

A Unified Approach: Testing the Effect of a Co-Teaching System in an Inclusive Classroom

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Abstract: This study examined the co-teaching system as a collaborative model within inclusive educational settings, focusing on the partnership between main classroom teachers and shadow teachers who specialized in Applied Behavior Analysis (ABA). It explored how their coordinated efforts influenced student learning outcomes, engagement, and social integration, particularly for students with diverse learning needs, including those with disabilities. The study was guided by four key components of teacher collaboration—co-planning, co-instruction, co-assessing, and co-reflecting—to determine the extent to which co-teaching contributed to a more structured and responsive instructional approach. Employing an action research design, the study utilized a mixed-method approach, integrating qualitative and quantitative data through classroom observations, interviews, checklists and Padlet updates. The "One-Teach, One-Assist" model provided the framework for examining collaborative teaching dynamics. Conducted in a private preschool in Salcedo, Makati, the research focused on two cases, each comprising a main teacher and a shadow teacher. Over a three-week implementation period, the findings demonstrated that co-teaching not only clarified instructional roles but also reinforced the value of shared decision-making in establishing a stable and supportive learning environment. The results addressed two central research questions: the effects of a formalized co-teaching system and the perspectives of main and shadow teachers regarding its implementation. The study revealed that while the structured collaboration between educators contributed to instructional clarity and enhanced student support, areas for improvement remained in workload distribution, communication, and role integration. These insights highlighted the necessity of refining co-teaching practices to ensure meaningful collaboration that benefited both educators and students. The findings emphasized that the effectiveness of inclusive education was not merely contingent on the presence of multiple teachers but on their ability to work in unison, adapting their methods to meet the unique needs of every child.

Key Words: Co-Teaching, Formalized Co-Teaching System, Main Teacher, Shadow Teacher, Collaboration, Shared-Decision Making, communication, Co-Planning, Co-Instructing

1. INTRODUCTION

Education serves as the cornerstone for equipping students with the fundamental capabilities, knowledge, and abilities needed to negotiate the challenges of today's complicated world. In early childhood settings, this vision highlights the necessity of an inclusive and collaborative approach, emphasizing the need for teachers to work together to promote the sharing of ideas, experiences, and knowledge—critical elements in refining instructional techniques and elevating the quality of the educational process.

The main teacher's primary duty extends beyond simply imparting curriculum content to the production of meaningful educational experiences that enable students to apply their knowledge to real-world circumstances. This position requires a thorough awareness of pedagogical techniques, curriculum standards, and the individual requirements of every student. Larasati et al. (2019) contend that students become creators and innovators when they move from rote memorization of abstract notions to active engagement with knowledge. Meanwhile, shadow teachers offer crucial assistance within inclusive education, particularly to students with special needs. According to the Vidhyandihi Education Society (2024), shadow teachers serve as essential intermediaries between students with learning disabilities or developmental delays and the regular classroom setting. The collaboration between main and shadow teachers is integral to the success of inclusive education, characterized by clear communication and a shared commitment to student success.

At a private preschool located in Salcedo, Makati, the implementation of a collaborative educational approach is evident within its progressive curriculum. The pre-kindergarten classroom accommodates 14 students, including two who require additional support. Student A, diagnosed with Autism Spectrum Disorder, is focused on building his independence, while Student B, who experiences a speech delay, is receiving targeted assistance to enhance his social skills and interactions with classmates. For the first time, the school has endorsed the hiring of two shadow teachers, supported by the parents, to effectively address these specific needs. These educators are trained in Applied Behavior Analysis (ABA), a well-established methodology that

focuses on behavior management and encourages learning among children with special needs (Fennell & Dillenburger, 2016).

In the pre-kindergarten classroom, two main teachers oversee daily routines from arrival to dismissal, ensuring the smooth execution of activities and the achievement of learning objectives. These objectives are guided by the curriculum, lesson plans, and a framework known as the "Bible," which outlines the developmental milestones expected at each age level. Professionally trained to identify and address potential developmental concerns, the main teachers collaborate closely to support children's growth and academic progress. Additionally, two shadow teachers, newly assigned to assist children with special needs, provide individualized guidance, facilitate engagement, and support task completion in alignment with class activities.

Shadow teachers, being externally hired, operate within a communication system that is largely informal and inconsistent. While a Facebook Messenger group chat is used for information sharing, it lacks reliability as a primary means of collaboration. Most student-related updates are directly communicated to parents, creating a gap in information exchange between main and shadow teachers. Furthermore, the absence of structured Individualized Education Plan (IEP) discussions hinders coordination. Main teachers utilize Padlet to document observations and share updates with parents, yet shadow teachers do not have access to this platform, leaving them uninformed about critical student progress. Communication between main and shadow teachers is also minimal, often occurring only during classroom interactions through brief verbal exchanges. This fragmented system limits the effectiveness of support provided to children with special needs.

