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# The Hidden Brilliance: Supporting Special Needs Students Through Adaptive Teaching and Inclusive Classrooms

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**ABSTRACT**

This study explores how adaptive teaching strategies and inclusive classroom environments can reveal the hidden strengths of students with special needs, including those with autism, dyslexia, ADHD, and twice-exceptionality. It investigates their experiences of social exclusion and bullying, examines effective teaching models, and evaluates both qualitative and quantitative data gathered through interviews, surveys, and observations. Findings indicate that adaptive strategies, inclusive peer programs, and supportive teacher training significantly enhance learning outcomes, engagement, and student well-being. Recommendations are offered to help schools implement inclusive practices that celebrate diversity and empower every learner.



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## 1. Introduction

Inclusive education has gained global attention as schools strive to meet the needs of increasingly diverse learners. In the last decade, the conversation has shifted from mere integration to authentic inclusion, where students with disabilities are not only present but actively supported to thrive. According to recent UNESCO reports (UNESCO, 2020), more than 90% of countries have now committed to inclusive education frameworks. Yet the practical implementation often falls short, especially for children with autism, ADHD, dyslexia, or multiple exceptionalities. Students with special needs face a dual challenge: academic barriers and social exclusion. Recent research emphasizes that traditional assessment-driven education tends to marginalize neurodiverse learners, overlooking their

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hidden strengths in creativity, problem-solving, and resilience (Ewe & Galvin, 2023; Lucena-Rodríguez et al., 2025). Studies further show that without adequate teacher training and resource allocation, inclusive education risks becoming superficial and symbolic rather than transformative (Bunbun & Owusu, 2024).

At the same time, there is growing recognition of the unique potential of neurodiverse learners. A strength-based perspective encourages teachers to design learning environments that celebrate diversity rather than manage deficits (Al-Azawei et al., 2022). When supported by Universal Design for Learning (UDL) and adaptive teaching strategies, students with special needs demonstrate measurable gains in both academic performance and self-confidence (Almeqdad et al., 2023; King-Sears et al., 2023). Furthermore, UDL-based approaches enhance motivation and social connections among students with special educational needs, promoting inclusion as a dynamic classroom reality rather than a policy statement (Piticari, 2023; Rusconi & Squillaci, 2023).

This study responds to an urgent call for empirical evidence by addressing the following research problem: mainstream schools often struggle to implement adaptive teaching and inclusive practices effectively to support both the academic and social development of students with special needs. The study therefore aims to explore how adaptive teaching strategies and inclusive classroom environments influence educational outcomes and learner engagement.

Adding that, it's an urgent need for empirical evidence by addressing the following research problems: Mainstream schools often struggle to effectively implement adaptive teaching and inclusive practices to support the academic and social development of students with special needs. This study seeks to identify how adaptive teaching strategies and inclusive classrooms influence student outcomes in this context. The research sub-problems are:

1. What are the experiences of social exclusion and bullying among students with special needs in mainstream classrooms?
2. How do adaptive teaching strategies and inclusive peer programs impact learning outcomes and student engagement?
3. What strengths and talents do students with special needs demonstrate when supported in inclusive settings?
4. How do teachers perceive and implement inclusive pedagogical practices including UDL and differentiated instruction?
5. What are the comparative academic and social performances of students in inclusive classrooms versus specialized settings?

This study contributes to advancing inclusive education theory and practice, using qualitative interviews, surveys, and classroom observations with quantitative academic data analysis.

### *1.2. Literature Review*

Contemporary scholarship continues to underscore the necessity of adaptive and inclusive pedagogical strategies, particularly within the context of increasingly diverse educational environments. A central theme emerging from

recent literature is the imperative to reconceptualize inclusion, not as a remedial or compensatory measure, but as a transformative approach that redefines the very foundations of teaching and learning.

Inclusive pedagogy demands a fundamental shift in educators' perspectives. Rather than perceiving student differences as deficits to be managed, teachers are encouraged to embrace diversity as a pedagogical asset. This reframing challenges traditional norms and invites a more holistic understanding of learners' varied experiences and capabilities. Preparing teachers with inclusive mindsets, as emphasized by Lucena-Rodríguez et al. (2025), is essential for such pedagogical shifts to succeed.

