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Research Paper

Students' Perception of Co-teaching In an Inclusive Classroom: Implementation of The Finnish Education Curriculum

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Abstract

Implementing instruction in inclusive classes in elementary schools requires a flexible and effective co-teaching model that can be carried out collaboratively between teachers so that the learning objectives of all students can be achieved. However, various problems with co-teaching practices in inclusive classes, such as differences in responsibilities and roles between teachers, lack of collaboration, and lack of communication between teachers, often occur, including in Indonesia. This study explores prospective teacher students' perceptions regarding implementing co-teaching in inclusive classes in the context of the Finnish education curriculum. Data were collected through semi-structured interviews with six students who had implemented co-teaching practices. Data were analyzed using thematic analysis. The study produced three main themes: supporting factors for implementing co-teaching, challenges in using co-teaching, and teacher professionalism. The findings show that a flexible and effective co-teaching model in inclusive classes can only be practiced if all teachers strongly commit to collaborating as equal partners, increasing qualified teacher professional development, and school support to serve all students in achieving their most significant potential. This research has implications for all stakeholders in supporting and providing all the determining factors for co-teaching success, including the competence of quality teachers and prospective teacher students in higher education to meet the learning objectives for all students in inclusive classes.

Keywords: *Co-teaching, Elementary School, Finnish curriculum, Inclusive Classroom*

INTRODUCTION

Inclusive education is an educational service that emphasizes providing a supportive learning environment for all students, including students with disabilities. Its primary goal is ensuring all students have equal access to quality education (Rasmitadila et al., 2023). Its implementation can be seen in elementary schools that provide inclusive education (inclusive elementary schools) through humanistic and equitable learning in all academic and non-academic aspects, without discrimination. Therefore, teachers need to select and implement teaching models that can enhance collaboration and good cooperation among all members of the inclusive class.

Teaching models in inclusive classes must also accommodate diversity, foster active participation of all students, be flexible and adaptive, and foster a safe and child-friendly learning environment to achieve learning objectives in inclusive classes (Page et al., 2023). This provides opportunities for teachers, both regular teachers (GR) and special assistant teachers (SAT), to choose teaching models appropriate to the inclusive class's characteristics and situation. This aligns with the Regulation of the Minister of National Education of the Republic of Indonesia Number 70 of 2009, specifically Article 8, which explains the principles of learning in inclusive classes, supported by collaborative classroom management or collaboration between the GR and SAT (Regulation of the Minister of National Education of the Republic of Indonesia Number 70 of 2009). Good collaboration between GR and SAT will provide equal opportunities for all students, including

students with disabilities, to receive quality learning, improve their academic and non-academic skills, thereby achieving learning objectives (Paulsrud & Nilholm, 2023).

However, in its implementation, learning in inclusive classes still faces various challenges, particularly in selecting flexible and effective teaching models. Some of the challenges faced by GR and SAT in inclusive classes include (Rasmitadila et al., 2023) teachers do not understand the characteristics of all students, especially students with disabilities, so the teaching models implemented are not appropriate for inclusive classroom situations; 2) minimal collaboration between teachers (GR and SAT), resulting in partial and incomplete implementation of the learning needs of all students; 3) the gap in responsibility between GR and SAT is quite large; 4) lack of communication between GR and SAT, especially regarding the progress of students with disabilities, which should be a shared responsibility.

The various problems in inclusive classroom learning should serve as a basis for improving learning, particularly in selecting appropriate teaching models for inclusive classrooms. The joint selection of teaching models by the GR and SAT will positively impact all students (Iacono et al., 2023; Jortveit & Kovač, 2022). One teaching model currently widely practiced in inclusive classrooms is co-teaching. Co-teaching is an important model for transforming the teaching system in inclusive classrooms, where two or more teachers share roles and responsibilities in teaching students, such as the GR and SAT (Jurkowski et al., 2023). The GR and SAT share the roles of planning, implementing, managing the class, and assessing to ensure students achieve learning objectives. The GR and SAT are like a team with a good relationship to achieve student success, develop student interests and talents, and help overcome student obstacles. Therefore, the responsibilities of GR and SAT must complement each other as equal partners in providing quality learning for all students in inclusive classrooms (Slowík et al., 2022).

