

Research Paper

Teamwork of General and Special Education Teachers in Managing the Education of Learners with Autism

John Lester Gaviola^{1*}, Genelyn Lacuña¹, Sharmaine Manigos¹

Cebu Technological University, Philippines

Received : March 20, 2024 | Revised : June 7, 2024 | Accepted : June 10, 2024 | Online : July 9, 2024

Abstract

Understanding the dynamics of collaboration helps identify best practices, resolve issues, and foster smooth working relationships among general and special education teachers for students with Autism Spectrum Disorder (ASD) achievement. This study explored the collaboration of general and special education teachers in educating learners with ASD at three selected elementary schools in Chicago, Illinois, USA, during the school year 2023-2024. This is a phenomenological inquiry of the ten purposively selected participants who answered the researchermade semi-structured questionnaire that contained four open-ended questions. Findings showed that in terms of the participants' views about the various collaboration models Implemented in educating learners with autism, the following were the emerging themes: 1) Team Teaching Collaboration, 2) Support Mechanisms on Demand, and 3) Structured Consultation Session. The impact of teacher collaboration on learners with autism academic outcomes were: 1) Enhanced Communication Abilities; 2) Active School Involvement; and 3) Self-sufficiency Development. The barriers encountered to effective collaboration were 1) Challenges in Communication, 2) Support and Policy from the Administration, and 3) Scheduling and Time Limitations. Thus, the general and special education teachers should intensify their collaboration and address the identified challenges. It is further recommended that a quantitative parallel study be conducted to validate and quantify the impacts of teacher collaboration strategies on the academic outcomes of learners with ASD.

Keywords Special Education; Inclusion; Learners with Autism; Teamwork of General and Special Education Teachers; Phenomenological Inquiry

INTRODUCTION

Effective collaboration is essential in education to ensure that every student receives a quality, inclusive education regardless of their learning needs. In the U.S., the prevalence of Autism Spectrum Disorder (ASD) in children has risen over the years, currently estimated at 1 in 54 children (Chiarotti & Venerosi, 2020). This rampancy emphasizes the necessity of collaborative education to improve academic and social results for ASD kids (Watkins et al., 2013). In Asia, educational systems adopt inclusive approaches to fulfil the different needs of all students, including those with disabilities (Forlin, 2019). This collaborative approach involves general and special education teachers devising ways to help diverse learners improve academic performance and social inclusion (Li & Ruppar, 2021). The absence of effective collaboration between general and special education teachers can impair education and quality of life (Kwan et al., 2014). Insufficient collaboration leads to lower academic achievement, behavioural issues, and social isolation in ASD kids (Anthony & Campbell, 2012).

The collaboration between general and special education teachers is a cornerstone of inclusive education, particularly for students with ASD. Pickl et al. (2016) emphasize the need to further strengthen both the inclusive and the reflexive attitude in teachers. Assessing the nature

Copyright Holder:

This Article is Licensed Under:



and effectiveness of this collaboration is crucial because it directly impacts the educational experiences and outcomes of students with ASD. Understanding the dynamics of this partnership helps identify best practices, address obstacles, and create an atmosphere where general and special education professionals may collaborate effectively for their students. While there are several studies and literature on general collaborative practices in inclusive education, detailed insights into how these collaborations work, their challenges and their specific impacts on students with ASD are less explored. Hence, this study was conducted to determine quantitatively the following: 1) various models implemented in educating autistic learners. 2) participants' views on the impact of teacher collaboration on learners with autism academic outcomes. 3) the barriers to effective collaboration in educating learners with autism.

LITERATURE REVIEW

Social Development Theory claims that learning is a social process where understanding individual development is influenced by interactions between individuals and their social environment. Understanding the concept is essential for educators to effectively support the learning of students with ASD through collaboration. Vygotsky's theory postulates that collaborative practices between general and special education teachers facilitate the learning and development of students with ASD (Dervan, 2023). The teachers' collaborative efforts demonstrate a deep understanding of how social interaction can enhance students' learning. Vygotsky's "Zone of Proximal Development" (ZPD) is the gap between what a student can do alone and what they can do with help from a more knowledgeable person. This notion shows how aided learning can lead to cognitive progress. ZPD emphasizes the dynamic aspect of learning, arguing that education should guide the development of higher-order thinking skills through directed interaction (Darling-Hammond et al., 2020). ASD students need resources and support due to their unique learning characteristics (Ackah-Jnr & Fluckiger, 2023). Thus, educator collaboration fosters ZPD-aligned learning. Teachers working together can model social conduct, improve peer interactions, and create inclusive social learning classrooms.

Bronfenbrenner's Ecological Systems Theory offers a comprehensive framework to grasp the various layers of environmental impact on an individual's development. This theory categorizes the environment into five interconnected systems: Microsystem, Mesosystem, Exosystem, Macrosystem, and Chronosystem. The theory emphasizes the impact of interactions within and between different systems on individual development. Within the realm of education, the Microsystem encompasses the immediate surroundings of the student, encompassing the classroom and home (Perron, 2017). The Mesosystem focuses on the interplay between these microsystems, including the dynamic between teachers and parents (Guo & Lee, 2023). Bronfenbrenner's theory explores how different layers of the students' environments (classroom, school, community) interact and influence their educational experiences and outcomes. The collaboration between general and special education teachers is an essential aspect of the Mesosystem, highlighting the dynamic interaction between different microsystems, such as diverse classrooms and the home environment.

