

Pedagogical And Psychological Aspects Of Preparing To Work With Gifted Students Based On The Cluster Approach

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Received: 22 September 2025; **Accepted:** 14 October 2025; **Published:** 18 November 2025

Abstract: This article analyzes the pedagogical and psychological aspects of a methodology for preparing students to work with gifted children based on a cluster approach. In particular, the article examines methods of working with gifted children, support for talented youth in various fields, the classification of gifted children in the general practice of modern pedagogy, the importance of the cluster approach in working with gifted children, as well as methods of working with gifted children.

The article reveals the importance of enriching and supporting the talents of gifted students, as well as the pedagogical and psychological aspects that future teachers should pay attention to when working with gifted students based on the cluster approach.

Keywords: Gifted student, cluster approach, creative activity, communicative approach, development of abilities, expansion of worldview, pedagogical, psychological aspects.

Introduction: Around the world, special attention is given to the preparation and professional development of teachers in working with children who have various behavioral and personality disorders. Yet one may be surprised to see relative indifference—and in some cases even negative attitudes—towards gifted children. Speaking about shortcomings, problems, and difficulties is considered almost honorable, while discussing talent, ability, superiority in various forms, achievements, and success is often avoided and, at times, regarded as improper etiquette. This attitude is undoubtedly the result of a long-standing emphasis on uniformity in the education system and a negative approach to encouraging individual achievement. In reality, if more attention had been directed toward gifted learners, humanity might have achieved far greater progress, discoveries, and innovations.

There is a widespread belief that gifted children do not need adults' assistance, special attention, or guidance. However, due to their personal characteristics, such children are highly sensitive in evaluating their activity, behavior, and thinking. They perceive emotional signals more quickly and understand interactions and relationships more deeply. A gifted child tends to be critical not only of others but also of themselves.

Therefore, teachers working with gifted learners must be tolerant of criticism in general—and especially of criticism directed at themselves. Gifted children often interpret not words but any action as a form of rejection from others.

Relevance of the Topic

Working with gifted students requires teachers to possess a special set of competencies. As stated: "In France, those who aspire to become school administrators study in special institutions that prepare leaders in education... The requirements for school teachers in France are extremely high. Particularly in primary schools, a teacher must be a master of their profession—an excellent orator, artist, musician, athlete, organizer, and a model of exemplary behavior."

Working with gifted students through a cluster-based approach requires the teacher to assign a specific student to prepare information on innovations in the subject, as well as materials from the press and the internet related to the chosen topic. These materials must then be presented to classmates in an engaging form. This process helps develop learners' abilities to evaluate, criticize, analyze, draw conclusions, and express their opinions. According to a specially

designed curriculum and program, learners' personal characteristics and cognitive processes are developed during the sessions.

A gifted child's experience in a traditional, standard curriculum can be compared to that of an average child accidentally placed in a class designed for children with intellectual disabilities. In such an environment, the gifted student begins to adapt, trying in every possible way to resemble their classmates; after some time, their behavior becomes similar to that of the other children in the class. A teacher who has undergone special psychological and pedagogical training can easily distinguish a gifted student from an average one. Therefore, it is crucial that educational programs for gifted students be enriched through a specialized, cluster-based approach.

Review of Scientific Research on the Topic. The great philosopher Plato once said, "No one becomes a good person by accident." Indeed, a person who grows and develops into a well-rounded, promising individual achieves this because noble ideas were instilled in their consciousness at the right time and because effective pedagogical and psychological influences were applied during their upbringing. In recent years in Uzbekistan as well, social, psychological, pedagogical, and methodological conditions for the development of students' individual abilities—along with normative foundations for fostering their intellectual, creative, and spiritual potential—are being created. Priority has been given to "creating social, psychological, pedagogical, and methodological conditions for developing students' individual giftedness."

As a result of conducted scientific studies, specialists have identified the following principles for working with gifted children:

- the principle of differentiated and individualized instruction, including the development of a personalized program for each gifted student;
- ensuring a high degree of diversity in the opportunities provided;
- enhancing the role of extracurricular activities through clubs and workshops for gifted children;
- strengthening interdisciplinary connections during individualized instruction;
- creating conditions for collaborative work among students with the teacher's external supervision.