Co-teaching in inclusive classrooms can be categorized into several ways, including (Friend et al., 2025) (1) one teacher teaches the class while the other observes; (2) one teacher leads the class while the other assists; (3) teachers teach students at different stations; (4) each teacher teaches half the class; (5) one teacher teaches the majority of students while the other works with a smaller group; and (6) both teachers lead the class collaboratively. Several countries that have implemented co-teaching in inclusive classrooms have successfully met all students' needs and learning outcomes. In Finland, implementing co-teaching in inclusive classrooms is a crucial element of its education system, prioritizing collaboration, curriculum flexibility, and student well-being (Sundqvist et al., 2023). To ensure all teachers in inclusive classrooms in Finland can implement co-teaching practices, prospective teachers are introduced to co-teaching during their studies. Each student receives specialized training on co-teaching, enabling them to understand and practice it when teaching in inclusive classrooms in elementary schools. The impact of this co-teaching approach has made Finland one of the countries with the best inclusive education systems in the world.

Meanwhile, co-teaching development in Indonesia has not yet been implemented in accordance with co-teaching principles. The application of co-teaching in the context of inclusive education is still relatively new. It has not been widely practiced by teachers in inclusive classrooms or prospective university teachers (Rasmitadila et al., 2023). The roles and responsibilities of GR and SAT, as outlined in Minister of National Education Regulation No. 70 of 2009, still do not constitute equal partners in inclusive classrooms. Therefore, changes in the roles and responsibilities of both types of teachers are needed to implement co-teaching in inclusive classrooms effectively. Like Finland, student teachers should already practice co-teaching to immediately practice it in inclusive classrooms once they become teachers. Through hands-on classroom practice, student teachers can understand and evaluate the implementation of co-

teaching, allowing them to identify weaknesses and shortcomings in its implementation in inclusive classrooms for improvement.

The co-teaching model, a collaboration between the principal and the Teacher Education Group in a single classroom, has been widely recognized as an effective model for supporting the success of inclusive education. Therefore, this study aims to explore student teachers' perceptions of implementing co-teaching in inclusive classrooms within the Finnish education curriculum. It is anticipated that this study will provide two primary contributions. From a theoretical standpoint, it broadens the comprehension of teacher perceptions in inclusive classrooms by applying co-teaching frameworks within a Southeast Asian context, thereby enhancing cross-cultural perspectives on inclusive pedagogy. The study provides practical insights for teacher training institutions, particularly in developing co-teaching practicum modules and enhancing collaborative skills among future teachers.

LITERATURE REVIEW

To meet all students ' learning goals, implementing inclusive education requires a flexible and collaborative learning model between regular teachers (GR) and assistant/special teachers (SAT). Co-teaching, a collaborative model—where two or more teachers share planning, implementation, classroom management, and assessment—is often recommended to address this need. Collaborative teaching is generally defined as cooperation between two or more teachers in planning, implementing, and evaluating the learning process for diverse groups of students. Previous studies have emphasized its positive impact on inclusive education, such as increased interprofessional collaboration, increased student engagement, and support for customized learning. However, the majority of existing research focuses on Western education systems, and only a few examine contexts such as Indonesia. The co-teaching framework serves as the theoretical basis for this study, with an emphasis on the dimensions of shared responsibility, equality, and mutual accountability. By placing this study within this framework, it aims to provide new insights into how Indonesian teacher candidates view and adapt co-teaching practices inspired by the Finnish model (Friend & Barron, 2025). International literature shows that co-teaching can improve student participation, instructional differentiation, and individual support when its implementation is supported by shared planning, good communication, and clear role allocation (Härkki et al., 2021).