Brown (2017) emphasizes the lack of support and resources for students with disabilities in inclusive schools. Feldman and Schechter (2017) note that organizational resources like time and space for collaborative learning, a learning culture, and administrative support slowed progress in teaching learners with ASD. U.S. Congress passed the Education for All Handicapped Children Act in 1975 to address the concerns. Special education changed with this pioneering act, ensuring that kids with physical and mental disabilities have equal educational opportunities. In 1990, the Individuals with Disabilities Education Act (IDEA) built on this foundation. IDEA strengthened and enlarged the 1975 Act's emphasis on free adequate public

education (FAPE) in the least restrictive environment (LRE) for disabled pupils. IDEA also required Individualized Education Programs (IEPs) to meet the unique educational needs of each student with a disability (U.S. Department of Education, 1990). The Americans with Disabilities Act (ADA) of 1990 guarantees disabled people equal opportunities in employment, state and local government services, public accommodations, commercial facilities, transportation, and telecommunications. ADA goes beyond IDEA's educational adjustments, requiring schools to implement educational adaptations, customized education, physical accessibility, assistive technology, and an inclusive school atmosphere (U.S. Department of Labor, 1990).

Collaboration between general education and special education teachers is essential in effectively supporting learners with ASD. Thousand et al. (2021) highlighted the significant benefits of collaborative consultation models on student outcomes. In their study, Huda et al. (2019) provided valuable insights into how collaborative efforts can be enhanced through joint training and dedicated planning time. Humphrey and Symes (2013) and Able et al. (2015) underscore that teachers' positive mindset towards inclusion, along with having tangible resources and specialized assistance, is essential for promoting successful collaboration and inclusion among learners with ASD. Curriculum changes and teaching method adjustments highlight the significance of collaborative planning between general and special education teachers. It also emphasizes the adoption of individualized education plans (IEPs) tailored to address the distinct needs of each student (Sanches-Ferreira et al., 2013; Tremblay & Belley, 2017). Love et al. (2020) contend that there is a direct association between teacher self-efficacy and student IEP outcomes. Peer-mediated interventions are recognized as an effective approach also to foster social inclusion and improve the social skills of individuals with ASD. Battaglia and Radley (2014) articulate the advantages of integrating peers in supporting roles within inclusive classrooms).

Xue and Li (2020) delve deeper into the obstacles and difficulties associated with inclusion. They emphasize the importance of tackling structural impediments, such as inadequate funding, imbalanced teacher-student ratios, and limited access to specialized training for educators. It is essential to overcome these obstacles to successfully adopt inclusive education policies and practices. This approach should encompass positive attitudes among educators, customized teaching methodologies, peer support, and systemic solutions to overcome obstacles (Watkins et al., 2019). This method requires the implementation of comprehensive solutions and the cooperation of general and special education teachers to establish an inclusive educational environment that promotes the success of learners with autism. Kunze and Machalicek (2022) note that this cooperation combines specialized techniques to fulfil varied student requirements. LaBarbera (2017) shows that teacher collaboration improves academic performance. Cardon et al. (2019) found that such collaboration improves ASD students' social skills and classroom integration. According to Roberts and Webster (2022), general and special educators must communicate and plan for regular collaborative meetings to improve teaching. Finally, Hauge's (2019) study underlines the necessity for collaborative practice professional development to prepare educators to support ASD students. Collaboration has many benefits, but communication hurdles, educational ideologies, and workload inequities might hinder it. Nuske et al. (2019) observed that teachers struggle to satisfy expectations and understand their duties in supporting ASD students. To improve collaboration, they suggested addressing insufficient resources and administrative support.

Understanding the dynamics of collaboration helps identify best practices, address difficulties, and create an atmosphere where general and special education professionals can cooperate smoothly for student success. Despite the necessity of collaboration, there exists a gap in comprehensive, empirical studies that specifically examine the relationship between general and special education teachers in the context of supporting students with ASD. Hence, this study

explored the collaboration of general and special education teachers in educating learners with autism spectrum disorder (ASD) at selected schools in Chicago, Illinois, United States of America, during the school year 2023-2024 to determine the: 1) various collaboration models implemented in educating learners with autism; 2) impact of teacher collaboration on learners with autism academic outcomes; and 3) barriers encountered to effective collaboration in educating learners with autism. This offers valuable insights into how these collaborations can be optimized to enhance the educational experiences of students with ASD.

RESEARCH METHOD

This study used a qualitative phenomenological technique to examine general and special education teachers' perspectives on working together to educate students with autism spectrum disorder. Tuffour (2017) defines phenomenology as a method that captures the essence of people's experiences through their subjective interpretations and meanings. Understanding and interpreting educators' collaboration practices in ASD education was the main goal. A purposive sampling technique was employed to select ten educators who were deemed to provide rich, insightful perspectives on the phenomenon under investigation. This method, as characterized by Creswell (1998), involves the deliberate selection of participants who are best positioned to illuminate the research question through their experiences and viewpoints. A precisely designed semi-structured interview guide with five open-ended questions was created to collect data. These questions examined general and special education teacher collaboration in ASD learning environments at selected elementary schools in Chicago, Illinois, USA, during the school year 2023-2024. All participants gave informed consent before the interviews to ensure their voluntary involvement and understanding of the study. Face-to-face interviews lasting about an hour were performed with school administrators' permission to foster in-depth discussion. Thematic analysis was used to analyze and interpret the data gathered. This analytical procedure followed Xu and Zammit's (2020) cyclical cycle of data transcription, systematic coding, and theme creation. This study concludes with a narrative analysis that intricately weaves together the findings with relevant literature to provide a deep understanding of ASD teachers' collaborative experiences and challenges, shedding light on special education.

