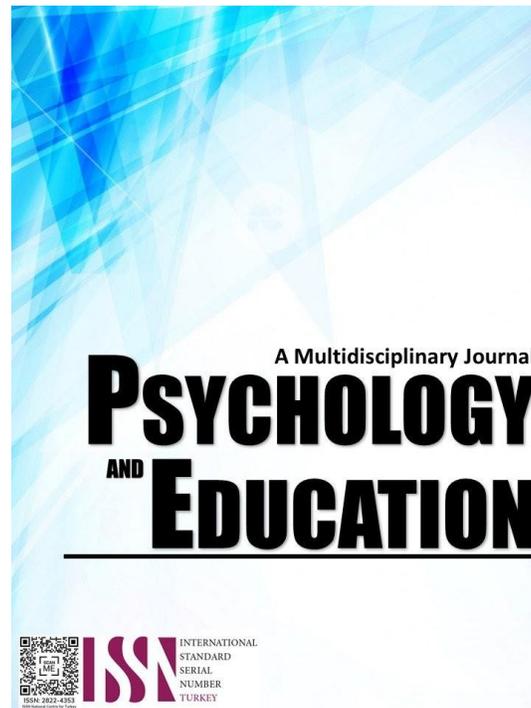# ASSESSING THE EFFICACY OF TEACHING STRATEGIES ON THE COGNITIVE AND BEHAVIORAL DEVELOPMENT OF CHILDREN WITH DEVELOPMENTAL DISORDERS

Assessing the Efficacy of Teaching Strategies on the Cognitive and Behavioral Development of Children with Developmental Disorders

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Abstract

This study examines the efficacy of scaffolding, positive reinforcement, differentiated instruction, and structured routines in supporting the cognitive and behavioral development of children with developmental disorders. Using a qualitative case study design with embedded units, data were collected through interviews and focus group discussions with ten (10) special education teachers who have at least two years of experience working with students with developmental disorders. Findings indicate that these teaching strategies significantly impact students' attention, problem-solving abilities, social skills, and emotional regulation. Teachers emphasized the importance of structured environments and reinforcement techniques in fostering student engagement and minimizing disruptive behaviors. However, they also reported challenges such as classroom management difficulties, limited resources, and the need for stronger collaboration with parents and school administrators. The study underscores the necessity of professional development programs to equip educators with effective teaching strategies. It also highlights the need for better resource allocation, including specialized learning materials and training opportunities. These findings contribute to the growing body of research advocating for evidence-based instructional approaches in special education. Future research should explore the long-term effects of these strategies and the role of parental involvement in reinforcing student learning beyond the classroom.

Keywords: *special education, developmental disorders, teaching strategies, cognitive development, behavioral development*

Introduction

Neurodevelopmental disorders are a set of conditions diagnosed together by the latest edition of the Diagnostic and Statistical Manual of Mental Disorders including intellectual disability, communication disorders, autism spectrum disorder, attention-deficit/hyperactivity disorder, specific learning disorder (SLD), and motor disorders defined from the study of (Rodríguez, C., et. al 2021).

Children with developmental disorders often face challenges in cognitive and behavioral development, making effective teaching strategies essential for their growth. These children have a much higher incidence of behavior problems than their typically developing peers (Bauminger et al., 2010). Educators and specialists continuously explore methods to enhance learning outcomes, yet the efficacy of these strategies remains a critical area of study (Odom et al., 2014).

On the international scene, educators who work directly with children diagnosed with developmental disorders such as ADHD, autism, and intellectual disabilities play a vital role in shaping learning experiences. However, their perspectives on the effectiveness, practicality, and challenges of these strategies have not been sufficiently documented (García-Carrión et al., 2018). Understanding how teachers perceive and apply these approaches can provide valuable insights into which methods yield the most significant benefits in enhancing cognitive skills (e.g., attention, problem-solving) and behavioral outcomes (e.g., social skills, emotional regulation) (Kasari et al., 2012).

