

РОЗДІЛ ІІІ. ПРОБЛЕМИ ПОРІВНЯЛЬНОЇ ПЕДАГОГІКИ

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THE TERMINOLOGICAL TOOLKIT OF COMPARATIVE PEDAGOGICAL RESEARCH OF GIFTED STUDENTS' EDUCATION IN THE UNITED STATES, CANADA AND THE UK

The article is aimed at revealing the approaches to defining giftedness and gifted in the USA, Canada and the UK.

The following research methods were used: terminological analysis with the help of which the essence of the basic concepts is defined; comparative analysis aimed at defining common features and differences in the approaches to defining giftedness and gifted education in the studied countries.

It is emphasized that the definition of "giftedness" and "gifted", presented in the official documents of the USA, Canada and the UK, often differ from the definitions formulated by leading researchers of the studied countries. It is found out that in order to define the studied category of children and youth foreign researchers often use two concepts – "giftedness" and "talent". It should be noted that the views of the theorists on the relationship of these concepts in the definition of the studied category differ significantly.

The requirements to the definition of giftedness, proposed by a well-known American theorist of gifted and talented education J. Renzulli are highlighted, namely: 1) the definition should be based on evidence from scientific research that contains the characteristics of gifted individuals; 2) the definition should provide guidance in the identification process in this category of children and youth; 3) the definition should guide and be logically related to existing practice; 4) the definition should synthesize the research that shows its validity

On the basis of analysis of the research works of foreign theorists of gifted and talented education and documents of the state education authorities of the USA, Canada and the UK the main types of giftedness are identified, in particular: 1) intellectual giftedness; 2) specific academic aptitude (math, language, etc.); 3) technical design talent; 4) musical and performing talent; 5) artistic talent; 6) sports talent; 7) creativity; and 8) leadership.

The basic concept of "giftedness", under which in our study we understand natural inclinations and abilities (intellectual, specific academic, technical-design, musical-performing, artistic, sports, creative and leadership), which are manifested in high achievements, and the potential for such achievements, is clarified.

The prospects for further research are seen in the revealing the peculiarities of the outlined types of giftedness.

Key words: *giftedness, gifted education, gifted student, USA, Canada, UK.*

Introduction. Gifted education nowadays has become one of the central issues of national educational policies in different countries. At the same time, attention to this problem has been paid since ancient times. The first attempts to nurture outstanding talents for the good of were made in ancient civilizations: Ancient Greece, Rome, China and Japan. Since that time there has

been no agreement on the understanding of the essence of giftedness among the scholars – philosophers, theologians and teachers-practitioners. Nevertheless, modern pedagogical thought of the USA, Canada and the UK contains a great number of research works on giftedness and gifted education.

Analysis of relevant research. The experience of foreign countries (Austria, Belgium, Belarus, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Israel, Japan, Kazakhstan, Poland, Turkey, Spain, Switzerland) in gifted education is studied by such native researchers as O. Antonova, I. Babenko, O. Bevz, O. Bocharova, A. Chychuk, N. Drobotenko, M. Halchenko, I. Holod, Yu. Hotsuliak, Ya. Kulchytska, M. Milenina, L. Popova, A. Sbruieva, V. Stryghalkovska, P. Tadeev, N. Telychko, V. Volyk, S. Yermakov and others. At the same time the comparative study of the gifted education theoretical research foundations in the USA, Canada and the UK has not been conducted yet.

Research methods: *terminological analysis* with the help of which the essence of the basic concepts is defined; *comparative analysis* aimed at defining common features and differences in the approaches to defining giftedness and gifted education in the studied countries.

Aim of the study is to reveal the approaches to defining giftedness and gifted in the USA, Canada and the UK.

Results. In modern conditions the definition of giftedness is an extremely complex problem, because there is no consensus on this issue among the educational policy makers, researchers and teachers-practitioners. The definitions of giftedness presented in the official documents reflect the attitude of society to this category of citizens, and the peculiarities of their state support. In this context it should be stressed that understanding of the essence of state support for gifted children and youth, as well as giftedness itself, in Ukraine and the studied countries differ greatly.