FINDINGS AND DISCUSSION

Participants' Views about the Various Collaboration Model Implemented in Educating Learners with Autism

Theme 1: Team Teaching Collaboration

Team Teaching collaboration is a crucial model in the education of learners with ASD. This theme highlights the value of collaboration between general and special education teachers in a coteaching format, which greatly improves the learning experience for students with ASD. Collaborative teaching is essential for meeting the diverse needs of ASD students by combining different teaching styles and expertise. Participants discussed their experiences and observations regarding the positive impact of team teaching on their approach to educating students with ASD. They conveyed:

"Team teaching has allowed us to combine our diverse skills and knowledge, creating a more dynamic and effective learning environment for our ASD students." – Participant 1

"Working in tandem with special education teachers has enriched our teaching strategies, making our lessons more inclusive and engaging for ASD learners." – Participant 4
"The synergy we achieve through team teaching has been instrumental in addressing the unique challenges faced by our students with ASD." – Participant 6

A special education teacher added,

"This collaborative approach has bridged the gap between general and special education, providing a well-rounded educational experience for our students." – Participant 9

"Our collective efforts in team teaching have led to significant improvements in both academic and social skills of our students with ASD." – Participant 10

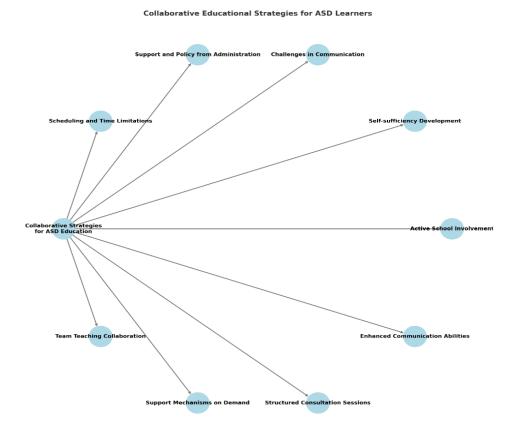


Figure 1. Thematic Analysis of Teacher Collaboration in ASD Education

These reflections from educators emphasize the importance of Team-Teaching Collaboration in improving the educational outcomes for students with ASD. The model's focus on shared responsibility and collective expertise guarantees students a thorough and flexible education. Backing this up, a study by Szumski et al. (2017) reveals that co-teaching models significantly positively impact students with ASD. This includes improved academic performance and better social integration. LaBarbera (2017) highlights the significance of collaborative teaching methods in addressing the unique requirements of students with ASD. Jimola (2024) claims that the teacher's teaching style must be improved because it is a good predictor of student achievement.

The study demonstrates how these methods not only promote academic progress but also contribute to social development. The theme of Team-Teaching Collaboration emphasizes the significance of synergy and cooperation among educators in ASD education, showcasing its influence on fostering a more inclusive, supportive, and effective learning environment for students with ASD.

Theme 2: Support Mechanisms on Demand

Support Mechanisms on Demand are essential in the education of learners with ASD, providing timely and effective assistance that is tailored to the unique needs of students. This model highlights the significance of implementing responsive support strategies activated when needed, guaranteeing that learners with ASD receive essential interventions at crucial times. Participants' insights demonstrate a deep understanding of how this approach empowers teachers to offer timely and tailored support, greatly benefiting the students. They made several noteworthy statements:

"Implementing on-demand support has been transformative. It allows us to respond promptly to the unique challenges our ASD students face, ensuring no student is left behind." - Participant 3

"The flexibility of as-needed support ensures we can address the specific requirements of our students with ASD in real-time, enhancing their learning experience." - Participant 5

"Providing targeted support when it's most crucial has made a remarkable difference in our ASD students' educational journey." - Participant 6

"Having the capability to offer support on demand has led to significant improvements in both academic and behavioural aspects for our ASD learners." - Participant 8

"Adapting our strategies to offer immediate assistance has fostered a more inclusive and supportive environment for students with ASD." - Participant 10

These statements imply the proficiency of Support Mechanisms on Demand in providing personalized interventions for students with ASD. With the availability of support, educators can better cater to the diverse needs of these students. Backing this approach, a study by Watkins et al. (2019) discovered that implementing responsive support strategies improved academic and social outcomes for students with ASD. Mahoney (2019) pinpointed the significance of on-demand support in addressing the diverse requirements of ASD students. The study demonstrates how it can effectively promote academic progress and social development. The theme of Support Mechanisms on Demand highlights the significance of being agile and responsive in educational settings for students with ASD. It emphasizes the importance of educators being well-prepared with the necessary skills and resources to offer prompt assistance so that they can effectively meet the individual needs of every student.

