>
</tr>
<tr>
<td>19.</td>
<td>Requires moving to a new place of residence</td>
<td>+</td>
<td>0.27</td>
</tr>
<tr>
<td>20.</td>
<td>Chosen by my friends</td>
<td>–</td>
<td>0.23</td>
</tr>
</tbody>
</table>

According to the data presented in Figure 1, among the factors that influenced the choice of profession, internal individually significant and external positive motives prevail; internal socially significant motives and external negative motives became less important.

At the same time the greatest development is reached by the motives connected with closeness to a favorite subject (0.70), creative possibilities of professional activity (0.69), conformity to abilities of the student (0.66), an opportunity to apply the professional skills out of work (0.64) etc. Thus, the motivational complex of pedagogically gifted students is aimed at developing professional orientation, acquiring skills and studying subjects that contribute to this process.
Fig. 1. Factors influencing the choice of profession

Satisfaction with the profession was determined using the methodology developed by V. Yadov, where it is presented quantitatively in the form of an index of satisfaction with the profession (Raygorodskiy, 2002). This index can vary from -1 to +1, taking any value. A value of -1 indicates obvious dissatisfaction, +1 – complete satisfaction. To determine the satisfaction ratio, 11 inter-related questions are used, which determine the attractiveness factors of the profession. For each of the 11 factors, the significance factor (SF) is calculated by the following formula:

$$K_3 = \frac{n_+ - n_-}{N}$$

where N is the sample size (number of subjects), n + is the number of subjects who noted this factor in graph A, n- is the number of subjects who noted this factor in graph B. The most influential factors that are of high importance with all samples of students of different years, were: the ability to achieve social recognition, respect (70–80%), the possibility of self-improvement (60–80%), correspondence to their abilities (55–65%). At the same time, the importance of these factors tends to increase throughout the empirical study, which indicates an increase in students’ trust in their own pedagogical abilities and the possibility of self-realization in this type of activity.

Among the adverse factors that repulse able students from teaching, the most common are low wages (85%) and high workload, which causes fatigue (60%). To find out the degree of motivation of students’ professional activity, in our survey we used the method of K. Zamfir in the modification of A. Rean...
which is based on the concept of internal and external motivation.

Table 2. **Factors influencing job satisfaction (averages)**

<table>
<thead>
<tr>
<th>Sampling</th>
<th>Factors and their significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>1st year</td>
<td>Opportunity to achieve social recognition, respect (70%)</td>
</tr>
<tr>
<td>4th year</td>
<td>Possibility of self-improvement (80%)</td>
</tr>
</tbody>
</table>

It is known that the internal type of motivation means that the activity itself is important for the individual. If the motivation of professional activity is based on the desire to meet other needs, external to the content of the activity itself, then in this case we talk about external motivation. External motives themselves are divided into external positive and external negative. External positive motives are undoubtedly more effective and more desirable from all points of view than external negative motives. Most students noted that they enjoy the process and the result of pedagogical activities, can fully realize themselves in the work of the teacher, feel the need to achieve social prestige and respect from others. Other motives turned out to be much less significant.

Analyzing the results of diagnostics by the method of “Motivation of professional activity” by K. Zamfir in the modification of A. Rean, it should be emphasized that the motivational complex under research is a type of relationship between three types of motivation: internal (IM), external positive (EPM), and external negative (ENM). The best, optimal complexes include the following types of relations IM > EPM > ENM and IM = EPM > ENM. The worst motivational complex is the ratio of ENM > EPM > IM. We calculated the intensity indicators of each of the motivation types (internal (IM), external positive (EPM), and external negative (ENM). The results of the calculations are shown in table 3:
The general motivational complex can be represented by the inequality: IM (3.29) > EPM (2.42) > ENM (2.1), which belongs to the optimal motivational complex. Thus, it can be stated that most of the surveyed students consciously chose the teaching profession, using internal motives, which is characteristic of the possible manifestation of pedagogical talent. However, as we see, for the first year students the motivational complex can be considered more negative than for the fourth year students. For the 4th year, the indicators of internal motivation increase, and there is a certain increase in the value of negative external motivation. In general, the motivational complex of future professionals demonstrates a steady dynamic to the growth of positive motivation for the teaching profession.

In order to assess the effectiveness of forms, methods and tools of teaching, students were asked to determine which forms of work with university students are most conducive to the development of abilities. Among the most important ones were: creative contests (33.3%); national contests (23.3%); visualization lectures, making visual aids (20%); discussions (13.3%); role play games (10%), etc.

Therefore, by means of a set of methods aimed at studying the attitude of future professionals to the profession, as well as the motives for its choice, we found that:

- among the dominant types of motivation for choosing a profession the most important were the factors related to the content of education and opportunities to realize themselves in creative activities;
- most of the surveyed students consciously chose their profession, using internal motives, which is characteristic of the possible manifestation of pedagogical talent;
- the most influential factors that are of great importance for students were the ability to achieve social recognition, the possibility of self-improvement, correspondence to their abilities.

**Conclusions**

Our study of the development of gifted students once again revealed the presence of this problem, thus confirming its relevance. Based on the theoretical analysis of the psychological and pedagogical literature, we have clarified the essence of the category “giftedness”, identified its content components and criteria for formation. It can be argued that among the most important indicators of gifted-
ness is the level of formation of internal subjective psychological mechanisms that are manifested in a particular activity. The most common way to diagnose a talent is to look for talents among a large number of young people; strategy of individual diagnostics, identification of gifted student youth in concrete activity.

Theoretical analysis of scientific works of Ukrainian and foreign researchers on giftedness leads to the conclusion that there is no single definition of giftedness, researchers have studied only some aspects, in particular, that the development of giftedness occurs throughout life, and giftedness is an integrative quality. And yet there is no research that would comprehensively cover the problem of educational work with gifted university students in Ukraine. A creative use of the achievements of our predecessors will contribute to the development of higher pedagogical school, development of abilities and talents of an individual. The best achievements of the past should be filled with modern scientific content, and promising for further research are the choice of ways and forms of work of higher education institutions of Ukraine, which will help Ukraine reach the world level in education, science and industry.

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