To educate students properly, one must first know them. The great Russian educator K.D. Ushinsky wrote in the preface to his major work "The Human as a Subject of Education":

"If pedagogy wishes to educate a person in all respects,

it must first know this person in all respects." . The essence of working with gifted students through a cluster-based approach lies in understanding the learner, knowing them closely, and enriching their potential and talent.

Research Purpose. It must be emphasized that gifted children tend to be highly demanding of themselves and often set goals that are difficult to achieve at their current level of development. This leads to emotional distress and instability in behavior. In addition, due to their superior abilities, gifted children display a high degree of tolerance toward peers who are less capable. During such processes, they may fall into disappointment when they fail to achieve the results they expect from themselves, and these situations can negatively affect their social position. Therefore, future teachers must develop the ability to change such situations and, above all, prepare themselves to work effectively with gifted children.

METHODOLOGY

During the research, philosophical, sociological, psychological, and pedagogical literature related to the problem was comparatively and critically analyzed; advanced pedagogical practices in higher educational institutions were studied; sociometric methods (questionnaires and interviews) were applied; and pedagogical experiment–testing methods were used.

Through observation, comparison, and contrast with pedagogy students, technologies for working with gifted learners based on the cluster approach were identified—focusing on self-awareness, possession of national and universal values, communication skills, social and practical competencies, and the ability to work independently. Methodological support and didactic conditions for organizing educational–pedagogical practice were demonstrated through methods such as "Networks," "Gallery Walk," "Aquarium," "Debate," and "Round Table."

Main Part. At present, the issue of giftedness is becoming increasingly urgent. This is primarily related to society's growing need for individuals with exceptional creativity. The era of globalization demands not only high activity from individuals but also unique abilities and the capacity to take unconventional approaches in their professional activities. For this reason, it is essential to work with a child or student who possesses unique abilities—giftedness—using special programs and methods tailored to their needs.

"Gifted learners demonstrate a strong desire for knowledge from an early age. A child aged 2–3 who repeatedly focuses attention on a single activity already displays the initial signs of giftedness. Unlike their

peers, a gifted child can remain engaged in an activity for several hours and may return to it repeatedly over several days. By the age of 3–4, they typically learn to read and count very quickly, exhibit consistency in their actions, and show great interest in intellectual and creative activities. When such children enter school, it becomes immediately evident that they are significantly ahead of their classmates in terms of knowledge.”

In working with gifted students within a cluster-based approach, it is essential to provide continuous support and encouragement.

Within the cluster approach, future teachers working with gifted learners should:

- Be observant and insightful;
- Possess a strong understanding of the psychology of gifted children and be sensitive to their needs and interests;
- Have a high level of intellectual potential;
- Be skilled, competent, and broad-minded;
- Be capable of fulfilling all responsibilities related to teaching gifted children;
- Be naturally active, communicative, and socially adaptive;
- Be inquisitive and committed to continuous self-development;
- Be creative thinkers with an unconventional outlook.

A significant portion of the difficulties gifted learners face stems from their ability to master the curriculum with ease, which may lead teachers to overlook them. This situation creates the impression that the student’s intellectual needs are being met. However, sudden changes in the learner’s behavior or complaints from parents may indicate that the student is not satisfied with the learning process. Because gifted learners grasp concepts quickly, understand information deeply, have strong generalization skills, curiosity, and independent thinking abilities, the already-mastered curriculum often leads to feelings of boredom.

Teaching methodology, as a system of organizing students’ learning activities, is a crucial factor in ensuring successful knowledge acquisition, as it develops cognitive abilities and personal qualities. In teaching intellectually gifted students, the leading and most effective methods are undoubtedly creative ones—problem-based, inquiry-based, heuristic, research, and project methods. These methods are implemented in combination with independent, individual, and group activities.

Such methods possess high cognitive and motivational

potential and are well aligned with the knowledge level and interests of gifted learners. They are highly effective in developing creative thinking and many important personal qualities, including motivation, perseverance, independence, self-confidence, emotional stability, and the ability to collaborate with others.

The process of educating gifted children must include the use of diverse sources and methods of obtaining information, including computer networks. Since gifted children require immediate access to large volumes of information and feedback regarding their activities, it is essential to utilize computer-based learning tools. Resources that provide rich visual content (videos, mass media, etc.) also contribute significantly to the development of giftedness. In general, the effectiveness of instructional tools in educating gifted learners depends largely on the content and teaching methods through which these tools are applied.