Theme 3: Structured Consultation Session

Structured Consultation Sessions play a crucial role in the collaborative education of learners with ASD. This theme highlights the significance of regular, well-structured meetings

among educators to exchange ideas and address the unique challenges of teaching students with ASD. Such sessions offer a valuable opportunity for knowledge exchange, resource sharing, and fostering a cohesive approach to educational methods. Participants' observations highlight the importance of these meetings in promoting productive collaboration. They state,

"Regular structured sessions have become a cornerstone of our collaborative efforts. They allow us to consistently align our teaching strategies and better understand the needs of our ASD students." – Participant 2

"The consultation sessions enable us to pool our expertise and collectively tackle the challenges we face in educating students with ASD." – Participant 4

"These meetings provide an essential space for us to plan, reflect, and adapt our methods, ensuring we always provide the best possible support to our ASD learners." – Participant 6

"Structured consultations have bridged the gap between different teaching perspectives, creating a more cohesive and effective approach to ASD education." – Participant 8

"Through these sessions, we have developed innovative strategies and interventions that have had a significant impact on our students' learning and development." – Participant 10

Structured Consultation Sessions are effective in ASD teaching, according to research. These encounters foster discourse and the development of innovative teaching methods and solutions for ASD students. As educators share their knowledge and experiences, they create a systematic approach to ASD education's many problems. Eskow et al. (2018) and Roberts and Webster (2022) have found that structured, collaborative sessions improve teaching and student outcomes. This implies that Structured Consultation Sessions represent the collaborative attitude needed to advance ASD education. They emphasize the importance of regular, purposeful engagements among educators to address shared difficulties and create novel solutions to improve ASD learners' educational experiences and outcomes.

Participants' Views on the Impact of Teacher Collaboration on Learners with Autism Academic Outcomes

Theme 1: Enhanced Communication Abilities

Enhancing communication abilities through teacher collaboration is a critical aspect of effectively educating learners with ASD. This theme highlights the positive impact of collaboration between general and special education teachers on enhancing the communication skills of students with ASD. With the expertise of ten educators, including a mix of general education and special education professionals, the study thoroughly examined how collaborative teaching affects the communicative development of students with ASD. The educators discussed their experiences and observations, emphasizing the advantages of collaborative strategies that focus on improving communication. Their comments are,

"Through our collaborative teaching, we have seen remarkable improvements in the communication skills of our ASD students. It is a result of targeted strategies and consistent efforts." - Participant 1

"Working together has enabled us to create a learning environment where students with ASD can develop their communication abilities more effectively." - Participant 3

"Our joint focus on communication has been key. We have developed specific activities and approaches that have greatly aided our ASD students in expressing themselves more clearly." - Participant 5

"The improvement in communication skills among our ASD students is evident. Our collaborative teaching methods have played a significant role in this development." - Participant 7

"The synergy in our teaching approaches has led to enhanced communication abilities in our students with ASD, facilitating better interaction and understanding." - Participant 9

These statements underline the importance of teacher collaboration in fostering communication skills in students with ASD. The well-coordinated efforts in developing and applying communication-focused strategies have resulted in significant improvements in this area. This focus on communication is backed by research conducted by Syriopoulou-Delli et al. (2017), which highlights the beneficial effects of collaborative teaching on the communication skills of students with ASD. The study emphasizes the importance of teacher collaboration in enhancing the communication skills of ASD learners, leading to improvements in their academic and social performance. This highlights the importance of collaborative teaching in fostering the communication skills of students with ASD, resulting in improved academic and social interactions and outcomes.

Theme 2: Active School Involvement

An essential aspect to comprehend while examining the impact of teacher cooperation on the educational experience of learners with ASD is the concept of Active School Involvement. This theme explores the beneficial effects of collaborative educational initiatives between general and special education teachers on enhancing the involvement and active involvement of learners with ASD in a wide range of school activities, including both academic and extracurricular domains. Participants recounted,

"Our collaborative teaching efforts have led to a significant increase in the active participation of our ASD students in school activities." - Participant 2

"Working together, we have created a more inclusive environment where our ASD students feel encouraged and supported to engage more in school events and projects." - Participant 4

"Seeing our students with ASD actively involved in classroom activities and school programs is a clear indicator of the success of our collaborative strategies." - Participant 7

"The combined efforts of our teaching team have opened new opportunities for our ASD students to participate in school activities, enhancing their sense of belonging and community." - Participant 8

"Our focus on inclusive teaching practices has resulted in greater involvement of our ASD

students in various aspects of school life, contributing to their overall development." - Participant 10

These observations emphasize the importance of teacher collaboration in promoting active participation in school for ASD kids. The educators' expertise and dedication have created a friendly and inclusive environment that encourages ASD learners to participate in school. Josilowski and Morris (2019) claim that collaborative teaching practices can increase ASD kids' school participation. Emmons and Zager (2018) have found that inclusive and participatory teaching methods help children with ASD participate in school. This underscores that active school involvement emphasizes the importance of collaborative education in making ASD kids feel included and engaged. This stresses that through collaboration, educators may create a learning environment that encourages these kids to participate in all school activities, fostering social and intellectual success.

Theme 3: Self-sufficiency Development

The theme of self-sufficiency development stands out as a cornerstone in the collaborative educational efforts for students with ASD, shedding light on the profound impact of joint teaching strategies in cultivating independence and self-reliance among these learners. Teachers discussed their findings and firsthand experiences, demonstrating the concrete advantages of their combined efforts to teach children self-sufficiency. The participants recounted,

"Our collaborative teaching has been pivotal in nurturing self-sufficiency among our ASD students. They are becoming more capable of handling tasks independently." - Participant 3

"Through our joint efforts, we have seen a marked improvement in the confidence and autonomy of our ASD students in both learning and daily activities." - Participant 4

"Encouraging independence is a key focus of our collaboration, and it's gratifying to see our ASD students develop skills that empower them to be more self-reliant." - Participant 6

"The progress in self-sufficiency in our students with ASD is remarkable. Our collaborative strategies have been instrumental in this development." - Participant 8