According to the Law “On Basic Foundations of State Support of Gifted Children and Youth in Ukraine” the gifted child is a “child under the age of 16, who is the winner of the city, regional, national or international Olympiads, contests or competitions, and has an official written confirmation of such victory. Also a child can be considered gifted if he is awarded a gold medal for excellent achievements during his/her study in general secondary school; a child who took part in at least three all-Ukrainian or international Olympiads, contests or competitions, and has an official confirmation of such participation” [1]. Based on this definition, we can state that in our country at the state level dominates a results-oriented approach to the definition of giftedness, in the frames of which most gifted and talented children are not recognized and, accordingly, do not receive any support.

On the contrary, in such countries as the USA, Canada and the UK dominates the personality-oriented approach to the definition of giftedness. In addition, in the studied countries along with the term “gifted” the term

“talented” is used. According to the definition given by the Department for Education and Skills (UK) in the document “Excellence in Cities” (2004), the term *gifted* describes learners who have the ability to excel academically in one or more subjects such as English, drama, technology; *talented* describes learners who have the ability to excel in practical skills such as sport, leadership, artistic performance, or in an applied skill [6]. In the guidance “Effective Provision for Gifted and Talented Students in Secondary Education” produced jointly by the National Academy for Gifted and Talented Youth and the Department for Children, Schools and Families (UK) is stated that in comparison to their peers, when engaged in their area of expertise, gifted and talented young people tend to: show a passion for particular subjects/areas of interest and seek to pursue them; master the rules of a domain easily and transfer their insights to new problems; analyse their own behaviour and hence use a greater range of learning strategies than others; make connections between past and present learning; demonstrate intellectual curiosity; show intellectual maturity and enjoy engaging in depth with subject material; actively and enthusiastically engage in debate and discussion on a particular subject; and produce original and creative responses to common problems [6].

In the United States, state support for gifted and talented students is carried out at the national, state and district levels. 32 states have their own laws regarding education and pedagogical support of gifted and talented students, in 12 states there is no regulatory support of the state level, the responsibility for this lies with the school district and educational agencies at the local level, in 6 states education institutions are guided by Federal legislation and receive support directly from the Federal budget. Most of the states when developing their own definition of “gifted” was guided by the definition presented in the 1993 report “National Excellence: A Case for Developing America’s Talent” which refers to “children or youth with outstanding talent who perform or show the potential for performing at remarkably high levels of accomplishment when compared to others of the same age, experience, and environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields” [15, 22].

In Canada each province also provides support to gifted and talented on the basis of relevant legislation. The legislation of Canadian departments of education contains definitions of giftedness, which are similar to American ones. For example, the Nova Scotia Department of Education and Culture use the term “gifted” to the students who give evidence of outstanding performance capability in areas such as intellectual, creative, artistic, or leadership or in specific academic fields” [16].

As noted above, the definition of “giftedness” and “gifted”, presented in the official documents of the USA, Canada and the UK, often differ from the

definitions formulated by leading researchers of the studied countries. In this context, special attention should be paid to requirements which a well-known American theorist of gifted and talented education J. Renzulli put forward: 1) the definition should be based on evidence from scientific research that contains the characteristics of gifted individuals; 2) the definition should provide guidance in the identification process in this category of children and youth; 3) the definition should guide and be logically related to existing practice; 4) the definition should synthesize the research that shows its validity [17].

We agree with American scientists G. Davis and S. Rimm, that there is no universal definition of “giftedness”, as different education theorists in their research works appeal to different aspects of this phenomenon [2].

