

PEDAGOGICAL FRAMEWORKS FOR THE HIGH-APTITUDE STUDENTS: IMPLEMENTING INDIVIDUALIZED EDUCATIONAL APPROACHES BASED ON CONTEMPORARY PSYCHOPEDAGOGICAL MODELS

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Abstract

This paper addresses the imperative of implementing an individualized educational approach for highly able and gifted students, highlighting their status as an invaluable yet frequently underserved socio-educational resource. Utilizing a comprehensive theoretical framework, the study examines the evolution of intelligence paradigms, contrasting traditional psychometric measures with Howard Gardner's Theory of Multiple Intelligences and Daniel Goleman's model of emotional intelligence. Furthermore, the paper analyzes contemporary operational models, specifically J.S. Renzulli's Three-Ring Model of Giftedness and F. Mönks' Model of the Dynamics of Excellence in Adolescence, to emphasize the dynamic interplay between native potential, intrinsic motivation, creativity, and macro-environmental factors such as family, school, and peers.

Special attention is dedicated to identifying the unique cognitive and metacognitive characteristics of gifted children, alongside the psychobehavioral challenges arising from developmental heterochrony, including emotional hypersensitivity and social maladjustment. To mitigate problematic classroom behaviors and prevent academic disengagement, this study outlines evidence-based methodological benchmarks for educators. These strategies encompass qualitative curriculum enrichment, systematic differentiation, telescoping, and the creation of specialized peer groups to support holistic development. Ultimately, the paper argues that cultivating exceptional potential requires a rigorous, long-term national strategy, specialized teacher training, and a robust collaborative partnership between parents and formal educational institutions to ensure that every talented student can achieve self-actualization.

Keywords: gifted students, individualized education, developmental heterochrony

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Introduction

According to estimates by the Gifted Edu Center, there are approximately 200,000 gifted children under the age of 15 in Romania—representing 6% of the total school-age population. They constitute an invaluable educational resource, endowed with above-average abilities that could enable them to develop into prominent figures in their fields of interest—future leaders or innovators capable of changing the course of society.

Social science experts explain that the term "gifted" is sometimes used inaccurately. In common parlance, a gifted child is understood to be one with above-average intelligence (IQ > 130) across all dimensions: fluid intelligence (logic), crystallized intelligence (linguistic), processing speed, and working memory.

Research over the last few decades has altered perceptions regarding gifted children. Psychologist Howard Gardner (1980, 1983) of Harvard University (USA) was the one who shattered stereotypes concerning the nature of intelligence, challenging the prevailing view that intelligence was unidimensional and measurable solely through IQ tests (such as the Stanford-Binet test). Gardner demonstrated that while these tests measure academic performance in linguistic, logical, and mathematical domains, intelligence is multifaceted and can manifest in other areas as well. His ideas—which quickly gained renown—are outlined in his "Theory of Multiple Intelligences" (Frames of Mind, 1983), in which he posits the existence of nine distinct forms of intelligence (1991, 1993, 2005): linguistic intelligence; logical-mathematical intelligence; musical/rhythmic intelligence, visual-spatial intelligence, naturalist intelligence, bodily-kinesthetic intelligence, intrapersonal and interpersonal intelligence, and existential intelligence. According to his theory, a person can be gifted with any of the listed types of intelligence without being exceptional in the others.

Another specialist, Daniel Goleman (1995), complements the previous theory by arguing that IQ is by no means the necessary and sufficient condition for social and professional success. Aspects related to emotional and relational intelligence are key factors for social success, complementing academic intelligence.

Therefore, to establish clear conceptual distinctions, we offer the following clarifications:

- "giftedness" is a restrictive concept, referring to individuals with high or above-average IQs (approximately the top 5% of the population);

- in line with new psycho-pedagogical theories, we prefer the more general terms "children with exceptional abilities," "children with high aptitudes," or "talented children." Indeed, the contemporary pedagogical terminology employs a multitude of terms to designate talent or exceptional aptitude displayed by a person at various ages: "capable of high performance," "child prodigy," "precocious," "gifted," and "genius."

