



Improving Teachers' Teaching Skills Using Co-Teaching: The Saudi Context

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ABSTRACT

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This study explored the significance and impact of co-teaching on teacher's teaching skills. In doing so, the study considered whether the practice is worth implementing and some of the strategies that could help with successful implementation for maximum benefits. A qualitative approach was used, and the primary instrument for collecting the data was semi-structured interviews. The sample comprised 13 Saudi Arabian teachers who had some experience or knowledge of co-teaching. Data analysis using thematic analysis revealed five themes. The first theme revolves around the teachers' knowledge and experiences with co-teaching on the skills and teaching styles of the teachers, while the third theme concerns the benefits of co-teaching for students. The fourth theme is related to factors affecting the successful implementation of co-teaching, and the fifth theme is concerned with the important factors for successful implementation of co-teaching. The conclusion highlights some of the steps that can be taken to improve the implementation process for positive outcomes and the roles of all stakeholders in the process.

KEYWORDS					
Co-teaching, professional development, skills, teachers, students, strategies					
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1. Introduction and Background of the Study

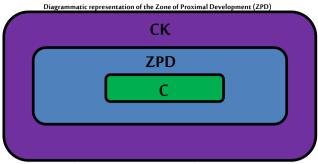
Co-teaching refers to a structured practice through which peers not only share teaching responsibilities (including planning, delivering instructions, and keeping track of students' progress) but also learn and gain knowledge from each other in a manner that enhances their respective teaching and associated teaching techniques (Harati, 2012). Unlike some other practices where one of the teachers is evaluated by their peers, asks for assistance, or sits and observes the other teacher/s, co-teaching has been likened to a marriage in which both parties are equally involved in the process and benefit by learning and gaining new knowledge and skills from each other. As Cramer (2010) points out, "In cases where a teacher and paraprofessional or classroom-volunteer work together to instruct students, supported instruction rather than co-teaching is occurring" (p. 560). Co-teaching is not only aimed at elevating all the teachers involved by helping them better themselves and their techniques but also the students who are taught by these teachers. In a special education class, for instance, co-teaching brings together a general education teacher with a high level of experience about specific subject areas and a special education teacher in order to meet the individual needs of the students (Cramer, 2010). This scenario exhibits the strength of each teacher, what they can learn from each other to better their techniques, and how the students benefit from the practice.

With ever-increasing diversity in schools, the needs of students have also continued to grow. This requires teachers to widen and improve their skills to meet the individual needs of students and ensure that no student is overlooked (Koroluk, 2017). As with any other profession, teachers have their strengths and weaknesses and therefore have to continue learning to better their skills and minimize their shortcomings. In doing so, as already mentioned, they can meet the needs of all their students more effectively. Through co-teaching, teachers get an opportunity to learn from each other in real-time and in an actual setting, which can prove very rewarding. Some of the skills that co-teachers can learn from one another include time planning, teaching methodologies, and classroom management approaches. As Koroluk (2017) explains, "Co-teachers have the ability to improve their instructional practice, develop their content knowledge, and increase their capacity to meet the needs of their students" (p. 29). This perspective is supported by Pesonen, Rytivaara, Palmu, and Wallin (2021), who note that co-teaching has been shown to result in increased job satisfaction, motivation, and professional growth. Therefore, in general, co-teaching has the potential to contribute to both professional development and consequently student performance.

2. Theoretical Framework

This study was guided by Vygotsky's Sociocultural Theory. Developed in the 1920s and 1930s, this theory holds that learning in human beings is the product of social interaction. As McLeod (2023) explains, the theory "views human development as a socially mediated process in which children acquire their cultural values, beliefs, and problem-solving strategies through collaborative dialogues with more knowledgeable members of society" (p. 2). The theory places great emphasis on the socio-cultural context where individuals gain knowledge from their more skilled peers (McLeod, 2023). This means that social interaction is essential to the learning process, where one individual gains knowledge from another individual who has higher level language skills. Secondly, the theory proposes that learning or the potential for cognitive development (ZPD).

Essentially, ZPD refers to the gap between what an individual can learn on their own and what they can achieve with the guidance of more skilled or advanced individuals (Vygotsky, 1978). Although Vygotsky acknowledges that people can learn and gain knowledge on their own, he notes that this is not the same as what they can learn with guidance from those with more advanced knowledge. That is, without guidance, they are not likely to reach their full potential. Therefore, learning occurs within this gap, with instruction being the most important factor.



C: Current knowledge (what an individual can do on their own) ZPD: Zone of Proximal Development (what an individual can do with help/assistance) CK- Can't Know (what an individual cannor do or know even with assistance)

3. Problem Statement and Significance of the Study

3.1. Problem Statement:

Despite the importance of professional development for teachers, many struggle to improve their teaching skills due to limited opportunities for collaboration and learning from peers. Co-teaching, which involves two or more teachers working together in a classroom to share responsibilities and expertise, has been proposed as a potential solution. However, there is a lack of research on the benefits and challenges of implementing co-teaching from the perspective of teachers. Moreover, previous studies have focused mainly on the impact of co-teaching on student outcomes, without exploring how it can contribute to the professional development of teachers (King-Sears, Stefanidis, Berkeley and Strogilos, 2021; Spoden, 2022).

