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Original article

Oh No! There's a Gifted Student in the Class: The Other Side of Giftedness

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Abstract

In the late 20th century, specialists began using tests like IQ assessments to identify children who displayed differences in their thinking and learning patterns. The use of these tests raised questions about how schools and teachers could best adapt their methods to help these exceptional students thrive in school. However, the practice of identifying and categorizing children sparked debates about the fairness of labeling students based on test results. Educators questioned the tests' fairness, accessibility, and ability to capture the diverse dimensions of intelligence and giftedness, especially since test-taking skills do not always accurately reflect a person's true talents. Giftedness extends beyond natural intelligence; it encompasses emotional awareness, cognitive flexibility, and the ability to navigate complex social dynamics. This paper focuses on the challenges faced by gifted children. It explores the experience of giftedness from multiple perspectives of parents, teachers, and the students themselves providing a comprehensive view of gifted education. Through this multi-faceted analysis, we aim to contribute to ongoing discussions about gifted education and illuminate the challenges educators encounter in identifying and properly instructing gifted students across various educational settings. Findings of the study indicated that gifted students demonstrate more acceptable attitudes toward others and themselves in the course of the study.

Keywords: Gifted Education, Underachievement in Gifted Children, Peer Relationships in Giftedness, Game-Based Learning, Social-Emotional Development

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INTRODUCTION

The education of gifted students presents a unique challenge in today's educational landscape. As both a gifted class teacher and teacher educator, I have witnessed firsthand the complexities of nurturing exceptional talents while addressing the diverse needs of gifted learners. This dual perspective – stemming from classroom practice and curriculum development – provides valuable insights into the challenges and opportunities in gifted education.

Despite decades of research and practice in gifted education, a significant gap persists between teacher preparation and classroom needs. As Justman (1951) noted more than a half-century ago:

> The professional preparation of teachers of intellectually gifted children, however, has not kept pace with the growth noted in training persons to serve in classes enrolling other types of exceptional children. Thus, few colleges or universities offer specific course work devoted to a consideration of the gifted child. For the most part, the preparation of teachers currently assigned to classes for gifted children has not been as specifically related to their professional needs as that of their colleagues working with other groups of exceptional (p. 41).

This observation remains relevant in 2025, as the collaboration between practicing teachers and teacher educators continues to face challenges. While both groups share common objectives, their different professional priorities and communication barriers often impede the development of effective teaching methods for gifted education (Chan, 2015; Justman, 1951; Khalil & Accariya, 2016; Olszewski-Kubilius, 2012). The global education community increasingly recognizes the need to develop specialized teaching approaches for gifted students (Matthews & Dai, 2014) and integrate these methods into mainstream curricula (Baccassino & Pinnelli, 2023; Chan, 2015; Jolly & Jarvis, 2018; Reis et al., 2021).

This article explores three key aspects of gifted education: the paradox of teaching gifted students, the identification of gifted and talented learners through various perspectives, and the challenges faced by both educators and students in different educational systems. Our analysis draws on current research and practical experience to provide insights into supporting gifted learners effectively (Smith & Campbell, 2016; Tan, 2012; Torrance, 1974).

The Paradox of Giftedness: Challenges Beyond Talent

During the early 20th century, the advent of IQ tests and other assessments prompted researchers to understand intelligence and quickly became a popular way to identify students' academic potential (El Khoury & Al-Hroub, 2018; Eriksson-Sluti, 2001; Kaufman & Harrison, 1986; Reid et al., 2000). This raised important questions about differentiated teaching methods and the appropriateness of labeling individuals based solely on standardized measurements (Alzahraney, 2023; Ford, 2021).

The Soviet Union's launch of Sputnik sparked concerns about national security in the United States. This "space race" elevated the importance of educating gifted students and identifying exceptional talent as matters of national priority. Researchers conducted numerous studies, developed tests, and designed specialized programs (Kefauver, 1943; Krasnova et al., 2021). While these programs were not widely implemented outside the US, similar initiatives emerged across continental Europe (Kirkiç, 2019; Pieczywok, 2013). The varying pedagogical approaches for gifted students – both between and within countries – have sparked debates about educational equity (Cross, 2013). In the US, where gifted programs are prevalent, Howley (1986) argued that differentiated teaching methods for gifted students promote *elitism* and compromise *equality*. Some educators have against the idea that labeling or categorizing individuals as gifted is a mistake (Smith & Campbell, 2016: Sternberg, 1996). However, this critique does not suggest ignoring the needs of intellectually advanced students. Rather, many educators advocate for differentiated instruction that addresses diverse learning styles and abilities, fostering an inclusive environment that nurtures each student's potential without creating divisions (Ninkov, 2020; Pendarvis & Howley, 1996).

From an institutional perspective, identifying children as gifted can elevate their status, making special accommodations seem natural. Research shows that parents often feel validated when their children are labeled as gifted, viewing it as confirmation of successful parenting (Headey et al., 2012; Olawa & Idemudia, 2019). Studies characterize gifted children as intellectually advanced (Vaivre-Douret, 2011), academically successful (Lohman, 2005), naturally curious, creative, and skilled problem-solvers. Their heightened self-awareness and environmental sensitivity (Lask, 1988), enable quick comprehension of new concepts (Johnsen, 2021; Z. Leana-Tascılar & Kanlı, 2014; Margrain & Farquhar; Markusic, 2019; Ünlü & Karadaş, 2023; Worrell et al., 2021). Yet, a careful review of the literature reveals a paradox. Despite the emphasis on positive traits (Fall & Nolan, 1993, Flynn & Shelton, 2022), many gifted individuals struggle to meet society's idealized expectations and face numerous life challenges (Jovanovic & Vukić, 2018; Renati et al., 2016). Schmitz and Galbraith (1985) identify several difficulties; including underachievement, low self-concept, decision-making anxiety, social isolation, narcissistic tendencies, and rigid compulsive behaviors. Buescher (1987) notes that empathy deficits can impair coding mechanisms, leading many gifted children and adolescents to suffer silently or express their frustrations through maladaptive behaviors. These academically advanced children often encounter significant challenges throughout their educational journey (Feuchter & Preckel, 2021; Neihart et al., 2016; Reis et al., 2021).

Figure 1 below summarizes the literature on the strengths and challenges that some gifted students may face.

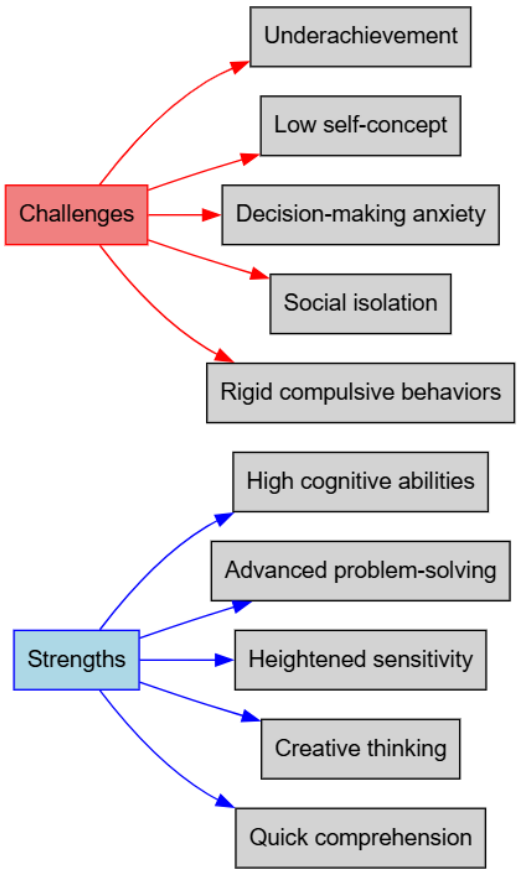

Figure 1. Strengths and challenges of the gifted

Giftedness or Talent: Understanding Learning Challenges

In classrooms with diverse learning levels, motivational drives, and comprehension abilities, gifted students can experience both positive (Vansteenkiste et al., 2009) and negative educational outcomes (David, 2015; Scherrer & Preckel, 2019). In conventional school settings, teachers often incorporate additional pedagogical exercises (Nettleton et al., 2023; VanTassel-Baska & Stambaugh, 2005), adapting and combining teaching strategies to address these students' special needs (Hornstra et al., 2018; Samsen-Bronsveld et al., 2022). A critical challenge for teachers lies in accurately identifying truly gifted students, as this requires expertise, specialized assessment skills, and multiple approaches to talent identification (Brigham & Bakken, 2014; Silverman, 2018). Consequently, adapting teaching strategies to meet gifted students' needs becomes a complex undertaking.