- similarly, in Anglo-Saxon literature, the term "giftedness" is increasingly being replaced by "high ability" and "talent"—concepts that best align with contemporary theoretical models in psychology and pedagogy. The rationale for choosing these semantic distinctions is found in the following quote:

"The concepts of talent, excellence, high aptitudes, and above-average aptitudes have the advantage of designating the phenomenon of exceptionality as it manifests in any field of socially useful human endeavor. They capture the probabilistic, virtual dynamics of performance potentials that exceed the statistical average." (Crețu C., 2020)

Literature Review (Theoretical Foundation)

Among the theoretical models explaining high aptitude, one model stands out as highly regarded by specialists worldwide: J.S. Renzulli's (1986) "Three-Ring Model of Giftedness." This model identifies the general and specific factors influencing high performance, concluding: "Gifted behavior consists of manifestations reflecting an interaction among three fundamental clusters of human traits: above-average general and/or specific aptitudes, high levels of task commitment, and high levels of creativity. Gifted and talented children possess—or are capable of developing—this composite of traits and applying them to any area of potential performance. Children who exhibit, or are capable of developing, an interaction among these three clusters of traits require a wide variety of educational opportunities and services not typically provided by current instructional programs" (Renzulli, 1986).

Building upon Renzulli's theory, the Dutch professor F. Mönks proposed the "Model of the Dynamics of Excellence in Adolescence." The proposed modifications include:

- task commitment was replaced by "motivation," a concept that—in addition to commitment—encompasses risk-taking, future perspective, anticipation, planning, and emotional factors;

- the criterion of above-average ability was replaced by "remarkable abilities in specific domains"; He asserts that giftedness involves aspects related to personality and environment, and that individual development during adolescence is interpreted holistically—as being determined by a dynamic network of biological, social, historical, and cultural circumstances—whereby any change to one component triggers a chain reaction affecting all others across multiple levels (see Fig. 1).

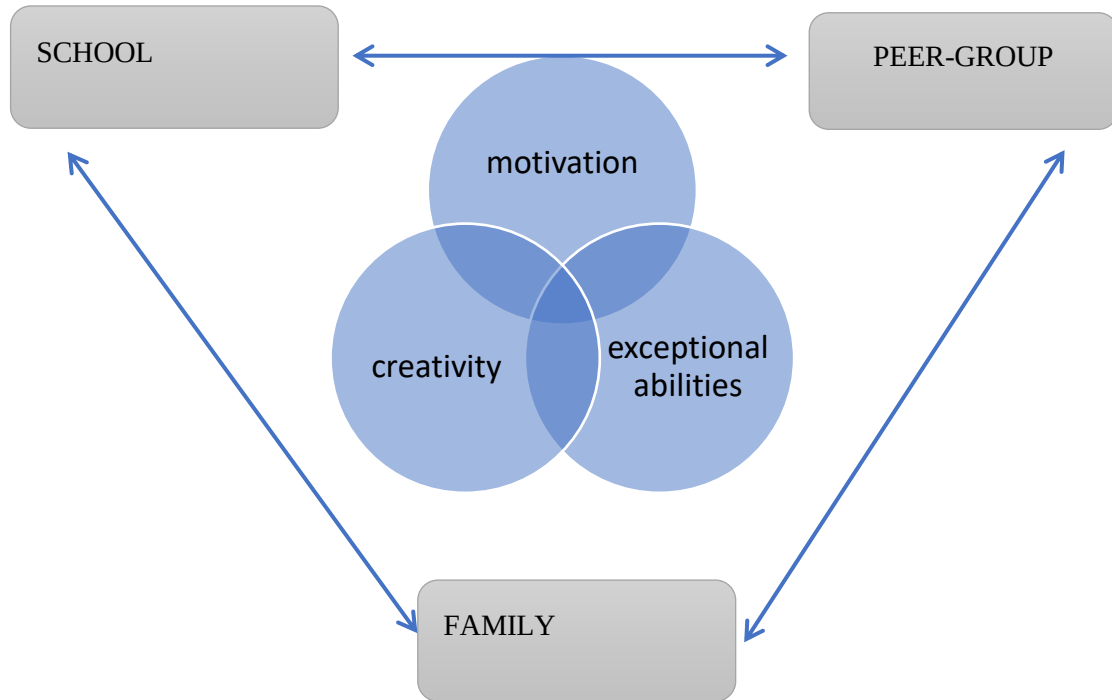


Figure 1. The model of the dynamics of excellence (F. Mönks)