3.2. Significance of the Study:

The proposed study aims to fill a gap in the existing literature by exploring the extent to which co-teaching can improve the teaching skills of educators, and how it can be effectively implemented in classrooms. By gathering data on teachers' perceptions of co-teaching and their experiences with this practice, the study provided insights into the potential benefits and challenges of using co-teaching as a professional development tool. This knowledge is valuable for educators, administrators, and policymakers who seek to improve the quality of teaching in schools. Moreover, the study contributed to the broader discourse on teacher professional development and collaborative learning, and provided new insights into how these practices can be integrated into educational settings.

4. Research Questions

The following questions will help guide the research:

- What are the perceived benefits and challenges of using co-teaching as a professional development tool for teachers?
- How can co-teaching contribute to the improvement of teaching skills among educators, and what factors facilitate or hinder this process?
- How do teachers perceive the implementation process of co-teaching, and what recommendations do they have for ensuring its effective utilization?
- In what ways can co-teaching be integrated into existing teacher professional development programs, and what are the potential implications of such integration?

5. Literature Review

5.1. Origin and Significance of Co-Teaching:

Co-teaching (team teaching) gained popularity in the 1950s when it was highly recommended by author and professor of education, J. Lloyd Trump (Friend, Reising and Cook, 1993). Due to the shortage of teachers in secondary schools at the time, Trump felt that this was the

most ideal approach through which institutions could meet the needs of individual students by offering individualized instruction. This idea is still held today, with different types of institutions implementing co-teaching as one of the methods through which teachers can meet the needs of individual students (Jones and Winters, 2022; Rytivaara, Pulkkinen and de Bruin 2019). Regarding special education, Rytivaara et al. note that the approach is "conceptualized as a support model in which a special education (SE) teacher, or other specialists, and a general education teacher work together to provide some or all of the students in the classroom with more individual attention" (p. 225). In the 1970s, co-teaching underwent several changes revolving around its utilization. In England, for instance, the recommended model was characterized by offering a lecture to a large number of students followed by instruction in the classroom with the traditional number of students. In some cases, however, the process entailed joint planning by the teachers involved in interdisciplinary units, followed by individual delivery of instruction (Friend et al., 1993).

By the 1970s, co-teaching had grown significantly in popularity and was utilized in both elementary and secondary schools around the world (Friend *et al.*, 1993). In the 1980s, with increased inclusivity in schools, the method became a common model of teaching in special education. Over time, however, it has also made it possible for students with disabilities to interact with their peers, as teachers from both camps unite to meet their respective needs. Its early recommendations and implementation were therefore largely driven by the need to not only address the shortage of teachers but also meet the individual needs of different types of students in various settings. In recent years, the method has continued to experience changes aimed at meeting current needs in the education sector.

5.2. Popularity and Current Areas of Utilization:

Co-teaching is often recommended as one of the best strategies to improve inclusive education (Saloviita and Takala, 2010). For this reason, it has become one of the most common methods through which teachers educate students within the inclusive classroom across the globe (Jones and Winters, 2022). In a study conducted in Finland in 2010, results indicated co-teaching to be a widespread approach commonly used in special education classrooms (Saloviita and Takala, 2010). Similar results have also been reported in more recent studies.

Teacher collaboration is becoming increasingly important due to the rising number of diverse students in regular classes (Kokko, Takala and Pihlaja, 2021). In the United States, co-teaching is also used in many high schools for the purpose of teaching students with disabilities. It is estimated that about a third of secondary students with disabilities have been taught through this approach (Johnson and King-Sears, 2020).

Although co-teaching is commonly used for inclusive education, particularly by special education teachers, it is less frequently used by other groups of teachers (Saloviita and Takala, 2010). According to Johnston and Berglund (2018), a number of factors have affected the utilization of co-teaching in many schools. Some of the most common factors include limited support, time constraints, and norms of teacher autonomy and isolation. Results of the study showed that only 31 percent of teachers had sufficient time to collaborate with other teachers. Time constraints have also been reported by Rabin (2020), who noted that "Absorbed by their own survival, candidates struggle to find time to reflect on practice, and this undermines their own learning; little bandwidth is left for their student's learning" (p. 136). According to another study that was published by Mofield (2020), 93 percent of the respondents cited lack of time as a major barrier to collaboration while 64 percent said that conflicted assumptions affected their ability to collaborate with other teachers.

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In an attempt to balance between other responsibilities and finding time to co-plan and co-teach, many of the teachers reported that they gradually found themselves unable to fully commit to the approach and could only manage it sporadically. On the other hand, regarding conflicting assumptions, some of the teachers felt that their counterparts did not fully understand the needs of some students, which strained the relationship and negatively affected the practice.

As already mentioned, regarding utilization, co-teaching was and continues to be recommended as one of the best strategies to teach special education students. Over time, however, it has come to be viewed as an excellent strategy for not only meeting the needs of diverse students but also as a tool through which teachers can improve their teaching skills. The latter point is particularly important in that it both equips teachers with a better understanding of new techniques that can greatly enhance their own methods and places them in a position to effectively meet the needs of different types of students without assistance. As Rabin (2020) puts it, "these relationships could serve as models of caring relationships for students" (p. 138). These views are supported by Kokko et al. (2021) where participants reported that co-teaching promotes professional development and supports the work of teachers, which in turn allows them to perform their functions more effectively. For these reasons, the approach is now recommended and used in both elementary and secondary schools (Friend et al., 1993; Friend, Cook, Hurley-Chamberlain, Shamberger, 2010; Johnson, King-Sears and Miller, 2022).

