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T-P-C Framework: Paraprofessional- Teacher Collaboration in Inclusive Education

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Abstract: Inclusive education has increasingly positioned students with disabilities in general education classrooms, making collaboration between general education teachers and paraprofessionals a critical component of effective instructional practice. Despite their essential role in supporting both academic and behavioural outcomes, paraprofessionals often experience limited structured collaboration, unclear role expectations, and inconsistent access to professional support. This study examined collaborative practices between paraprofessionals and general education teachers in K–12 inclusive classrooms and identified key factors that contribute to effective partnerships. A phenomenological qualitative research design was used to explore the lived experiences of paraprofessionals. Twelve participants from two school districts in South San Francisco, California, were selected through purposive sampling to provide in-depth perspectives on collaborative practices. Data were collected through structured interviews with open-ended questions and analysed using Interpretative Phenomenological Analysis (IPA). Findings revealed that effective collaboration is characterised by consistent communication, shared instructional planning, and team-based approaches to supporting students. Participants emphasised that strong professional relationships are built on trust, mutual respect, and

shared responsibility, which are essential for implementing accommodations, managing student behaviour, and delivering targeted instructional support. The result of the Teacher-Paraprofessional Collaboration Framework (TPC) highlights the importance of role clarity, shared goals, and structured communication in fostering effective teamwork. Collaboration also included reviewing Individualised Education Programs (IEPs), adapting instructional strategies, and providing individualised or small-group support. However, challenges such as limited planning time, inconsistent communication structures, and unclear role expectations were reported. The study concludes that strengthening collaboration through TPCF principles enhances inclusive practices and improves student outcomes. Establishing clear communication systems, defining roles, and providing ongoing professional development are essential for effective collaboration.

Keywords: Inclusive education, Paraprofessionals, Teacher collaboration, K–12 classrooms, Student support.

Introduction

The pursuit of equitable learning opportunities for all students has positioned inclusive education as a central priority in modern K–12 schooling. Increasingly, students with disabilities are taught in general education classrooms, where they access grade-level curriculum alongside their peers while receiving targeted academic and behavioural supports. As classroom diversity expands, collaboration among teachers and paraprofessionals is no longer optional but essential to ensuring that students with diverse learning needs are effectively supported.

National trends underscore this shift toward inclusive practice. The percentage of students with disabilities spending 80% or more of their school day in general education classrooms increased from 61% in 2012 to 67% in 2022 (National Centre for Education Statistics [NCES], 2024). This pattern is particularly evident among students with speech or language impairments, specific learning disabilities, and other health impairments, the majority of whom are now educated in inclusive settings (NCES, 2024). As inclusion becomes the norm, the collaborative relationship between general education teachers and paraprofessionals, a key provider of in-class support, has grown increasingly critical.

Paraprofessionals play a vital role in facilitating access, supporting behaviour, and promoting student engagement in inclusive classrooms. Working near students, they provide individualised support, reinforce instruction, and assist with behavioural regulation. Their work is inherently connected to that of general education teachers, who are responsible for instructional design, assessment, and classroom management. Effective collaboration among these professionals is therefore necessary to ensure alignment on instructional delivery, behavioural expectations, and student support strategies.

Recent research highlights that strong collaborative relationships are associated with improved student outcomes, particularly in academic engagement, behavioural regulation, and independence (Huri et al., 2024). Scholars have identified key domains of effective collaboration, including levels of collaboration (e.g., coordination to co-construction), learning and behaviour support, and student engagement strategies. Higher levels of collaboration—characterised by shared decision-making and joint problem-solving—are linked to improved differentiation, reduced behavioural challenges, and increased student participation (Barnes et al., 2022). Additionally, coordinated approaches to learning and behaviour support, such as small-group instruction and targeted interventions, improve academic and social-emotional outcomes (Low & Van, 2024). Engagement-focused practices, including scaffolding and adaptive supports, further enhance student participation and access to instruction (Zhang et al., 2025).

Despite this growing body of research, significant gaps remain. First, understanding how collaboration is experienced and enacted in real-time classroom contexts. Much of the existing literature focuses on outcomes, roles, or effectiveness of paraprofessionals, with less attention to the nuanced, lived experiences of collaboration between paraprofessionals and general education teachers (Mason et al., 2020). While studies identify key components of effective collaboration, they often overlook how these practices are interpreted, negotiated, and sustained in daily interactions within inclusive classrooms.

Second, the predominance of quantitative and survey-based designs that measure collaboration through predefined variables, limiting insight into the complexity and context-dependent nature of collaborative practices (Almusaed et al., 2025). These approaches, while valuable, may not fully capture the relational dynamics, shared meanings, and contextual challenges that shape collaboration in practice. There is a need for research that centres on educator perspectives and explores how collaboration is constructed through lived experience.