In contemporary discourse, the concept of talent has begun to replace traditional notions of giftedness—shifting focus from IQ to ability. While giftedness primarily relates to high IQ (Al-Shabatat, 2013), talent encompasses the capacity to develop and apply skills across various domains (Rahmadani, 2022; Reis et al., 2021). However, Frasier and Passow (1994) note that many identification methods for

talent may be unreliable (Callahan et al., 2017; Oreck et al., 2003). Given individual differences and today's information-rich environment, the challenge of distinguishing truly gifted individuals remains an argumentative educational debate (Ford et al., 2013).

While gifted individuals are often viewed as exceptional achievers, reality is more nuanced. A child might learn quickly yet simultaneously struggle with certain aspects of learning. They may show limited interest in formal education while displaying remarkable dedication to creative pursuits, exploration, and play (Li et al., 2012). This raises an important question: Can a child be both gifted and face learning challenges? The common assumption is that a child is either gifted or has learning difficulties-not both (Cross, 2015; Wormald et al., 2015). This oversimplified view fails to capture the complexity of giftedness and learning challenges.

Giftedness does not immunize a child against difficulties, just as learning challenges do not preclude exceptional talents. Understanding this "other side" of giftedness—the complications in gifted individuals' experiences—has become crucial in educational theory and practice (Sayi & Şahin, 2021). By understanding how these factors interact, educators can better support gifted students' strengths while addressing their challenges (Altintas & Özdemir, 2015; Flynn & Shelton, 2022; Nolte, 2012; Wellisch & Brown, 2012). Teachers face a dilemma between creating inclusive environments that celebrate learning diversity and separating gifted students into specialized classes. Through appropriate support, educators can help gifted children thrive both academically and emotionally, enabling them to navigate their complexities confidently (Kerr, 2014; Nissen, 2019). Customary definitions of giftedness may overlook talents that are mainly non-academic, such as interpersonal and emotional development. Since environmental dynamics play a fundamental role in talent development, we need broader measures of success well beyond academic scores (Al-Shabatat, 2013; Hamza et al., 2020).

This broader viewpoint necessitates multiple indicators of talent diagnosis. Schools must reconsider their identification methods beyond single approaches to avoid overlooking potential talents (Anghel, 2018). Understanding how giftedness manifests in various learning contexts, particularly in group work, is critical. While teachers often approve of mixing students with different abilities to promote collaboration, this approach may not suit some gifted students who look for more stimulating, complex material to deal (Coleman, 1994; Fiedler et al., 2002). Balancing inclusive group dynamics with gifted students' needs present a multifaceted challenge. Figure 2 illustrates this equilibrium for teachers managing mixed-ability groups.

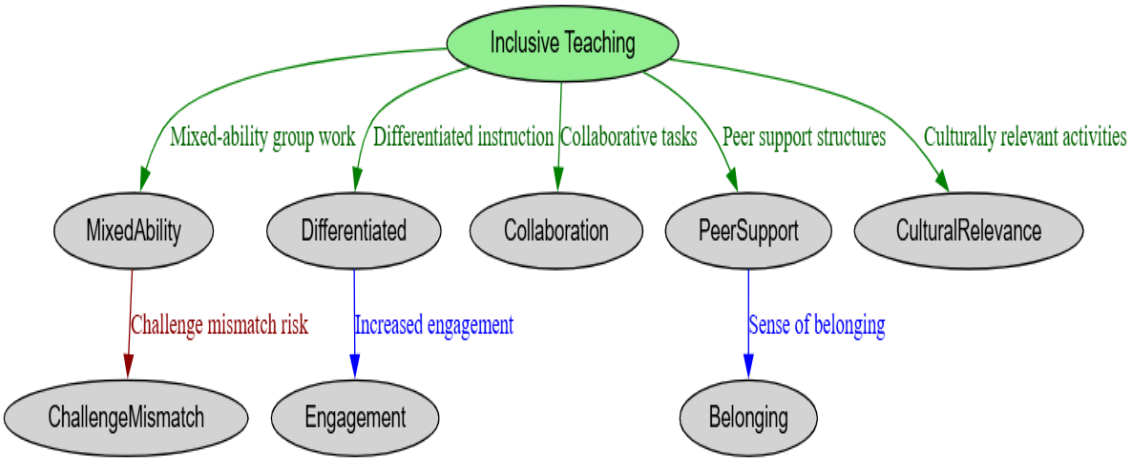

Figure 2. Inclusivity in teaching gifted

Research demonstrates that careful preparation and implementation of group activities are necessary for maximizing gifted students' learning outcomes. Schools and teachers should develop expertise in crafting group activities (Peters, 2021) that allow all students to participate and grow as individuals (Ellett, 1993; Jung et al., 2022). Through inventive methods and well-selected resources, teachers can support diverse learners in one classroom (Parsons et al., 2013), enhancing both teamwork and individual achievement (Sears & Reagin, 2013).

Addressing various student needs while supporting gifted and talented students raises fundamental questions about educational equity. Effective cooperation evidences that to maximize outcomes among gifted students schools must create environments where all students, regardless of ability, (Dai, 2013; Peters, 2021), can participate meaningfully without sacrificing individual growth opportunities (Ellett, 1993). Differentiated teaching approaches, where educators adapt methods and materials to various ability levels within one classroom, can nurture both collaborative and individual success. Recent research indicates that when students clearly understand their roles and topics in group settings, they engage more deeply with complex concepts. Gifted students in groups can support their peers' learning, creating beneficial reciprocal relationships that enhance their own understanding.

Teachers in Charge: Managing Talents, Challenges, and the Learning Environment

Understanding giftedness and learning differences is more complex than it appears from the outside, as it affects the entire school dynamic. Teachers continuously work to effectively teach gifted students alongside those who face learning challenges (Aziz et al., 2021). Both students and teachers may struggle when implementing new teaching strategies in classrooms with gifted learners (Hornstra et al., 2018). Without adequate support for their emotional needs and friendships, these students may experience anxiety or loneliness. (Neihart et al., 2016; Wormald et al., 2015). Schools need to develop appropriate curricula that value all talents while supporting teachers in managing both emotional and academic aspects of learning (Cara, 2011; Hymel & Katz, 2019; Garn et al., 2012). This curriculum

should create an environment where all students can achieve their academic and social goals (León, 2020).

Including gifted students in environments where they can interact with their peers is crucial. When separated, they may experience internal conflict-recognized for their giftedness yet set apart from others due to their learning differences. This separation can lead to feelings of isolation, particularly in peer relationships (Abedi, 2023). While separating these students during classroom activities can intensify emotional challenges, an inclusion that promotes teamwork may be the best approach (Nettleton et al., 2023). However, if not implemented properly, inclusion can be problematic for gifted students, leading to boredom and feelings that their unique abilities are being overlooked (Coleman, 1994; Huss, 2006; Zeidner, M., & Matthews, G. 2017). This sense of disconnection may reduce their motivation and increase anxiety. Teachers can address this by carefully selecting group activities that are inclusive for all students. Research underlines that these methods require considerate implementation-composition of group and action planning must be considered carefully to ensure gifted learners feel properly challenged and gain academic confidence. When executed well, this approach enhances their educational experience (Ellett, 1993).

To further support gifted students' peer learning experiences, teachers should employ strategies that enrich both emotional well-being and academic achievement. Research shows that when gifted children engage in thoughtful reflective dialogues with peers about their group experiences, they develop a stronger sense of *I belong here*. This course of action also enhances their self-esteem (Alexopoulou et al., 2019; Hu, 2019; López & Sotillo, 2009). Moreover, peer feedback among gifted students enables knowledge exchange and through learning from one another their collaborative skills develop, while maintaining their intellectual contributions to each other (Ayoub & Aljughaiman, 2016; Berndt et al., 2022; Cotabish & Robinson, 2012; Ghazali, 2015; Lee et al., 2012).

In gifted schooling, cultural context and learning milieu strongly influence student involvement and peer collaboration. Research specifies that culture-sensitive group activities motivate students by celebrating their backgrounds and experiences (Alexander & van Wyk, 2014; Ginsberg, 2005; Ginsberg & Wlodkowski, 1995; Ladson-Billings, 1995). When teachers integrate culture-related games, for instance, that share stories and explicate diverse perspectives, students become active knowledge sharers rather than ambivalent participants (Chen & Hwang, 2017; Huss, 2006; Patrick et al., 2005). This approach parallels with findings signifying that mixed-ability groups are utmost effective when students bond around shared ideas and feel valued and accepted, fostering a sense of belonging essential for optimal learning outcomes (Ellett, 1993; Gordon & Bridglall, 2006). By executing a complete understanding of *diversity* and *inclusivity* in scholastic settings, schools and teachers can create more vigorous and equitable cooperative learning experiences for gifted individuals, improving both their

academic and social-emotional growth (Eddles-Hirsch et al.; Eriksson & Wallace, 2006; Matthews et al., 2007).