5.3. Advantages and Disadvantages of Co-Teaching:

5.3.1. Advantages

Co-teaching in elementary and secondary schools has been associated with a number of benefits that have contributed to its popularity in some regions. One of the most commonly cited advantages of the approach is that it lowers the student-to-teacher ratio (Jones and Winters, 2022; Rabin, 2020). In addition, the increase in student diversity means that there are more needs to be met by teachers. Through co-teaching, they share the responsibility of both planning and teaching. The approach is therefore beneficial in that two or more teachers, rather than one, would be better able to use their expertise to meet the individual needs of these students. This becomes even more important in cases where one or several teachers have specific skills that would allow them to help given groups of students more effectively. According to Mofield (2020), co-teaching is one of the strategies that gained significant popularity when the No Child Left Behind legislation was mandated. This can be attributed to the fact that the approach is designed to ensure that each of the teachers involved uses their strengths to meet the needs of given groups of students. Moreover, teachers expose students to different strategies and styles of learning, allowing them to look at problems from different perspectives and use the approach they find most effective (Rabin, 2020). Students who are co-taught in subjects like science have also been shown to outperform their peers (Mofield, 2020), which is an indication that co-teaching is a more effective method when it comes to individualized support.

Another advantage of co-teaching is that it creates more time to focus on content (Dover, 1994). As mentioned, co-teaching reduces the teacher-to-student ratio. This is because having more than one teacher makes it possible to address the needs of different types of students within a shorter period of time, as compared to only having one teacher, and more spare time is created. With this spare time, teachers can focus on more content as well as dedicate some time to other additional activities aimed at improving learning. In addition, some teachers have reported an increase in job satisfaction and overall well-being by adopting co-teaching (Kokko *et al.*, 2021). This finding is supported by other studies where job satisfaction was reported in schools with stronger collaboration between teachers. Rabin (2020) reports, "One meta-study found that teachers whose schools have strong collaboration report dramatically higher satisfaction \dots " (p. 136).

Another big advantage of co-teaching is that it creates an opportunity for professional development, which can in turn enhance student learning outcomes (Rabin, 2020). In this case, one of the best examples is the collaboration between a gifted education teacher and another teacher. Although they are both gualified in their respective areas, a gifted education teacher might have unique skills that they use to interact with and provide instruction/guidance to high-ability students, which a general education teacher may lack. According to Mofield (2020), through focused, sustained, and data-driven collaborative work, the general education teacher can learn a lot from their peer, which would in turn allow them to employ the same skills and strategies to meet the needs of their students. This perspective is also shared by Rytivaara and Kershner (2012), who note that "The teachers' practice of inclusive education is found to be closely integrated with their own professional development, including the knowledge base that they share and develop together" (p. 1000). Considering that the primary function of teachers is to educate, this is a big advantage of co-teaching because it equips teachers with additional skills to perform their duties more effectively.

Aside from learning from each other, co-teaching also provides a unique opportunity for innovation. According to Serrat (2017), ideas do not come out of thin air. Rather, new ideas (or innovations) always emerge from existing ones. By exchanging and mixing ideas through co-teaching, teachers can develop new and better strategies as well as methods of teaching that can greatly enhance the teaching process (Kursch and Veteška, 2021). Therefore, co-teaching not only has the potential to promote professional development but also transform teaching practice.

5.3.2. Disadvantages

Co-teaching also comes with some challenges that may affect implementation and utilization. One of the most common challenges revolves around different interpretations of the practice among teachers. This is often the result of conflicting concepts between the teachers, which can prove to be counterproductive. While the teachers involved bring their respective expertise, Kursch and Veteška (2021) report that the differences in concepts can conflict and even cause confusion. Moreover, it can take longer to prepare and rehearse synchronization (Kursch and Veteška, 2021). As already mentioned, teachers do not always have enough time to carry out their responsibilities. The amount of time required to plan, prepare, and rehearse may discourage some teachers from implementing this approach. Another problem with co-teaching is the tendency for one or several teachers to acquire a passive role in the process (Middlecamp, 1997). Typically, co-teaching entails two or more teachers coming together to contribute their skills and expertise for the benefit of the students. In some cases, however, some of the teachers may find themselves adopting a passive role and not contributing as actively as they should. This undermines the goal of co-teaching and can also discourage more active teachers from future participation.

6. Methodology

This study explored the level of improvement of teachers' teaching skills through co-teaching. To do this, the study relied heavily on the perspectives, views, and opinions of the participants. Using qualitative research, it becomes possible and easy to collect this type of data. Although the approach can generate vast amounts of data, this is also a considerable advantage in that the data collected is unique and

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represents the actual feelings of the participants. As a result, any conclusions made based on the results were informed by the perspectives of the participants rather than the researcher.