To address these gaps, this study employs a phenomenological research design, which is well-suited to exploring the lived experiences and shared meanings of individuals engaged in a common phenomenon (Bush et al., 2019). Phenomenology allows for an in-depth examination of how paraprofessionals and general education teachers perceive, interpret, and enact collaboration in inclusive classrooms. By focusing on participants' lived experiences, this approach provides rich, contextualised insights into the processes underlying collaboration. This design is particularly appropriate for addressing the identified methodological gap, as it captures the complexity of interpersonal interactions and the meanings educators assign to their collaborative practices.

Grounded in these lived experiences, the findings of this study resulted in the development of the Teacher-Paraprofessional Collaboration Framework (TPCF), which conceptualises collaboration across three interconnected domains: levels of collaborative relationships, learning and behaviour support, and engagement strategies. This framework provides a structured lens for understanding how collaboration is enacted in practice and how it influences student outcomes in inclusive settings.

Research Problem

This study examines the collaborative practices of paraprofessionals and teachers in K-12 inclusive classrooms, focusing on how the quality and structure of their collaboration affect students' academic and behavioural outcomes. Analysing this issue is timely as inclusive education continues to expand, requiring more effective coordination among educators to support diverse learners. Although prior research has examined inclusion and paraprofessional roles, the specific impact of collaboration on student outcomes remains underdeveloped, underscoring the need for further investigation. This study can uncover effective collaboration strategies, identify existing challenges, and offer practical recommendations to strengthen inclusive education.

Research Focus

This study examines collaborative practices between paraprofessionals and teachers in K-12 inclusive classrooms, with particular attention to how these interactions influence students' academic and behavioural outcomes. It aims to analyse the effectiveness, structure, and challenges of these collaborative relationships to identify strategies that enhance instructional support for diverse learners.

Research Aim and Research Questions

This study aims to explore the collaborative practices between paraprofessionals and general education teachers in K-12 inclusive classrooms. Specifically, this study seeks to understand the nature and quality of collaborative relationships between paraprofessionals and general education teachers; to

identify effective collaborative practices and strategies used to plan, problem-solve, and support students; to examine how collaboration positively impacts student learning and behavior; to determine the common areas of concern that paraprofessionals and teachers address collaboratively; and to describe the communication methods and frequency of collaborative interactions.

Specifically, it seeks to answer the following questions:

1. How would you describe your collaborative relationship with the general education teacher(s) you work with?
2. Can you describe a situation where collaboration with a general education teacher positively impacted a student's learning or behaviour?
3. What are the areas of concern that you usually collaborate on?
4. How do you typically communicate and collaborate with the general education teacher?
5. How frequently do you and the general education teacher(s) collaborate or debrief regarding student support?

Literature Review

In this study, a sequential approach was used in which the literature was reviewed after initial results were analysed to identify research directly aligned with emergent themes related to collaboration between paraprofessionals and general education teachers in inclusive classrooms. This approach ensured that the selected literature was closely related to the study's findings.

Paraprofessionals are essential members of school support staff who work under the supervision of certified teachers to support instruction and student needs in inclusive settings. Their roles have expanded to include direct instructional support, behavioural interventions, small-group instruction, adaptation of materials, family communication, and administrative documentation (Ladenstein, Breyer, & Gasteiger-Klicpera, 2022; Ufermann, Domsch, & Urton, 2024; Yates, Chopra, & Likins, 2024; Brock & Carter, 2020; Astudillo, Simón Rueda, & Blázquez, 2025). This expansion is consistent across countries, particularly in inclusive environments where paraprofessionals support diverse learners and contribute to instructional and intervention efforts (Giangreco, 2021; Cook, Collins, & Feldman, 2023; de Bruijn & Leeman, 2020).

Research indicates that paraprofessionals frequently provide one-to-one and small-group instruction and support, and access to academic and social participation through behaviour strategies and engagement support (Astudillo et al., 2025; Yates et al., 2024; Ufermann et al., 2024; Szumski, Smogorzewska, & Grygiel, 2022; Rose & Monda-Amaya, 2024). They also contribute to IEP implementation, communication with specialists, and interdisciplinary coordination (Ladenstein et al., 2022; Turner & Mansouri, 2022; Douglas, Chapin, & Nolan, 2021). However, role ambiguity and unclear supervision remain ongoing challenges (Ufermann et al., 2024; Astudillo et al., 2025; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2020).

Effective collaboration is strongly influenced by communication, role clarity, and interpersonal relationships, though structural barriers often limit these practices (Ufermann et al., 2024; Turner & Mansouri, 2022; Yates et al., 2024; King-Sears, Brawand, Jenkins, & Preston-Smith, 2021). Facilitators include positive communication routines, defined responsibilities, mutual respect, and joint planning time (Ladenstein et al., 2022). Structured collaboration practices such as co-planning, shared documentation, and professional development improve collaboration quality and implementation fidelity (Turner & Mansouri, 2022; Ufermann et al., 2024; Yates et al., 2024).