The research review on this issue allows us to conclude that in order to define the studied category of children and youth foreign researchers often use two concepts – “giftedness” and “talent”. It should be noted that the views of the theorists on the relationship of these concepts in the definition of the studied category differ significantly. So, J. Davidson [3], J. Renzulli [17] and R. Sternberg [18] don't use the concept “talent”, but most foreign researchers use the concepts “giftedness” and “talent” as synonyms, for example, in the widely known definition of gifted students, presented in the report “Education of the gifted and talented” (1972), better known as Marland Report. According to this definition, gifted are children or youth with outstanding talent who have the potential to high achievements in comparison with other students of the same age and social status. These children and youth exhibit high performance in intellectual, creative and/or artistic areas, possess outstanding leadership potential, or have significant achievements in specific subject fields” [14, 26].

On the contrary, in Jacob K. Javits Gifted and Talented Students Education Act (1988) [13] the very definition of the studied group of children includes both concepts, where the “gifted and talented students” means children and youth who demonstrate ability for high performance in intellectual, creative, artistic areas and specific subject areas or high leadership potential, and require services or activities not normally provided by the schools for the most complete development of such capabilities [13].

In some researches, talent is defined as a component of giftedness, for example, J. Feldhusen in “A conception of giftedness” argues that “the second component of giftedness is talent” [7, 113]. The same vision of talent (as a component of giftedness) is presented in the work of American researchers headed by P. Haensly “Giftedness: coalescence, context, conflict, and commitment)”: “giftedness encompasses a wide set of abilities, talents and inclinations” [Haensly, 1986, p. 131]. In his turn D. Feldman identifies talent with potential and giftedness with achievement, claiming that “talent from the standpoint of cognitive developmental theory is the potential for constructive interaction between different aspects of an experience... If these processes of

interaction lead to high levels of achievements, then it is advisable to talk about giftedness” [8, 287]. Unlike D. Feldman, a leading theorist in the field of psychology of giftedness A. Tannenbaum offers the following definition of giftedness: “realizing the fact that developed talent exists only in adults, giftedness in children implies a potential to become a future famous performers or exemplary producers of ideas” [19, 33]. In contrast to the mentioned above researchers, K. Heller defines *giftedness* (emphasis added – M. B.) as “individual cognitive and motivational potential – as well as the social and cultural conditions – to achieve excellent results in solving complex theoretical and/or practical problems in one or more areas, such as mathematics, languages, art” [12].

Despite the diversity of definitions that exist in academic discourse, their authors consciously or subconsciously distinguish between early forms of outstanding ability, that are innate to a certain extent and are usually detected in childhood, and fully developed adult forms of extraordinary abilities. By a remark of F. Gagné, you can show the difference between these forms of abilities manifestation through the following pairs of terms: potential/achievement ability/implementation and promise/execution. The author stresses the need for clear delineation of these terms, offering to understand the abilities as natural inclination in a certain area, and achievements as skills in a particular area of talent, which are being systematically developed [9].

In his “Differentiated Model of Giftedness and Talent”(DMGT), the famous Canadian researcher F. Gagné differentiates between the concepts of “giftedness” and “talent”. So, giftedness describes the availability and use of untrained and spontaneously expressed natural abilities (which are often referred to extraordinary powers and gifts), in at least one area of abilities, in such volume that allows a person to enter into 10 % of the capable peers. Talent, in turn, requires outstanding abilities (or skills) that are being systematically developed, and knowledge in at least one area of human activity in such volume that allows a person to enter 10 % of the capacity of peers who are or were active in a particular sphere or spheres [9, 120].

It should be noted that definitions of giftedness of different authors cover components of giftedness in different ways. For example, researchers A. Ziegler and K. Heller identify the following components of giftedness, calling them factors of talent: intellectual abilities (linguistic, mathematical, technical design etc.); creativity; social competence; musical ability; artistic ability; psychomotor skills; practical intelligence [20].

These definitions have several common characteristics, in particular:

- both definitions relate to human abilities;
- both definitions are normative in the sense that they characterize individuals who differ from the norm or average;
- both definitions characterize individuals as “non-normal” because of their unusual behaviour.