7. Study Sample and Sample Collection

Teachers were the primary participants in this study. A total of 13 teachers were selected to participate. Boddy (2016) notes that in qualitative studies, a sample of 12 for in-depth interviews is more than enough. For this study, a sample of 13 teachers was sufficient to generate enough data to represent the population of teachers in the area. Participants were selected through purposive sampling. As mentioned, the study consisted of 13 participants. For this reason, it was important to select participants with knowledge of the topic to generate data that properly addressed the research questions. In particular, the 13 participants were selected from a purposefully selected sample through random purposive sampling in order to add credibility to the sample.

8. Data Collection

Data was collected through semi-structured interviews. Following sampling, all the participants were required to sign consent forms to show that they were free participants and supported the study. Consent forms were handed out in person, mailed, or emailed, depending on the participants' preferences. Once the forms had been signed, dates were set for the interviews with each of the participants. As with the consent forms, participants were allowed to choose the most appropriate time for the interviews so that they did not rush or feel under pressure. The interviews were conducted in person or via Zoom meetings. All the participants were asked a total of 10 questions, with follow-up questions whenever appropriate. All the interviews were recorded. Whereas face-to-face interviews were recorded using recording features on a smartphone, Zoom interviews were recorded using the Zoom client recording application. All the data was then transcribed in order to have audio and transcriptions of the data for analysis.

To ensure the reliability and validity of the data collection tool, a pilot test was conducted with a small sample of participants prior to the actual data collection. The pilot test involved administering the semistructured interview questions to a group of teachers who were not part of the main study. The purpose of the pilot test was to assess the clarity and comprehensibility of the questions, and to identify any areas that needed improvement. Feedback from the pilot test was used to revise the interview questions and to ensure that they were appropriate for the target population. Additionally, inter-rater reliability was established by having two researchers independently analyze a subset of the interview transcripts and compare their findings. Any discrepancies were discussed and resolved through consensus. The final interview questions were used for data collection in the main study.

9. Data Analysis

The data was analyzed using thematic analysis. This was a qualitative data analysis method that entails going through the data set (both audio and transcripts) to identify patterns and derive meaning. This approach comprised six main steps. The first step involved becoming familiar with the data by reading the transcripts and listening to the audio recordings. Initial codes were created in the second step of the analysis. The codes created in this step represent early meanings and patterns identified. In the third step, supporting data was added to the codes in a process known as collating. The codes were then sorted into potential themes in the fourth step. These themes represent patterns in the data. The themes were reviewed and revised in the fifth step to ensure that individual themes had sufficient supporting data. Themes could be combined in this step, while others could be removed if they lacked enough supporting data. Finally, once the themes had been identified, a narrative could be formulated.

10. Ethical Considerations and Limitations

Some of the principles that guided the research included informed consent, confidentiality, and results communication. Participants of the study were well informed about the study to ensure that they understood the purpose and significance of it. This was particularly important in ensuring that participants understood what type of study they were involved in. Moreover, they were able to make informed decisions on whether they wished to continue participating or not. Secondly, confidential information about the participants was not collected, in order to maintain anonymity. For this reason, information such as their full names or addresses was not collected. Instead, the teachers were identified using numbers (Teacher 1, Teacher, 2, Teacher...). In addition, results were shared with the participants so that they not only felt included but also had a chance to approve or reject any aspect they might be concerned about. This was a further step in validating the results and ensuring these represented the true perspectives of the participants.

Although purposive sampling helped select participants who were well informed about the topic, one of the biggest limitations was that it was not possible to include teachers who did not have any, or only limited knowledge, of co-teaching to speak on why they were yet to utilize the approach. However, random purposive sampling helped limit potential bias and contributed to the diversity of results.

11. Data Analysis

Table 1: An analysis of the interviews							
Focus of interview questions	Sample answers	Frequency of mention by teachers					
Knowledge of and participation in co- teaching	"I am familiar with the concept. I have participated in one so far." (Teacher 7)	All teachers have participated in co-teaching except Teacher 5 (90%)					
Teacher's experience with co- teaching	"For the most part, it is always a great experience—one of the best strategies to exchange skills and ideas." (Teacher 4)	Apart from Teacher 5, all the teachers generally had positive experiences with co-teaching. Teacher 8 had one bad experience. (90%)					
Impact of co- teaching on teaching skills	"Collaborating allows a teacher to learn and acquire new and effective skills from another teacher and vice versa." (Teacher 2)	(100%)					
Impact of co- teaching on teaching style	"Certainly, over the years, I have noticed that increased engagement with my students results in better outcomes. I learned to do this from other teachers." (Teacher 6)	Apart from Teachers 3 and 5, all the teachers reported changes in their style of teaching. (80%)					
Benefits of co- teaching (to students)	"The biggest benefit is that it allowed me to identify the individual needs of my students and use appropriate approaches to meet their needs." (Teacher 1)	All the teachers agreed that co- teaching ultimately benefits the students. (100%)					
Challenges affecting implementation	Time constraints Resistance to change Miscommunication and lack of clear roles Inconsistency (lack of or poor commitment) and lack of proper resources	6 teachers (60%) 4 teachers (40%) 2 teachers (20%) 2 teachers (20%)					
Factors to consider for successful implementation	 Good communication between involved parties Time and resources Patience, flexibility, and commitment A review and evaluation of the partnership A good understanding of co-teaching Being realistic about expectations 	3 teachers (30%) 2 teachers (20%) 2 teachers (20%) 1 teacher (10%) 1 teacher (10%) 1 teacher (10%)					
"Each teacher brings a unique style, approach, or expertise to the table, which better meets the needs of individual students. Sharing these strategies will ensure that different needs are met." (Teacher 1)		All teachers agreed that co- teaching helps teachers meet the needs of their students. (100%)					
Using co-teaching to support diverse learning styles 'As long as the teachers involved have something unique to offer, each of them utrn equip them with knowledge on how to support the diverse needs of different groups of students." (Feacher 8)		All teachers agree that learning new skills makes it possible to meet students' diverse learning styles. (100%)					