Several studies also highlight the variety of co-teaching models (e.g., station teaching, team teaching, one-teach/one-assist) and the importance of selecting a model that best suits classroom characteristics and learning objectives (Spörer et al., 2021). Research from Finland and the Nordic context shows that integrating co-teaching into pre-service teacher training and institutional support (shared schedules, collaboration time, and professional culture) enhances trainee readiness and the sustainability of collaborative practices in the field (Kotilainen & Takala, 2025). These findings are relevant to adapting the Finnish model in other contexts. However, the literature also cautions that the educational system context, resources, and stakeholder expectations will mediate implementation outcomes (Leithwood et al., 2021).

In the Indonesian context, Rasmitadila et al. (2023) found that co-teaching experiences were still influenced by internal classroom support and instructional goals that were not always synchronized between teachers. The study reported role gaps, a lack of scheduled collaboration time, and communication challenges between GR and SAT, often resulting in partial or inconsistent co-teaching implementation. The findings of (Rasmitadila et al., 2023) emphasize that without institutional support (e.g., shared planning time, school policies) and teacher professional capacity, co-teaching models struggle to achieve optimal results—a critical gap when attempting to transfer

successful practices from contexts like Finland to schools in developing countries.

RESEARCH METHOD
Research Design

This study used an exploratory qualitative design with thematic analysis. Prospective elementary school teachers from private universities in Indonesia, who were part of the INCO Project, were selected using purposive sampling. Because this study was exploratory in nature, a small sample size was acceptable. Data were collected through semi-structured interviews and verified by two education experts. To enhance credibility, triangulation was used by combining verification from experts, checks by members, and discussions among peers. Thematic analysis was used to identify themes and patterns that emerged in the data.

In this study, researchers explored student teachers' perceptions of co-teaching in inclusive classrooms implementing the Finnish curriculum. This study employed a quasi-qualitative approach with a Simple Research Design (SRD). This study employed an SRD design because it allowed researchers to reflect on field findings by applying theory to solve problems encountered. The SRD research procedure involved five main steps (Bungin, 2020): (1) selecting a social context and determining the research question (social context and research question); (2) conducting a literature review; (3) implementing research methods and data collection; (4) analyzing data; and (5) reporting research results to gather in-depth data on student perceptions of the use of co-teaching in inclusive classrooms implementing the Finnish curriculum.

Participants

This study involved six prospective elementary school teacher students from a private university in Indonesia who had participated in the Inclusive Education in Co-teaching Project (INCO-Project). These six students were in their fifth and seventh semesters and had taken inclusive education courses. The INCO-Project is a collaborative practicum using co-teaching in inclusive classrooms with prospective teacher students from three other universities, including two from Finland and one from Malaysia. The INCO-Project was implemented over two months in 2024 and 2025 at a private international school in Kuala Lumpur, Malaysia, using the Finnish elementary school curriculum. For the first month (January 2024 and 2025), students participated in a preparatory program consisting of workshops and seminars on co-teaching. Students conducted a hands-on practicum at the inclusive school for the following month (February 2024 and February 2025). In the first period (February 2024), all universities sent three students each to carry out co-teaching practicums in lower grades (grades 1-3 of elementary school), while the other three (February 2025) were in upper grades (grades 4-6 of elementary school).

Data Collection

The data collection process was conducted through direct interviews with three student participants from Indonesia. Data were collected through in-depth, semi-structured interviews with participants regarding co-teaching implementation in inclusive classrooms. Four aspects were asked in the interviews: 1) planning during the co-teaching preparation phase; 2) implementation of the on-site practicum; 3) evaluation of the on-site practicum in schools regarding personal and professional development; and 4) feedback. Before conducting the interviews with participants, the researcher used a pre-developed interview guide validated by two inclusive education experts. Interviews were conducted with all students from February 9th to 14th, 2025. The interviews were face-to-face and lasted approximately 30 minutes per participant. Participants responded enthusiastically and shared their opinions, while the researcher recorded each interview. Before

beginning the questions, the researcher asked the participants for permission to record the interviews, which were then used solely for data analysis.