"We have specifically tailored our teaching methods to enhance the independence of our ASD students, and the results have been incredibly positive." – Participant 9

The perspectives provided by these educators highlight the value of collaborative education in helping children with ASD become more self-sufficient. The combined efforts and professional techniques have led to a notable advancement in the pupils' ability to manage their daily tasks and education independently. Emmons and Zager (2018) and Onwumere et al. (2012) support these findings by demonstrating the important role that teacher collaboration plays in helping students with ASD become more independent. These studies highlight the close relationship between collaborative teaching strategies and the development of self-reliance abilities in students with ASD. The self-sufficiency theme using collaborative teaching practices highlights the need to encourage independence in kids with ASD. This suggests that by working together, instructors may create a supportive environment where students feel empowered to develop the skills and confidence needed to take on challenges and problems independently, ultimately improving their overall growth and preparation for future endeavours.

Participants' Views about the Barriers to Effective Collaboration in Educating Learners with Autism

Theme 1: Challenges in Communication

Challenges in communication emerge as a pivotal theme in delineating the barriers to successful collaboration among educators teaching students with ASD. This theme captures the intricate communication hurdles that can obstruct the synergy between general and special education teachers, potentially limiting the effectiveness of their collaborative educational efforts. The educators' reflections shed light on the multifaceted aspects of communication barriers within collaborative settings. They said,

"Effective communication among our team is sometimes challenging, leading to misunderstandings that can impact our collaborative efforts for ASD students." - Participant 1

"Differences in communication styles among teachers can create obstacles in developing a unified approach to educating our students with ASD." - Participant 4

"Sometimes, the lack of clear and consistent communication hinders our ability to coordinate and implement strategies effectively for ASD learners." - Participant 6

"Overcoming communication barriers is essential. Miscommunication can lead to disjointed teaching methods, which are not beneficial for our students with ASD." - Participant 8

"Finding ways to improve communication within our team is crucial for enhancing our collaborative teaching of students with ASD." - Participant 10

These reflections highlight the importance of clear and efficient communication in fostering successful collaboration among general and special education teachers. Understanding how to effectively share information, empathize with different perspectives, and collaborate toward shared objectives is crucial for the success of educational strategies for ASD students. Backing up these observations, Bowman et al. (2021) and Samala's (2023) research highlight the significance of precise and efficient communication in collaborative teaching environments. Atienza (2023) claims that school heads may provide different professional development activities to enhance effective communication and collaboration. These studies indicate that successfully addressing communication obstacles results in more cohesive and effective teaching methods for students with ASD. The challenges in communication theme emphasizes how important it is for educators to have better communication techniques when the educators collaborate to teach students with ASD. This implies that these obstacles must be overcome to promote a more successful and integrated educational strategy that will improve the learning process and results for students with ASD and ensure that every student has access to a cohesive and encouraging learning environment.

Theme 2: Support and Policy from Administration

The issue of Support and Policy from the Administration is crucial to recognizing structural hurdles to educator collaboration with ASD students. This theme examines how administrative activities and policy frameworks affect ASD students' collaborative teaching landscape, either positively or negatively. Participants highlighted several key issues related to administrative

support and policy frameworks that impact collaborative teaching for ASD learners. They expressed,

"Administrative support is often lacking, making it challenging to implement collaborative teaching strategies effectively for our ASD students." – Participant 2

"The existing policies do not always align with the needs of collaborative teaching, which limits our ability to work together for the benefit of ASD learners." – Participant 4

"A major barrier we face is inadequate policy support for collaborative initiatives, hindering our efforts to develop cohesive teaching strategies." – Participant 6

"A special education teacher pointed out the need for the administration to understand and support the unique requirements of collaborative ASD education." – Participant 8

"The lack of administrative foresight in policymaking often leads to challenges in executing collaborative teaching methods effectively for ASD students." – Participant 10

These observations collectively emphasize the necessity of administrative assistance and the synchronization of policies with the actualities of collaborative teaching methods. The perspective is reinforced by research conducted by DeMatthews et al. (2020), which explains the crucial importance of strong administrative support and the development of appropriate policies in promoting successful collaboration in special education settings. Azman et al. (2019) argue that administrative decisions significantly impact collaborative dynamics. They suggest that policy reforms and increased administrative awareness are necessary to effectively promote multidisciplinary teaching efforts. Roberts and Webster (2022) underscore the necessity of a comprehensive approach to equip school leaders and staff to develop autism-friendly cultures, adopt evidence-based practices, and improve outcomes for students with autism. Olsen et al. (2019) and Satsatin et al. (2023) corroborate that there is a need to extend current adaptations and support to children with autism within the educational settings to enable a more inclusive practice. School administration enhances their support by providing top-notch equipment, comprehensive materials, and diverse teacher training. The theme of assistance and Policy from the Administration emphasizes the importance of educational institutions offering strong assistance and implementing policies tailored to the unique challenges of collaborative education for individuals with ASD. It requires administrative practices and policy formulations that are aware of and responsive to the collaborative needs of educators, ensuring that these efforts are well-supported and facilitated, thus positively contributing to the educational experiences and outcomes of learners with ASD.