In the Philippines, research on effective teaching strategies for children with developmental disorders remains limited, particularly regarding local adaptations and culturally relevant practices (Bernardo, 2020). In Mindanao, particularly in Region XI, where resources and specialized training for educators vary, assessing the effectiveness of teaching strategies remains a challenge (Valle, 2019).

This research aims to assess how various teaching approaches impact children with developmental disorders' cognitive and behavioral progress (Wong et al., 2015). By examining their effectiveness, this study seeks to provide insights to improve instructional practices and foster better learning experiences for these children (Hallahan, Kauffman, & Pullen, 2020).

Despite the development of various teaching strategies for children with developmental disorders, there remains a gap in assessing their efficacy in fostering both cognitive and behavioral growth. Many studies examine these aspects separately, overlooking their interconnected impact, while localized research considering cultural and contextual factors is limited (Sulemana et al., 2021).

This study seeks to bridge this gap by exploring educators' experiences, observations, and challenges in implementing these strategies. With the rising number of children diagnosed with developmental disorders, the urgency for evidence-based interventions grows (Dillenburger et al., 2015). By evaluating teaching strategies, this study aims to provide practical, research-backed approaches to enhance teaching, learning, and behavior, ultimately improving special education practices.

Research Questions

Existing research has examined the teaching strategies on the cognitive and behavioral development of children with developmental disorders individually, but there is still a lack of comprehensive studies that integrate educators' firsthand experiences in implementing them. Therefore, this case study aims to address the following questions:

1. How do educators perceive the effectiveness of these teaching strategies in supporting the cognitive and behavioral development of children with developmental disorders?
    1.1. scaffolding;
    1.2. positive reinforcement;
    1.3. differentiated instruction; and
    1.4. structured routines?
2. How do these teaching strategies influence students' cognitive skills and behavioral outcomes?
    2.1. attention;
    2.2. problem-solving;
    2.3. social skill; and
    2.4. emotional regulation?
3. What challenges do educators face when implementing these strategies in classroom settings?
4. What insights and recommendations can be drawn from educators' experiences to improve teaching practices and professional development in special education?

Methodology

Research Design

This research utilized a qualitative single-case study design with embedded units (Yin, 2014) to explore the efficacy of various teaching strategies used by educators working with children diagnosed with developmental disorders. The case being examined is the collective implementation of teaching strategies, while the embedded units consist of 10 educators from different schools, each providing insights into how these strategies are applied in different classroom settings. A case study approach is appropriate as it allows for an in-depth exploration of real-world teaching practices (Merriam, 2009). Focusing on the effectiveness of scaffolding techniques, positive reinforcement, differentiated instruction, and structured routines. By analyzing educators' experiences, observations, and challenges, this study aims to generate practical insights that can inform special education practices and professional development programs (Miña, 2024). The research involves collecting and analyzing non-numerical data, such as interviews, observations, and documents, to understand the case comprehensively (Creswell & Poth, 2018).

Participants

The participants of this study were ten (10) educators, preferably special education teachers, and specialists with a minimum of two years of experience, who work with children diagnosed with developmental disorders, particularly ADHD, autism, and intellectual disabilities. They were educators from different schools in Region XI selected through purposive sampling to participate in the in-depth interviews and share their deep and valuable insights in implementing specific teaching strategies for children with developmental disorders (Patton, 2015). Creswell (2013) suggests that a reasonable sample size may range from 5 to 25 participants, and ten (10) participants is an adequate number for this single-case study design with embedded units (Creswell & Poth, 2018).

Instrument

The study utilized a guided questionnaire as the research instrument developed by the researchers. The guide will consist of a questionnaire with open-ended questions encouraging participants to share their personal experiences, perceptions, and recommendations they could give to improve teaching practices and professional development for educators working with children with developmental disorders. To ensure its relevance and reliability in addressing the research questions, three research experts validated the questionnaire.

Procedure

After confirming the accuracy and reliability of the research instruments, a letter seeking permission to conduct the study was given to the school head. The researchers carefully adhered to all procedures, emphasizing transparency, ethical standards, and respect for the participants of the study, then data collection was conducted. Initially, the researchers explained the objectives of the research and oriented the participants with their rights and responsibilities before answering the questions.