Despite these benefits, barriers such as limited planning time, fragmented communication, and physical isolation persist (Ufermann et al., 2024; Szumski et al., 2022; Brock & Carter, 2020). To address these issues, research recommends structured collaboration systems emphasising co-delegation, clear

supervision, and formal planning protocols (Yates et al., 2024; Turner & Mansouri, 2022; King-Sears et al., 2021). Practices such as systematic fading of support also promote student independence (Yates et al., 2024; McLeskey, Waldron, & Redd, 2023).

Instructional planning and behaviour support are enhanced through collaboration, improving paraprofessional effectiveness in delivering supports (Ladenstein et al., 2022; Ufermann et al., 2024; Douglas et al., 2021; Yates et al., 2024). While collaboration improves classroom processes and perceptions, evidence linking it to direct student achievement outcomes remains limited (Brock & Carter, 2020; Szumski et al., 2022; Cook et al., 2023). Overall, literature emphasises the need for structured systems and aligns with the Teacher-Paraprofessional Collaboration Framework (TPCF), which highlights communication, role clarity, and shared responsibility as essential to effective inclusive practice.

Despite substantial progress, significant gaps remain in both knowledge and practice. While clear role definitions, structured communication, joint planning, and embedded professional development enhance collaboration (Ladenstein, Breyer, & Gasteiger-Klicpera, 2022; Yates, Chopra, & Likins, 2024; Turner & Mansouri, 2022), challenges such as role ambiguity, limited planning time, and inconsistent supervision continue to impede effectiveness (Ufermann, Domsch, & Urton, 2024; Astudillo, Simón Rueda, & Blázquez, 2025). Additionally, there is limited rigorous empirical evidence linking specific collaborative strategies to measurable student outcomes (Brock & Carter, 2020; Szumski, Smogorzewska, & Grygiel, 2022), and international studies show variability across contexts, policies, and resources (Cook, Collins, & Feldman, 2023). These gaps highlight the need for further context-rich research on collaboration in inclusive classrooms.

Materials and Methods

Research Design

This study employed a phenomenological qualitative research design to explore the lived experiences of paraprofessionals regarding their collaborative practices with general education teachers in K-12 inclusive classrooms. Phenomenology is a qualitative approach that seeks to understand the essence of a phenomenon through the lived experiences of individuals who have directly encountered it (Creswell & Poth, 2021; Moustakas, 1994). This design was selected as most appropriate for capturing the subjective, everyday experiences of paraprofessionals as they navigate collaborative relationships with general education teachers in inclusive settings.

Sample and Participants

Participants were selected using purposive sampling from district-employed paraprofessionals with direct experience supporting students with disabilities in inclusive general education classrooms. This approach ensured participants had relevant experience with paraprofessional–teacher collaboration. Additionally, the small sample size enabled an in-depth, idiographic exploration of participants' lived experiences, allowing detailed and rich analysis of each perspective. Participants were drawn from multiple school sites across two districts and spanned grade levels from kindergarten through twelfth grade, providing a cross-district perspective on collaborative practices.

A total of 12 paraprofessionals participated in this study (N = 12). Participants were recruited from multiple school sites across two districts and represented grade levels from kindergarten through twelfth grade.

Inclusion criteria: (a) current employment as a paraprofessional in one of the participating districts, (b) active assignment supporting students with disabilities in inclusive general education classrooms, and (c) direct student support responsibilities.

Exclusion criteria: Any participants who were not currently assigned to a paraprofessional role, did not work full-time in the district, or were not actively supporting students.

Instrument and Procedure

Data were collected using a researcher-developed interview schedule administered through an online platform (Google Forms). The interview schedule was designed in accordance with phenomenological interview principles to elicit rich, detailed descriptions of paraprofessionals' lived experiences of collaborative practices. The interview schedule consisted of three distinct parts: preliminary questions, developmental questions, and post-interview questions, following the structured approach recommended for phenomenological inquiry (Bevan, 2024; Moustakas, 1994).

Preliminary Questions. These questions established the participants' background and situated their collaborative experiences within specific educational contexts.

Developmental Questions. The developmental section formed the core of the interview schedule and consisted of five open-ended questions designed to explore the essence of participants' lived experiences with collaboration. These questions were carefully crafted to elicit detailed, descriptive responses about the phenomenon of teacher-paraprofessional collaboration.

Prior to accessing the interview questions, participants were presented with an informed consent statement explaining the study's purpose, the phenomenological nature of the research, the voluntary nature of participation, confidentiality procedures, and their right to withdraw at any time. Participants indicated their consent by proceeding to complete the interview schedule. No personally identifiable information was collected beyond self-selected pseudonyms, ensuring participant anonymity.

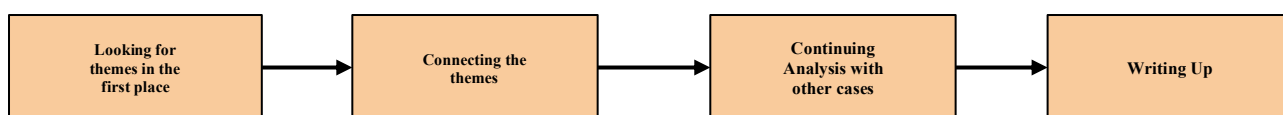
In addition, responses to the interview schedule were automatically collected and stored securely in the researcher's password-protected Google Forms account. Upon completion of the data collection period, responses were exported to Microsoft Excel for data management and analysis.