A Case from Turkey: Some caveats to keep in mind

The identification and education of gifted students is of particular importance in Turkey. In the Turkish education system, gifted students are typically identified through the recommendations of elementary school teachers and central exams (Baykoç et al., 2014; Dolu & Ürek, 2014), and later receive extra curricular education at institutions called Science and Art Centers. However, as mentioned earlier, this identification process comes with challenges and shortcomings since it heavily relies on measuring academic performance. Central exams' focus is generally on academic performance, aspects like creativity, problem-solving abilities, and social skills, personality aspects may be neglected or not considered at all (Darling-Hammond et al., 2012; Pallas, 2010) .

Countries like Turkey, which heavily rely on central measurement approaches, should develop more effective ways to the education of gifted students, more importantly, the education system needs to be restructured based on more formative and developmental assessments, not on standardized achievement and summative test-oriented systems. This would involve providing teachers with specialized training on how to work with gifted students and integrating both in-school and after-school education.

METHOD

Research Design

This study aimed at focusing on emerging problems in the field of gifted education. The cyclical and reflective characteristics of the action research were considered appropriate approach due to the nature of this present study, which allows the researcher to begin the study in collaboration with participants and engage in ongoing interaction at every stage, reflecting on the findings, and continuously improving interventions based on real-time feedback. In this action process, collaboration, reflection, and problem-solving are approached cyclically, aiming to improve educational practices and directly address the challenges faced by gifted students in regular classrooms. Action Research allows for the continuous adaptation of intervention strategies according to the observed needs of students in this study. The participation of teachers, parents, and a professor specialized in curriculum development ensures that the interventions are shaped from different perspectives. Moreover, the iterative nature of action research allows for the continuous improvement of support mechanisms for gifted students, providing the researcher with an opportunity to create a dynamic learning environment while considering both academic and social-emotional development. Many sources highlight the importance of action research in the educational context, particularly when addressing the specific issues faced by gifted students (McNiff, 2013; Kemmis & McTaggart, 2005). Through this reflective and participatory

process, the researcher not only explores how to improve gifted education but also shares findings with other educators to contribute to the broader field of educational theory and practice.

Setting and Participants

This study was conducted in one of the Science and Art Centers (SAC) in the western part of Turkey. The center was newly established in 2022 and each year accepts more students. The center is single floor designed with arts, music, technology and design, and STEM studios. In addition, laboratories exist in the areas of science, computer sciences, information sciences, foreign language, and math. Building is in the middle of a land grant area allowing outside activities like gardening, physical education, agricultural applications and so forth.

This present study involves;

Students: 20 students, 12 girls and 8 boys participate at 2nd, 3rd, and 4th grade, aging 7-12 who are identified as gifted based on an official gifted exam process. The student participants are enrolled in regular classes and join after-school education at science and art center every other day from 4:45 to 8:00 pm.

Teachers: Fifteen classroom teachers who teaches these gifted students in their regular classrooms during regular school hours. Their teaching experiences range from 10 to 22 years.

SAC Teachers: The Ministry of National Education (MONE) selects these teachers through a special program named SAC Teacher Selection and Placement Exam. In order to be a teacher at these institutions rigorous selection procedures and interviews are conducted. For this study six SEC teachers volunteered to participate.

A Professor specializing in curriculum and instruction: provides expert support for the analysis of the collected data and reflections on the interventions.

Data collection instruments

The following are used to gather data and evaluate the effectiveness of the interventions:

1. Gifted Student Observation Form (Likert scale). The form included 5 sub-domains
   - Cognitive and Academic Challenges
   - Emotional and Social Challenges
   - Group Dynamics and Collaboration
   - Social Behaviors and Personality Traits
   - General Observations
2. Semi-structured Interviews with Teachers, Professors, and Parents
3. Play-Based Learning Activities (culturally appropriate games focused on academic, social, and emotional development)

These tools provide a comprehensive approach to assess both the academic performance and social-emotional development of gifted students.

Research procedure

Stage 1: Problem Definition and Initial Data Collection

In the first stage, the main challenges faced by gifted students were identified through the Gifted Student Observation Form. Teachers of these gifted students observed and recorded students' social withdrawal, overconfidence, lack of participation in group activities, and difficulties in peer interactions. These observations provided insights into the difficulties faced by students and formed the basis for interventions to be made in the subsequent stages. The researcher also collects and analyzes individual and group observations of students in gifted classes.

Stage 2: Intervention Planning and Implementation

Based on the findings from the first stage, play-based learning activities were designed to address the academic, social, and emotional needs of the students. The selected activities promote students' interaction, empathy, creativity, and critical thinking skills while also meeting their intellectual needs.

The four selected games focus on different aspects of development and are chosen from traditional games:

Play-Based Learning Activities:

1. Cooperation and Problem-Solving Game:
2. Empathy Development Exercise:
3. Creative Expression through Art and Storytelling:
4. Complex Group Task:

Stage 3: Reflection, Data Analysis, and Adjustment

After the intervention, the Gifted Student Observation Forms and interview data are analyzed to assess the effectiveness of the interventions. The researcher, together with teachers and the professor, reviews the data to determine whether there has been any improvement in students' social behavior, academic participation, and emotional regulation. Based on these analyses, necessary adjustments are made to improve interventions or introduce new strategies.

Stage 4: Final Evaluation and Family Involvement

The final stage embraces a final round of observations to decide the sustainability of the shifts observed in Stage 3. Moreover, semi-structured face to face interviews are steered with the parents of gifted students to assess alterations in behavior at home, mostly related to social integration, emotional

well-being, and academic attitudes. Responses from classroom teachers and parents offers a comprehensive insight into the long-term value of the interventions.

Data Analysis

The data gathered throughout the research were analyzed using both qualitative and quantitative methods:

Qualitative data were analyzed using thematic analysis from interviews, field notes, and observations. This analysis aims to identify key themes by categorizing, and labeling findings related to students' social behaviors, emotional development, and academic participation from the perspectives of their teachers, families, and the researcher herself. Quantitative data were analyzed as descriptive checklists from the Gifted Student Observation Forms, comparing the initial and final states of students' behaviors.

RESULTS

This study aims to identify the challenges gifted students face in terms of academic success and social integration and improve these challenges through game-based learning strategies, using a four-phase research process. The findings were analyzed based on qualitative data obtained from observations and interviews with teachers, parents, and students after each phase. Each phase provided important insights into students' academic, social, and emotional development, offering data that contributed to achieving the research objectives.

Stage 1: Teachers and Parent Observations

In the first step, the academic, social, and emotional interactions of gifted students in school were examined through interviews and observations with their classroom. Classroom teachers, SAC teachers, and parents congregated in a large group setting and discussed the findings. Discussions stemmed in 10 important affective factors (AF) criteria presented in Table 1 below. The numbers from 1 to 5 represents teachers' opinions after the observations and interviews regarding their students. 1: Never Observed, 2: Rarely, 3: Sometimes, 4: Often, and 5. Always.

AF1: *Pressure for academic advancement*: Appears to be pressured because of others' high expectations of academic success.

AF2: *Low self-confidence*: Shows little or low self-confidence even though high achiever.

AF3: *Problems in decision-making*: Face trouble or nervousness when making decisions.

AF4: *Social segregation*: Tends to remain alone in peer relations.

AF5: *Feeling excluded*: Seems to feel left out in societal surroundings.

AF6: *Controlling/dominance tendency*: Displays superiority complex or excessive controlling behaviors.

AF7: *Lack of empathy*: Has struggle empathizing or fails to contemplate others' emotions.

AF8: *Emotional withdrawal*: Demonstrations of maladaptive manners instead of uttering undesirable emotions.

AF9: *Lack of sense of belonging*: Lacks a sense of belonging in group work or social activities.

AF10: *Loss of motivation*: Easily loses motivation or gets bored with given tasks.