Giftedness arises at the intersection of native potential, the child's intrinsic motivation (the engine that propels them to achieve their goals) and creativity (generated by relationships with children who have the same abilities). Only when the three factors coexist, then we can talk about giftedness leading to performance. Among the main factors that stimulate the full manifestation of children's intellectual potential are: the family (primary socialization framework), school and children of the same age. These factors make up the social environment in which children develop, being of crucial importance in achieving individual success.

The Role of Education and Educators in Developing the Potential of Students with Exceptional Abilities

We will refer to the educational factor, out of the desire to raise awareness among teachers of the need to identify and support children with high abilities. If the school wants to be truly inclusive, a "school for all", we must all be aware that these children represent students with special educational needs. They can only evolve through the effort and involvement of teachers, who must prepare for them an adapted educational path that stimulates their development, in accordance with their potential and talents.

Currently, there are lists of typical characteristics of gifted children in most publications on giftedness (for example in Davis, Rimm, 1998; Davis, Rimm, Siegle, 2013; Porter, 1999; Leyden, 1985, Clark, 2013; Webb, 2002). These can be useful for teachers to carry out the diagnostic process and thus identify children with superior abilities: According to the study carried out at the European Union level (2016, p. 13) the intellectual characteristics that denote superior intelligence include:

- “Verbal competence: gifted children use an advanced vocabulary from the earliest years. They present a fluent, descriptive oral language, early mastery of the phonetic code and grammar. They use words or expressions from other languages assimilated alongside their mother tongue since preschool age.

- The power of abstraction, conceptualization, generalization: together with high creativity, this ability helps children produce original products and ideas. Children love to play with words, they enjoy word puzzles and science experiments.

- Metacognitive skills: Gifted children have their own knowledge about when and how to use learning or problem-solving strategies. Metacognitive skills help children plan, monitor and evaluate their thinking. They often use more advanced learning styles than their peers.

- Critical thinking: Gifted children tend to challenge teachers, adults, or “experts.” They are skeptical of the information they receive out of the box and seek out additional information.

- Early reading skills: Most highly intelligent children are interested in letters and numbers. Some experts (e.g., R. J. Sternberg) suggest that the ability to read before a child is four years old is a sign of exceptional giftedness.

- Quick and accurate memory: Gifted children are brilliant observers and have a keen eye for detail. They prefer to memorize logically, based on understanding.

- Abundance of advanced information on many subjects: Gifted children have deep knowledge in the subjects they are interested in. They easily recall information and assimilate an impressive amount of knowledge, which can make them experts in their fields of interest. On the other hand, they may fail in subjects that they do not find compelling.”

To these general characteristics, there are added the particular ones, specific to each child, which reflect his/her uniqueness.

Specialists warn that sometimes, children with superior abilities can represent a challenge for teachers. "To have the intelligence of an adult and the feelings of a child combined in a child's body means to experience certain difficulties," said Leta Stetter Hollingworth, the American psychologist who pioneered the study of giftedness, in 1942.

Winebrenner (2001) associates different qualities with problems that they can generate in the relationship with the teacher:

Table 1. Problematic behavior examples of gifted students according to Winebrenner (2001)

General characteristic	Problematic behavior examples
Fast and high-quality learning process	- impatience; - nervousness towards the slower tempo of classmates; - dislike for repetitive exercises
Critical thinking, abstract conceptualization, high generalization skills	- corrects the teacher; - challenges the rules; - defends their beliefs;
Creativity	- cannot stand routine and repetitive tasks, which require the application of algorithms; - refuses to follow the teacher's instructions;
Advanced cognitive processes	- prefers the company of adults; - are rejected by peers;
Curiosity	- interrupts the teacher often; - needs to be stimulated by new activities;
Perfectionism	- stubbornness; - lack of tolerance for imperfections; - gets discouraged when criticized; - overly sensitive;

