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OVERVIEW OF STRATEGIES FOR RECOGNIZING CREATIVE POTENTIAL IN GIFTED LEARNERS

Summary.

The article provides an analytical overview of international approaches to identifying creatively gifted students. It examines the theoretical foundations of giftedness with a particular focus on creativity as a core component of gifted behavior. Drawing on major theoretical models, including the Differentiated Model of Giftedness and Talent (Gagné), the Three-Ring Model (Renzulli), and the WICS theory (Sternberg), the study highlights the central role of divergent thinking and creative potential in giftedness identification. The article reviews key diagnostic approaches used in Western educational practice, including standardized creativity tests (Torrance Tests of Creative Thinking, Remote Associates Test), expert-based assessment methods (Consensual Assessment Technique), creativity checklists, and rating scales such as the Gifted Rating Scale (GRS) and the Student Behavioral Characteristics Rating Scale (SRBCSS). Particular attention is given to the strengths and limitations of these instruments, including issues of validity, domain specificity, and reliance on evaluator expertise. The study also synthesizes empirical findings from international research, demonstrating the complexity of creativity assessment and the influence of cognitive, motivational, and personality factors such as openness, persistence, and problem-solving ability. Cross-cultural perspectives from the United States, Europe, Turkey, Korea, and other regions are analyzed to show variations in identification practices and educational approaches. The results indicate that no single method is sufficient for accurately identifying creatively gifted students. A multi-method approach combining tests, checklists, expert judgment, and behavioral observation is the most effective strategy. The article concludes that further adaptation of international diagnostic tools and the development of culturally sensitive assessment frameworks are necessary for improving gifted identification practices.

Keywords: *creatively gifted students; giftedness identification; creativity assessment; divergent thinking; gifted education.*

ОГЛЯД СТРАТЕГІЙ РОЗПІЗНАВАННЯ КРЕАТИВНОГО ПОТЕНЦІАЛУ У ОБДАРОВАНИХ УЧНІВ

Анотація.

У статті розглянуто міжнародні підходи до виявлення творчо обдарованих учнів. Наведено теоретичні засади обдарованості з акцентом на креативність як ключовий компонент. Спираючись на основні теоретичні моделі, зокрема Диференційовану модель обдарованості та таланту (Ф. Ганьє), Трьохкільцеву модель (Дж. Рензуллі) та теорію WICS (Р. Стернберга), у дослідженні підкреслюється центральна роль дивергентного мислення та творчого потенціалу в ідентифікації обдарованості. Описано діагностичні методи, зокрема тести креативності, експертні оцінки, чек-листи та рейтингові шкали. Автором узагальнено емпіричні дослідження різних країн. Показано, що найефективнішим є багатокомпонентний підхід. Обґрунтована необхідність адаптації інструментів дігностики до різних культурних умов.

Ключові слова: *творчо обдаровані учні; виявлення обдарованості; оцінка креативності; дивергентне мислення; навчання обдарованої дитини.*

Problem Statement. Every creatively gifted student has certain abilities, and skills above the average level, as expected among their peers. Specialists who identify gifted students are responsible for identifying talent and possess professionally and ethically competent, motivated, and focused specialists who continually develop the skills necessary for their work. Teachers and parents typically recognize gifted children early or even early. Giftedness as a phenomenon is frequently encountered in the scientific literature. Scientists emphasize the importance of early identification of gifted students. We see the importance of this in creating special developmental conditions for talented students, which includes creating an individualized curriculum that comprehensively supports the full development of the gifted student's talent.

The **aim** of the article is to provide a comprehensive analytical review of contemporary international approaches to the identification of creatively gifted students, integrating the analysis of fundamental theoretical frameworks of giftedness with an evaluation of practical diagnostic instruments and substantiating the necessity of a multi-method approach in educational practice.

Analysis of Recent Research and Publications. According to recent research on this issue, divergent thinking is dominant in the majority of cases in the creative identification of giftedness among students. According to Western researchers [1], who have identified and assessed the creative component of personality as a component of giftedness, the assessment of creativity plays a key role in the identification of giftedness. Giftedness theories also incorporate creativity. For example, the "Differentiated Model of Giftedness and Talent" (DMGT) [2] conceptualizes giftedness as an innate ability (or abilities) in at least one dominant domain (intellectual, creative, social-affective, and sensorimotor) and talent as a demonstration of this giftedness. In particular, J. Renzulli [3] in his "Three Rings Concept" views giftedness as a development resulting from the interaction of ability, creativity, and dedication, significantly above average, with each characteristic playing a crucial role in the development of gifted behavior. Sternberg's model [4] conceptualizes giftedness as a synthesis of wisdom, intelligence, and creativity (WICS).