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Table 2: Themes							
Major themes	Sample responses	Frequency of mention (by teachers)					
Knowledge and experience with co-teaching Questions: Familiarity with the concept of co-teaching Participation in co-teaching Experience with co-teaching	90 percent of participants knew of and had good experiences with co- teaching.	90 percent					
Impact of co-teaching on teachers' skills and style of teaching Questions: Changes in teaching skills Benefits for teachers Changes in skill following participation Changes in style of teaching following participation	Teachers acquired new teaching methods, techniques, and generally improved their skills.	80 percent					
Benefits to the students Questions: How do you think co-teaching can benefit students? 12. Meet student needs 13. Meet diverse learning styles	Improved skill level and new styles of teaching make it possible for teachers to meet the needs of students.	100 percent					
Factors affecting successful implementation of co- teaching Questions: What challenges affect implementation?	Time constraints Resistance to change miscommunication, inconsistency, and lack of resources	6 teachers (60 percent) 4 teachers (40 percent)					
Important factors for successful implementation Questions: 11. Most important factors for successful implementation	Good communication between involved parties Time and resources Patience, flexibility, and commitment	30 percent 20 percent 20 percent					

12. Results

Data analysis of the results yielded five major themes. For this reason, the interview questions were compressed into five main sections. The first theme revolves around knowledge and experiences of the teachers with co-teaching. The second theme is the impact of coteaching on the skills and teaching styles of the teachers, while the third theme concerns the benefits of co-teaching for students. The fourth theme is the factors affecting the successful implementation of co-teaching, and the fifth theme is concerned with the important factors for the successful implementation of co-teaching.

12.1. Theme 1: Knowledge and Experience with Co-Teaching:

With the exception of Teacher 5, all the teachers know of and have participated in co-teaching in one form or another. Although she reported that she was yet to participate in the practice, the teacher (Teacher 5) also noted that she was aware of co-teaching, and that her school has tried to implement it several times. These reports align with Teacher 10's statement that "I am familiar with co-teaching. I can't imagine a teacher who isn't." Given that all the teachers were aware of co-teaching, and the vast majority have participated in the actual practice, it can be argued that co-teaching is one of the most popular professional development tools among teachers. About 90 percent of the teachers also reported having a good experience with co-teaching. As Teacher 10 explained, "I love co-teaching. Passing knowledge to others, learning something new from them. It is an excellent approach to professional development." This sentiment was also shared by many of the other teachers, who reported learning something different from their counterparts. As Teacher 7 simply put it, "I loved it, I learned quite a lot." Teacher 8, on the other hand, had an uncomfortable experience. However, she attributed this to having a quarrelsome relationship with one of the teachers. She stated, "I have mixed opinions of the concept. I liked my first experience, but with the second, I was very uncomfortable. The other teacher could be very quarrelsome." From these results, it became evident that coteaching is not only popular but also, in general, positively perceived.

12.2. Theme 2: Impact of Co-Teaching on Skills and Style of Teaching:

According to 80 percent of the teachers who participated in the study, participation in co-teaching resulted in acquiring new skills and a new style of teaching. As many of the teachers pointed out, co-teaching allowed them to learn new methods, approaches, and techniques, which transformed the way they interacted with and taught their own students. Teacher 6 noted that "over the years, I have noticed that increased engagement with my students results in better outcomes. I learned to do this from other teachers." Regarding the style of teaching, Teacher 2 reported that "My style has changed with every teacher I have worked with. This has also been beneficial given the increasing diversity among the students." Similarly, Teacher 4 reported that "One of the biggest benefits of co-teaching is that there is always something you can pick up as a teacher from other teachers. Teachers improve their skills by adding those ideas into their skillset." Essentially, this highlights the benefits of co-teaching for the teachers involved. Teacher 4 summed it up perfectly noting that there is something unique a teacher can pick from other teachers, which in turn makes it possible to improve one's skills. For teachers who do not think they have something to learn from others, Teacher 4 reminds them that "even if a teacher does not think they can learn something, they can still pass their experiences to other teachers." With every changing need of diverse students, this is a good point that all teachers should keep in mind to become more effective.

12.3. Theme 3: Benefits of Co-Teaching to Students:

All the teachers in the study agreed that co-teaching ultimately benefits the students. Although Teacher 5 had not yet participated in co-teaching, she reported that "I think the biggest benefit is that teachers can collaborate and meet the needs of diverse students and potentially exchange great teaching methods." As mentioned, the majority of teachers agreed that co-teaching makes it possible to learn new ideas, techniques, and approaches, which in turn enhance their overall skills and style of teaching. Having learned new approaches, they can use them to better meet the individual needs of their students. According to Teacher 10, co-teaching for teachers is "an opportunity to grow professionally from the experience and knowledge of others." By growing as a teacher, new skills acquired can be used to teach better and yield more positive results. Reflecting on his experience, Teacher 1 explained that "my style has changed quite a lot since participating in the exercise. I approach every topic very differently than I used to. Mostly to ensure no student is left behind as we move from one topic to another." This emphasizes the idea that no one teacher knows everything. As a result, interaction with other teachers through exercises like co-teaching provides an opportunity to learn something new that can be used to directly benefit the students.