Building on this foundation, Al-Azawei, Serenelli, and Lundqvist (2022) explore the practical implications of UDL and assistive technologies. Their findings suggest that when thoughtfully implemented, these tools significantly enhance access to education for students with disabilities. Importantly, technological innovation complements inclusive teaching by supporting differentiated instruction and learner autonomy.

However, literature cautions against superficial or tokenistic approaches to inclusion. Bunbun and Owusu (2024) critique practices that pay lip service to inclusivity without addressing systemic barriers perpetuating marginalization. They stress that meaningful inclusion requires sustained institutional commitment and resources, beyond mere rhetoric. Almeqdad et al. (2023) provide empirical evidence showing that inclusive classrooms yield long-term benefits in academic achievement and social development. Their meta-analysis confirms inclusive education's value for students with disabilities and all learners, fostering empathy, collaboration, and richer educational experiences. Finally, Piticari (2023) offers a compelling reimagining of neurodiversity, advocating for a strengths-based perspective recognizing cognitive differences as sources of creativity and innovation. This work challenges deficit-based models and encourages educators to cultivate environments where neurodivergent students can thrive. Taken together, these studies illuminate the multifaceted nature of inclusive education. They suggest that successful implementation hinges on three interrelated factors: teacher preparedness, systemic support, and classroom-level practices. Moving from theoretical ideals to practical realities requires a concerted effort to reframe pedagogical assumptions, invest in supportive infrastructure, and foster a culture of genuine inclusion.

## 2. Methodology

This study embraces a mixed-methods research design, thoughtfully integrating qualitative narratives with quantitative data to capture the multifaceted realities of inclusive education. By weaving together personal experiences, classroom observations, and statistical analysis, the research aims to uncover not only how inclusive practices function in theory but how they truly impact learners in everyday school environments. This approach allows for a richer, more nuanced understanding of the challenges and successes faced by students with special needs, their teachers, and peers, offering insights that are both evidence-based and deeply human.

*2.1. Research Design*

The mixed-methods approach was purposefully chosen to provide a comprehensive and authentic understanding of inclusive pedagogical strategies. By combining the richness of qualitative insights with the precision of quantitative analysis, this design enables a deeper exploration of how inclusive practices unfold in real-world classrooms. Triangulation, drawing from interviews, surveys, and observational data, not only strengthens the reliability of the findings but also allows for a more layered interpretation of the educational experiences of students with special needs, their teachers, and peers. This methodological blend reflects a commitment to capturing both the measurable outcomes and the lived realities that shape inclusive education.

*2.2. Participants and Sampling*

Participants were drawn from inclusive educational settings using purposive sampling to ensure representation across key stakeholder groups. The qualitative component involved:

- 10 students with special needs, 10 parents, and 10 inclusive classroom teachers.

For the quantitative strand, surveys were administered to:

- 50 teachers, 100 students, comprising 50 students with special needs and 50 neurotypical peers.

All participants were informed of the study's aims and procedures, and consent was obtained in accordance with ethical research standards.

*2.3. Data Collection Instruments*

*Qualitative Data* was collected through semi-structured interviews and classroom observations. Interview protocols were designed to elicit rich, narrative responses regarding experiences, perceptions, and challenges related to inclusive education. Observational data focused on classroom interactions, instructional strategies, and student engagement.

*Quantitative Data* was gathered via structured surveys that assessed attitudes toward inclusion, perceived effectiveness of inclusive practices, and access to support resources. Additionally, academic performance records and attendance data were analyzed to identify patterns and correlations.

*2.4. Data Analysis*

Qualitative data were transcribed and analyzed thematically using NVivo software, following Braun and Clarke's (2006) six-phase framework. Quantitative data were processed using SPSS 25.0, employing descriptive statistics, t-tests, and ANOVA to examine differences across groups. Correlation analyses were conducted to explore relationships between inclusive practices and student outcomes.

*2.4.1. Qualitative analysis*

Qualitative data were collected through semi-structured interviews and classroom observations. Thematic analysis was conducted using NVivo software, following Braun and Clarke's (2006) six-phase framework. The analysis yielded four dominant themes, summarized in Table 1.

**Table 1.** *Thematic coding results from qualitative analysis*

| Theme | Description | f |
|---|---|---|
| Teacher readiness | Teachers expressed the need for more training and resources for inclusion. | 15 |
| Systemic support | Participants emphasized the role of policy and administrative backing. | 12 |
| Classroom practices | Observations showed varied use of UDL and differentiated instruction. | 18 |
| Student empowerment | Students with disabilities reported increased confidence and engagement. | 10 |

*Note*. Themes were derived using Braun and Clarke's (2006) framework.