Table 1. Challenges faced by gifted

Student	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10
1	5	5	5	4	5	1	1	3	1	1
2	1	5	3	4	3	1	1	4	2	4
3	3	4	5	3	4	4	4	5	2	5
4	5	4	4	1	4	4	1	4	5	4
5	2	3	2	3	2	1	5	2	1	2
6	2	5	2	1	2	3	3	2	5	1
7	4	3	2	3	4	4	1	3	2	3
8	2	5	4	2	5	5	2	3	4	2
9	1	4	2	4	3	5	2	3	3	3
10	4	1	3	4	1	1	4	4	2	5
11	2	5	5	4	1	3	2	3	5	5
12	4	2	1	4	4	4	4	3	4	1
13	5	4	5	5	5	2	1	3	3	2
14	1	3	5	1	4	4	3	1	3	3
15	1	3	3	4	1	5	5	5	3	4
16	1	2	1	1	1	3	5	3	2	3
17	5	4	4	5	3	1	3	5	4	3
18	2	2	2	3	2	5	4	2	3	4
19	3	5	4	1	4	1	3	2	2	3
20	4	3	2	4	5	4	5	3	5	1

The findings from this step have revealed that, in addition to the academic achievements, pupils faced some communal and sensitive challenges. AF1 (Academic Stress) and AF2 (Lack of Self-Confidence) received medium to high scores from many students. This recommends that students often feel faced by academic expectations. AF5 (Feeling Excluded) and AF9 (Lack of Belonging) confirmed inconsistency, with high scores in some students and very low in others. This specifies that feelings of rejection and lack of belonging changed widely among students. AF6 (Controlling/Superiority Attitudes) and AF7 (Lack of Empathy) were marked as lower scores. This may validate that some students are collaborative and emotionally intact with others. AF10 (Loss of Motivation) was

considerably high for some students, suggesting that they may struggle with low motivation in classes or the school environment overall. On the other hands, AF8 (Emotional Withdrawal) and AF3 (Difficulty in Decision Making) resulted with average scores, indicating that some students may occasionally struggle with emotional expression and decisiveness.

Qualitative results also supported the findings presented in Table 1 through different opinions related to challenges students encounter. Teachers noted that some of these students have a tendency to dominate group activities, which sometimes undesirably affected group dynamics. One teacher mentioned, *"...sometimes my students show real leadership abilities, but there are times this tendency to rule makes it difficult for them to work in coordination with other students."* Another teacher added, "*Although they are cognitively advanced, there are intermittent tensions in their socialization because they tend to prioritize showcasing their own ideas over collaboration."*

Parents also shared similar observations. One parent said: "…*my son is very good at school, but when he is with friends, he always wants to take the lead, and this is not well accepted by the other children.*" Another parent stated, "… Okay *my child is an advanced, I know, but I am tired with her, she always struggles with making or holding friendships. Not only her but also other kids too…have the same problem common. Her desire to control people, games, and situations etc. sometimes leads to leaving others out*."

The observations highlighted that their academic success is not sufficient to address their need for social development, and they face challenges. One teacher expressed, *"...gifted students are faced with a paradox. Their intellectual abilities are so advanced that this can prevent them from connecting with their peers on a social level, leading to isolation or frustration."* Another teacher explained, *"these students have the potential, but sometimes their focus on personal success makes it difficult for them to collaborate within a group... collaboration suddenly becomes competition"*

These findings expressed the need for interventions aimed at developing students' social skills in later stages. One teacher said*, "we need strategies to convey them... Skills into promoting cooperation and teamwork, and teach them that they should not always focus on their own success…"* One parent also remarked, "*these children are usually smart, but I think smartness is not enough they need to develop their humane skills, as they often struggle with their friends."*

Stage 2: Introduction of Game-Based Interventions

In the second stage, four games and/or educative activities were selected to improve social skills and group interactions. These games aimed to support both the academic, emotional, and social development of gifted students. The content of the games targeted enhancing students' skills in creative thinking, cooperation, problem-solving, and empathy. The themes related to games were *mental creativity, mental connections, and group belongings.*

Teacher assert that these games helped students communicate more efficiently with each other and share group roles more harmoniously. In particular, the *Mental Creativity* game observed a reduction in conflicts within the group as students developed problem-solving and creative thinking skills. One teacher remarked,

> *First of all, one thing is very clear! It does not a matter of game only, they do not know how to play at all. Culturally he have forgotten how to be kids. We need to teach them to be a kid again. Look, initially, they were somewhat hesitant to share their ideas, but over time, I saw them becoming more open to exploring new possibilities. This game helped… their social development is changing… They were more engaged in discussions and showed an increased willingness to listen to one another. It helped break down some of the barriers between them, especially the tendency of some students to dominate conversations.*

Another teacher observed,

> *…the students were reluctant to cooperate and often tried to work individually, this can be considered normal for these kids, but after a few rounds of the creativity game, they started to trust each other more. I think they started appreciating the importance of group effort, realizing that collecting and sharing ideas led to better solutions. This shift in behavior was remarkable, and it really helped improve their group actions…*

In addition to improving creativity, the *Mental Connections* game played a critical role in students' aptitude to share ideas and think critically. One teacher said:

> *The game helped students to exercise ideas and thinking in a straight forward and interconnected way. What I found most exciting was that the students started to learn how to communicate their thoughts more clearly without monopolizing the conversation. They started to express their ideas in a manner that asked others to contribute, creating a well-adjusted and active group discussion. This was a significant shift from the way they had interacted previously…*

Another teacher added:

> *…the activities also supported students to explain ideas from different angles, which led to more respectful and constructive dialogs. At the beginning, they were very competitive, but after joining the Mental Connections for a while, the students started to appreciate that collaboration was not about winning or being right—it was about learning from each other. They became more receptive and respectful to different ideas, which was a big breakthrough for them.*

The *Group Connections* activity was also critical in enhancing the students' logic of teamwork and improving cohesion within the group. One teacher stated:

> *…students understand the necessity of teamwork and acting as a member of a group contributes to the overall success. What was most obvious was that the students started to backing each other—whether it was offering assistance, sharing ideas, or listening to one another. They understand how to communicate their needs and cooperate with others more successfully. The level of cooperation and understanding in their group work was observable, and I could see the social barriers they used to live with starting to break down.*

Parents also shared that they have observed positive changes in their children's behavior. One parent noted:

My child is now more pleasant at home…she has started to get along better with his friends and his father. He became an easygoing kid, willing to share with his siblings, and is learning how to let others take the lead. These changes were not noticeable last year after just a few weeks of different games at school, and it has been wonderful to see him bringing those skills home.

Another parent remarked,

My child always tries to dominate, insisting on having things done only his way. It bothers me a lot. When I go somewhere with my own friends and the kids with us, she always a problem kid…I am also a teacher but cannot handled my own… But now, teachers at Bilsem made her considerate of other people's feelings. She's started allowing her friends to take turns as a leader, and she's more adjusted to the dynamics of the group, which has made her school time more enjoyable….

One parent shared their deep thankfulness for how the activities helped their child's social skills, mentioning,

…I was not observing my kids. Teachers made me aware!… not only has he become more disciplined in his course homework, but he has also started showing empathy towards others. It's as if he's become more alert of the feelings of his peers, which is something I had not seen before. It's clear that the center is helping him mature social skills that he can use in everyday interactions. His overall behavior is more positive, and he's showing more attention in understanding others' viewpoints…

Additionally, another parent noted:

I have noticed that my child now has a better understanding of others. He's become more communicative with his siblings and friends, and he's more willing to compromise and do demonstrate better behavior. He is not selfish about him leading the way ; he's more focused on working together to handle the problems, which has made him a much better family member.

These observations highlighted the effectiveness of game-based interventions in nurturing both academic and social development in gifted students. Teachers noted that the activity based games provided a safe and engaging atmosphere in which students could grow and refine social skills, such as cooperation, empathy, and active listening.

Stage 3: Impact of the Games on Students' Social and Academic Development

The third phase elaborate a deeper assessment of the games' effects. During this phase, teachers and observers revisited students' interaction levels, group unity, and individual behaviors after each game. The data revealed that students' participation in group activities increased, and they developed deeper communication skills in academic discussions.
After playing the Mental Connections activity, it was observed that students exhibited improved problem-solving abilities. Students also reported a significant increase in their contribution to group

work. One student stated, "*In the Mental Connections game, I shared more ideas, and there was more sharing within the group. This game is interesting and taught us a lot."* The Group Connections game also had a significant impact. This game enhanced students' ability to collaborate in groups and assisted children who had difficulty with social integration become more harmonious.

Finally, in the *Challenges and Creativity* activity, students were demonstrated a development in more creative and original solutions. They focused on problems from different angles and generated innovative solutions. One student said, *"In the Challenges and Creativity game, when I faced difficulties, I tried to come up with more interesting ideas. By the end of the game, we were really successful."*

Stage 4: Post-Game Student Evaluations and Parental Feedback

In the final stage, the game-based interventions were assessed over interviews with teachers, parents, and students. Teachers and parents observed fluent improvements in students' social integration, self-confidence, and group interaction levels. Students, via these games, began to better comprehend their roles, developed empathy, and started resolving social conflicts more effectively. One student shared, *"...during group work, I feel less alone now. I listen more to my friends' ideas no fighting any more."* Parents noted improvements in both the academic and social development of their children. One parent said, *"...my child is now more social and confident. At home, he plays games with other children no screams, no pushes, no kicks!"* Teachers and parents emphasized the importance of integrating game-based learning strategies into educational processes, as they play a crucial role in the development of gifted students.