In-depth interviews and focus group discussions were conducted to assess the efficacy of their teaching strategies on the cognitive and behavioral development of children with developmental disorders. Open-ended questions were used to gain a deeper understanding of their experiences, an audio recording application was used to capture the details of the interviews. The respondents provided valid replies with the agreement and full support of the school administrator. Researchers wrote down information observed and verified the teaching materials of the participants to gain an overall understanding of their teaching practice.

Finally, the data gathered were analyzed by converting them into written text called transcripts; verbatim transcription ensures that the written text is an exact replication of the recorded audio.

Data Analysis

The study employed thematic analysis to address the research question. Thematic analysis is a method used to identify patterns or themes within qualitative data (Clarke, V., & Braun, V., 2017). It is a flexible, widely-accepted framework and a powerful way to explore and understand people's experiences, thoughts, and behaviors within a data set, allowing the researchers to uncover meaningful patterns that provide deeper insights into the lived realities of participants (Braun & Clarke, 2006). An additional benefit, due to the flexibility of thematic analysis, is that researchers must clearly define their guiding perspectives and assumptions to maintain the credibility and reliability of their findings and interpretations (Castleberry, A., & Nolen, A., 2018). Unlike many qualitative methods, thematic analysis isn't limited to a single way of thinking or theory. Its flexibility makes it a valuable tool, especially for the diverse and ever-evolving field of learning and teaching (Gulam et al. 2025).

The researchers recorded the separate interviews and focus group discussions and took down notes as initial impressions, which is the most important stage in the analysis (Riessman, 1993). Next, the transcripts were read several times over, and the recordings were listened to numerous times over (Braun & Clarke, 2006). At the second stage, key points were coded, with attention to patterns throughout the dataset as a whole. These codes were then collated into themes, with thematic maps being used to investigate connections. Themes were also honed to make sense of and represent the data as a whole. When complete, each theme was thoroughly defined and examined as part of the overall findings. Finally, short excerpts from the transcript were utilized in the report to illustrate key themes.

Ethical Considerations

Ethical considerations were prioritized throughout the research process. The study upheld the rights and well-being of participants, fostering trust and transparency in the research (Kang, E., & Hwang, H.-J., 2023). Informed consent was obtained from the educators, who will ensure that they understand the purpose, confidentiality, and their right to withdraw at any time (Pahuja, R. (2024). Furthermore, the interviews will be conducted respectfully and sensitively to participants' experiences, perspectives, and recommendations, ensuring their comfort and privacy. As suggested by Hwang, H. J. (2023), confidentiality and anonymity were upheld, with this data securely stored to safeguard sensitive information, such as the identities of participants, held with integrity. Lastly, transparency was maintained throughout the research process to enhance the study's credibility (Alessi & Kahn, 2023). Thus, the researchers maintained openness in reporting methods, results, and findings, fostering accountability and trust among researchers, participants, and the public.

Results and Discussion

This section presents thematic analysis, key findings, and their justification, highlighting implications for the study. Conclusions summarize the results, and recommendations suggest actions for future research and practice.

Table 1. *Teaching strategies in supporting the cognitive and behavioral development of children with developmental disorders*

Teaching Strategy	Significant Statements
1.1 Scaffolding	"I use the 'I do, we do, you do' approach because I see that they understand more easily." - R1
	"It is important for them to have visual aids and concrete examples so they can grasp the lessons more effectively." - R5
1.2 Positive Reinforcement	"My students are more eager to participate in activities when they receive recognition or rewards." - R2
	"Positive feedback is very important. They seem to actively seek praise or rewards after putting in effort." - R6
1.3 Differentiated Instruction	"I have both graded and non-graded students in my class, so I need to use different approaches for each of them." - R4
	"Every day, I prepare multiple activities because they have different learning paces. Flexibility is a must." - R7
1.4 Structured Routines	"Structured routines make classroom management easier. When students know what to expect, their anxiety and disruptive behavior are reduced." - R10
	"Routine is the most important thing, especially for children on the spectrum. When they know the schedule, they cooperate better." - R9

These themes highlight the importance of teaching strategies that cater to the unique needs of children with developmental disorders, ensuring an inclusive and supportive learning experience.