In their turn, American theorists in the field of gifted and talented education G. DeHaan and R. Havighurst in the structure of giftedness identify the following components:

- *intellectual ability* – verbal, numerical, spatial memory, logical thinking;
- *creative thinking* – the ability to recognize a problem, flexibility of thinking, ability to create original ideas or products, finding new ways to use old objects or materials;
- *research skills* – skills of working with numbers and algebraic symbols, mathematical reasoning, interest in the natural world, the ability to apply scientific methods;
- *social leadership* – the ability to help the group achieve its goals and to improve human relations within the group;
- *mechanical skills or “crafts skills”* – manipulative skills, spatial ability, visual perception of the samples, details, ability to find common and distinctive features – are manifested in the field of fine arts, natural sciences and engineering;
- *talents in the arts* (visual, literary and performing) [5].

Unlike previous researchers, a prominent American scientist, and the author of the theory of multiple intelligences H. Gardner considers the structure of giftedness as a unity (multiple intelligences), distinguishing the following types:

- *verbal-linguistic intelligence* – involves the sense of language, effective skills of memorizing language material;
- *logical-mathematical intelligence* – refers primarily to such abilities as general and special logical mathematical thinking;
- *visual-spatial intelligence*, which involves a sense of space, spatial memory and spatial thinking;
- *bodily-kinesthetic intelligence* – covers a number of psychomotor abilities that are required for such specialists as athletes or dancers;
- *musical-rhythmic intelligence* – involves not only musical competence in the narrow sense, but also the mood and emotions;
- *intrapersonal intelligence* – involves sensitivity to the inner sensory world of the individual;
- *interpersonal intelligence* – is the capacity to feel the needs of others;
- *naturalistic intelligence* encompasses the ability to understand and study living nature;
- *existential intelligence* – manifests itself in such areas as mythology, art, science, philosophy;
- *spiritual intelligence*.

The author of the theory of multiple intelligences emphasizes that the latter two types of intelligence work in the case where there are no (or insufficient) empirical evidence [10].

The analysis of the research works of foreign theorists of gifted and talented education and documents of the state education authorities of the USA, Canada and the UK allowed us to identify the main types of giftedness, in particular: 1) intellectual giftedness; 2) specific academic aptitude (math, language, etc.); 3) technical design talent; 4) musical and performing talent; 5) artistic talent; 6) sports talent; 7) creativity; and 8) leadership.

Taking into account the above mentioned, we consider it appropriate to clarify the basic concept of “giftedness”, under which in our study we understand natural inclinations and abilities (intellectual, specific academic, technical-design, musical-performing, artistic, sports, creative and leadership), which are manifested in high achievements, and the potential for such achievements.

Conclusions. Defining giftedness is an actual problem of nowadays because there is no agreement on this issue among both native and foreign researchers. In our study we made an attempt to outline the structural components (types) of giftedness and propose our own definition of this phenomenon based on the analysis of the research works of foreign theorists of gifted and talented education and documents of the state education authorities of the USA, Canada and the UK.

Considering the importance of this problem the prospects for further research are seen in the revealing the peculiarities of the outlined types of giftedness.

LITERATURE

1. Закон України «Про основні засади державної підтримки обдарованих дітей та молоді на Україні» [Електронний ресурс]. – 1 січня 2005. – Режим доступу : <http://www.zakon.rada.gov.ua/>
2. Davis G. A. Education of the gifted and talented / G. A. Davis, S. A. Rimm. – Boston, MA : Allyn & Bacon, 2004. – 534 p.
3. Davidson J. E. The role of insight in giftedness / J. E. Davidson // Conceptions of giftedness / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 201–222.
4. DCSF (Department for Children, Schools and Families). Effective Provision for Gifted and Talented Students in Secondary Education. – Nottingham, 2007. – 42 p.
5. DeHaan R. G. Educating the gifted / R. G. DeHaan, R. J. Havighurst. – Chicago : University of Chicago Press, 1957. – 257 p.
6. DfES (Department for Education and Skills). Excellence in Cities [Electronic resource]. – London : HMSO, 2004. – URL : www.dfes.gov.uk.
7. Feldhusen J. F. A conception of giftedness / J. F. Feldhusen // Conceptions of giftedness / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 112–127.