Theme 3: Scheduling and Time Limitations

Within the realm of educating learners with ASD, Scheduling and Time Limitations are identified as formidable barriers impeding effective collaboration among educators. This theme explores the logistical challenges inherent in coordinating collaborative planning and execution efforts within the constraints of existing schedules and time limitations. The educators' shared experiences highlight the importance of this obstacle in collaborative education for students with ASD by revealing a common issue with scheduling alignment to support joint planning and teaching practices. Participants said,

"A significant "Coordinating our schedules to allow for collaborative planning is a persistent challenge, affecting our ability to work effectively as a team for our ASD students." - Participant 3

"The rigidity of our school schedules often leaves little flexibility for joint planning sessions, which are critical for cohesive teaching strategies for ASD learners." - Participant 4

"Aligning our teaching schedules for collaborative work often leads to missed opportunities and disjointed efforts." - Participant 6

"As much as we recognize the need for collaboration, the constraints of our schedules often hinder our efforts to work together consistently." - Participant 8

"Finding time for team meetings and joint planning is challenging, leading to gaps in our collaborative teaching approaches for ASD students." - Participant 10

The importance of scheduling flexibility in facilitating and improving collaborative teaching for students with ASD is highlighted in these educator perspectives. Research supports the necessity for educational institutions to implement more flexible scheduling methods. Studies by Bowman et al. (2021) and Stenhoff et al. (2021) posit the significance of flexible scheduling and efficient time management in removing barriers to collaboration. These studies support the adoption of scheduling procedures and policies that consider the special requirements of collaborative teaching to support a more successful and integrated approach to teaching students with ASD. This suggests that educational systems should acknowledge and respond to the difficulties presented by scheduling and time restrictions. This approach is expected to greatly increase the viability and effectiveness of teacher collaboration by adopting more flexible scheduling options, which will eventually benefit students with ASD by providing them with richer educational experiences and results.

CONCLUSIONS

Based on the study's findings, it is concluded that the synergy of collaborative educational strategies, specifically team-teaching collaboration, support mechanisms on demand, and structured consultation sessions, greatly enhances the educational environment for learners with Autism Spectrum Disorder (ASD). These tactics not only improve academic results, as seen by the growth of communication skills, participation in school, and self-reliance, but also shed light on creating a more inclusive and efficient educational setting. To fully harness the benefits of collaborative teaching, it is crucial to address and overcome obstacles such as communication difficulties, lack of administrative assistance, and scheduling constraints to cultivate a learning environment that is more encouraging, captivating, and empowering for students with ASD. It is recommended that a quantitative parallel study be conducted to validate and quantify the impacts of teacher collaboration strategies on the academic outcomes of learners with ASD. The three collaborative models—Team Teaching, Support Mechanisms on Demand, and Structured Consultation Sessions—that improve autism education are this study's new insights that contribute to the body of knowledge for this shows how structured, demand-driven support and teamwork can overcome communication barriers and scheduling constraints, improving communication, school involvement, and self-sufficiency among students with ASD.

LIMITATION & FURTHER RESEARCH

The limitations of this study are diverse and emphasize areas where future research might be improved. It is important to recognize the possibility of peer influence on participants' responses, as interactions among teachers may impact the credibility of the insights regarding collaborative tactics. Furthermore, the analysis was limited to only two elementary schools in Chicago, Illinois, which may not offer a broad perspective on the collaboration approaches used in various educational settings or geographical areas. The utilization of a limited sample size of 10 teachers for phenomenological investigation, albeit intentionally, could restrict the applicability of the results to wider settings. A significant drawback of the study is its narrow focus on a limited number of teacher collaboration models for educating learners with ASD. This approach may not fully encompass the wide range of collaborative efforts or obstacles that arise in special education. Additionally, the research indicates that both regular and special education instructors might benefit from more comprehensive training and preparation to improve the efficacy of their collaborative endeavours. To enhance the credibility and relevance of the findings in other educational settings, it would be beneficial to raise the sample size and include a wider range of schools in the study.

REFERENCES

- Able, H., Sreckovic, M. A., Schultz, T. R., Garwood, J. D., & Sherman, J. (2015). Views from the trenches: Teacher and student supports needed for full inclusion of students with ASD. *Teacher Education and Special Education*, 38(1), 44-57. https://doi.org/10.1177/0888406414558096.
- Ackah-Jnr, F. R., & Fluckiger, B. (2023). Leading Inclusive Early Childhood Education: The Architecture of Resources Necessary to Support Implementation and Change Practice. *International Journal of Disability, Development and Education, 70*(1), 56–76. https://doi.org/10.1080/1034912X.2021.1885013
- Anthony, N., & Campbell, E. (2020). Promoting collaboration among special educators, social workers, and families impacted by autism spectrum disorders. *Advances in Neurodevelopmental Disorders*, 4, 319-324. https://doi.org/10.1007/s41252-020-00171-w.
- Atienza, E. M. (2023). Leaders of Collaboration, Communication, and Confidence Behind Adversity. *Advanced Qualitative Research*, *1*(2), 28-39. https://doi.org/10.31098/aqr.v1i2.1672.
- Azman, N., Sirat, M., Pang, V., Lai, Y. M., Govindasamy, A. R., & Din, W. A. (2019). Promoting university-industry collaboration in Malaysia: stakeholders' perspectives on expectations and impediments. *Journal of Higher Education Policy and Management, 41*(1), 86–103. https://doi.org/10.1080/1360080X.2018.1538546
- Battaglia, A. A., & Radley, K. C. (2014). Peer-mediated social skills training for children with autism spectrum disorder. *Beyond Behavior, 23*(2), 4-13. https://doi.org/10.1177/107429561402300202.
- Bowman, K. S., Suarez, V. D., & Weiss, M. J. (2021). Standards for interprofessional collaboration in the treatment of individuals with autism. *Behavior Analysis in Practice, 14*(4), 1191-1208. https://doi.org/10.1007/s40617-021-00560-0.
- Brown, B. (2017). *Inclusive or Special Classrooms: Factors Influencing Parents' Choice of Placement* [Doctoral dissertation, Minot State University].
- Cardon, T., Wangsgard, N., & Dobson, N. (2019). Video modeling using classroom peers as models to increase social communication skills in children with ASD in an integrated preschool. *Education and Treatment of Children, 42*(4), 515-536. https://doi.org/10.1353/etc.2019.0024.
- Chiarotti, F., & Venerosi, A. (2020). Epidemiology of autism spectrum disorders: a review of