Scaffolding is highlighted as an effective teaching strategy that helps children with developmental disorders build understanding incrementally. Respondents who said that "I use the 'I do, we do, you do' approach because I see that they understand more easily" - R1. emphasizes the gradual release of responsibility, allowing students to gain confidence and independence in their learning. On the other hand, concrete examples and visual aids add to the understanding by presenting abstract ideas in more concrete forms. "It is important for them to have visual aids and concrete examples so they can grasp the lessons more effectively." - R5 Therefore, the use of visual aids and concrete examples further supports comprehension, catering to diverse learning needs. This technique helps students obtain adequate guidance before progressing to independent activities, creating confidence and the memorization of facts.

Positive reinforcement is used by participants to encourage students through rewarding effort and participation. The statement "My students are more eager to participate in activities when they receive recognition or rewards" - R2. Clearly, praise and rewards instill a sense of accomplishment, making learning more enjoyable. "Positive feedback is very important. They seem to actively seek praise or rewards after putting in effort." - R6 Evidently, praise from teachers forms the foundation, which implies that children with developmental disorders are highly motivated by encouragement, which reinforces positive behaviors and enhances their self-esteem. This teaching strategy encourages a healthy learning atmosphere inside the classroom where students feel appreciated and encouraged to perform better.

The differentiated instruction teaching strategy used by respondent teachers recognizes that students have diverse needs and, therefore, teaching should respond to differences in abilities and styles of learning. Their statements "I have both graded and non-graded students in my class, so I need to use different approaches for each of them" - R4 and "Every day, I prepare multiple activities because they have different learning paces. Flexibility is a must." - R7 reveals the co-existence of both graded and non-graded students necessitates flexibility in approaches, providing more than one activity for students to meet the needs of various paces of learning. Hence, the flexibility in meeting individual needs is critical to enable students with developmental disorders to move at their pace while being interested in the lesson.

Clear routines implemented by the teachers offer stability and predictability, which are critical for students with developmental disorders, especially those on the autism spectrum. Statements indicate "Structured routines make classroom management easier. When students know what to expect, their anxiety and disruptive behavior are reduced." - R10 "Routine is the most important thing, especially for children on the spectrum. When they know the schedule, they cooperate better." - R9 Predictable schedules reduce anxiety and disruptive behavior and encourage cooperation and concentration in the classroom. As suggested, using structured routines, teachers establish a safe learning environment where students feel comfortable and ready for daily routines.

The results mentioned above confirm that educating children with developmental disorders calls for a reflective and flexible strategy. The teaching strategies employed by teachers—scaffolding, positive reinforcement, differentiated instruction, and structured routines—have a significant impact on students' ability to learn concepts, gain confidence, and acquire vital life skills.

Previous studies signify that scaffolding aims to assist students until they can independently use new skills and strategies (Larkin, M. J. 2001). According to study of Cuban (2001), most of what people learn comes from what they see. 83% of learning happens through sight, making visual aids a powerful tool in education.

In comparison, 11% of learning comes from hearing, while much smaller percentages come from smell (3.5%), touch (1.5%), and taste (1%) (Shabiralyani, G., et. al 2015). This highlights the importance of using visual materials, such as images, videos, and diagrams, to enhance understanding and retention (Shabiralyani, G., Hasan, K. S., Hamad, N., & Iqbal, N. 2015). This strategy aligns with Vygotsky's (1978) theory of the Zone of Proximal Development, where guided learning enhances students' ability to master new skills.

Positive reinforcement is also a dominant strategy that pushes students to respond and participate; findings from research conducted by Adam Ismail, I. (2023) have indicated positive reinforcement enhances participation by students within the classroom In acknowledgement of effort—be it in the form of praise, rewards, or words of encouragement—their spirits are lifted and they are persuaded to continue to attempt. Most developmental disorders depend on consistent, immediate feedback, something that makes them equate effort with success. This is consistent with behavioral theories emphasizing the role of reinforcement in defining learning and behavior (Skinner, 1953).