Future teachers in general education schools can implement the teaching of gifted children based on the principles of differentiation and individualization. This may include identifying groups according to types of giftedness, organizing individualized learning plans, and teaching specific subjects according to personalized programs. Unfortunately, current educational practice largely focuses on individualized programs in only one subject, which does not support the development of a child’s additional abilities outside that specific field. It is also important to ensure that working through individual programs, including external learning, does not isolate the child from their peer group.

Working according to a personalized plan and designing individual learning programs requires the use of modern information technologies (including distance learning), within which a gifted child can receive targeted informational support aligned with their needs.

In the individualization of gifted education, the teacher must play a major role. To work effectively with a gifted learner, a teacher must be a highly qualified specialist—possessing knowledge in the area of the child’s interest, whether it be science, literature, art, chess, or any other field. Only then will the teacher be fully prepared to carry out individualized work with a gifted student.

The primary task of the teacher is to assist the learner in developing the ability for self-understanding and, through dialogue and collaborative exploration, to help them develop the most effective strategy for personal growth. As an experienced specialist, the teacher must coordinate the child’s uniqueness, lifestyle

characteristics, and various options for the content of learning.

Activities based on free choice—elective subjects and especially the formation of small groups—provide greater opportunities for differentiated learning compared to traditional classroom work, as they allow the use of different methods of instruction. This helps respond to the diverse needs and abilities of gifted children. This form of work offers great potential: it enables the establishment of scientific research groups or associations that allow students not only to choose the direction of their research work but also to determine their individual pace and methods of advancement in the subject.

Programs for working with gifted children that rely solely on increasing the complexity and volume of educational materials have serious limitations. In particular, a curriculum can be intensified only to a certain extent before excessive overload occurs. Further development of the learner's abilities must take place through their involvement in research activities, as the formation of creative abilities occurs only when the individual engages directly in the creative process. Research activities ensure a high level of systematic knowledge. Through this process, the learner enriches their knowledge and acquires new information.

To enhance the training program and to work with students using a cluster-based approach, it is essential to select methods that correspond to the child's abilities and physical condition. Excessive pressure placed on the learner by parents or neglect of the child's high aspirations may lead to conflict between the gifted student and teachers or peers. Therefore, future teachers must possess adequate psychological knowledge and be psychologically prepared to work with gifted students.

“Based on modern scientific principles, the science of psychology increasingly discusses the problem of the relationship between education, upbringing, and development in shaping an individual's personality.”

DISCUSSION AND RESULTS

The psychological characteristics of gifted children—alongside their unique social behavior compared to ordinary student groups—require particular attention in understanding the primary educational and developmental goals. When forming knowledge and skills in specific subject areas, it is crucial to consider the learner's giftedness. Depending on students' individual characteristics and various educational systems, particular goals may become more prominent.

Special attention must be paid to the following aspects when working with gifted children:

Gifted students must acquire knowledge across all subjects of the general secondary education curriculum. At the same time, their psychological characteristics and the social expectations directed toward this group help define a unique component beyond the traditional goal of acquiring a certain amount of subject knowledge. This distinctive component is the higher (or expanded) level and breadth of general education, which aims to develop a holistic worldview and advanced competence across different fields of knowledge in accordance with the learner's individual needs and capabilities. Despite possessing high abilities in certain subject areas—or even outside the general curriculum—many gifted children may still struggle to master such diverse sets of knowledge.

For all children, the fundamental goal of education and upbringing is to create the conditions needed to uncover and develop abilities and talents for future professional realization. However, this goal is particularly important for gifted children. Society places considerable hope on gifted individuals to address the pressing challenges of modern civilization. Therefore, in the education of gifted learners, it is crucial to support and develop individuality, and ensure that their abilities are neither lost nor slowed down.

Understanding giftedness as a system involves viewing personal development as the primary goal in the education and upbringing of gifted children. At the same time, it is important to remember that the systemic component of giftedness is intrinsic motivation, and creating the conditions necessary to preserve and develop this motivation must be considered a central task of personal development.

When working through a cluster-based approach, young teachers must pay special attention to their speech. “The teaching profession requires a high level of culture, humanism, and internationalism. In the process of educating and instructing students, the teacher's speech is as important as their practical work. Indeed, a significant part of a teacher's professional activity is carried out through speech. Therefore, a teacher's speech must always be ideologically rich, fluent, gentle, and engaging. Hesitation or inconsistency in speech or action is unacceptable for a teacher. Every speech must be structured with consideration for the students' age characteristics, knowledge, and understanding.”