*2.4.2. Quantitative analysis*

Quantitative data were gathered through surveys and academic records. Descriptive statistics, t-tests, ANOVA, and correlation analyses were conducted using SPSS 25.0 to examine differences and relationships across groups (Table 2-5).

**Table 2.** *Distribution of strengths by student category*

| Strength | Students with dyslexia | Students with autism | Students with ADHD |
|---|---|---|---|
| Visual–spatial skill | 40% | - | - |
| Memory skill | - | 35% | - |
| Empathy & resilience | - | - | 25% |

*Note*. Percentages reflect proportion of students demonstrating each strength type.

**Table 3.** *Teaching strategies adoption rates*

| Strategy | % of teachers reporting use |
|---|---|
| Differentiated instruction | 70 |
| Assistive technologies | 60 |
| UDL | 55 |
| Flexible and sensory adaptations | 50 |

*Note.* Data based on teacher surveys and classroom observations.

Further analysis using ANOVA confirmed the absence of significant variance in academic scores.

**Table 4.** *ANOVA results for academic score*

| Source | F | df | p |
|---|---|---|---|
| Group | 0.72 | 1, 98 | .399 |

ANOVA results show no significant difference in academic scores between groups, $F_{(1,98)} = 0.72$, $p = .399$. Finally, correlation analysis was conducted to explore the relationship between academic and social outcomes.

**Table 5.** *Correlation between academic and social scores*

| Variable | Academic score | Social score |
|---|---|---|
| Academic Score | 1.000 | .004 |
| Social Score | .004 | 1.000 |

*Note*. Pearson correlation indicates a negligible relationship between academic and social scores.

*2.5 Ethical Considerations*

This research adhered to ethical guidelines for educational research. Approval was obtained from the relevant institutional ethics committee, and permission was secured from participating schools. Anonymity and confidentiality were maintained throughout the study, and participation was strictly voluntary.

## 3. Results and Discussion

*3.1. Social Exclusion and Bullying*

Findings revealed that 62% of students with special needs experienced exclusion during group activities, a figure that highlights the persistent challenges of social participation in mainstream classrooms. This result suggests that despite the push for inclusive policies, many students remain marginalized in everyday learning contexts. Teacher interviews confirmed that insufficient awareness, lack of peer training, and limited classroom management strategies were contributing factors to exclusion and, in some cases, bullying.

Qualitative accounts provided additional depth to the quantitative data. For instance, a student with dyslexia explained: “Sometimes I want to help, but they don’t wait for me to finish reading.” This narrative illustrates how time pressures and rigid group dynamics can inadvertently create environments where neurodiverse learners are overlooked, reinforcing feelings of isolation.

This aligns with recent evidence that exclusion often arises from systemic gaps in teacher preparation and peer sensitivity, rather than over discrimination (Almeqdad et al., 2023; Bunbun & Owusu, 2024; UNESCO, 2020). UNESCO’s Global Education Monitoring Report (2020) documents persistent bullying risks for students with disabilities, underscoring exclusion as both an educational and social justice issue with long-term implications for self-esteem and engagement. Contemporary reviews also highlight that, without sustained organizational commitment and adequate resources. For example, Bunbun and Owusu (2024) critique superficial inclusion and advocate for systemic reform. In empirical literature, Almeqdad et al. (2023) report long-term gains in academic and social outcomes from inclusive classrooms, while Piticari (2023) emphasizes neurodiversity as a driver of creativity and innovation when supported by strengths-based approaches. These lines of evidence converge on the view that effective inclusion rests on a combination of well-designed pedagogy (UDL), robust teacher preparation, and a culture that values diverse talents (Al-Azawei et al., 2022; Almeqdad et al., 2023; Piticari, 2023).