Because no two learners learn the same, differentiated instruction conveys a mode of teaching that assists teachers in modifying their teaching to address the diverse learning requirements of their pupils (Smale-Jacobse, A. E., et al., 2019). Teachers have to modify lessons and activities according to the individual requirements of each child so that graded and non-graded students get the assistance they require. Flexibility is essential since children learn at varying rates and need tailored methods to retain them. Differentiated instruction is well known to be an efficient means of establishing inclusive and caring learning environments (Tomlinson, 2017).

Lastly, studies emphasize that having routines creates a sense of predictability and security for students, which lessens anxiety and disruptive behavior and increases self-regulation (Hallahan, Kauffman, & Pullen, 2015). Most children, especially those with autism, have a hard time dealing with unexpected changes. If they know what to expect, then they are more apt to cooperate and engage. Structured routines also make classroom management easier for teachers, creating a more stable and productive learning environment (Arlinghaus, K. R., & Johnston, C. A. 2019).

These findings demonstrate the necessity of deliberate, systematically designed instruction for the achievement of students with developmental disorders. Professional development programs need to emphasize educators learning these techniques to equip themselves and their learners for success. Long-term follow-up studies would benefit from assessing the effects on the cognition and behavior of these students as well as additional measures to better ensure classroom integration.

The table 2 shows that students with developmental disorders need attention and repetition of instruction to learn. Teachers illustrate, "Some students need constant repetition to learn. The lesson must be repeated multiple times for better retention." - R3. "They tend to get distracted, but with guided learning and a structured environment, they can focus better." - R2 This represents structured settings

and assisted learning, which enable students with developmental disorders to stay attentive and minimize distractions. By offering a consistent environment, teachers can maximize students' concentration on lessons.

Table 2. *Cognitive skills and behavioral outcomes*

Cognitive & Behavioral Development	Significant Statements
2.1 Attention	"Some students need constant repetition to learn. The lesson must be repeated multiple times for better retention." - R3
	"They tend to get distracted, but with guided learning and a structured environment, they can focus better." - R2
2.2 Problem-Solving	"We shouldn't just spoon-feed them; they also need to be trained to think independently." - R8
	"They participate more when given small challenges that are within their capability." - R6
2.3 Social Skills	"One of my students used to be very stubborn, but now he is no longer shy about greeting other students." - R1
	"Before, they didn't know how to play with others. Now, they are more open to collaboration and group activities." - R5
2.4 Emotional Regulation	"Structured learning and clear routines help reduce their frustration. They need to know what to do next so they don't get upset." - R4
	"Some students throw tantrums when they don't understand a task, but with positive reinforcement, they become more motivated." - R9

Another point this theme points out is that Independent thought is critical for intellectual development. Teachers suggests that "We shouldn't just spoon-feed them; they also need to be trained to think independently." - R8; "They participate more when given small challenges that are within their capability." - R6, These statements proved that instead of direct teaching, students learn best from small, manageable problems that hone their problem-solving abilities. This teaching approach encourages critical thought and active engagement, cultivating a sense of achievement. Nevertheless, for students with developmental disorders, patience is necessary.

Moreover, students with developmental disorders exhibit considerable gains in social interaction, as confirmed by this theme. Teachers reported, "One of my students used to be very stubborn, but now he is no longer shy about greeting other students." - R1 "Before, they didn't know how to play with others. Now, they are more open to collaboration and group activities." - R5 As much as they may resist performing group work early on, repetition of peer contact makes them feel more at ease in social settings. It emphasizes the gradual improvement in collaboration and communication observed as the students become more receptive to group work.