- worldwide prevalence estimates since 2014. *Brain sciences,* 10(5), 274. https://doi.org/10.3390/brainsci10050274.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied developmental science*, *24*(2), 97-140. https://doi.org/10.1080/10888691.2018.1537791.
- DeMatthews, D., Billingsley, B., McLeskey, J., & Sharma, U. (2020). Principal leadership for students with disabilities in effective inclusive schools. *Journal of Educational Administration*, *58*(5), 539-554. https://doi.org/10.1108/JEA-10-2019-0177.
- Dervan, M. (2023). Evidence-based practice to develop social communication competency: listening to the voices of teachers of autistic children [Thesis, Mary Immaculate Collage]. Mary Immaculate Research Repository. https://dspace.mic.ul.ie/handle/10395/3152.
- Emmons, C. L., & Zager, D. (2018). Increasing collaboration self-efficacy to improve educational programming for students with autism. *Focus on Autism and Other Developmental Disabilities,* 33(2), 120-128. https://doi.org/10.1177/1088357616686312.
- Eskow, K. G., Summers, J. A., Chasson, G. S., & Mitchell, R. (2018). The association between family–teacher partnership satisfaction and outcomes of academic progress and quality of life for children/youth with autism. *Journal of Policy and Practice in Intellectual Disabilities, 15*(1), 16-25. https://doi.org/10.1111/jppi.12221.
- Feldman, N., & Schechter, C. (2017). Exploring the Professional Learning Community in a Special Education School Serving Pupils with Autism. *International Journal of Special Education*, 32(1), 2-36.
- Forlin, C. (2019). Teacher education and inclusion in the Asia-Pacific region. In *Oxford Research Encyclopedia of Education*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.570.
- Guo, X., & Lee, J. S. (2023). A systematic review of informal digital learning of English: An ecological systems theory perspective. *System*, 103097. https://doi.org/10.1016/j.system.2023.103097.
- Hauge, K. (2019). Teachers' collective professional development in school: A review study. *Cogent Education*, *6*(1), 1619223. https://doi.org/10.1080/2331186X.2019.1619223.
- Huda, M., Qodriah, S. L., Rismayadi, B., Hananto, A., Kardiyati, E. N., Ruskam, A., & Nasir, B. M. (2019). Towards cooperative with competitive alliance: Insights into performance value in social entrepreneurship. In *Creating business value and competitive advantage with social entrepreneurship* (pp. 294-317). IGI Global.
- Humphrey, N., & Symes, W. (2013). Inclusive education for pupils with autistic spectrum disorders in secondary mainstream schools: teacher attitudes, experience and knowledge. *International Journal of Inclusive Education*, 17(1), 32-46. https://doi.org/10.1080/13603116.2011.580462.
- Jimola, F. E. (2024). Teaching with Styles: A Predictive Factor for Improved Students' Learning Outcomes in Classrooms. *Journal of Elementary and Secondary School, 2*(1), 47-58. https://doi.org/10.31098/jess.v2i1.2118.
- Josilowski, C. S., & Morris, W. (2019). A qualitative exploration of teachers' experiences with students with autism spectrum disorder transitioning and adjusting to inclusion: Impacts of the home and school collaboration. *The Qualitative Report, 24*(6), 1275-1286. https://doi.org/10.46743/2160-3715/2019.3757.
- Kunze, M., & Machalicek, W. (2022). Interdisciplinary teams: A model to support students with autism. *Psychology in the Schools, 59*(7), 1350-1362. https://doi.org/10.1002/pits.22618.