We can isolate three major psychobehavioral problems specific to gifted children and young people, direct effects of the heterochrony of development, described by Wallace (cited by Crețu, C., 1997):

- the feeling of being different from peers, through ideas in a certain field, through interests developed more deeply, more varied, more expressively;
- the burden of high sensitivity (“gifted children have extra survival problems, precisely because they are exceptional”);
- advancing mental levels for age, premature intellectuality are not accompanied by the same emotional and physiological precocity;

However, gifted children do not constitute a homogeneous population group. We cannot speak of a unique psychological profile in the case of gifted children, this being even risky. Only through adequate knowledge and through an examination of the most relevant differential characteristics, can the child be offered an adapted and individualized education.

Education is the central factor of development, the one that will stimulate the development of native potentialities and organize environmental influences to create a valuable personality for society. And the agents of formal education, the people specialized in education, are responsible for the quality and adequacy of the educational act to the individual and age peculiarities of the learners.

Highlights for teachers

The duty of the teacher towards each child in the class is to offer him/her an individualized development path, which will allow him/her to reach his/her maximum potential and to value his/her uniqueness.

Given that we have gifted children in the classroom, it is imperative that we make efforts to adapt to their needs and particularities. Several effective strategies, tested globally, represent true models of good practices, providing methodological benchmarks for teachers:

- adjusting the curriculum for gifted students - will include both qualitative and quantitative modification of all parts of the educational program. Enriching the curriculum ("enriched curriculum") means qualitative (quantitative) modification of specific parts (content, process, product, environment, assessment). These modifications will respond to the needs of the gifted student. General characteristics of curriculum adjustment include (Davis, Rimm & Siegle 2011):

- Challenge - cognitive targets at a higher level;
- Choice - possibility of creative problem solving;
- Interest – offering interesting and motivating tasks;
- Engagement – supported by appropriate teaching methods;

- differentiation and individualization – teachers should design tasks appropriate to students' interests and talents, allowing for active learning and stimulating different learning styles. Gifted students need to be challenged, involved in decision-making, given projects that stimulate their interest and motivate them;

- telescoping – the ability to advance faster than their peers, for example, to condense two years into one. The mental age of gifted children can be 1-2 years older than their peers, and as they grow, the gap can reach 6-7 years. By forcing a child with superior abilities to follow the class level, we condemn them to boredom and disinterest.

- stimulation of cooperation – gifted students should be included in learning teams with typical students, in order to stimulate the development of social skills and a harmonious personality;

- creating groups of gifted students, at the school level or at the local level. The opportunity for them to meet other children like them will help them to balance emotionally and stimulate them

intellectually. In these groups, a curriculum can be adopted to achieve excellence, preparation for olympiads and competitions, projects, thematic circles, etc.

- valorization – teachers must provide them with opportunities to contribute to the success of lessons, to bring information from their field of interest, to present their projects.

- holistic development – if a student has a talent or an inclination, it is not necessary for them to excel in all areas. Remember that it is not enough to stimulate the cognitive development of students, we must develop their personality harmoniously. A good counter-example is that of students with high academic performance, but who are not emotionally balanced or are not accepted by their peers, situations that can negatively influence their school results.

Conclusions

When we use the term “gifted” we refer to above-average intellectual abilities. Recent research shows that high, superior abilities can also manifest themselves on other levels, with people having multiple intelligences or “talents” in areas such as sports, arts, social, etc.

Children capable of high performance, gifted or talented need a stimulating educational environment and competent people to value their abilities. They need quality education, adapted to their particularities and interests, an adjusted curriculum and opportunities to test their abilities (such as projects or competitions).

At a societal level, it is necessary to establish a long-term strategy and allocate resources, to train competent teachers, to ensure that these talents are identified and valued.

It is said that it takes a whole village to raise a child. In the case of children gifted with exceptional talents, the greatest responsibility lies with parents and teachers, who must collaborate to give them the chance to reach their full potential.

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