Structured learning environments and predictable routines enable students to regulate their emotions, as described in this theme. Significant statements: "Structured learning and clear routines help reduce their frustration. They need to know what to do next so they don't get upset." - R4 "Some students throw tantrums when they don't understand a task, but with positive reinforcement, they become more motivated." - R9 revealed that frustration or tantrums can result from uncertainty or task difficulty, but positive reinforcement and clear expectations enable them to learn coping strategies and motivation to continue.

The findings of these results highlight the value of systematic teaching methods in supporting both behavioral and cognitive development. The requirement for repetition in attention development resonates with evidence that children with developmental disorders are helped by multisensory and systematic learning approaches (Tomlinson, 2017). Teachers have a central role to play in developing problem-solving abilities by setting engaging but realistic challenges, encouraging independent thought within students.

Social development is also important, as the students at first find it difficult to interact with peers but come to learn to work together. This is consistent with Vygotsky's (1978) social learning theory, where social interaction plays a central role in cognitive development. In the same way, emotional control becomes better when there are clear routines and organized support, which is in line with behavioral intervention programs for children with developmental disabilities (Hart, E. J., Doyle, L., Cantero, C., & Garrington, F. O., 2022).

In general, the findings imply that the role of teachers' attention to children, developing children's problem-solving and social abilities, and supportive approaches to emotional regulation have important effects on the cognitive and behavioral profiles of students with developmental disorders. Future research may investigate how the development of these capacities changes over time and how parent support can support them even stronger beyond the classroom.

Table 3. *Challenges educators face when implementing the teaching strategies in classroom settings*

Challenges in Implementation	Significant Statements
Classroom Management	"At first, gaining their trust and getting them to follow instructions was a big challenge. They would throw tantrums if they didn't get what they wanted." - R10
	"Managing the behavior of some students, especially the very hyperactive ones, is very difficult. Routines must always be consistent." - R2
Instructional Barriers	"It's not easy to manage a class with so many different needs. It's even more challenging when there is no support from parents." - R5
	"It's hard because we lack teaching materials, especially for students who are visual learners." - R6

The classroom management theme is defined as methods and programs that enhance students' academic achievement, conduct, social-emotional growth, and motivation. However, management of students' behavior is a serious issue, especially in trying to trust them and getting them to comply with instructions. Given the statements "At first, gaining their trust and getting them to follow instructions was a big challenge. They would throw tantrums if they didn't get what they wanted." - R10 "Managing the behavior of some students, especially the very hyperactive ones, is very difficult. Routines must always be consistent." - R2 It shows that most of the students are not able to regulate their emotions, and this results in tantrums when things do not proceed as they have planned. Hyperactivity also becomes a challenge for maintaining a disciplined classroom and focused environment. Establishing routine activities and developing bonds with the students over time will help teachers design a stable learning environment.

This theme is described as instructional barriers, which means that teaching students with different learning needs is already demanding, but the challenge grows when there's little parental support or a lack of teaching materials. Teachers reveal, "It's not easy to manage a class with so many different needs. It's even more challenging when there is no support from parents." - R5 "It's hard because we lack teaching materials, especially for students who are visual learners." - R6 Some students, especially visual learners, need specific resources to fully understand lessons. Without these tools, teachers have to be extra creative to make learning accessible for everyone. The lack of support can leave educators feeling overwhelmed as they try to meet each student's unique needs on their own.

The findings signify that classroom management challenges emphasize the need for routine structure and behavior management. Studies indicate that children with developmental disorders do well in environments with predictability, where expectations are clear, and reinforcement strategies are employed to minimize disruptive behavior (Wangdi, T., & Namgyel, S. 2022). Teachers need to use patience and consistency to establish trust and encourage cooperation in the classroom.

Meanwhile, the instructional obstacles highlight the necessity of robust support structures—both school administration and parents. Differentiated instruction is hard to achieve with a lack of resources, hence the importance of teacher training and the development of materials (Tomlinson, 2017). Educator-teacher and parent collaboration is also necessary in reinforcing learning outside the classroom.

Finally, these challenges need to be overcome through improved resource distribution, specific training, and closer cooperation among teachers, parents, and administrators. Interventions that work best in behavior management, as well as parental involvement in assisting students with developmental disorders, can be investigated through future studies.