Data Analysis

In this study, the researcher employed Interpretative Phenomenological Analysis (IPA) to analyse the data. This process followed a systematic approach, which included: i) identifying and defining themes within individual cases, ii) establishing connections between these themes, iii) iteratively analysing additional cases to deepen understanding and enhance the findings, and iv) synthesising the results into a comprehensive written report (Smith, J.A., 1996, p. 68-91).

Figure 1.

Interpretative Phenomenological Analysis Schema



Source: Author Development

Results

The following section presents the background information about the results of the interviews that were conducted into three primary findings:

Levels of Collaborative Relationships with General Education Teachers

Strong Collaborative Partnerships

Participants consistently described their relationships with general education teachers as positive, professional, and collaborative, highlighting strong teamwork, consistent communication, and shared responsibility for student success. Several responses emphasised mutual support and alignment in addressing student needs.

One participant stated,

"I love working and collaborating with the gen ed teachers. They always update me about student behaviours/concerns and share the lesson plan every week. We are a great team!" (Participant 1)

This reflects ongoing communication and coordinates instructional planning.

Another participant characterised the relationship as a partnership grounded in shared goals and open communication:

"I would describe our relationship as a true partnership. We maintain open lines of communication, allowing us to align on lesson goals and strategies for specific students. I feel my input regarding student behaviour and academic progress is valued, which helps us create a more inclusive and supportive classroom environment." (Participant 7)

This response illustrates collaborative decision-making and mutual respect for professional input. Similarly, a third participant described professional interactions that support instructional problem-solving, noting:

"Very well, we communicate professionally as colleagues, and we collaborate 1-on-1 when we need to, if something needs to be discussed and change how we approach things with the students. If the students still have difficulty understanding the instructions of the assignments..." (Participant 11)

This highlights direct communication and responsiveness to student learning challenges.

Participants' responses indicate that collaborative relationships with general education teachers are characterised by positive attitudes toward teamwork, consistent and open communication, shared instructional planning, and joint efforts to support students' academic and behavioural needs.

Positive but Informal Working Relationships

Participants described their collaborative relationships with general education teachers as positive, cooperative, and grounded in mutual respect, while also reflecting a more informal and collegial dynamic. Responses emphasised professionalism, approachability, and a shared commitment to supporting students, though with less emphasis on structured coordination than in more formal partnerships.

Several participants highlighted the overall quality of their working relationships. For instance, one participant shared,

"My collaborative relationship with the general education teacher I work with is wonderful. She is kind, respectful, and a professional at her job." (Participant 3)

This response reflects strong interpersonal rapport and professional respect. Others emphasised teamwork focused on student support, noting,

"We work together to ensure students receive the support they need." (Participant 4)

Similarly, another participant expressed appreciation for the collaborative experience and professional growth, stating,

"I would say pretty good! I love working with the K-2 general education teachers. Working with them allows me not only to experience being in a regular classroom, but I also get to see how much time and effort each teacher puts into their classroom and into helping their students learn. It put me into perspective and made me appreciate teachers more." (Participant 5)

This illustrates both positive collaboration and professional appreciation. Additional responses pointed to ease of communication and accessibility, as one participant explained,

"We get along well and talk often. They are easy to approach when I have a question about a lesson or need help with a project." (Participant 8)

Another participant noted a focus on working closely to improve student outcomes, stating,

"I like to work closely with the teachers to improve students' performances." (Participant 12)

The responses indicate that participants experience positive interpersonal relationships characterised by professionalism, approachability, mutual support, and a general preference for collaboration, forming an informal yet effective working dynamic with general education teachers.

Limited or Minimal Collaboration

One participant described their collaborative relationship with general education teachers as limited, characterised by minimal communication and limited shared planning. The participant noted,

"The collaboration is okay. The gen ed teachers mostly let me take the lead with the students, with limited communication about behaviour or learning strategies. There are small moments of support, but overall, the collaboration is minimal." (Participant 2)

This response reflects a neutral perception of the working relationship, where collaboration occurs only occasionally and is not consistently structured or interactive. The results indicate that, while some support is present, communication about student behaviours and instructional strategies is infrequent and collaborative planning is minimal, resulting in a less integrated partnership between special education and general education teachers.

Collaborative Practices Used to Support Student Learning and Behaviour

Communication as the Core Collaborative Practice

Participants consistently identified communication as the central mechanism guiding collaboration between special education and general education teachers. Collaboration was often described as occurring through informal in-class interactions, quick check-ins, and ongoing exchanges of information on student needs, behaviour, and instructional strategies.

One participant explained that collaboration primarily occurs in brief, informal moments during instruction, stating,

"Most collaboration happens through quick check-ins during class. The gen ed teachers usually let me take the lead, but they occasionally offer small suggestions or provide materials when needed." (Participant 2)

This reflects limited but practical collaboration supported by resource sharing and in-the-moment communication.