Another challenge is the limited access that shadow teachers have to lesson plans. Lesson plans serve as a structured guide, outlining the specific objectives, activities, and assessments that will be used during the lesson, helping teachers stay focused on the learning goals. They also allow for the efficient use of time, ensuring that each topic is covered adequately while maintaining a cohesive progression throughout the course (Farhang et al., 2023). Without access to the lesson plans in advance, shadow teachers are left with minimal insight into the content or structure of the lessons. While shadow teachers can typically adapt once



the lesson is in progress, having access to the lesson plans beforehand would allow them to better prepare, anticipate potential challenges, and collaborate more effectively with the main teacher in real time.

This lack of collaboration is further compounded by an insufficient understanding of school policies. When the researchers interviewed the School Directress, it became clear that while shadow teachers are generally aware of the school's overarching policies, they are not fully informed about the specific guidelines or expectations related to their roles. This ambiguity emphasizes the urgent need to introduce shared decision-making processes. Building relational trust begins by establishing agreed norms and values, which are skillfully incorporated into these processes (Darling, Alexander & Hernández, 2024). Furthermore, implementing a formalized co-teaching system, where educators collaborate in the planning and delivery of lessons, is crucial for effective collaboration. Rooted in inclusive education, this system promotes a partnership between general education and special education teachers. Together, they work to provide all students with exceptional educational experiences.

1.1 Rationale

The research aimed to test the effect of the co-teaching system as a collaborative model within inclusive educational settings. It examined four key components of teacher collaboration—co-planning, co-instruction, co-assessing, and co-reflecting—within the framework of the co-teaching model to assess its effectiveness in supporting collaboration between main and shadow teachers. In the long term, the findings aimed to inform educational policy, instructional strategies, and practices that promoted equity and inclusivity, ensuring that all students had access to high-quality education and equal opportunities for success.

1.2 Conceptual Framework

In this study, the Independent Variable was the collaboration challenges between main and shadow teachers, including teacher collaboration, shared decision-making, and the implementation of a

formalized co-teaching system. The Dependent Variable was student outcomes, shaped by the effectiveness of these collaborative efforts.

The Input stage explored challenges such as differing teaching styles, unclear roles, and limited coordination, which hindered effective collaboration in inclusive classrooms.

The Process stage focused on establishing shared decision-making, supported by the Co-Teaching Model. This model incorporated Co-Planning, Co-Instruction, Co-Assessment, and Co-Reflecting, helping main and shadow teachers align their roles and strengthen their partnership.

The Output stage revealed that implementing an effective co-teaching system led to improved student outcomes, including better academic performance, enhanced social skills, and increased engagement, particularly for students with special needs.

1.3 Statement of the Problem

This study sought to bridge the gap between main teachers and shadow teachers by structured, formalized co-teaching system. Through this unified approach, the goal was to enhance collaboration, strengthen teaching quality, improve the outcomes for students with special needs, and provide both teachers with a clearer, more effective framework for working together in an inclusive classroom. Given this, the research intended to answer the following questions:

1. What is the effect of the formalized co-teaching system on teaching quality?
2. How do the main teachers and shadow teachers perceived the formalized co-teaching system?

2. METHODOLOGY

2.1 Research Design

The research design employed in this study was an Action Research Design. This methodological framework provided a holistic understanding of the research topic through synthesized qualitative insights with quantitative data, thus constituting a mixed-method study. In this context, data were collected through observation, interviews, Co-Teaching Self-Assessment Checklist, and Padlet updates that tested the effect of the co-teaching system within inclusive education. Moreover, this study used the One-Teach, One-Assist model (Friend & Cook, 2010). This model was mainly utilized in inclusive classrooms, where one teacher delivered the activities while the other provided targeted support to individual students.

2.2 Site and Participant Selection

The research was conducted at a private preschool located in Salcedo, Makati, with two (2) cases served as the primary participants. Each case included the main teacher and the shadow teacher. These individuals were chosen due to their significant roles in the inclusive classroom, where they actively observed and facilitated shared decision-making processes.

2.3 Sources of Data

PHASE 1: The first phase involved obtaining formal school approval through an official letter sent to the school directress in December 2024, outlining the study details and participants. Since shadow teachers were hired by parents and student observation was necessary, parent consent forms were also distributed with the directress's assistance.

PHASE 2: After approval, the second phase began with pre-intervention data collection in January 2025 through:

- A. *Classroom Observation.* Data collection involved systematic, sit-down observations to closely examine how teachers implemented shared decision-making within the co-teaching model. Researchers maintained written, detailed anecdotal

records to capture raw, unfiltered details of classroom interactions, including verbal exchanges, nonverbal cues, and decision-making processes.