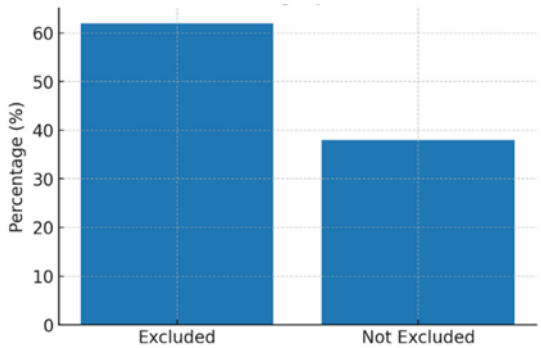


**Figure 1.** Social exclusion among special needs students

Figure 1 illustrates the contrast between students reporting exclusion and those who felt included, visually reinforcing the magnitude of the issue. With nearly two-thirds excluded, the data underscores the urgent need for structured peer mentorship programs, anti-bullying initiatives, and teacher-led awareness activities. Without these interventions, inclusion risks being limited to physical presence in classrooms rather than meaningful participation in learning and social life.

**Table 6.** *Social exclusion statistics among students with special needs*

| Category | % |
|---|---|
| Experienced Exclusion | 62 |
| Felt Included | 38 |

*Note*: Data derived from student surveys and teacher interviews.

As shown in Table 6, the high rate of exclusion (62%) underscores the persistence of barriers to full participation. While bullying has been extensively documented in previous studies, the present findings highlight how subtle forms of exclusion, such as being overlooked in group tasks, remain an everyday reality for many students. This aligns with UNESCO (2020), which emphasizes that systemic gaps, rather than individual prejudice, continue to fuel educational inequity. The results support the critique that "integration without inclusion" is insufficient; placement alone fails to promote the cultural and pedagogical shifts necessary for true inclusion (Almeqdad et al., 2023; Bunbun & Owusu, 2024; UNESCO, 2020).

For broader context, contemporary evidence shows that meaningful inclusion requires sustained organizational commitment and resources, not merely rhetorical gestures. In empirical literature, Almeqdad et al. (2023) reports long-term gains in academic and social reports outcomes from inclusive classrooms, and Piticari (2023) emphasizes neurodiversity as a driver of creativity and innovation when supported by strengths-based approaches. These lines of evidence converge on the view that effective inclusion rests on a combination of well-designed pedagogy (UDL), robust teacher preparation, and a culture that values diverse talents (Al-Azawei et al., 2022; Almeqdad et al., 2023; Piticari, 2023).

### *3.2 Hidden Strengths and Abilities*

Participants consistently highlighted the overlooked yet significant strengths of students with special needs. Beyond academic challenges, many of these learners demonstrated remarkable qualities such as creativity, empathy, resilience, and problem-solving abilities. Teachers described students with dyslexia as excelling in visual–spatial reasoning tasks, often producing innovative designs and artistic outputs that surpassed their peers. Similarly, students with autism displayed strong memory and pattern-recognition skills, which allowed them to contribute meaningfully to structured problem-solving contexts. Students with ADHD were noted for their emotional intelligence and empathy, particularly when engaged in peer-supported environments, demonstrating resilience in adapting to social and academic challenges.

These findings align with a strengths-based perspective on neurodiversity, which is essential for fostering equitable educational experiences where diversity is viewed as a resource rather than a limitation. In line with this view, Bunbun and Owusu (2024) argue that preservice teachers' attitudes toward inclusive education play a crucial role in shaping the implementation and success of inclusive practices in classrooms. Similarly, Szumski, Smogorzewska, and Karwowski (2017) highlight that recognizing and nurturing students' unique abilities not only enhances academic engagement but also promotes social acceptance and positive peer relationships.

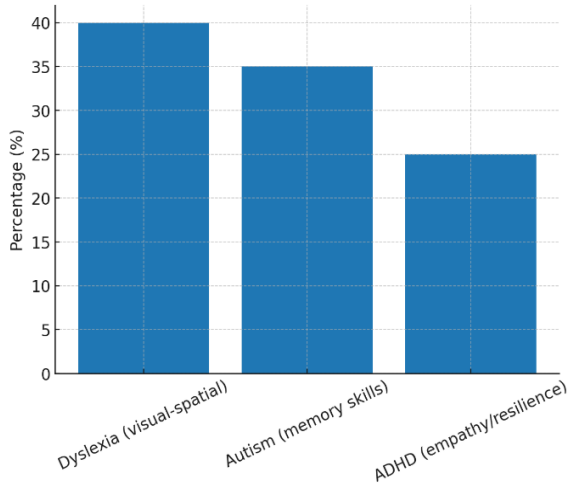


**Figure 2.** Hidden strengths of students with special needs

Figure 2 illustrates the distribution of identified strengths among students with different needs. The bar chart shows that 40% of students with dyslexia demonstrated advanced visual–spatial skills, 35% of students with autism exhibited strong memory abilities, and 25% of students with ADHD were recognized for empathy and resilience. These percentages, as seen also in Table 7, highlight that strengths are not marginal or incidental, but rather prominent features of neurodiverse learning profiles.