Another participant emphasised communication as the foundation of effective collaboration, noting,

“Some collaborative practices I used between my general education teacher and me have been effective, and one of them is communication. I think communication is a key factor in a classroom, allowing teachers to communicate with students who need help.” (Participant 3)

This highlights the perceived importance of communication in supporting students. Additional responses further illustrate structured yet ongoing communication practices. One participant shared,

“We communicate regularly about lesson plans and student needs. I share what I observe while supporting students, and we work together to adjust strategies when needed.” (Participant 4)

This indicates that communication also supports shared decision-making and instructional adjustments based on student progress. Another participant focused on communication as a means of reporting student behaviour and coordinating support, stating,

“Mainly communication. If I see one of our SPED kids, or any of their students, not listening or following directions, as well as misbehaving, I will notify the general teacher as well as their SPED teacher(s).” (Participant 5)

This reflects communication as a tool for monitoring behaviour and ensuring timely intervention. Furthermore, participants’ responses suggest that communication—both informal and ongoing—is the primary collaborative practice, serving as the foundation for sharing information, reporting student behaviour, exchanging resources, and supporting instructional and behavioural interventions.

Instructional and Behavioural Support Strategies

Participants described a range of instructional and behavioural support strategies implemented collaboratively with general education teachers to address student needs and promote academic success. These strategies included proactive behaviour interventions, data-informed decision-making, differentiated instruction, and targeted academic support.

One participant highlighted a structured and collaborative approach to behaviour management, stating,

“We regularly collaborate to analyse student behaviour data to figure out the ‘why’ behind challenging behaviours. We brainstorm and implement proactive, positive behaviour support strategies together to ensure consistency in the classroom, which has significantly reduced disruptions.” (Participant 7)

This response reflects the use of proactive, data-driven behaviour interventions and shared responsibility in maintaining consistent classroom expectations. In addition to behavioural supports, participants described instructional strategies to improve student understanding and engagement.

One participant noted,

“Having small groups, reading at a slow pace for the students to understand the readings and doing step-by-step math problem solving, having homework help and catching up with missing assignments, quizzes/tests, open notes and extra time.” (Participant 11)

These practices illustrate the use of differentiated instruction, scaffolded learning, and accommodations such as extended time and open-note assessments to support diverse learners.

Participants' responses indicate that instructional and behavioural support strategies are collaboratively implemented through small-group instruction, academic support sessions, assignment recovery efforts, and proactive behaviour interventions. These strategies aim to provide individualised support, improve student performance, and maintain a structured, supportive learning environment.

Collaborative Instructional Planning and Problem-Solving

Participants described collaborative instructional planning and problem-solving as a key component of their work with general education teachers, often involving joint review of student IEPs, shared development of instructional strategies, and data-informed decision-making to address both academic and behavioural needs.

One participant emphasised the importance of working together to align supports with student needs, stating,

"Reviewing the IEP at a glance together, coming up with strategies as a team, asking the gen ed teachers for a modified homework or creating my own." (Participant 1)

This response reflects collaborative review of student plans and the use of accommodations and modifications developed through shared input. Another participant highlighted the role of data-driven collaboration in addressing behavioural challenges, noting,

"We regularly collaborate to analyse student behaviour data to figure out the 'why' behind challenging behaviours. We brainstorm and implement proactive, positive behaviour support strategies together to ensure consistency in the classroom, which has significantly reduced disruptions." (Participant 7)

This illustrates ongoing collaborative problem-solving grounded in behavioural data and the implementation of consistent, proactive interventions. Participants' responses indicate that collaborative instructional planning and problem-solving involve joint IEP review, shared development of instructional strategies, data-based decision-making, and coordinated efforts to modify assignments and support student behaviour. These practices reflect a team-based approach that aligns instruction and interventions to better meet student needs.

Collaborative Practices to Support Student Learning, Behaviour, and Engagement

Building Trust and Positive Relationships; Reducing Student Behavioural Incidents

Participants highlighted the importance of building trust and positive relationships between students and general education teachers as a key factor in reducing behavioural incidents. One participant shared a specific example illustrating how a teacher's consistent support and rapport with a student led to meaningful behavioural improvement:

"Yes! My student M loves Ms W because she goes the extra mile in showing my student that she is there for him. Student M, who has a lot of trust and anger issues, does not lash out at Ms W anymore." (Participant 1)

This response demonstrates how intentional relationship-building, trust, and consistent emotional support from the teacher contributed to a reduction in negative behaviours, particularly for a student with a history of trust and anger challenges. It suggests that positive student-teacher relationships can play a critical role in improving emotional regulation and promoting more appropriate classroom behaviour.

Behaviour and Focus Support

Participants described a range of collaborative strategies with general education teachers to maintain student engagement, reduce behavioural issues, and improve focus. These strategies included shared support during instruction, use of behaviour regulation tools, consultation for student resistance, and the development of intervention plans to address emotional and behavioural needs.