- B. *Interview.* Semi-structured interview with main and shadow teachers were conducted to explore their perspectives, experiences, and specific challenges related to shared decision-making in an inclusive classroom.

PHASE 3: In this phase, the researcher formulated the co-teaching system which includes the Co-Teaching Self-Assessment Checklist and Padlet, and conducted an orientation the first week of February about the co-teaching system for the main teachers and shadow teachers. After the orientation, another implications for the Formalized Co-teaching System have been taken into account.

PHASE 4: This is the 3-week intervention proper of the formalized co-teaching system. At the beginning of each week, on Monday, a new copy of the checklist was given to the main and shadow teachers for them to review their specific roles and responsibilities in line with their day-to-day approach to students with special needs. Every Thursday, they were tasked with completing the Co-Teaching Self-Assessment Checklist, followed by Friday, when they were given time to update the Padlet before the new week started. Every Monday, researchers reviewed the completed checklist and Padlet updates to ensure timely information was shared between the main and shadow teachers. This had been a routine for the main and shadow teachers, as well as the researchers, for three weeks.

2.4 Data Analysis

Various data analysis procedures were used to collect the data, which served as pre-intervention data.

For the Classroom Observation, data were analyzed using a holistic classroom observation. Observers documented behaviors in real-time or through video recordings, facilitating a comprehensive analysis of patterns in teacher and student actions, classroom environment, and levels of student engagement.



For the Interview Questionnaire, data from Main and Shadow Teachers underwent thematic analysis. Thematic analysis was a qualitative method employed to systematically identify, analyze, and interpret patterns within qualitative data. This approach involved coding participant responses, organizing similar ideas into thematic categories, and interpreting the underlying meanings of these themes (Dawadi, 2020).

For the Co-Teaching Self-Assessment Checklist data, frequency counts were computed for each section.

3. RESULTS AND DISCUSSION

This section presented the results and discussion of the study, *A Unified Approach: Testing the Effects of a Co-Teaching System in an Inclusive Classroom*. It aimed to address the study's research questions by analyzing the experiences of main and shadow teachers as they participated in this collaborative intervention.

3.1 Results

RQ1: What are the Effects of the Formalized Co-teaching System?

The findings provided a comprehensive understanding of how the structured approach influenced Planning and Preparation, Classroom Environment and Structure, Instructional Delivery and Interaction, Behavior Management and Student Support, Data Collection and Documentation, and Reflection and Feedback during the three-week implementation. The analysis highlighted how the co-teaching system enhanced collaboration, improved instructional strategies, and strengthened classroom management. In response to Research Question 1, it emphasized the system's impact on teaching quality and its contribution to positive student learning outcomes.

RQ2: How do the main teachers and shadow teachers find the formalized co-teaching system?

Through the open-ended responses of both the main and shadow teachers, they shared their experiences with the co-teaching system over a three-week period. Their reflections offered a deeper understanding of how the system had influenced their instructional strategies, classroom management, and overall teamwork. They explored specific insights that had enhanced their ability to coordinate effectively, address challenges, and support student learning more efficiently. Additionally, the responses revealed adjustments they had made to their collaboration techniques, emphasizing the importance of flexibility and open communication in a shared teaching environment. Through the analysis of their perspectives, this section provided a comprehensive evaluation of the co-teaching system's effectiveness and its impact on their professional growth.

3.2 Discussion

Strengths of the Formalized Co-Teaching System

a. Teaching with Structure

Co-Instructing. This showed consistency in Classroom Environment and Structure and Behavior Management and Student Support. Teachers upheld structured routines and clear roles, benefiting all students, especially those with special needs. Shadow teachers, though varied in engagement, reinforced the structure. Despite a tendency toward traditional approaches, they aligned with the school's philosophy through collaboration. A clear plan minimized miscommunication and role overlap.

b. Unified Teaching. Main and shadow teachers engaged in shared decision-making, leading to a uniform instructional approach. Main teachers improved in planning and preparation, while shadow teachers contributed individualized strategies, differentiated materials, and behavior management strategies applied in collaboration.

Collaboration. Main Teacher A, Shadow Teacher A, and Shadow Teacher B worked effectively together, maintaining structured routines and clear role distribution.

Shared Decision-Making. Teachers consistently collaborated on strategies and support for Student A and Student B. Observations confirmed joint planning and consistent interventions for student progress and classroom stability.

c. Promotion of Co-Teaching

One Teach, One Assist. It was effective in clarifying roles—main teachers led activities while shadow teachers supported. Padlet helped maintain transparency and unity. The success of this model confirms that it was well-suited for the action research site, showcasing the application of the One Teach, One Assist model with main and shadow teachers in the Philippine context.