Data Analysis

Data were analyzed using inductive procedures and thematic analysis to identify and generate themes in accordance with the research objectives established at the outset. The steps in thematic analysis included (Braun & Clarke, 2023): (1) familiarizing oneself with the data; (2) creating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) writing a report of the interviews. The resulting transcripts were verbatim, sorted, and categorized into several emerging themes regarding implementing co-teaching in inclusive classrooms within the context of the Finnish education curriculum. Each participant's response was coded (using keywords) to identify the participants' descriptions to avoid overlap. The data received by the researcher was then coded and categorized using NVivo 12 to generate the main themes.

FINDINGS AND DISCUSSION
Results

Table 1. Participant Profile

Participants	Gender	Practicum Group
P1	Female	Group A
P2	Female	Group A
P3	Female	Group B
P4	Male	Group B
P5	Female	Group C
P6	Female	Group C

The results suggest that student teachers generally viewed co-teaching as a helpful approach for inclusive classrooms. A number of participants underscored that working together with peers boosted their confidence and enhanced classroom management.

"Co-teaching allowed me to feel more confident because I was not alone in the classroom."

Despite these positive experiences, participants also reported challenges in implementing co-teaching. A key difficulty concerned the limited time for joint planning and coordination,

"It was difficult to find time for joint planning since our schedules were different."

The inductive data analysis yielded three main themes: supporting factors for co-teaching implementation, challenges in using co-teaching, and teacher professionalism, as seen in picture 1:
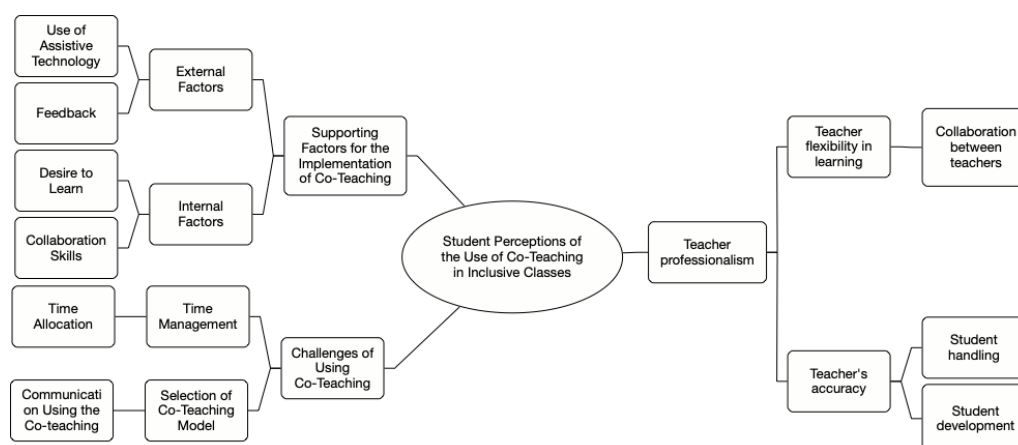
Figure 1. Main themes of data analysis results (using Nvivo 12)

Supporting Factors of Co-Teaching

Factors supporting co-teaching in inclusive classrooms consist of two sub-themes: internal factors and external factors. External factors include the use of assistive technology and feedback. According to students, using technology is a crucial component in co-teaching. Examples include using the internet and other technology-based learning resources, such as videos and technology-based games, which significantly assist teachers in explaining lesson material. This aligns with the opinion of one student:

> *"This school has excellent technology-based learning media that teachers can use to explain lesson material, making it easy for students to understand, including those who need assistance, and supporting co-teaching."*

Meanwhile, feedback is also crucial in co-teaching. Feedback is always provided after students and class teachers have completed class lessons. Topics discussed include how to deliver the material, handling students who need special assistance, including those with learning difficulties, time management, interacting with students, and collaboration among students as a co-teaching team. One student explained this opinion:

> *"Usually, after the lesson is over, we students, along with the class teacher, the assistant teacher, and the supervisor, evaluate and discuss the learning that has been implemented. The teacher usually provides feedback and points for improvement for the next lesson."*

The subtheme on internal factors consisted of the desire to learn and the ability to collaborate. This desire to learn is a strong motivation for students to deeply understand co-teaching practices, which they have previously only learned in theory and have never practiced in an inclusive classroom. According to the students, this strong desire motivates them to gain valuable experience so that when they become teachers, they can put it into practice effectively in inclusive classrooms. One student stated:

> *"For me, this is a very valuable experience learning and practicing co-teaching directly from friends who use the Finnish curriculum, and I will practice it directly in the classroom when I*

become a teacher."