12.4. Theme 4: Factors Affecting the Successful Implementation of Co-Teaching:

Time constraints, resistance to change, and miscommunication were identified as some of the major factors affecting the successful implementation of co-teaching. For the majority of the teachers (60 percent), time was identified as the biggest factor. As Teacher 10 simply put it, "There is never enough time." This is a sentiment that was shared by many other teachers. Teacher 7, for instance, stated that "Time constraint is one of the biggest issues with co-teaching." This issue, however, is further complicated by factors like resistance to change, poor commitment, miscommunication, and lack of proper resources. As Teacher 4 explained, "There is also limited time to try this, which is further complicated by the attitude of some teachers." Aside from having limited time, some teachers may not be on board while others tend to be very comfortable with what they are used to. This can result in inconsistency when they decide to participate. On the other hand, the lack of enough resources to support the exercise can greatly affect its effectiveness. According to Teacher 10, "Resources like technology to help teachers communicate and plan are very important." This combination of factors can greatly hamper

any goodwill on the part of some teachers and even prevent the practice from yielding maximum benefits.

12.5. Theme 5: Important Factors for Successful Implementation:

Good communication, time, and resources, patience, flexibility, and commitment were identified as some of the most important factors to consider for the successful implementation of co-teaching to yield maximum benefits. Although only 20 percent of participants identified time as one of the most important factors to consider, it is worth noting that this is further complicated by factors like poor communication, lack of proper resources (e.g., planning and communication resources), and lack of patience among others. As Teacher 4 pointed out, "There is also limited time to try this which is further complicated by the attitude of some teachers." Through good/clear communication, a proper understanding of the practice and intended goals, flexibility, and a change in the mindset of some teachers, it would become possible to create enough time to implement and participate in co-learning. Consequently, teachers would not only be able to enhance their skills but also benefit the students by using what they have learned.

13. Interpretation of Results

The results indicate that co-teaching is viewed positively by the majority of the teachers who participated in the study. This is reflected in their reported positive experiences with co-teaching and their belief that it ultimately benefits students. The teachers also reported changes in their teaching skills and styles as a result of co-teaching, which suggests that the collaborative nature of co-teaching can be a valuable professional development tool for teachers. This finding is consistent with previous research on co-teaching, which has suggested that it can improve teacher performance and promote student learning.

However, the results also highlight some challenges to the successful implementation of co-teaching. These challenges include time constraints, resistance to change, miscommunication and lack of clear roles, inconsistency, and lack of proper resources. These challenges may make it difficult for some teachers to fully engage in co-teaching and realize its potential benefits. The factors identified for successful implementation, such as good communication between involved parties, time and resources, and a review and evaluation of the partnership, may help to address these challenges.

The finding that co-teaching helps teachers meet the needs of their students is particularly noteworthy. This suggests that co-teaching can be an effective strategy for supporting diverse student needs and promoting equity in the classroom. Co-teaching can provide an opportunity for teachers to share their expertise and learn from one another, which can lead to more effective teaching strategies and better outcomes for students.

Overall, the results suggest that co-teaching has the potential to be a valuable tool for improving teacher skills and promoting student learning. However, successful implementation may require careful attention to the challenges and factors identified in this study, as well as ongoing evaluation and support to ensure that co-teaching is implemented effectively.

14. Discussion

Results of the study yielded five major themes. These include knowledge and experience with co-teaching, the impact of coteaching on teachers' skills and style of teaching, benefits of coteaching to students, factors affecting successful implementation, and important factors for successful implementation. These results will be discussed in detail in this section.

According to Saloviita and Takala (2010), co-teaching is often recommended as one of the best strategies to improve inclusive education. Jones and Winters (2022) agree with this statement, noting that co-teaching has become one of the most common methods through which teachers educate students within inclusive classrooms across the world. In the present study, the majority of teachers, with the exception of Teacher 5, reported that they were aware and have participated in co-teaching in one form of another. The majority of teachers also reported that participating in coteaching improved their style of teaching and their skills in general. Talking about the impact of co-teaching on a teacher's teaching skills, Teacher 4 said that "One of the biggest benefits of co-teaching is that there is always something you can pick up as a teacher from other teachers. Teachers improve their skills by adding those ideas into their skillset." The teacher also mentioned that co-teaching had improved her style of teaching in the classroom. These sentiments were shared by all the other teachers who have participated in coteaching. According to Teacher 2, a teacher can learn so much from different types of teachers. She stated that "I have learned so much from different types of teachers, especially newer teachers. There is so much to learn from different types of teachers." According to Teacher 8, however, some teachers are resistant to change, which impedes professional development. Moreover, it deprives the students of a chance to benefit from new skills and a new style of teaching that would have benefited them. According to Vygotsky's Sociocultural Theory, learning is a product of social interaction (McLeod, 2023). This means that individuals gain and improve their knowledge through interaction with their more skilled peers.