The general findings of the study revealed that the academic success of gifted students should not be the sole focus in their education; social integration and emotional development must also be considered. Game-based learning strategies stand out as an effective tool in balancing students' academic and social skills. Through these activities, students enhanced their interaction skills within the group, while also gaining essential social skills such as self-confidence, empathy, and cooperation. These findings underscore the importance of addressing social skill development in parallel with academic achievement for gifted students in their educational processes.

DISCUSSION

As a teacher of gifted students, I have experienced the importance of assessing students' activities in groups, as traditional tests often lack in capturing their true capabilities. When students collaborate, use their imagination, and cognitive abilities, they exhibit behaviors that traditional assessment methods struggle to measure reliably. Therefore, performance observation and portfolio assessment would be more effective approaches. Research indicates that diverse assessment methods better reveal gifted students' unique abilities, enabling us to design more targeted and effective lessons (McArthur, 2023). This holistic evaluation approach requires expertise and recognizes diverse skill sets (Ellett, 1993). The

identification and education of gifted students holds global significance. While these students are typically identified through elementary school teacher recommendations and central exams (Baykoç et al., 2014; Dolu & Ürek, 2014), this process presents several challenges. This article criticize the identification processes of gifted students and teachers' educational approaches, highlighting the significance of teacher training and the need to reconsider teaching strategies.

The identification of gifted students primarily relies in class teacher recommendations and central exams during their elementary school. Teachers refer students to counselors based on academic performance, but this selection process has many limitations. Teacher evaluations can be subjective, potentially leading to inaccurate assessments. Moreover, central exams and IQ tests predominantly focus on academic achievement, often overlooking crucial aspects such as creativity, problem-solving abilities, social skills, and personality traits (Darling-Hammond et al., 2012; Pallas, 2010). This narrow focus may prevent a complete understanding of students' potential. Early identification of giftedness presents particular challenges (Fatouros, 1986; Huang, 2008; Margrain & Farquhar, 2012), often resulting in selections based solely on test performance (Chen et al., 2008). While after-school programs exist, their separation from regular schooling complicates the development of a holistic educational model (Popescu et al., 2022; Shernoff, 2013)

Teachers' often experience anxiety when including exceptional students in regular programs, as this requires adapting their standard classroom practices. Research demonstrates that professional development helps teachers better recognize students' latent abilities (Johnsen, 2021; Ladson-Billings, 1995; Sharma & Kudei, 2024; Yaluma & Tyner, 2018). Such training also enables them to modify their teaching methods and develop individualized learning plans.

Research indicates that effective instruction of gifted students requires specialized training in educational methods and psychological understanding. Traditional training approaches often fall short in preparing teachers to educate gifted students (Feldhusen, 1985; Renzulli, 2005; Rowley, 2008). These necessities developing more flexible and creative approaches to address diverse student needs. Many teachers experience anxiety-the "Oh no, there's a gifted student in my class!" phenomenon-when working with gifted students. These feelings of inadequacy can impede student development. To overcome this challenge, teachers need enhanced knowledge and skills for working with gifted students (David, 2015; Goetz et al., 2008; Lamont, 2012). Teaching strategies are particularly crucial, as gifted students typically grasp concepts quickly. Consequently, lessons should offer greater depth and enriched content to maintain student engagement (Cohen, 1987; Park & Oliver, 2009).

Teacher education institutions should expand beyond subject matter expertise to develop more effective training programs for gifted education. More importantly, the education systems need restructuring to emphasize formative and developmental assessments rather than standardized achievement tests (Kazu & Şenol, 2012; Mammadov, 2015; Tortop, 2013). This transformation requires

providing teachers with specialized training and integrating in-school and after-school education. Teachers need access to seminars, educational programs, in-service training, and resources to work more effectively with gifted students (Kaya & Ataman, 2017; Kirkiç, 2019; Tan, 2021).

In conclusion, current methods for identifying and educating gifted students have significant limitations. Addressing these challenges requires greater teacher involvement and more flexible, individualized teaching strategies. Both identification methods and teacher training approaches must be reassessed to provide more comprehensive education. Effective identification and education of gifted students not only help maximize their potential but also benefits society as a whole. Despite progress, continued efforts are necessary to ensure all gifted individuals receive a quality education that promotes both academic and personal growth.

Ethical Considerations

All relevant ethical principles were meticulously followed during the preparation of this article. The research, which includes data collection, analysis, and interpretation, was conducted in strict adherence to established ethical standards, with particular attention given to minimizing potential risks to participants. Before the study commenced, participants were provided with a comprehensive explanation of the study's content.

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REFERENCES

Abedi, A. (2023).Social development in gifted children: challenges and opportunities. *Psychological Research in Individuals with Exceptional Needs*, (1)3, 1-3. https://doi.org/10.61838/kman.prien.1.3.1

Alexander, G., & van Wyk, M. M. (2014). Does cooperative learning as a teaching approach enhances teaching and learning in integrated culturally diverse school settings? An exploratory study. *Mediterranean Journal of Social Sciences*, (5)2, 689-698. https://doi.org/10.5901/MJSS.2014.V5N2P689

Alexopoulou, A., Batsou, A., & Drigas, A. (2019). Resilience and academic underachievement in gifted students: causes, consequences and strategic methods of prevention and intervention. *International Journal of Online and Biomedical Engineering*, 15(14), 78–86. https://doi.org/10.3991/ijoe.v15i14.11251

Al-Shabatat, A. M. (2013). A review of the contemporary concepts of giftedness and talent. *International Interdisciplinary Journal of Education*, (2)12, 1336-1346. https://doi.org/10.12816/0002983

Altintas, E., & Ozdemir, A. S. (2015). Evaluating a newly developed differentiation approach in terms of student achievement and teachers' opinions. *Kuram ve Uygulamada Eğitim Bilimleri/Educational Sciences: Theory & Practice, 15*(4),1103-1118. https://doi.org/10.12738/estp.2015.4.2540

Alzahraney, T. S. (2023). Labeling is not the issue: the benefits of labeling children with learning disabilities when response to intervention is implemented. *International Journal of Special Education*, *38*(1), 1–15. https://doi.org/10.52291/ijse.2023.38.1

Ayoub, A. E. A., & Aljughaiman, A. M. (2016). A predictive structural model for gifted students' performance: A study based on intelligence and its implicit theories. *Learning and Individual Differences, (5)1,* 11–18. https://doi.org/10.1016/j.lindif.2016.08.018

Aziz, A. R. A., Razak, N. H. A., Sawai, R. P., Kasmani, M. F., Amat, M. I., & Shafie, A. A. H. (2021). Exploration of challenges among gifted and talented children. *Malaysian Journal of Social Sciences and Humanities*, (6)4, 242-251. https://doi.org/10.47405/MJSSH.V6I4.760

Baccassino, F., & Pinnelli, S. (2023). Giftedness and gifted education: A systematic literature review.*Frontiers in Education*, (7). https://doi.org/10.3389/feduc.2022.1073007

Baykoç, N., Aydemir, D., & Uyaroğlu, B. (2014). Inequality in educational opportunities of gifted and talented children in Türkiye.*Procedia-Social and Behavioral Sciences*.(143), 1133-1138. https://doi.org/10.1016/J.SBSPRO.2014.07.566

Berndt, M., Strijbos, J.-W., & Fischer, F. (2022). Impact of sender and peer-feedback characteristics on performance, cognitive load, and mindful cognitive processing. *Studies in Educational Evaluation*,(75). https://doi.org/10.1016/j.stueduc.2022.101197

Brigham, F. J., & Bakken, J. P. (2014).Assessment of individuals who are gifted and talented. *Gifted Education: Current Perspectives and Issues*, (26). https://doi.org/10.1108/S0270-4013(2014)0000026002

Buescher, T. M. (1987). Influences on strategies adolescents use to cope with their own recognized talents (Report No. ED288285). National Research Center on the Gifted and Talented. https://eric.ed.gov/?id=ED288285

Callahan, C.M., & Hertberg-Davis, H.L. (Eds.). (2017). *Fundamentals of Gifted Education: Considering Multiple Perspectives* (2nd ed.). Routledge. https://doi.org/10.4324/9781315639987

Cara, C. (2011). Embracing diversity through open doors: using social competency processes to build effective teaching and learning communities. *The International Journal of Diversity in Organizations, Communities, and Nations: Annual Review*, (11)1. https://doi.org/10.18848/1447-9532/CGP/V11I01/38953

Chan, D. W. (2015). Education for the gifted and talented. *International Encyclopedia of the Social & Behavioral Sciences,* (2),158-164. https://doi.org/10.1016/B978-0-08-097086-8.92137-8

Chen, C.-H., & Hwang, G.-J. (2017). Effects of the team competition-based ubiquitous gaming approach on students' interactive patterns, collective efficacy and awareness of collaboration and communication. *Educational Technology & Society*, (20)1, 87-98.