One participant emphasised how shared instructional support can help maintain student focus and minimise disruptions, stating,

“One example was when the gen ed teacher briefly supported another student so I could focus on a student who needed more help. It kept both students on task and reduced behaviour issues.”
(Participant 2)

This reflects how coordinated support between teachers helps redistribute attention and maintain classroom management. Another response highlighted the use of tools to support student focus, while also addressing potential overreliance.

The participant shared,

“A student uses a fidget toy to focus, but it was distracting for him as well. The teacher and I planned to cut back on it slowly, and the student stayed on task better.” (Participant 4)

This demonstrates a collaborative intervention to regulate behaviour and promote more effective focus strategies. Participants also described proactive planning to support students’ emotional regulation and independence.

One participant noted,

“Together we came up with a plan to help him regulate his emotions and minimise his behaviour, as well as help him progress more academically and independently. Because of this immediate intervention, the student was able to better succeed at school.” (Participant 5)

This reflects a joint effort to design and implement behaviour interventions that support both academic and emotional growth. Additionally, consultation with general education teachers was identified as a useful strategy when addressing student refusal to work.

One participant explained,

“I asked the teacher about a student not wanting to work with me and what to do. They mentioned to walk away and work with other students to support them, and it really helped.”
(Participant 6)

This illustrates how seeking guidance from colleagues can inform effective redirection strategies and improve student engagement. The participants’ responses indicate that behavioural and focus support is achieved through collaborative efforts, such as shared classroom support, the use and adjustment of focus tools, consultation on behavioural challenges, and the development of targeted interventions to regulate emotions and improve student participation.

Communication and Student Advocacy

Participants highlighted communication as a key mechanism for promoting student advocacy, fostering understanding, and reducing frustration. Collaborative practices between special education and

general education teachers often involve direct communication with students, clarifying expectations, and using shared tools to enhance student expression.

One participant emphasised how teacher communication supports student understanding and encourages self-advocacy, stating,

“A situation is where a student does not know/understand what to do, a teacher can come in and communicate with the student, helping him/her out and asking what he/she needs from the teacher.” (Participant 3)

This response reflects how direct interaction between teacher and student can clarify tasks, address confusion, and empower students to express their needs. Another participant described the use of collaborative communication tools to support student expression and reduce frustration, noting,

“We worked together on using a communication device/visual board during class. Because the teacher and I both used the same symbols, I was able to tell them what I needed without getting frustrated.” (Participant 8)

This illustrates how consistent use of visual supports and shared communication systems can enhance student voice and accessibility. The participants’ responses indicate that communication and student advocacy are closely connected, with collaborative practices focused on clarifying instructions, encouraging students to express their needs, and using structured tools to support effective and frustration-free communication.

Shared Responsibility and Instructional Strategies

Participants described collaboration with general education teachers as a shared responsibility, involving joint planning, coordinated behavioural supports, and the use of instructional strategies to enhance student understanding and engagement. These practices reflect a team-based approach in which both special education and general education staff contribute to student success.

One participant highlighted the importance of coordinated communication and planning when addressing student behaviour, stating,

“There was one situation where a student was showing disruptive behaviour. As soon as the behaviour was observed by me (his para), I notified both his SPED teacher and his general teacher.” (Participant 5)

This response reflects shared responsibility and collaboration across team members to address student needs in a timely and coordinated manner. Another participant emphasised shared implementation of behaviour management strategies, noting,

“Ms F and I shared the load of both correcting negative behaviours and handing out rewards. We met daily to discuss which strategies were working and which needed adjustment.” (Participant 7)

This illustrates collaborative monitoring, shared accountability, and ongoing adjustments to strategies to support student behaviour. Additionally, participants described instructional strategies that support student comprehension and motivation.