Although individuals can learn something on their own, Vygotsky stresses that this is different from what they can learn with guidance from individuals with advanced knowledge. For this reason, individuals who are not guided by those who are more knowledgeable are less likely to reach their full potential. As Teacher 4 and Teacher 8 point out, some teachers resist change, believing that they have nothing more to learn. However, Teacher 2 disagrees, noting that she has learned so much from different types of teachers, including younger and newer teachers. This aligns well with Vygotsky's Sociocultural Theory and can help explain why many of the teachers not only reported professional development but were also better able to relate and meet the diverse needs of their students. Through their interaction with other teachers (in co-teaching), the teachers reported that they could better meet the needs of their students. This is best explained by Teacher 10 who says, "The only way to support different needs of the students is for the teachers themselves to learn new strategies on how to do so. Co-teaching helps teachers learn about such strategies from other teachers and introduce them in their teaching." Therefore, in order to benefit the students whose needs are constantly changing, it is important for teachers to recognize their limitations and appreciate the fact that there is always room for improvement. As all the teachers reported, co-teaching equipped them with new skills and better styles of teaching, which made it possible to engage more effectively and meet the individual needs of their students. This is well put by Teacher 1, who said, "my style has changed quite a lot since participating in the exercise. I approach every topic very differently than I used to. Mostly to ensure no student is left behind as we move from one topic to another." All teachers have to go through a period of training to qualify in their respective fields. Through training, teachers gain the necessary skills that allow them to meet the needs of students and also fulfill their roles as teachers. Similarly, co-teaching equips teachers with new techniques they can incorporate into their skillset

and become more effective in their duties. By failing to take advantage of this opportunity, as some of the teachers mentioned in the study, they deprive themselves of an opportunity to grow as educators. In turn, this deprives their students of an opportunity for better learning through skills that would have otherwise been acquired.

Although co-teaching is important for professional development and has a positive impact on student learning, the teachers identified a number of factors that affect proper implementation. Aside from poor attitudes towards change, clear communication and time constraints were identified as some of the main factors affecting the implementation process. These are aspects of the implementation process that require the support of the administration. Given that most of the teachers have a positive attitude toward co-teaching and have reported positive outcomes following participation, it is important for school administrations to play their part by providing the necessary resources and training to educate staff on the significance of such practices for the benefit of different groups of students. This can help change teachers' attitudes and make the implementation process smoother and more productive.

15. Conclusion

This study aimed to explore the significance and impact of coteaching on teachers' teaching skills. In doing so, it also sought to determine whether the practice is worth implementing and how to go about it from the perspective of teachers. This is particularly important given that teachers are the primary stakeholders, and the success and failure of the practice is largely dependent on their input. From the results obtained in this study and the findings of previous study, co-teaching is widely recognized as an effective strategy for improving inclusive education. With the ever-changing needs of students in today's society, it is safe to say that co-teaching has an important role to play in every school across the globe. Whatever their level of experience, individual teachers have their strengths and weaknesses and therefore something to teach or learn from their peers. Resistance to change not only prevents a teacher from acquiring new ideas, methods, and strategies that they can add to their skillset but also denies their students an opportunity to benefit from them. However, by opening oneself to new experiences, teachers have the potential to continue growing professionally and employing new ideas to meet the diverse needs of their students. At the same time, it is important for school administrations to play their role to smoothen the implementation process. Without enough support, staff members may not have enough motivation to proceed, and those who are already resistant to change may never find a reason to try. Given that the practice has already been shown to be beneficial for both the teachers and students, every stakeholder should take their roles seriously for maximum positive outcomes.

16. Implication and recommendation for future research

This study revealed the benefits of co-teaching for both teachers and students. In addition to its positive impact on professional development among teachers, all the teachers agreed that the practice directly benefits students by improving the teachers' teaching skills and style of teaching. More importantly, however, the study revealed some of the factors that affect the implementation process and how these factors affect expected outcomes. By reporting on these factors and how they can be mitigated to improve implementation and utilization, many more teachers will benefit by employing some of the recommendations. For example, by having a more supportive administration, availing the necessary resources, and encouraging patience and flexibility, the implementation process is likely to proceed smoothly, which will in turn boost professional development and consequently benefit the students. Future research can study the effectiveness of these recommendations to determine how beneficial they are to the implementation and utilization process. Given that the goal is to improve teaching skills and consequently benefit students, it is important to first determine how effective recommendations like increasing resources, administration support, encouraging patience, cooperation, and flexibility are to the implementation process. Through such studies, validity of these recommendations can be affirmed and taught to all teachers to make the implementation process smoother and yield maximum results.