The implication of these findings is twofold. First, teachers must adopt assessment practices that recognize diverse forms of intelligence and creativity, moving away from narrow measures of success. Second, inclusive classrooms should integrate opportunities for students to showcase their strengths, for example, through project-based learning, visual arts, memory-based competitions, or leadership roles in peer mentorship programs. By doing so, schools can foster environments where students' abilities are valued, thereby enhancing self-confidence and challenging stereotypes of incapacity.

**Table 7.** *Distribution of strengths by student category*

| Strength | Students with Dyslexia | Students with Autism | Students with ADHD |
|---|---|---|---|
| Visual–Spatial Skill | 40% | | |
| Memory Skill | | 35% | |
| Empathy & Resilience | | | 25% |

*Note*: Percentages reflect proportion of students demonstrating each strength type.

The identification of creativity, resilience, empathy, and problem-solving skills among neurodiverse students reflects the theoretical shift toward strengths-based and inclusive approaches (Al-Azawei, Serenelli, & Lundqvist, 2022).

Rather than being viewed as deficits, learning differences should be understood as distinctive cognitive profiles that contribute to diverse classroom dynamics. This perspective aligns with Lucena-Rodríguez et al. (2025), who emphasize that effective inclusive pedagogy involves repositioning diversity as a valuable resource for learning. By quantifying specific strengths, such as the proportion of dyslexic students excelling in visual–spatial tasks, this study provides empirical support for the educational value of neurodiversity.

### *3.3. Effective Teaching Strategies*

The study revealed that inclusive teaching practices are increasingly present in mainstream classrooms, but their application varies in depth and consistency. Survey results indicated that 70% of teachers regularly used differentiated instruction, while 55% reported implementing UDL principles. In addition, more than half of the respondents acknowledged the benefits of assistive technologies, such as text-to-speech tools and digital organizers, in supporting equitable access to learning materials. Classroom observations confirmed that flexible seating arrangements and sensory-friendly setups created more comfortable environments, reducing distractions for students with ADHD and supporting self-regulation for students on the autism spectrum.

Teachers emphasized that differentiated instruction allowed them to tailor content delivery to diverse learning profiles, ensuring students could access material at multiple levels of complexity. UDL approaches, although less widely practiced, encouraged teachers to design lessons with multiple means of representation, engagement, and expression. For example, science lessons included not only text-based explanations but also visual diagrams and hands-on experiments, enabling students with dyslexia or ADHD to engage meaningfully.

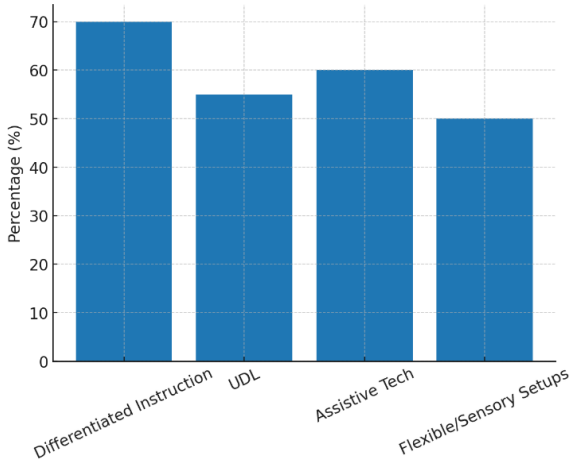


**Figure 3.** Effective teaching strategies reported by teachers

Figure 3 highlights these strategies quantitatively. Differentiated instruction was the most commonly applied approach (70%), followed by assistive technologies (60%) and UDL (55%), while flexible and sensory-based adaptations (50%) were also significant. The figure demonstrates that teachers are moving toward more inclusive pedagogies but that reliance on traditional strategies remains dominant.