Weakness of the Formalized Co-Teaching System

Uncertain Gains. Main and shadow teachers had differing views on the model's impact. While applied daily, concerns arose around increased workload, communication gaps with parents, and limitations of Padlet for real-time decisions.

Impact of the Formalized Co-Teaching System on Student Outcomes

a. Strengthened Learning Outcomes. Before implementation, lack of structured collaboration caused inconsistencies. During implementation, unified strategies improved behavior and engagement—Student A's tantrums decreased and Student B became more engaged and adapted to routines. Post-implementation, students showed independence and motivation. Teachers highlighted the value of openness, adaptability, and aligned strategies in supporting students.

Student A. Collaboration improved Student A's engagement and independence. Structured routines and guided questioning supported confidence. Transition time aided cooperation. Scaffolding and reduced prompting helped with autonomy. Improvements were seen in attention and transitions.

Student B. Academic and socio-emotional development improved. Emotional regulation and engagement increased. Participation during circle time grew from passive to active. Communication improved with consistent WH-question responses.

b. Reinforced Learning Support. Strong teacher-student relationships enhanced intervention effectiveness. Multi-sensory methods supported learning. Open communication ensured strategy implementation. Expressiveness increased, creating language development opportunities. Engaging tasks were planned to encourage communication.

4. PLAN OF ACTION

The three-week co-teaching implementation in an inclusive classroom reinforced the significance of collaboration, shared decision-making, and role clarity between main and shadow teachers. More than just working alongside one another, they developed a deeper appreciation for how coordinated teaching fosters a sense of stability and belonging among students. While the system provided structure, key areas for improvement emerged, particularly in communication, workload distribution, and parental engagement. Refining these aspects is essential to ensure seamless integration into daily teaching practices.

To strengthen communication, structured weekly meetings should be scheduled to align behavioral strategies, academic interventions, and student progress. While Padlet was useful for documentation, it lacked real-time collaborative functions. Utilizing platforms like Google Classroom and Microsoft Teams, along with a shared digital calendar, would improve coordination, transparency, and responsiveness to

classroom challenges. Establishing clear communication protocols will help streamline discussions, define roles, and enhance the efficiency of co-teaching partnerships.

Workload distribution and role expectations also require further clarification. Establishing a standard operating procedure (SOP) can formalize responsibilities and ensure shadow teachers are fully integrated into the school system, preventing scheduling conflicts. Regular co-planning sessions, structured feedback mechanisms, and shared training opportunities would enhance collaboration. A designated coordinator should oversee shadow teacher placements and ensure alignment with the main teacher's goals, while professional development programs on co-teaching strategies can strengthen teamwork and instructional effectiveness.

Parental engagement should be more interactive and accessible. Although progress-sharing methods were established, some parents struggled to interpret recorded observations. Enhancing Padlet's functionality—such as organizing sections into academic progress, behavioral updates, and upcoming activities—can improve clarity. Introducing multimedia elements like videos, audio clips, or interactive polls would encourage parent participation, fostering a two-way communication process that strengthens the home-school connection.

For long-term sustainability, developing a co-teaching handbook with best practices, role expectations, and operational guidelines would provide consistency. Institutionalizing co-teaching through formal school policies would ensure its continued implementation across classrooms and grade levels. A continuous improvement cycle, including termly reviews and data-driven assessments, would help refine strategies over time.

The self-rating checklist proved valuable in guiding teachers' reflection and ensuring alignment in their approaches. However, integrating actionable feedback and external observations from mentors or instructional coaches would add depth to the evaluation process. This would create a structured feedback loop, allowing teachers to make more

informed decisions about their strategies and better address diverse student needs.

For the replication of this study, a structured approach should be implemented. Pre-implementation training for co-teachers is essential to establish a shared understanding of expectations and responsibilities. Clear assessment rubrics should be developed to measure co-teaching effectiveness, ensuring that evaluations remain consistent across different classroom settings. Standardized documentation methods, such as unified reporting templates and observational logs, should be used to systematically track progress and challenges.

Future research should explore the long-term impact of co-teaching on student performance, teacher workload, and classroom dynamics. Longitudinal studies analyzing student progress over multiple academic terms would provide deeper insights into its effectiveness. Investigating variations of co-teaching by integrating methodologies like differentiated instruction, Universal Design for Learning (UDL), or response-to-intervention (RTI) could help determine their impact on inclusive education. Additionally, examining challenges such as balancing responsibilities across subjects and preventing teacher burnout is crucial for ensuring sustainability. Understanding how co-teaching can be adapted to schools with varying levels of resources would also be beneficial in making the model more accessible and scalable. Continuous feedback from teachers would further refine and improve co-teaching practices, ensuring long-term success in supporting inclusive education.

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