17. Recommendations Based on Study Findings

The results of this study suggest that co-teaching can be a beneficial practice for both teachers and students. To fully realize the benefits of co-teaching, it is important to address some of the challenges that affect the implementation process. Based on the findings of this study, the following recommendations are suggested:

- Provide Adequate Resources: Schools should ensure that coteachers have access to the necessary resources, such as classroom space, instructional materials, and technological tools, to effectively implement the co-teaching model. This will facilitate the planning and delivery of instruction and will help co-teachers to work collaboratively to meet the needs of all students.
- Foster Supportive Administration: School administrators should be trained to provide ongoing support to co-teachers throughout the implementation process. This includes creating a positive school culture that promotes collaboration, providing regular feedback on performance, and addressing any issues that arise in a timely and supportive manner.
- Encourage Patience and Flexibility: Co-teachers should be encouraged to approach the implementation process with patience and flexibility. It takes time to build a successful co-teaching partnership, and flexibility is necessary to accommodate the different teaching styles and personalities of each co-teacher.
- Promote Professional Development: Professional development opportunities should be provided to co-teachers to enhance their knowledge and skills in the areas of co-teaching, collaboration, and differentiated instruction. This will help to sustain the implementation of the co-teaching model and ensure that co-teachers are able to provide high-quality instruction to all students.

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References

- 1. Boddy, C.R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, **19**(4), 426–32.
- Cramer, E.D. (2010). Co-teaching. International Encyclopedia of Education, n/a(2), 560–4.
- 3. Dover, W. (1994). *The Inclusion Facilitator*. Master Teacher, Incorporated, Inc.
- 4. Friend, M., Cook, L., Hurley-Chamberlain, D. and Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in

special education. *Journal of educational and psychological consultation*, **20**(1), 9–27.

- Friend, M., Reising, M. and Cook, L. (1993). Co-teaching: An overview of the past, a glimpse at the present, and considerations for the future. *Preventing School Failure: Alternative Education for Children and Youth*, 37(4), 6–10.
- Harati, R. (2012). Collaboration teaching and its role on education performance and students achievement. *European Journal of Experimental Biology*, 2(6), 2182–7.
- Johnson, T.M., and King-Sears, M.E. (2020). Eliciting students' perspectives about their co-teaching experiences. *Intervention in School and Clinic*, 56(1), 51–5.
- Johnson, T.M., King-Sears, M.E. and Miller, A.D. (2022). High school coteaching partners' self-efficacy, personal compatibility, and active involvement in instruction. *Learning Disability Quarterly*, 45(2), 96–107.
- Johnston, W. and Berglund, T. (2018). The Prevalence of Collaboration Among American Teachers: National Findings from the American Teacher Panel. Available at: https://www.rand.org/pubs/research_reports/RR2217.html (accessed on 28/12/2022).
- Jones, N. and Winters, M.A. (2022). Are two teachers better than one? The effect of co-teaching on students with and without disabilities. *Journal of Human Resources*, n/a(n/a), 0420-10834R3. DOI: 10.3368/jhr.0420-10834R3
- King-Sears, M.E., Stefanidis, A., Berkeley, S. and Strogilos, V. (2021). Does co-teaching improve academic achievement for students with disabilities? A meta-analysis. *Educational Research Review*, 34(100405), 1–20.
- 12. Kokko, M., Takala, M. and Pihlaja, P. (2021). Finnish teachers' views on co-teaching. *British journal of special education*, **48**(1), 112–32.
- Koroluk, N. (2017). Co-teaching: An effective professional development tool. BU Journal of Graduate Studies in Education, 9(1), 28–31.
- Kursch, M. and Veteška, J. (2021). Advantages and disadvantages of coteaching. In: *Learning Never Ends... Spaces of Adult Education: Central and Eastern European Perspectives*, University of Warsaw Press, Warsaw, Poland,
- Mcleod, S. (2023). Vygotsky's sociocultural theory of cognitive development. Available at: https://simplypsychology.org/vygotsky.html (accessed on 28/12/2022).
- Middlecamp, C. (1997). *Teaching stories*. Available at: http://archive.wceruw.org/cl1/cl/story/middlecc/TSCMD.htm (accessed on 22/12/2022).
- Mofield, E.L. (2020). Benefits and barriers to collaboration and coteaching: Examining perspectives of gifted education teachers and general education teachers. *Gifted Child Today*, 43(1), 20–33.
- Pesonen, H.V., Rytivaara, A., Palmu, I. and Wallin, A. (2021). Teachers' stories on sense of belonging in co-teaching relationship. *Scandinavian Journal of Educational Research*, 65(3), 425–36.
- 19. Rabin, C. (2020). Co-teaching: Collaborative and caring teacher preparation. *Journal of Teacher Education*, **71**(1), 135–47.
- Rytivaara, A. and Kershner, R. (2012). Co-teaching as a context for teachers' professional learning and joint knowledge construction. *Teaching and teacher education*, 28(7), 999–1008.
- Rytivaara, A., Pulkkinen, J. and de Bruin, C. L. (2019). Committing, engaging and negotiating: Teachers' stories about creating shared spaces for co-teaching. *Teaching and Teacher Education*, 83 (n/a), 225–35.
- Saloviita, T. and Takala, M. (2010). Frequency of co-teaching in different teacher categories. *European Journal of Special Needs Education*, 25(4), 389–96.
- Serrat, O. (2017). The scamper technique. In: O. Serrat (eds.) Knowledge solutions: Tools, Methods, and Approaches to Drive Organizational Performance. Springer, Singapore.
- 24. Spoden, S. (2022). *The Impact of Co-Teaching on Students Receiving Special Education Service*. Master Thesis, Concordia University, St. Paul. United State.
- Vygotsky, L.S. (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.