Cohen, L. M. (1987). 13 tips for teaching gifted students. *Teaching Exceptional Children*, 20(1), 34-38. https://doi.org/10.1177/004005998702000108

Coleman, L. J. (1994). "Being a teacher": Emotions and optimal experience while teaching gifted children. *Gifted Child Quarterly*, 38(3), 146-152. https://doi.org/10.1177/001698629403800308 (Original work published 1994)

Cotabish, A., & Robinson, A. (2012). The effects of peer coaching on the evaluation knowledge, skills, and concerns of gifted program administrators. *Gifted Child Quarterly*, 56(3), 160-170. https://doi.org/10.1177/0016986212446861

Cross, J. R. (2013). Gifted education as a vehicle for enhancing social equality. *Roeper Review*, 35(2), 115-123. https://doi.org/10.1080/02783193.2013.766962

Cross, J. R. (2015).*Gifted Children and Peer Relationships*. Routledge: Newyork https://doi.org/10.4324/9781003238928-5

Dai, D. Y. (2013). Excellence at the cost of social justice? negotiating and balancing priorities in gifted education. *Roeper Review*, 35(2), 93–101. https://doi.org/10.1080/02783193.2013.766961

Darling-Hammond, L., Amrein-Beardsley, A., Haertel, E. H., & Rothstein, J. (2012). Evaluating Teacher Evaluation: Popular Modes of Evaluating Teachers Are Fraught with Inaccuracies and Inconsistencies, but the Field Has Identified Better Approaches. *Colleagues,* (10)2, 19-27.

David, H. (2015). The gifted disabled student in the regular and the special classroom. *International Letters of Social and Humanistic Sciences*, 51, 19-32. https://doi.org/10.18052/www.scipress.com/ILSHS.51.19

Dolu, G., & Ürek, H. (2014). A study related to the investigation of multiple intelligence profiles of gifted and talented children across Turkey. *Journal for the Education of Gifted Young Scientists*, 2(2), 58-66.

Eddles-Hirsch, K., Vialle, W., McCormick, J., & Rogers, K. (2012). Insiders or outsiders: The role of social context in the peer relations of gifted students. *Roeper Review*, *34*(1), 53–62. https://doi.org/10.1080/02783193.2012.627554

El Khoury, S., Al-Hroub, A. (2018). Identification of gifted students: History, Tools, and Procedures. In: Gifted Education in Lebanese Schools. *Springer Briefs in Psychology*. Springer, Cham. https://doi.org/10.1007/978-3-319-78592-9_3

Ellett, P. (1993). Cooperative learning and gifted education. *Roeper Review*, 16(2), 114–116. https://doi.org/10.1080/02783199309553553

Nettleton, K. F., Kessinger, M. W., & Lennex, L. (2023). Engaging on common ground: inclusion of the gifted student in the classroom. In K. Koreeda, M. Tsuge, S. Ikuta, E. Dalton, & L. Ewe (Eds.), *Building Inclusive Education in K-12 Classrooms and Higher Education: Theories and Principles,* (pp. 260-283). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-6684-7370-2.ch015

Eriksson, G., & Wallace, B. (Eds.). (2006). *Diversity in Gifted Education: International Perspectives on Global Issues,* (1st ed.). Routledge. https://doi.org/10.4324/9780203012147

Eriksson-Sluti, G. (2001). The gifted game: overcoming stereotyping in gifted education. *Gifted Education International*, 15(2), 178-187. https://doi.org/10.1177/026142940101500208

Fall, J., & Nolan, L. (1993). A paradox of exceptionalities. *Gifted Child Today Magazine*, 16(1), 46-49. https://doi.org/10.1177/107621759301600112

Fatouros, C. (1986). Early identification of gifted children is crucial but how should we go about it? *Gifted Education International*, 4(1), 24-28. https://doi.org/10.1177/026142948600400107

Feldhusen, J. F. (1985). The teacher of gifted students. *Gifted Education International*, 3(2), 87-93. https://doi.org/10.1177/026142948500300203

Feuchter, M. & Preckel, F. (2021). Reducing boredom in gifted education—Evaluating the effects of full-time ability grouping. *Psychological Test and Assessment Modeling*, 63(3), 381–403. https://www.psychologie-aktuell.com/fileadmin/download/ptam/3-2021_20211210/07_Feuchter_Preckel.pdf

Fiedler, K., Walther, E., Freytag, P. & Plessner, H. (2002). Judgment biases in a simulated classroom—A cognitive-environmental approach. *Organizational Behavior and Human Decision Processes*, 88(1). https://doi.org/10.1006/obhd.2001.2981.

Flynn, A. S., & Shelton, A. L. (2022). Solving the right problem: The need for alternative identification measures in gifted education. *Gifted Child Quarterly*, 66(2), 144-145. https://doi.org/10.1177/00169862211046394

Ford, D. Y. (2021).*Intelligence Testing and Cultural Diversity: The Need for Alternative Instruments, Policies, and Procedures*. Alternative Assessments with Gifted and Talented Students (1st ed.). Routledge. https://doi.org/10.4324/9781003232988-6

Ford, D. Y., Scott, M. T., Moore, J. L., & Amos, S. O. (2013). Gifted education and culturally different students: examining prejudice and discrimination via microaggressions. *Gifted Child Today*, 36(3), 205-208. https://doi.org/10.1177/1076217513487069

Frasier, M. M., & Passow, A. H. (1994). Toward a new paradigm for identifying talent

potential. National Research Center on the Gifted and Talented, University of Connecticut. https://nrcgt.uconn.edu/research-based_resources/fraspass/

Garn, A.C., Matthews, M.S. and Jolly, J.L. (2012), Parents' role in the academic motivation of students with gifts and talents. *Psychology in the Schools*, (49), 656-667. https://doi.org/10.1002/pits.21626

Al-Ghazali, F.(2015), Peer feedback for peer learning and sharing, *Learning and Teaching in Higher Education: Gulf Perspectives*, (12)1, 46-61. https://doi.org/10.18538/lthe.v12.n1.179

Ginsberg, M. B. (2005). Cultural diversity, motivation, and differentiation. *Theory Into Practice*,44(3), 218–225. https://doi.org/10.1207/s15430421tip4403_6

Wlodkowski, R. J. & Ginsberg, M. B. (1995).A framework for culturally responsive teaching. Educational Leadership, (53)1, 17-21.

Goetz, T., Preckel, F., Zeidner, M., & Schleyer, E. (2008). Big fish in big ponds: A multilevel analysis of test anxiety and achievement in special gifted classes. *Anxiety, Stress, & Coping*, 21(2), 185–198. https://doi.org/10.1080/10615800701628827

Gordon, E. W., & Bridglall, B. L. (2006). The affirmative development of academic ability: in pursuit of social justice. *Teachers College Record*, 108(14), 58-70. https://doi.org/10.1177/016146810610801404

Hamza, E. G., Abo Mohamed, E., & Elsantil, Y. (2020). A systemic review based study of gifted and talented. *Talent Development & Excellence*, (12), 2888-2897. https://doi.org/10.3390/ijerph16183266

Headey, Bruce and Muffels, Ruud and Wagner, Gert G. (2012). Parents transmit happiness along with associated values and behaviors to their children - a lifelong happiness dividend? SOEPpaper No. 492, Available at SSRN:https://ssrn.com/abstract=2166753 or http://dx.doi.org/10.2139/ssrn.2166753

Hornstra, L., Stroet, K., van Eijden, E., Goudsblom, J., & Roskamp, C. (2018). Teacher expectation effects on need-supportive teaching, student motivation, and engagement: a self-determination perspective. *Educational Research and Evaluation*, 24(3–5), 324–345. https://doi.org/10.1080/13803611.2018.1550841

Howley, A. (1986). Gifted education and the spectre of elitism. *The Journal of Education*, 168(1), 117–125. http://www.jstor.org/stable/42741712

Hu, H. (2019). Implementing resilience recommendations for policies and practices in gifted curriculum. *Roeper Review*, *41*(1), 42–50. https://doi.org/10.1080/02783193.2018.1553216

Huang, S.Y. (2008). Early identification: cultivating success for young gifted children. *Gifted Education International*, 24(1), 118-125. https://doi.org/10.1177/026142940802400113