The ability to collaborate is also an external factor perceived by students, who believe that the success of co-teaching depends on collaboration with all parties in the inclusive classroom. The ability to collaborate with other students and the classroom teacher must be practiced and practiced effectively to ensure the success of the learning designed jointly by the students and the classroom teacher. One student expressed this opinion:

"In my opinion, co-teaching in inclusive classrooms will be successful if there is good cooperation between teachers, or in this case, between students and students and between students and their teachers."

The supporting factors contributing to the implementation of the co-teaching model are the foundation for its success. They significantly impact the learning outcomes of all students, including students with disabilities, in inclusive classrooms. Without collaboration from all parties, successful co-teaching is difficult to achieve.

Challenges in Using Co-Teaching

The challenges in using co-teaching consist of two sub-themes: time management and choosing a co-teaching model. Given the various learning dynamics in inclusive classrooms, the time management sub-theme addresses the allocation of time used in co-teaching. Students believe that the time allocated for learning should be used in accordance with the time allocated in the lesson plan. However, time constraints often arise with highly dynamic classroom conditions requiring special attention, especially for students with learning difficulties or those requiring special services. Therefore, students and teachers must adapt their learning strategies to be more flexible. This situation significantly impacts the achievement of the subject matter, which teachers should be able to cover within the allocated time. Although students have been assigned tasks according to their roles in co-teaching principles, implementation remains challenging due to the changing time allocation. One student's opinion on this matter included:

"Even though we have been assigned roles and responsibilities in class, whether as leaders or facilitators, when problems arise with students and we need to address them quickly, sometimes we lack the time to do so."

The subtheme of selecting a co-teaching model presents a challenge for students, especially before implementing the lesson. A particularly challenging issue is communicating with parents and the principal. Before using a co-teaching model that aligns with the characteristics of an inclusive classroom, students must be able to communicate with the principal and parents. Hence, they understand and ensure that the learning in the classroom aligns with the parents' needs and goals. Students argued that they must be able to communicate the co-teaching model to the principal and parents in a way that is easily understood, especially by parents, who have high expectations that their children receive their rights at school and that there are changes in all aspects of learning outcomes, including cognitive, affective, and psychomotor. One student explained this opinion:

"Usually, schools have time to bring in parents to explain how the lesson is going and how teachers teach with multiple teachers in the classroom. Teachers must be able to explain the

objectives of the lesson so that parents' expectations can be met."

Teachers face the challenge of using co-teaching in inclusive classrooms, especially when students practice the co-teaching model. This model is crucial for improving the quality of learning and ensuring equity for all students, ensuring that they receive learning that meets their needs.

Teacher Professionalism

The theme of teacher professionalism consists of the subthemes of teacher flexibility and teacher thoroughness. The subtheme of teacher flexibility relates to the dynamics of learning and teaching development that must change in inclusive classrooms. Students observed that teachers easily change learning strategies and adapt to classroom conditions when learning does not go according to the lesson plan between the class teacher and other teachers. Teachers are also very active and creative when changing learning patterns, actively taking on their respective roles to ensure smooth learning. Communication between teachers is very open, and all input is valued, allowing all teachers to work as an equal team. One student expressed this opinion:

"When there is a change in learning strategy, all teachers immediately discuss it and communicate, including with us, so everyone can fulfill their respective roles and serve students as best as possible. There is a sense of teamwork."