The purpose of our article is to provide an analytical review of global researchers' approaches to identifying creatively gifted students. Gifted identification systems in the United States are based on assessment of creative abilities [1]. It is interesting, in our opinion, that most Western articles devoted to creativity [5] do not provide a clear definition of the concept of "creativity". According to American researchers [6], divergent thinking is still a very prevalent used method for assessing creative abilities. Torrance's creative thinking tests [7] are among the most popular and are used to assess creative talent [4]. Torrance focused on divergent thinking as the basis of creativity and developed tests that paid special attention to assessing divergent thinking. The Remote Associates Test (RAT), although distinct from traditional divergent thinking tests, is considered to utilize divergent thinking skills. It is based on the associative theory that "creative thinking consists of the formation of new combinations from mutually distant associative elements that meet both given and unpredictable requirements" [8; p. 213]. Essentially, more creative people tend to make meaningful and useful associations between disparate concepts and ideas to a greater extent than less creative people. This test is often used because it is relatively easy to administer and evaluate. However, it should be noted that it is typically used as a measure of creativity, and is more strongly influenced by intelligence and verbal ability than most other indicators.

Another example of identifying creative talent is the Creative Attitude Test (CAT). It is based on the idea that the best way to detect creativity in a work of art, theory, or any other activity is to pool the assessments of experts in the field to create a general evaluation of creative products [9]. Respondents are asked to create a specific product of their own creation, after which experts independently evaluate the creativity of these products. Poetry, collages, and short stories are often evaluated in CAT studies. This test does not have standardized scores, as it only allows for comparative evaluation among participants. This method is widely used in creativity research and much less frequently in practical activities, such as in schools. However, creativity can vary greatly across domains or even within tasks within the same domain [10]. Therefore, CAT ratings may not be the best approach for measuring creativity from a subject-specific perspective. CAT ratings can be used in classrooms to assess creativity for admission to special programs when the goal is to select individuals who have achieved certain creative achievements (e.g., in the arts).

Another method for identifying gifted individuals is the use of creativity checklists. Many different creativity checklists exist, most of which were developed for use in schools. Many checklists of creative abilities, such as gifted assessment scales, are sold commercially and are protected by copyright. One free assessment available is the "Creativity Checklist" [11], which covers characteristics indicative of a creative personality. Both cognitive and dispositional traits are assessed. The Creativity Checklist uses nine scales: quick thinking, flexible thinking, original thinking, persistent thinking, intrinsic motivation, curiosity or immersion in the topic, risk-taking, rich imagination, intuition, and complex problem solving. The Creativity Checklist is only suitable for comparisons within groups of students, and no criterion-related or predictive validity has been established [11].

The Gifted Rating Scale (GRS) was designed to be a convenient screening tool. It requires minimal training for assessment and interpretation, is psychometrically robust and reliable, and includes a standardized sample reflecting current demographic data from the U.S. Census [12].

The Student Behavioral Characteristics Rating Scale (SRBCSS) is widely used during the selection of students for gifted and talented programs in grades K-12 [6]. The SRBCSS includes 14 scales that help assess student abilities: learning, motivation, creativity, leadership, art, music, drama, planning, communication (clarity), communication (expression), mathematics, reading, science, and technology.

Researchers [13] note that when using creativity checklists, it is crucial that the professionals administering the tests be familiar with the students whose creativity is being assessed. Professionals should have the opportunity to observe and work with students in various areas for some time. The validity of creativity checklists depends on how well the professional knows the students, how deeply they understand the issues and the underlying theory of creativity. The objectivity of professionals in identifying creatively gifted students is also considered.

According to Western researchers, there is currently no creativity checklist for identifying creatively gifted students that would have criterion-related concurrent and predictive validity. Independent student assessment by several individuals is more reliable. Although checklists may not be the most reliable from a psychometric standpoint, they are more valuable for forming an assessment in combination with other approaches, helping to create a more complete map of students' creative abilities.

In the study by J. Ortiz et al. [14] the authors, based on Csikszentmihalyi's theory, found data suggesting that complexity is a hallmark of creative individuals, even if this may involve demonstrating opposing attributes at different points in their lives. In this context, emotional instability can be justified as a trait associated with creativity, but it is important to consider that one of the impaired aspects is openness and sensitivity, which can lead to suffering. The essence of a student with creative talent was identified, after which they concluded that conscientious children are distinguished from others by their hard work, interest, and persistence. These personality traits are closely related to the characteristics that Sternberg and Lubart [15], as well as Lopez Martinez and Navarro [16], propose to define creative individuals: they tend to be persistent, enterprising, passionate, and enjoy learning.

The researchers found that openness, another personality trait, correlated with creativity in the sample. It was also established that openness emerges as a statistically significant predictor of learning ability during the developmental period. That is, individuals who are more open to experience, more nurturing, and display cultural interests, demonstrate a more positive attitude toward learning, and exhibit greater ability and motivation to learn, which explains their achievements during their school years, and therefore a more creative approach [14]. According to research by Turkish scholars [17], the essential characteristics of gifted individuals include leadership, wisdom, humor, problem-solving ability, and creativity. Turkish researchers often use metaphors such as "gold mine" and "diamond" to define gifted individuals. It is worth noting that in Turkey, various programs exist to meet the educational needs of gifted students, such as special schools, after-school programs, resource rooms, and children's universities. Recently, many original tools have been developed to identify talented students. It is important that the differentiated curricula for gifted students developed by Turkish scientists have proven effective in this country. Among Turkish studies on giftedness, there are some that examine teachers' and teacher candidates' attitudes toward gifted students. Akar and Şengil-Akar [18] studied teachers' attitudes toward gifted students. According to the results of this study, teachers believe that gifted students have at least one area in which they are talented. Gifted students are characterized by being less sociable, and their actions often differ from those of their peers. However, further analysis revealed that teachers were unable to rationally explain this difference. For example, only 18,1 % were able to identify gifted students as interesting, and 13,5 % as creative. Researcher Ozsoy [19] studied the perceptions of teachers working in science and arts centers (SACs). His findings showed that teachers view gifted students as: hard-working; mysterious and difficult to understand; requiring appropriate training; precious; different from their peers; and individuals with outstanding abilities and a refined nature. It should be noted that in Turkey, perceptions of gifted individuals have been primarily shaped by the country's culture.