Huss, J. A. (2006). Gifted education and cooperative learning: a miss or a match? *Gifted Child Today*, 29(4), 19-23. https://doi.org/10.4219/gct-2006-13

Hymel, S., & Katz, J. (2019). Designing classrooms for diversity: Fostering social inclusion. *Educational Psychologist*, 54(4), 331–339. https://doi.org/10.1080/00461520.2019.1652098

Johnsen, S. K. (2021). Diversity and developing potential. *Gifted Child Today*, 44(4), 185-186. https://doi.org/10.1177/10762175211030355

Jolly, J.L., & Jarvis, J.M. (Eds.). (2018). *Exploring Gifted Education: Australian and New Zealand Perspectives* (1st ed.). Routledge. https://doi.org/10.4324/9781351227704

Jovanovic, M. M., & Vukić, T. M. (2018). Types of support gifted students receive in school. Facta Universitatis, Series: *Teaching, Learning and Teacher Education*, 2(2), 125-135. https://doi.org/10.22190/FUTLTE1802125J

Jung, J. Y., Jackson, R. L., Townend, G., & McGregor, M. (2022). Equity in gifted education: the importance of definitions and a focus on underachieving gifted students. *Gifted Child Quarterly*, 66(2), 149-151. https://doi.org/10.1177/00169862211037945

Justman, J. (1951). Obstacles to the improvement of teaching in classes for the gifted. *Exceptional Children*, 18(2), 41-44. https://doi.org/10.1177/001440295101800203

Kaufman, A. S., & Harrison, P. L. (1986). Intelligence tests and gifted assessment: What are the positives? *Roeper Review*, 8(3), 154–159. https://doi.org/10.1080/02783198609552961

Kaya, N. G., & Ataman, A. (2017). Effectiveness of teacher education program developed for teachers of gifted students. *Journal for the Education of Gifted Young Scientists*, 5(4), 1-30. https://doi.org/10.17478/JEGYS.2017.67

Kefauver, G. N. (1943). Education for international security. *The Bulletin of the National Association of Secondary School Principals*, 27(117), 3-16. https://doi.org/10.1177/019263654302711702

Kemmis, S., & McTaggart, R. (2005). *Participatory Action Research: Communicative Action and the Public Sphere*. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (3rd ed., pp. 559-603). SAGE Publications.

Kerr, B. (Ed.) (2014). *Gifted and talented education*. SAGE Publications Ltd, https://doi.org/10.4135/9781473915503

Khalil, M. and Accariya, Z. (2016) Identifying "good" teachers for gifted students. *Creative Education*, (7), 407-418. https://doi.org/10.4236/ce.2016.73040

Kirkiç, K. A. (2019). A study on the university placement system for gifted children in Turkey. *Journal of Education and Learning*, (8)3, 59-68. https://doi.org/10.5539/JEL.V8N3P59

Krasnova, G. A., & Fedotov, A. V. (2021). STEM education as a factor of national security. *RUDN Journal of Informatization in Education, 18*(2), 137-151. https://doi.org/10.22363/2312-8631-2021-18-2-137-151

Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 34(3), 159–165. http://www.jstor.org/stable/1476635

Lamont, R. T. (2012). The fears and anxieties of gifted learners: Tips for parents and educators. *Gifted Child Today*, 35(4), 271-276. https://doi.org/10.1177/1076217512455479

Lask,B. (1998).The highly talented child. *Archives of Disease in Childhood,* (63)**,**118-119 https://doi.org/10.1136/ADC.63.2.118

Leana-Taşcılar, M. Z. & Kanlı, E. (2014). Investigation of perfectionism and self–esteem scores of gifted and average students. *Ankara University Journal of Faculty of Educational Sciences*, 47(2), 1-20. https://doi.org/10.1501/Egifak_0000001335

Lee, S.-Y., Olszewski-Kubilius, P., & Thomson, D. T. (2012). Academically gifted students' perceived interpersonal competence and peer relationships. *Gifted Child Quarterly*, 56(2), 90-104. https://doi.org/10.1177/0016986212442568

León, G.M. I. (2020). La Soledad en la Alta Capacidad Intelectual: Factores de Riesgo y Estrategias de Afrontamiento: Loneliness in giftedness. *Revista De Psicoterapia*, 31(117), 297–311. https://doi.org/10.33898/rdp.v31i117.364

Li, J., Niu, Y., Chen, J. (2012). Study on Cooperative Game Model of Talent Training through School-Enterprise Coalition. In: Wang, F.L., Lei, J., Gong, Z., Luo, X. (eds) *Web Information Systems and Mining*, WISM 2012. https://doi.org/10.1007/978-3-642-33469-6_14

Lohman, D. F. (2005). An aptitude perspective on talent: implications for identification of academically gifted minority students. *Journal for the Education of the Gifted*, 28(3-4), 333-360. https://doi.org/10.4219/jeg-2005-341

López, V., & Sotillo, M. (2009). Giftedness and social adjustment: evidence supporting the resilience approach in Spanish-speaking children and adolescents. *High Ability Studies*, 20(1), 39–53. https://doi.org/10.1080/13598130902860739

Mammadov, S. (2015). Current policies and policy efforts for the education of gifted children in Turkey. *Roeper Review*, *37*(3), 139–149. https://doi.org/10.1080/02783193.2015.1047548

Margrain, V., & Farquhar, S. (2012). The education of gifted children in the early years: a first survey of views, teaching practices, resourcing and administration issues. *The New Zealand Journal of Gifted Education*, 17(1). https://doi.org/10.21307/APEX-2012-005

Markusic, M. (2019). Unusual behaviors of gifted students: Disciplining gifted children. Retrieved from http://www.brighthubeducation.com/teaching-giftedstudents/49993-disciplining-badbehavior-in-gifted- children/

Matthews, D., Foster, J., Gladstone, D., Schieck, J., & Meiners, J. (2007). Supporting professionalism, diversity, and context within a collaborative approach to gifted education. *Journal of Educational and Psychological Consultation*, 17(4), 315–345. https://doi.org/10.1080/10474410701634161

McArthur, J. (2023). Rethinking authentic assessment: Work, well-being, and society. *Higher Education,* (85), 85–101. https://doi.org/10.1007/s10734-022-00822-y

McNiff, J. (2013). *Action Research: Principles and Practice* (3rd ed.). Routledge.

Neihart, M. (2016). *The Social and Emotional Development of Gifted Children: What Do We Know?* (M. Neihart, S.M. Reis, N.M. Robinson, & S.M. Moon, Eds.) (2nd ed.). Routledge. https://doi.org/10.4324/9781003238928

Ninkov, I. (2020). Education policies for gifted children within a human rights paradigm: a comparative analysis. *Journal of Human Rights and Social Work,* (5), 280–289 https://doi.org/10.1007/s41134-020-00133-1

Nissen, P. (2019).Detecting talent from the perspectives of students, parents, and teachers.*US-China Education Review B*, *9*(4), 119-127. https://doi.org/10.17265/2161-6248/2019.04.001.

Nolte, M. (2012). A new view on giftedness? *High Ability Studies*, *23*(1), 85–87. https://doi.org/10.1080/13598139.2012.679100

Olawa, B. D., & Idemudia, E. S. (2019). Later-life satisfaction with adult children's achievements: does parents' personality matter? *Heliyon*, (5)9, 1-6 https://doi.org/10.1016/J.HELIYON.2019.E02406

Olszewski-Kubilius, P. and Thomson, D. (2012). *Gifted Education Programs and Procedures. In Handbook of Psychology, Second Edition* (eds. I. Weiner, W.M. Reynolds and G.E. Miller).https://doi.org/10.1002/9781118133880.hop207016

Oreck, B. A., Owen, S. V., & Baum, S. M. (2003). Validity, reliability, and equity issues in an observational talent assessment process in the performing arts. *Journal for the Education of the Gifted*, 27(1), 62-94. https://doi.org/10.1177/016235320302700105

Pallas, A. M. (2010). Measuring What Matters. Phi Delta Kappan, 92(4), 68-71. https://doi.org/10.1177/003172171009200414

Park, S., & Steve Oliver, J. (2009). The translation of teachers' understanding of gifted students into instructional strategies for teaching science. *Journal of Science Teacher Education*, 20(4), 333–351. https://doi.org/10.1007/s10972-009-9138-7

Parsons, S. A., Dodman, S. L., & Burrowbridge, S. C. (2013). Broadening the view of differentiated instruction. *Phi Delta Kappan*, 95(1), 38-42. https://doi.org/10.1177/003172171309500107