“At the same time, the teacher's speech aims to reveal new aspects of the material and spiritual world surrounding the younger generation. A teacher's

speech is the foundation of teaching and upbringing. It should be syntactically simple, attractive, and expressive whenever possible. All knowledge and upbringing are essentially conveyed through the teacher's speech—both during lessons and in everyday interactions outside the classroom.”

“In any form of speech, our values must be treated with deep respect. The uniqueness of pedagogical speech communication lies in the fact that a teacher remains an educator everywhere and under any circumstances. A teacher communicates verbally with students most frequently in the classroom during lessons, and that speech carries scientific and pedagogical meaning. Such speech reflects the rules, terms, and conclusions characteristic of various branches of science. In this form of speech, everything has its place and measure. Explanations of terms and newly introduced words must be simple and syntactically accessible for the learners.”.

If it is considered appropriate to educate children with certain types of giftedness (for example, in music or ballet) in specialized schools and classes, the question of why special classes and schools for gifted children should be created continues to spark intense debate. The reason is that educating gifted children separately has both clear advantages and drawbacks.

The major advantage of specialized classes and schools is the ability to achieve the most adequate pace of development in learning (in terms of self-esteem and self-confidence). In such settings, conditions can be created that are most suitable for each student, whereas in a regular classroom, the potential of highly capable students often remains underutilized. Secondly, homogeneous classes are usually taught by teachers who have experience working with gifted children. In regular classes of 20–30 students, teachers rarely have enough time to accumulate sufficient experience in working with the few uniquely capable students present. In contrast, teachers in specialized classes and schools can become true experts in gifted education.

At the same time, there are disadvantages to grouping students in homogeneous classes, as it narrows children's social circles, creates unique social boundaries, and may encourage the development of elitist attitudes. Therefore, optimizing gifted education involves finding a balance between specialized classes and schools, heterogeneous (mixed-ability) education, and individualized instruction. It should be emphasized that the advisability of any form of differentiation must be evaluated not only in terms of benefits for the gifted group, but also for all students.

It should be remembered that regardless of the

setting—whether a gifted student is educated in a specialized school or class, or in a mainstream comprehensive school—what truly matters is what and how the gifted child learns. Educational programs, modes of instruction, teaching methods, and the characteristics of the learning process aimed at educating both generally gifted and specially gifted children (e.g., in linguistics, mathematics, etc.) must meet several specific requirements.

In general, taking into account the unique needs and capabilities of gifted children, as well as the overarching goals of educating them, it is possible to determine the essential requirements that educational programs for intellectually capable students must fulfill.

CONCLUSION

Every child, without doubt, must have access to an education that enables them to reach the highest possible level of their development. For this reason, the issue of differentiated instruction is relevant for all children, and even more so for gifted learners. The core pedagogical essence of preparing future primary school teachers to work with gifted students based on the cluster approach lies in becoming a constant supporter and a trustworthy figure for the learner. To achieve this, it is essential to view each student as an individual and to be aware of any challenges in their family relationships in a timely manner, ensuring that such issues do not negatively influence the child's learning or the realization of their giftedness.

It should be especially emphasized that, according to traditional wisdom, a person is not born inherently good or bad — every child is born the same. Becoming good or bad depends on upbringing, beginning with the parents, the family, the neighborhood, the village or community, and ultimately the society and system in which the child grows. In this process, ancestral heritage — family pedagogy, folk pedagogy, as well as traditions related to customs, values, and social unity — together with the efforts of society, play a decisive role. Folk wisdom asserts that if a child is raised correctly and truthfully from the beginning, they will grow into a good person; if raised improperly, they may turn into a negative personality. Indeed, the proverb “A seedling must be shaped from the beginning, a child must be guided from youth” reflects the main principle of traditional pedagogy. Therefore, in folk pedagogy, there is no such thing as minor or secondary aspects of upbringing: everything must be taken into account, no domain should be ignored, and the most delicate, subtle, and complex aspects of education should be approached with great care — measuring seven times before cutting once.

Another distinctive feature of folk pedagogy is that upbringing always considers yesterday, today, and tomorrow — grounding education in respect for the past, understanding of the present, and hope for the future.

In this process, it is crucial that the gifted learner feels the attention directed toward them. A gifted student must clearly understand that developing their abilities is essential — not only for those around them, but also for themselves and for their own future.

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