- Kwan, C., Gitimoghaddam, M., & Collet, J. P. (2020). Effects of social isolation and loneliness in children with neurodevelopmental disabilities: a scoping review. *Brain sciences, 10*(11), 786. https://doi.org/10.3390/brainsci10110786.
- LaBarbera, R. (2017). A comparison of teacher and caregiver perspectives of collaboration in the education of students with autism spectrum disorders. *Teacher Education Quarterly*, 44(3), 35-56.
- Li, L., & Ruppar, A. (2021). Conceptualizing teacher agency for inclusive education: A systematic and international review. *Teacher Education and Special Education*, 44(1), 42-59. https://doi.org/10.1177/0888406420926976.
- Love, A. M. A., Findley, J. A., Ruble, L. A., & McGrew, J. H. (2020). Teacher Self-Efficacy for Teaching Students With Autism Spectrum Disorder: Associations with Stress, Teacher Engagement, and Student IEP Outcomes Following COMPASS Consultation. *Focus on Autism and Other Developmental Disabilities*, *35*(1), 47-54. https://doi.org/10.1177/1088357619836767.
- Mahoney, M. W. (2019). Peer-mediated instruction and activity schedules: Tools for providing academic support for students with ASD. TEACHING Exceptional Children, 51(5), 350-360. https://doi.org/10.1177/0040059919835816.
- Nuske, H. J., McGhee Hassrick, E., Bronstein, B., Hauptman, L., Aponte, C., Levato, L., ... & Smith, T. (2019). Broken bridges—new school transitions for students with autism spectrum disorder: A systematic review on difficulties and strategies for success. *Autism: the international journal of research and practice, 23*(2), 306–325. https://doi.org/10.1177/1362361318754529.
- Olsen, K., Croydon, A., Olson, M., Jacobsen, K. H., & Pellicano, E. (2019). Mapping inclusion of a child with autism in a mainstream kindergarten: how can we move towards more inclusive practices? *International Journal of Inclusive Education*, 23(6), 624–638. https://doi.org/10.1080/13603116.2018.1441914.
- Onwumere, D. D., Cruz, Y. M., Harris, L. I., Malfucci, K. A., Seidman, S., Boone, C., & Patten, K. (2021). The impact of an independence curriculum on self-determination and function in middle school autistic students. *Journal of Occupational Therapy, Schools, & Early Intervention, 14*(1), 103-117. https://doi.org/10.1080/19411243.2020.1799904.
- Perron, N. C. (2017). Bronfenbrenner's ecological systems theory. In *College student development: Applying theory to practice on the diverse campus, 197*(23), 1-10.
- Pickl, G., Holzinger, A., & Kopp-Sixt, S. (2016). The special education teacher is between the priorities of inclusion and specialization. *International Journal of Inclusive Education*, 20(8), 828–843. https://doi.org/10.1080/13603116.2015.1115559.
- Roberts, J., & Webster, A. (2022). Including students with autism in schools: a whole school approach to improve outcomes for students with autism. *International Journal of Inclusive Education*, *26*(7), 701–718. https://doi.org/10.1080/13603116.2020.1712622
- Samala Jr, G. (2023). Communication in Focus: Supervisors' Lived Experiences. *Advanced Qualitative Research*, 1(1), 15-29. https://doi.org/10.31098/aqr.v1i1.1375.
- Sanches-Ferreira, M., Lopes-dos-Santos, P., Alves, S., Santos, M., & Silveira-Maia, M. (2013). How individualized are the individualized education programmes (IEPs): An analysis of the contents and quality of the IEPs goals. *European Journal of Special Needs Education*, *28*(4), 507-520. https://doi.org/10.1080/08856257.2013.830435.
- Satsatin, K. A. C., Latayan, J. C., Panopio Jr, F. P., Sapin, S. B., & Tesoro, J. F. B. (2023). Lived Experiences of Social Studies Teachers Conducting Hybrid Classes amidst COVID-19 Pandemic. *Advanced Qualitative Research*, 1(2), 17-27. https://doi.org/10.31098/aqr.v1i2.1589.
- Stenhoff, D. M., Pennington, R. C., & Tapp, M. C. (2020). Distance education support for students with autism spectrum disorder and complex needs during COVID-19 and school closures. *Rural Special Education Quarterly*, 39(4), 211-219. https://doi.org/10.1177/8756870520959658.

- Syriopoulou-Delli, C. K., Cassimos, D. C., & Polychronopoulou, S. A. (2016). Collaboration between teachers and parents of children with ASD on issues of education. *Research in developmental disabilities*, *55*, 330-345. https://doi.org/10.1016/j.ridd.2016.04.011.
- Szumski, G., Smogorzewska, J., & Karwowski, M. (2017). Academic achievement of students without special educational needs in inclusive classrooms: A meta-analysis. *Educational research review, 21*, 33-54. https://doi.org/10.1016/j.edurev.2017.02.004.
- Thousand, J. S., Villa, R. A., & Nevin, A. I. (2021). The many faces of collaborative planning and teaching. In *Inclusive Schooling Practices Tip V 45# 3* (pp. 239-248). Routledge.
- Tremblay, P., & Belley, S. (2017). Individualized education plans in Canada: A comparative analysis. International Journal for Cross-Disciplinary Subjects in Education, 8(1), 3017-3024. https://doi.org/10.20533/ijcdse.2042.6364.2017.0409.
- Tuffour, I. (2017). A critical overview of interpretative phenomenological analysis: A contemporary qualitative research approach. Journal of healthcare communications, 2(4), 52. https://doi.org/10.4172/2472-1654.100093.
- U.S. Department of Education. (1990). *IDEA History*. https://bitly.ws/3gtTV.
- U.S. Department of Labor. (1990). The Americans with Disabilities Act. https://bitly.ws/3gtU8
- Watkins, L., Ledbetter-Cho, K., O'Reilly, M., Barnard-Brak, L., & Garcia-Grau, P. (2019). Interventions for students with autism in inclusive settings: A best-evidence synthesis and meta-analysis. *Psychological Bulletin*, *145*(5), 490. https://doi.org/10.1037/bul0000190.
- Xu, W., & Zammit, K. (2020). Applying thematic analysis to education: A hybrid approach to interpreting data in practitioner research. *International journal of qualitative methods, 19,* 1609406920918810. https://doi.org/10.1177/1609406920918810.
- Xue, E., & Li, J. (2022). Exploring the type-based vocational education system: Insights from China. *Educational Philosophy and Theory,* 54(10), 1670-1680. https://doi.org/10.1080/00131857.2021.1934668.