8. Feldman D. H. Giftedness as a developmentalist sees it / D. H. Feldman // *Conceptions of giftedness* / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 285–305.
9. Gagné F. Transforming gifts into talents : the DMGT as a developmental theory / F. Gagné // *High Ability Studies*. – 2004. – Vol. 15, № 2. – P. 119–147.
10. Gardner H. The role of crystallizing experiences / H. Gardner // *Developmental perspectives on the education of the gifted* / F. Horowitz, M. O'Brien. – Washington, DC : APA, 1985. – P. 74–102.
11. Haensly P. Giftedness : coalescence, context, conflict, and commitment / P. Haensly, C. R. Reynolds, W. R. Nash // *Conceptions of giftedness* / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 128–148.
12. Heller K. A. Perspectives on the diagnosis of giftedness / K. A. Heller // *German journal of psychology*. – 1989. – № 13. – P. 140–159.
13. Jacob K. Javits Gifted and Talented Students Education Act. Title IV, Part B of P.L. – 1998. – P. 100–297.
14. Marland S. P. Education of the gifted and talented : Report to the Congress of the United States by the U.S. Commissioner of Education and background papers submitted to the U.S. Office of Education / S. P. Marland (2 vols.). – Washington, DC : U.S. Government Printing Office, 1972. – (Government Documents Y4.L 11/2: G36).
15. National Excellence : A Case for Developing America's Talent / P. O'Connell-Ross and others. – Office of Educational Research and Improvement (ED), Washington, DC, 1993. – 42 p.
16. Nova Scotia Department of Education and Culture. Making the Arts Accessible to All Students : Report of the Ministers' Advisory Committee on Arts Education. – 1995.
17. Renzulli J. S. The three ring conception of giftedness : A developmental model for creative productivity / J. S. Renzulli // *Conceptions of giftedness* / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 53–92.
18. Sternberg R. J. A triarchic theory of intellectual giftedness / R. J. Sternberg // *Conceptions of giftedness* / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 223–243.
19. Tannenbaum A. Giftedness : a psychological approach / A. Tannenbaum // *Conceptions of giftedness* / R. J. Sternberg, J. E. Davidson (Eds). – New York : Cambridge University Press, 1986. – P. 21–52.
20. Ziegler A. Conceptions of giftedness from a meta-theoretical perspective / A. Ziegler, K. A. Heller // *International handbook of giftedness and talent* / K. Heller, F. Möns, R. Sternberg, R. Subotnik eds. – 2000. – P. 3–21.

REFERENCES

1. *Zakon Ukrainy "Pro osnovni zasady derzhavnoi pidtrymky obdarovanykh ditei ta molodi na Ukraini"* (Law of Ukraine "On the main foundations of gifted children and youth support in Ukraine") (2005). Retrieved from <http://www.zakon.rada.gov.ua/>
2. Davis, G. A., Rimm, S. A. (2004). *Education of the gifted and talented*. Boston, MA: Allyn & Bacon.
3. Davidson, J. E. (1986). The role of insight in giftedness. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 201–222). New York: Cambridge University Press.
4. DCSF (Department for Children, Schools and Families) (2007). *Effective Provision for Gifted and Talented Students in Secondary Education*. Nottingham.
5. DeHaan, R. G., Havighurst, R. J. (1957). *Educating the gifted*. Chicago: University of Chicago Press.