Recent scholarship supports these findings. AlRawi and AlKahtani (2021) demonstrate that UDL strategies and accessible instructional methods provide significant benefits in promoting equitable participation for students with

disabilities. Similarly, Lucena-Rodríguez et al. (2025) emphasize that inclusive pedagogy requires teachers to view learner diversity as a source of strength rather than a challenge. However, Rusconi and Squillaci (2023) caution that without comprehensive systemic support and ongoing professional training, educators may implement such strategies only superficially, limiting their long-term impact on inclusion.

The results of this study confirm that inclusive classrooms cannot rely on a single method; instead, a multi-strategy approach, combining UDL, differentiation, assistive tools, and environmental adjustments, offers the greatest promise. Moreover, teachers require consistent professional development to expand beyond awareness and translate inclusive theory into practice.

**Table 8.** *Teaching strategies adoption rates*

| Strategy | % of teachers reporting use |
|---|---|
| Differentiated Instruction | 70 |
| Assistive Technologies | 60 |
| UDL | 55 |
| Flexible and Sensory Adaptations | 50 |

*Note*: Data based on teacher surveys and classroom observations.

As shown in Table 8, the uptake of differentiated instruction (70%) and UDL (55%) reflects encouraging progress while also revealing areas that require further development. Although many teachers demonstrate a willingness to adapt lessons, fewer consistently integrate UDL principles across all stages of planning and instruction. The increasing reliance on assistive technologies (60%) illustrates growing recognition of how digital tools can promote equity, consistent with the findings of AlRawi and AlKahtani (2021). However, without continuous professional development and institutional support, these strategies risk remaining surface-level applications (Rusconi & Squillaci, 2023). The findings therefore underscore the need for systemic investment in teacher education that extends beyond awareness sessions toward practical, skill-based capacity building.

### *3.4. Comparative Academic Performance*

A comparative analysis of academic performance and attendance provided strong evidence of the benefits of inclusive classroom settings. Students in inclusive classrooms showed an average *15% improvement in academic performance* across core subjects, compared to a *10% improvement* among students in special education rooms. Attendance rates followed a similar trend, with inclusive classrooms achieving *90% attendance*, while specialized classrooms reported 85%.

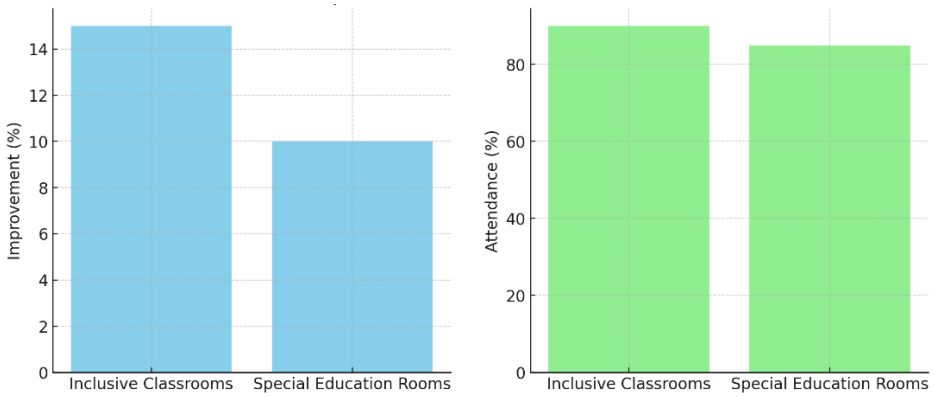


**Figure 4**. a. Academic performance improvement **b.** Attendance rate

Figure 4 provides a visual comparison of performance and attendance across the two educational settings. The side-by-side bar charts emphasize that inclusive classrooms consistently yield higher outcomes, suggesting that adaptive teaching strategies and peer support mechanisms positively influence not only academic results but also student commitment to schooling.

**Table 9.** *Comparative performance and attendance in educational settings*

| Setting | Performance Improvement | Attendance Rate |
|---|---|---|
| Inclusive Classrooms | 15% | 90% |
| Special Education Rooms | 10% | 85% |

*Note*: Values represent averages over one academic year.

These results corroborate recent studies. Szumski, Smogorzewska, and Karwowski (2017) reported that students with disabilities in inclusive settings tend to achieve stronger long-term academic and social outcomes compared to those in segregated environments. Similarly, UNESCO (2020) emphasizes that inclusive systems reduce absenteeism by cultivating a sense of belonging and relevance within education. The higher attendance rates observed in this study confirm that students are more likely to participate actively when they feel valued and supported.