One participant stated,

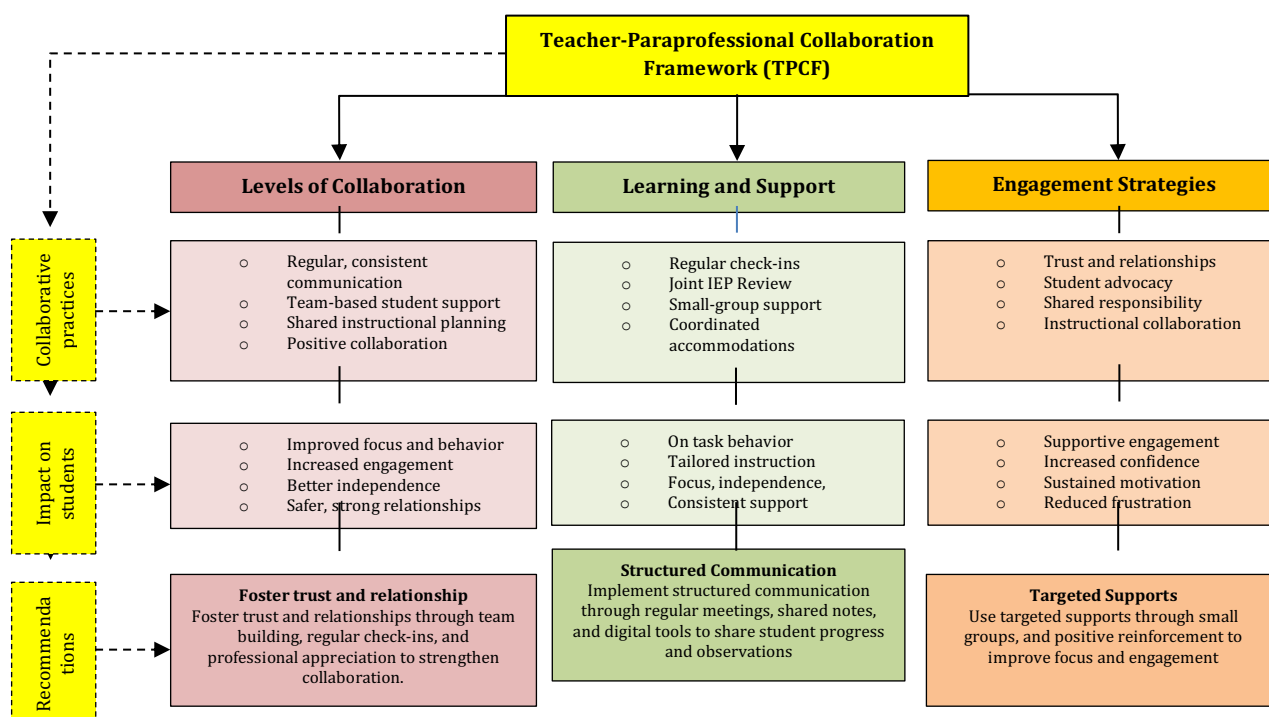
“Students tend to understand more when certain keywords are changed and positive/negative reinforcement is given for their progress in class.” (Participant 12)

This highlights the use of adjusted language and reinforcement techniques within collaborative instructional practices. Overall, participants’ responses indicate that shared responsibility between special education and general education teachers involves joint planning, coordinated behavioural interventions, shared reward systems, and instructional adjustments, all aimed at improving student outcomes and maintaining consistent support across the classroom.

Figure 2.

Schematic Diagram of Teacher-Paraprofessional Collaboration (TPC)

Framework



Source: Author's Development

Discussion

The findings of this study provide a nuanced understanding of how paraprofessionals experience collaboration with general education teachers, demonstrating that both relationship quality and collaborative practices influence student academic and behavioural outcomes. Collaboration emerged as a continuum shaped by communication, shared responsibility, and the structure of professional interactions.

First, the findings highlight variability in collaborative relationships, ranging from strong, team-based partnerships to minimal or inconsistent interactions. This variability aligns with existing literature suggesting that collaboration is influenced by role clarity, communication, and shared ownership, while also being constrained by limited planning time and unclear expectations (Gilson & Bigg, 2023). According to Yates et al. (2020), structured tools such as planning templates, feedback protocols, and evaluation instruments can strengthen instructional coordination. Similarly, Barnes et al. (2021) found that establishing routines for collaboration and clear communication practices improves daily functioning and reduces role conflict in self-contained classrooms.

A key barrier identified in this study is the lack of structured communication time. According to Bruce (2025), without dedicated time for planning and reflection, communication becomes reactive rather than proactive. Participants described communication as occurring “on the fly,” limiting opportunities for long-term planning. This finding is consistent with research indicating that fragmented communication, limited planning time, and paraprofessional isolation reduce effective collaboration (Ufermann et al., 2024). However, informal communication remains valuable for addressing immediate concerns. Therefore, as suggested by McCarty and Light (2021) and BeGell (2024), a hybrid approach that combines informal communication with scheduled collaboration time can enhance instructional alignment and coordination.

Communication emerged as the core collaborative practice. Participants relied heavily on informal, real-time exchanges during instruction. This supports research indicating that communication quality, professional trust, and interpersonal relationships are central to effective collaboration (Ladenstein et al., 2022; Yates et al., 2024). According to Turner and Mansouri (2022), structured supports such as regular planning time and embedded training opportunities further strengthen collaboration. At the same time, the predominance of informal communication suggests a need for more formalised systems, including scheduled meetings and shared documentation processes, to improve consistency.

In addition, the findings emphasise the importance of shared responsibility and collaborative problem-solving. Participants described working together on IEP implementation, instructional planning, and behavioural strategies. According to Kennedy (2021), shared ownership of student learning improves both student outcomes and professional satisfaction. Similarly, coordinated behavioural interventions implemented consistently across educators lead to improved student behaviour (Meyer et al., 2021; Bruce, 2025). However, the findings also suggest that collaboration is more consistently focused on behaviour than academics. According to Paju et al. (2021), paraprofessionals often provide academic support but may lack sufficient training or guidance, highlighting the need to strengthen collaboration in instructional planning.