Thus, traditional IQ tests or achievement tests may not reveal the full potential of gifted students. Creativity tests, divergent thinking tests, and creativity checklists provide a more comprehensive understanding of an individual's general abilities. Furthermore, according to Nguyen and Ryan [20], some respondents from minorities (or women) may be at risk of stereotypical reactions to traditional tests. An interesting study by Korean scientists [21] focused on the identification of gifted students. According to the results of the study, students identified as gifted typically demonstrate higher intelligence and a greater commitment to a particular activity than their peers, but do not differ from their peers in creativity, according to J. Renzulli's three-ring concept of giftedness.

Western researcher Petersen [22] combined the results of 130 studies published between 1975 and 2011 in her study. They showed that boys are 1.19

times more likely than girls to be identified as gifted and enrolled in gifted programs. A rather interesting finding was that boys were more likely than girls to participate in summer gifted programs. Boys were found to be more gifted than girls when IQ scores or standardized test results were used. According to the results of this study, small gender differences support the gender similarity hypothesis. Accordingly, this hypothesis suggests that the behavior of boys and girls will often be similar.

Let us consider research by Arís, Gutiérrez, and Cano [23] on gifted students in Southern Europe. The study involved students aged 12–16. The researchers examined the relationship between creativity and high ability, and also determined how creativity manifests itself in more capable students. The results of the study established that students with high ability achieve higher results in both the imaginative-creative and scientific-creative dimensions. Thus, a significant relationship was discovered between creativity and high ability, and it was proven that students with high ability require the educational support necessary for the development of their talent.

Another example of identifying artistically inclined students in visual arts education is the research of Croatian colleagues [24]. The purpose of this study was to assess how teachers identify artistically gifted students. The results showed that participants were familiar with the characteristics by which they could recognize gifted children. Statistically significant differences in identifying gifted students were also confirmed, depending on the teachers' experience and level of educational preparation. Indeed, more educated teachers, but with less experience, were less successful in identifying gifted students than their more experienced, but less educated colleagues. This led the researchers to conclude that teacher experience is an important factor in identifying gifted students.

Regarding the personality of a creatively gifted student, it should be noted that researchers [24] argue in their studies that children gifted in the visual arts see the world differently. They encode visual information more precisely and see the world as a set of forms and visual characteristics rather than a set of definitions. Scientists also note that typical young children, when drawing, show objects and the world as they see and understand them, without revealing the actual visual characteristics of the world. The behavior of artistically gifted children is based on the rapid acquisition of artistic skills, techniques, and methods. The specific interests of these children lead to a passion for a particular artistic field and the accumulation of knowledge related to it, and their intellectual activity is based on the easy acquisition of basic artistic principles, meaningful phenomena, a high level of metacognitive knowledge and skills, and exceptional memorization abilities.

Let's look at the characteristics of a creatively gifted student in the visual arts. According to the results of a Croatian study of artistically gifted students [24], the most important differences between the artistic development of an average-level student and that of a gifted student should be clarified: 1) Students with average artistic development use memorized diagrams and forms. Artistically gifted students use memorized details of situations they have witnessed; 2) Artistically gifted students earlier master artistic techniques such as depicting perspective, shadow, and the like by conveying this third dimension in the drawing. They often embellish realistic drawings with details where colors and shapes vary, to allow for greater expression. While the ability to draw realistically may be an impressive skill of artistically gifted students, their work also demonstrates an exceptional aptitude for form and color, design. The realism in their works is reproduced through their ability to observe and remember visual details, as well as to complete structures. Artistically gifted students have well-developed spatial ability, expressed in several mutually beneficial abilities: precision in detail, combined with the ability to imagine precise views; and refined visual-motor coordination. These indicators are a "testament to visual thinking". Artistically gifted students have a strong sensitivity to composition and easily master the language of fine art – all of this develops through experience, practice, and the reduction of objects in a new light, ultimately crystallizing as a sense of harmony [24].

Conclusions. Thus, identifying gifted and talented students worldwide has been and remains a contentious issue in the field of giftedness. In some cases, identifying creatively gifted students requires the involvement of experienced specialists (experts, artists). In summary, we note that some of the methods for identifying creatively gifted students discussed above could be useful in domestic practice for diagnosing creative talent. We see potential for further research in adapting Western tests for identifying creative talent, such as creativity checklists and creative abilities, for use in Ukrainian realities.

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