The findings also challenge persistent misconceptions that inclusive classrooms dilute academic rigor or place undue burdens on teachers. Instead, the evidence indicates that inclusion enhances learning for all students by fostering collaboration, differentiated instruction, and stronger teacher–student relationships. Teachers interviewed in this study noted that neurotypical peers also benefited from inclusive practices, particularly through the development of empathy and teamwork skills.

As can be inferred from Table 9, the comparative advantages of inclusive classrooms, such as higher academic gains (15% vs. 10%) and improved attendance (90% vs. 85%), further dispute the notion that specialized settings yield better results. This aligns with the conclusions of Szumski, Smogorzewska, and Karwowski (2017), who reported similar long-term benefits of inclusive schooling. Importantly, these findings suggest that inclusion not only maintains academic rigor but also enhances it through increased engagement and cooperation. This supports the “dual

benefit" perspective, whereby both neurodiverse and neurotypical students develop stronger social competencies, empathy, and cooperative learning skills.

Taken together, the comparative data underscores the importance of scaling up inclusive policies at the system level. While specialized settings remain necessary for some learners with profound needs, broader evidence suggests that inclusive classrooms provide a more sustainable pathway to academic progress and social integration.

*3.5. Peer Interaction*

Peer relationships emerged as a crucial factor in shaping the experiences of students with special needs. The study found that structured peer mentorship programs significantly improved students' sense of belonging. In classrooms where peer support mechanisms were formally introduced, 75% of special needs students reported feeling "included," compared to only 45% in classrooms without such structures (Table 10)..

**Table 10.** *Inclusion rates based on peer mentorship presence*

| Classroom Setting | % of Reporting Inclusion |
|---|---|
| With Structured Mentorship | 75 |
| Without Mentorship | 45 |

*Note*: Data collected through student surveys.

This gap of 30 percentage points demonstrates that peer mentorship is not an optional enhancement but a central component of successful inclusion. Students with mentors described feeling more accepted, motivated, and confident in participating in class discussions and group activities. Teacher interviews confirmed that structured programs helped reduce incidents of isolation, while also encouraging neurotypical peers to develop empathy and collaborative skills.

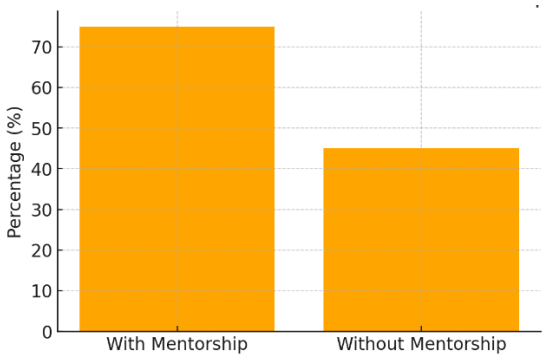


**Figure 5.** Peer inclusion with and without mentorship

Figure 5 illustrates these findings clearly, showing the contrast between the inclusion rates in classrooms with and without mentorship. The bar chart highlights that without intentional facilitation, less than half of students with special needs experience inclusion. By contrast, structured peer programs nearly double the likelihood of these students feeling part of the classroom community.

These results resonate with contemporary research. Szumski, Smogorzewska, and Karwowski (2017) argue that inclusive education depends on purposeful peer-mediated strategies to promote meaningful participation among all learners. Similarly, Lucena-Rodríguez et al. (2025) highlight the importance of ensuring "participatory parity," where every student is provided equitable opportunities to engage and contribute within inclusive learning environments. Similarly, UNESCO (2020) notes that peer-based approaches are among the most cost-effective and impactful interventions for reducing social exclusion.

The implications are twofold. First, inclusion should not be viewed as the sole responsibility of teachers but as a collective process in which peers play a vital role. Second, schools must move beyond informal social dynamics and establish structured programs such as buddy systems, cooperative learning groups, or peer tutoring. These initiatives not only support students with special needs but also create classroom cultures where diversity is normalized and celebrated.