Table 4. *Insights and recommendations*

Recommendations & Insights	Significant Statements
Teacher Training & Professional Development	"It would be better if teachers had additional training because every child has unique needs." - R2 "There is still so much we need to learn to apply these strategies effectively." - R4
Access to Better Learning Materials	"Schools should invest in instructional videos and interactive tools because they are more effective for these children." - R5 "It would be beneficial if we had more resources, like picture cards, manipulatives, and assistive technology." - R3

The theme teacher training and professional development is significant in this result, wherein teachers acknowledge that ongoing training and learning are necessary in responding to the varied needs of children with developmental disorders. Teachers claimed, "It would be better if teachers had additional training because every child has unique needs." - R2 "There is still so much we need to learn to apply these strategies effectively." - R4. It conveys that as each child learns uniquely, teachers require specialized training to be able to implement strategies like scaffolding, differentiated instruction, and management of behavior effectively. Clearly, without training, even the best-intentioned strategies may not be as effective.

The theme access to better learning materials exhibits the problem faced by educators. They cite a lack of interesting and usable materials like educational videos, interactive materials, picture cards, manipulatives, and assistive technology. "Schools should invest in instructional videos and interactive tools because they are more effective for these children." - R5 "It would be beneficial if we had more resources, like picture cards, manipulatives, and assistive technology." - R3 These resources help lesson planning be more engaging and user-friendly, particularly for visual and tactile learners. Moreover, the absence of the resources forces teachers to delay fully using the most effective instruction practices, complicating it for learners with developmental disorders to catch new information and remain motivated towards learning.

The Key findings of this research are insights from teachers that signify the growing need for teacher training programs focused on special education strategies. Even dedicated teachers helping their students acknowledge that more training is necessary to fully support learners with developmental disorders. Past and recent studies show that professional development programs in special education significantly improve teachers' confidence and effectiveness in the classroom (Florian, L., & Spratt, J. 2013). Moreover, schools and educational institutions should prioritize workshops, seminars, and hands-on training to equip teachers with practical skills tailored to diverse learning needs.

Similarly, the demand for improved learning materials underlines the need to offer specialized materials to students. Some research indicates that multisensory tools—such as visual aids, hands-on materials, and digital tools—help students with developmental disorders remain focused, grasp concepts better, and retain information longer (Mayer, R. E., 2017). That is why schools need to step

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out of the conventional mode of teaching and invest in appropriate materials to bridge learning gaps and ensure student success.

Moving forward, stakeholders—including school administrators, policymakers, educators, special education teachers, and parents—must work together to improve teacher training opportunities and ensure better access to learning materials. Future research could explore the most effective training models for special education teachers and assess the impact of digital tools and interactive learning resources on student engagement and progress.

Conclusions

Based on the findings, this study reinforces the need for flexible and reflective teaching strategies when educating children with developmental disorders. Teachers play a crucial role in fostering learning, confidence, and life skills through scaffolding, positive reinforcement, differentiated instruction, and structured routines. Therefore, these approaches truly enhance students' cognitive and behavioral development but also highlight the importance of structured classroom environments that minimize disruptive behaviors and promote engagement.

However, the challenges teachers face—such as classroom management difficulties and limited resources—express the need for stronger support systems from both schools and parents. On the other hand, differentiated instruction is most effective when teachers have access to proper training and adequate learning materials. Investing in teacher development programs focused on special education can equip educators with the skills and confidence needed to support diverse learning needs.

Further, based on the results, this study conveys that multisensory tools, visual aids, and assistive technology can significantly improve students' understanding, retention, and overall learning experience.

Lastly, there should be collaboration between teachers, parents, school officials, and stakeholders and society in providing the right teaching techniques, interactive, and conducive education to students with developmental disorders. For this reason, teacher training, resource and material preparation, and inclusive classrooms must be prioritized. By addressing these, schools can fill learning gaps and enable students with developmental disorders to overcome cognitive and behavioral difficulties and become productive and contented members of their communities.

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