Patrick, H., Bangel, N. J., Jeon, K.-N., & Townsend, M. A. R. (2005). Reconsidering the issue of cooperative learning with gifted students. *Journal for the Education of the Gifted*, 29(1), 90-108. https://doi.org/10.1177/016235320502900105

Pendarvis, E., & Howley, A. (1996). Playing fair: the possibilities of gifted education. *Journal for the Education of the Gifted*, 19(2), 215-233. https://doi.org/10.1177/016235329601900207 (Original work published 1996)

Peters, S. J. (2021). The challenges of achieving equity within public school gifted and talented programs. *Gifted Child Quarterly*, 66(2), 82-94. https://doi.org/10.1177/00169862211002535

Pieczywok, A.(2013).Changing the paradigm of education for securityconnections. *The Quarterly Journal,* 13(1),1-12. https://doi.org/10.11610/CONNECTIONS.13.1.01

Popescu, D.-M., Miu (Rotaru), F., & Manache (Șerban), A. (2022). Management of activities "school after school". *LUMEN Proceedings*, (18), 176-184. https://doi.org/10.18662/lumproc/gidtp2022/18

Gusti Rahmadani. (2022). Determining talent based on student skills using fuzzy logic. *International Journal of Health Engineering and Technology*,1(3), 490-498. https://doi.org/10.55227/ijhet.v1i3.77

Reid, C., Romanoff, B., Algozzine, B., & Udall, A. (2000). An evaluation of alternative screening procedures. *Journal for the Education of the Gifted*, 23(4), 378-396. https://doi.org/10.1177/016235320002300404

Renati, R., Bonfiglio, N. S., & Pfeiffer, S. (2016). Challenges raising a gifted child: Stress and resilience factors within the family. *Gifted Education International*, 33(2), 145-162. https://doi.org/10.1177/0261429416650948

Renzulli, J. S. (2005). Applying gifted education pedagogy to total talent development for all students. *Theory Into Practice*, 44(2), 80–89. https://doi.org/10.1207/s15430421tip4402_2

Rowley, J. L. (2008). Teaching strategies to facilitate learning for gifted and talented students. *Australasian Journal of Gifted Education*, 17(2), 36–42. https://search.informit.org/doi/10.3316/informit.720828846652095

Samsen-Bronsveld, H.E., Van der Ven, S.H.G., Speetjens, P.P.A.M. and Bakx, A.W.E.A. (2023), Impact of the COVID-19 lockdown on gifted and non-gifted primary school students' well-being and motivation from a self-determination perspective. *Journal of Reseach in Special Educational Needs*, (23) 100-115. https://doi.org/10.1111/1471-3802.12583

Sayı, A.K. & Şahin, F. (2021). Examination of gifted students' internet / game addiction and school social behaviors. *Pegem Journal of Education and Instruction*, (11) 4, 33-43. https://doi.org/10.47750/pegegog.11.04.04

Scherrer, V., & Preckel, F. (2018). Development of motivational variables and self-esteem during the school career: A meta-analysis of longitudinal studies. *Review of Educational Research*, 89(2), 211-258. https://doi.org/10.3102/0034654318819127

Schmitz, C. C., & Galbraith, J. (1991). *Managing the social and emotional needs of the gifted*. Australia: Hawker Brownlow Education. Melbourne

Sears, D.A., Reagin, J.M. (2013). Individual versus collaborative problem solving: divergent outcomes depending on task complexity. *Instructional Science,* (4)1, 1153–1172. https://doi.org/10.1007/s11251-013-9271-8

Sharma, Anjali, and Ashutosh Kudei. 2024. Opportunities and challenges of working with gifted learners: A systematic review. *Journal of Education, Society and Behavioural Science,* (37)6, 491-501. https://doi.org/10.9734/jesbs/2024/v37i61360.

Shernoff, D.J. (2013). Model *After-School Programs. In: Optimal Learning Environments to Promote Student Engagement. Advancing Responsible Adolescent Development*. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-7089-2_13

Silverman, L.K. (2018). *Assessment of Giftedness*. In: Pfeiffer, S. (eds) *Handbook of Giftedness in Children*. Springer, Cham. https://doi.org/10.1007/978-3-319-77004-8_12

Smith, L. M, & Campbell, R. J. (2015). So-called giftedness and teacher education: issues of equity and inclusion. *Teachers and Teaching*, 22(2), 255–267. https://doi.org/10.1080/13540602.2015.1055448

Sternberg, R. (1996). Neither elitism nor egalitarianism: Gifted education as a third force in American education. *Roeper Review*, 18(4), 261–263. https://doi.org/10.1080/02783199609553755

Tan, H. H. (2012). *Educating gifted and talented students: From teachers' thinking to thinking teachers* [Murdoch University]. https://researchportal.murdoch.edu.au/esploro/outputs/doctoral/Educating-gifted-and-talented-students-From/991005543128407891#file-0

Tan, S. (2021). Providing equity in gifted education in a single-state country. *Gifted Child Quarterly*, 66(2), 157-158. https://doi.org/10.1177/00169862211040523

Torrance, E. P. (1974). Readiness of teachers of gifted to learn from culturally different gifted children. *Gifted Child Quarterly*, 18(3), 137-142. https://doi.org/10.1177/001698627401800030

Tortop H.S. (2013). A new model program for academically gifted students in turkey: overview of the education program for the gifted students' bridge with university (epgbu). *Journal for the Education of Gifted Young Scientist*, 1(2), 21-31. https://doi.org/10.17478/JEYSG.201329004

Ünlü, Ö., & Karadaş, Y. (2023). Challenges faced by gifted students in the school environment and proposed solutions. *International Journal of Turkish Education Sciences*, (21), 1032-1071. https://doi.org/10.46778/goputeb.1336214

Vaivre-Douret, L. (2011). developmental and cognitive characteristics of "high-level potentialities" (highly gifted) children, *International Journal of Pediatrics*, 420297, 14. https://doi.org/10.1155/2011/420297

Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., & Lens, W. (2009). Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology*, 101(3), 671–688. https://doi.org/10.1037/a0015083

VanTassel-Baska, J., & Stambaugh, T. (2005). Challenges and possibilities for serving gifted learners in the regular classroom. *Theory into Practice*, 44(3), 211–217. https://doi.org/10.1207/s15430421tip4403_5

Wellisch, M., & Brown, J. (2012). An integrated identification and intervention model for intellectually gifted children. *Journal of Advanced Academics*, 23(2), 145-167. https://doi.org/10.1177/1932202X12438877

Wormald, C., Rogers, K. B., & Vialle, W. (2015). A case study of giftedness and specific learning disabilities: bridging the two exceptionalities. *Roeper Review*, *37*(3), 124–138. https://doi.org/10.1080/02783193.2015.1047547

Worrell, F.C., Olszewski-Kubilius, P., & Subotnik, R.F. (2021). *Gifted and talented students*. In E. Cole & M. Kokai (Eds.),*Mental health consultation and interventions in school settings: A scientist-practitioner's guide (*pp. 199–216). Hogrefe Publishing GmbH.

Yaluma, C. B., & Tyner, A. (2020). Are U.S. schools closing the "gifted gap"? analyzing elementary and middle schools' gifted participation and representation trends (2012–2016). *Journal of Advanced Academics*, 32(1), 28-53. https://doi.org/10.1177/1932202X20937633

Zeidner, M., & Matthews, G. (2017). Emotional intelligence in gifted students. *Gifted Education International*, 33(2), 163-182. https://doi.org/10.1177/0261429417708879

Appendix. Observation Rubric

Assessment Area	**Level 1: Inadequate**	**Level 2: Developing**	**Level 3: Proficient**	**Level 4: Excellent**
Cognitive and Academic Challenges	Has difficulty generating ideas; repeats existing ones.	Produces a limited number of ordinary ideas.	Develops a variety of applicable ideas.	Presents extraordinary, original, and inspiring ideas.
Emotional and Social Challenges	Struggles to communicate with peers and others.	Communicates, but insufficient sentences .	Develops applicable communication and present proposals.	Generates conversations versatile, creative, and effectively, socially and emotionally.
Group Dynamics and Collaboration	Does not be a part of a group and follow instructions of others.	Develops a membership identity but lacks skills in collaboration.	Demonstrates membership that is original and related to learning outcomes.	Develops a highly collaborative effort and lead group interaction .
Social Behaviors and Personality Traits	Cannot develop strategies; struggles to establish relationships.	Tries simple strategies; has deficiencies in reasoning.	Develops appropriate strategies to solve social problems.	Develops and explains effective strategies for complex problems.
General Observations	Cannot use inductive/deductive methods.	Attempts reasoning but is limited.	Makes logical inferences and provides examples.	Effectively uses various reasoning methods and builds connections.