6. DfES (Department for Education and Skills) (2004). Excellence in Cities. London: HMSO. Retrieved from: www.dfes.gov.uk.
7. Feldhusen, J. F. (1986). A conception of giftedness. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 112–127). New York: Cambridge University Press.
8. Feldman D. H. (1986). Giftedness as a developmentalist sees it. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 285–305). New York: Cambridge University Press.
9. Gagné, F. (2004). Transforming gifts into talents: the DMGT as a developmental theory. *High Ability Studies*, 15 (2), 119–147.
10. Gardner, H. (1985). The role of crystallizing experiences. In F. Horowitz, M. O'Brien (Eds), *Developmental perspectives on the education of the gifted* (pp. 74–102). Washington, DC: APA.
11. Haensly, P. Reynolds, C. R., Nash, W. R. (1986). Giftedness: coalescence, context, conflict, and commitment. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 128–148). New York: Cambridge University Press.
12. Heller, K. A. (1989). Perspectives on the diagnosis of giftedness. *German journal of psychology*, 13, 140–159.
13. Jacob K. Javits Gifted and Talented Students Education Act. Title IV, Part B of P.L. (1998).
14. Marland, S. P. (1972). *Education of the gifted and talented: Report to the Congress of the United States by the U.S. Commissioner of Education and background papers submitted to the U.S. Office of Education* (2 vols.). Washington, DC: U.S. Government Printing Office. (Government Documents Y4.L 11/2: G36).
15. O'Connell-Ross P. and others (Eds). (1993). National Excellence: A Case for Developing America's Talent. Office of Educational Research and Improvement (ED), Washington, DC.
16. Nova Scotia Department of Education and Culture. (1995). *Making the Arts Accessible to All Students: Report of the Ministers' Advisory Committee on Arts Education*.
17. Renzulli, J. S. (1986). The three ring conception of giftedness: A developmental model for creative productivity. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 53–92). New York: Cambridge University Press.
18. Sternberg, R. J. (1986). A triarchic theory of intellectual giftedness. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 223–243). New York: Cambridge University Press.
19. Tannenbaum, A. (1986). Giftedness: a psychological approach. In R. J. Sternberg, J. E. Davidson (Eds), *Conceptions of giftedness* (pp. 21–52). New York: Cambridge University Press.
20. Ziegler, A., Heller, K. A. (2000). Conceptions of giftedness from a meta-theoretical perspective. In K. Heller, F. Möns, R. Sternberg, R. Subotnik (Eds), *International handbook of giftedness and talent* (pp. 3–21).

АНОТАЦІЯ

Бойченко М. Поняттєво-термінологічний інструментарій порівняльно-педагогічного дослідження освіти обдарованих школярів у США, Канаді та Великій Британії.

У статті висвітлено підходи до визначення понять «обдарованість» і «обдарований» у США, Канаді та Великої Британії. На основі аналізу наукових праць американських, канадських та британських учених і урядових документів досліджуваних країн подане власне визначення поняття «обдарованість», під якою мається на увазі сукупність природних задатків та здібностей (інтелектуальних,

специфічних академічних, технічно-конструкторських, музично-артистичних, художніх, спортивних, креативних і лідерських), що проявляються у високих досягненнях, та наявність потенціалу до таких досягнень.

Ключові слова: обдарованість, освіта обдарованих, обдарований школяр, США, Канада, Велика Британія.

РЕЗЮМЕ

Бойченко М. Понятийно-терминологический инструментарий сравнительно-педагогического исследования образования одаренных школьников в США, Канаде и Великобритании.

В статье освещены подходы к определению понятий «одарённость» и «одарённый» в США, Канаде и Великобритании. На основе анализа научных работ американских, канадских и британских ученых и правительственных документов исследуемых стран представлено собственное определение понятия «одарённость», под которым подразумевается совокупность природных задатков и способностей (интеллектуальных, специфических академических, технико-конструкторских, музыкально-артистических, художественных, спортивных, креативных и лидерских), что проявляются в высоких достижениях, и наличие потенциала к таким достижениям.

Ключевые слова: одарённость, образование одарённых, одарённый школьник, США, Канада, Великобритания.