Furthermore, relationship quality and trust emerged as critical factors. Participants who experienced mutual respect, shared decision-making, and open communication described stronger collaboration and better student outcomes. According to Bronstein et al. (2021) and Kennedy (2021), trust enhances communication, problem-solving, and effectiveness. Conversely, limited trust led to feelings of isolation and uncertainty. These findings align with research indicating that relationship quality is a key determinant of collaboration (Meyer et al., 2021).

The study also highlights the importance of role clarity. According to Cole-Lade and Bailey (2019) and Urbani et al. (2024), unclear roles limit meaningful collaboration, while structured meetings and defined responsibilities improve effectiveness. Participants in this study similarly reported that ambiguity in expectations reduced collaboration, reinforcing the need for clearly defined roles and responsibilities.

Additionally, school culture and administrative support play a significant role. According to Sobeck and Robertson (2024), schools that prioritise collaboration through structured time, clear expectations, and supportive leadership foster effective partnerships. Participants emphasised the importance of administrators who advocate for collaboration and model respect for paraprofessionals.

Overall, the findings reinforce that effective collaboration requires more than informal interaction. Instead, it depends on structured communication, clear role expectations, shared responsibility, and strong professional relationships. While informal communication meets immediate needs, it is insufficient on its own. Therefore, integrating structured collaboration time, professional development, and administrative support can strengthen paraprofessional-teacher partnerships and improve student outcomes in inclusive settings.

Limitations of the Study

This study has several limitations that should be considered when interpreting the findings. The sample was conducted in a single location, which may restrict the transferability of the results to other regions or school settings. Additionally, the study focused exclusively on paraprofessional perspectives, without including general education teacher viewpoints, which may limit a more comprehensive understanding of collaborative practices. Moreover, data were collected through self-reported online forms, which may introduce response bias, including social desirability bias, and lack the depth that may be captured through face-to-face interviews. Furthermore, the relatively small sample size is consistent with IPA methodology but may limit broader generalizability. Despite these limitations, the study provides valuable insights into paraprofessional experiences and highlights important factors influencing collaboration in inclusive classrooms.

Conclusions

This study aimed to explore the collaborative practices between paraprofessionals and general education teachers in K-12 inclusive classrooms, with a focus on understanding the nature of their relationships, the strategies they use, and the impact of collaboration on student learning and behaviour. The findings provide clear, comprehensive insights that address each guiding research question.

First, in response to how paraprofessionals described their collaborative relationships with general education teachers, the results indicated that these relationships exist along a continuum, ranging from strong, highly collaborative partnerships to more informal or minimal interactions. Strong partnerships were characterised by mutual respect, shared responsibility, and consistent communication, whereas less-developed relationships involved limited communication and fewer opportunities for joint planning.

Second, when examining situations in which collaboration positively impacted student learning or behaviour, participants consistently described improvements in student engagement, emotional regulation, and academic performance. These outcomes were achieved through coordinated efforts, including shared behavioural interventions, instructional adjustments, and consistent reinforcement strategies. The findings demonstrated that collaboration plays a meaningful role in reducing behavioural challenges and enhancing student success.

Third, regarding the areas of concern addressed collaboratively, the study found that paraprofessionals and general education teachers most frequently collaborate on student behaviour, academic support, task completion, and emotional regulation. These areas reflected the day-to-day challenges of inclusive classrooms and highlighted the importance of coordinated efforts to meet diverse student needs.

Fourth, regarding communication methods and collaboration practices, the findings revealed that communication is the primary mechanism through which collaboration occurs. Participants reported relying heavily on informal methods, such as in-class check-ins, real-time discussions, and brief exchanges during instruction. While these methods support immediate responsiveness, they are often unstructured and may limit deeper collaborative planning.

Finally, regarding the frequency of collaboration, the results suggested that interactions occur regularly but are typically brief and embedded in daily classroom routines rather than through scheduled or formal meetings. This indicates that while collaboration is ongoing, it may lack the consistency and structure needed to maximise its effectiveness fully.

Overall, this study concludes that collaboration between paraprofessionals and general education teachers is essential in supporting student learning and behaviour in inclusive settings. However, the

effectiveness of collaboration is influenced by the level of structure, clarity, and intentionality in these interactions. Strengthening collaborative practices through formalised communication systems, clearly defined roles, and dedicated planning time may enhance both the quality of collaboration and student outcomes. These findings reinforce the importance of collaboration as a critical component of inclusive education and provide direction for improving practice in K–12 classrooms.

The voices of paraprofessionals in this study make clear that effective collaboration is not merely a professional nicety but a practical necessity for providing high-quality, coordinated support to students with disabilities in inclusive classrooms. By honouring these voices and acting on their insights, educators and school leaders can create collaborative structures and cultures that enable all students to thrive.

Suggestions for future research

Future research could examine structured collaboration models, differences across settings, and long-term (longitudinal) effects on student outcomes. It should also explore professional development, technology use, students' and families' perspectives, and organisational and systemic factors that influence effective collaboration in inclusive classrooms.

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