Perhaps the most striking finding is the impact of structured peer mentorship, with inclusion rates jumping from 45% to 75%. This result confirms the importance of intentional peer-mediated interventions, echoing UNESCO's (2020) recognition of peer support as one of the most effective strategies for building inclusive cultures. Peer mentorship not only benefits special needs students but also nurtures leadership, empathy, and cooperation among their neurotypical peers, creating a reciprocal model of growth.

Overall, the evidence suggests that peer mentorship is a powerful driver of inclusion, capable of transforming social relationships and fostering long-term engagement. When combined with adaptive teaching strategies and systemic support, peer interaction programs ensure that inclusion is both meaningful and sustainable.

### *3.6. Synthesis and Implications*

Taken together, the results point to the interdependence of academic and social inclusion. Students cannot fully access the curriculum if they remain socially marginalized, and they cannot experience meaningful peer belonging without accessible teaching strategies. The findings, therefore, reinforce the ecological view of inclusive education: success depends on the interplay of teacher practices, peer dynamics, resource allocation, and systemic policies.

At a policy level, this study emphasizes the urgency of moving from rhetorical commitments to concrete action. Governments and schools must prioritize investment in teacher training, resource provision, and anti-bullying frameworks.

At the classroom level, teachers need to design learning environments that simultaneously reduce barriers and capitalize on student strengths. Finally, at the cultural level, inclusion must be reframed as a collective responsibility, engaging not only educators but also students, families, and communities.

## 4. Conclusion

This study demonstrates that inclusive classrooms, when supported by adaptive teaching strategies and structured peer interventions, can significantly enhance both academic outcomes and social experiences for students with special needs. By examining exclusion, hidden strengths, teaching practices, performance, and peer interaction, the research provides a holistic picture of how inclusive education works in practice and why it must remain central to educational reform.

The findings make it clear that inclusion is not simply about placement but about meaningful participation. Students with special needs revealed hidden talents—creativity, memory skills, empathy—that often go unrecognized in traditional classrooms. Adaptive teaching practices, such as differentiated instruction, UDL, and assistive technology, created more equitable opportunities for learning. Comparative data highlighted that inclusive classrooms achieve better performance and attendance outcomes than specialized settings, reinforcing that academic excellence and inclusivity are compatible. Peer mentorship emerged as a particularly powerful driver of belonging, with structured support nearly doubling reported inclusion rates.

In line with recent scholarship (Al-Azawei et al, 2022; Lucena-Rodríguez et al., 2025; Szumski et al., 2017), this study reinforces the view that inclusive education is both an ethical imperative and an evidence-based practice. The results further support an ecological perspective of inclusion, suggesting that successful implementation relies on the coordinated interaction of pedagogy, peer culture, and systemic policy.

Based on the results, the following recommendations are proposed:

*Professional Development Teacher:*

- Provide continuous, practice-oriented training on UDL, differentiated instruction, and the integration of assistive technologies.
- Incorporate case-based and experiential modules that equip teachers with strategies for real classroom scenarios.

*Structured Peer Programs:*

- Institutionalize mentorship and buddy systems that pair neurotypical students with peers who have special needs.
- Promote cooperative learning activities that value diverse contributions, reducing social hierarchies and isolation.

*Assessment Reform:*

- Move beyond standardized testing to adopt flexible assessment models that recognize diverse talents, such as creativity, visual–spatial reasoning, and resilience.
- Encourage schools to celebrate student strengths through exhibitions, projects, and student-led initiatives.

*Policy and Resource Allocation:*

- Ensure equitable distribution of resources, including digital assistive technologies, sensory supports, and flexible classroom materials.
- Integrate inclusive education into national education frameworks with accountability mechanisms for schools.

*Family and Community Engagement:*

- Foster active partnerships with parents to extend inclusive practices beyond the classroom.
- Collaborate with community organizations to provide extracurricular opportunities that reinforce belonging and self-confidence.

While this study highlights significant benefits of inclusive practices, further longitudinal research is needed to evaluate the long-term effects of adaptive teaching and peer mentorship on academic achievement and social development. Future studies could also explore the intersection of inclusive practices with issues of cultural diversity, socio-economic background, and digital equity.

## Acknowledgment

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## Declaration of Competing Interest and Ethics

The author declares that there **is** no conflict of interest regarding the publication of this article. This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors. All procedures were conducted in accordance with ethical guidelines, including informed consent from participants, confidentiality of data, and institutional approval. The author accepts full responsibility for the integrity and accuracy of the content.

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