The subtheme of teacher thoroughness relates to teachers' ability to understand student development when implementing learning in inclusive classrooms. Teachers and students work together quickly, which is essential for students' learning. When a student does not understand or is suspected of behaving in a way detrimental to other students, the teacher quickly analyzes and takes responsive action to prevent the student's behavior from negatively impacting the classroom. The GR, SAT, and students will jointly evaluate the situation after the lesson, ensuring that negative student behavior does not recur. They will also provide feedback to students to improve their cognitive and affective aspects. This explanation aligns with the student's opinion:

Teachers always evaluate student behavior and learning together to see if anything is inconsistent with the lesson plan. Teachers are very thorough in this evaluation, so they know what needs to be improved, both behaviorally and cognitively."

Teachers' professionalism and thoroughness in co-teaching are crucial in inclusive classrooms, as they lay the foundation for understanding students' achievement in achieving learning objectives. Teamwork in co-teaching is crucial in responding quickly to student conditions and needs in the classroom. As an equal team, this has a significant positive impact on students' progress.

Discussion

The research in this article significantly contributes to the empirical and conceptual understanding of co-teaching in inclusive classrooms, particularly at the elementary school level. The results of thematic data analysis yielded three main themes. First, supporting factors for co-teaching implementation, which are external and internal factors essential for implementing co-teaching. These factors significantly determine the success of co-teaching in the classroom. Teachers can provide various teaching materials tailored to students' needs, such as audio, text, video, or other interactive digital learning aids. Through this assistive technology, teachers can also

collaborate in joint planning (Hoogerwerf et al., 2021), communicate, and evaluate learning through specific applications such as learning management systems, which facilitate communication as a team or as equal partners (Yenduri et al., 2023). Feedback provided during learning evaluations aims to help teachers improve the effectiveness of collaboration in achieving student learning success (Er et al., 2021; Hooda et al., 2022).

In addition to external factors, internal factors also significantly contribute to the success of co-teaching. Teachers' desire to learn and ability to collaborate significantly influence their motivation and enthusiasm for co-teaching success (Jortveit & Kovač, 2022). This desire to learn significantly determines teachers' attitudes and initiatives in finding and using the best co-teaching models for implementation in inclusive classrooms, particularly regarding differentiated learning strategies, classroom management, and teaching methods for all students, including students with disabilities (Chatzigeorgiadou & Barouta, 2022). A strong desire to learn is also a driving factor in fostering collaboration in co-teaching practices (Härkki et al., 2021). Teachers who can collaborate effectively typically demonstrate strong qualities, particularly in sharing responsibilities, avoiding feelings of dominance, professional problem-solving in inclusive classrooms, and a commitment to mutual growth and development in providing the best possible service to students (Nguyen & Ng, 2022).

Second, the challenges of using co-teaching are obstacles that teachers face in practicing co-teaching in inclusive classrooms. Co-teaching practices require collaborative planning time from teachers, which is often associated with tight and short schedules, high workloads, and a lack of dedicated time for designing collaborative learning. This is a barrier to time allocation (Kotilainen & Takala, 2025). Furthermore, dynamic changes in the classroom often cause teachers to change learning strategies, which automatically require more time to adjust to classroom and student conditions (Mogas et al., 2022). Therefore, if the main lesson must change or is not successfully implemented by teachers in one learning session, careful planning is needed for alternative learning. Good collaboration between teachers, mutual respect for opinions, and a shared belief that learning will be successful are necessary (Duran et al., 2021; Rytivaara et al., 2023). Changes in implementing learning in inclusive classrooms must be communicated to other stakeholders, such as the principal and parents. The principal ensures that co-teaching principles are implemented effectively as a shared commitment to achieving learning objectives in inclusive classrooms. Likewise, parents have the right to know that co-teaching is running smoothly, thanks to the collaboration and commitment of teachers within the inclusive classroom. Teachers can communicate with parents through appropriate, lively discussions under conducive conditions, ensuring that all parties agree on progress and providing the best possible feedback to teachers on co-teaching practices, thereby improving learning (Leithwood et al., 2021).

Third, teacher professionalism is a crucial factor in implementing co-teaching. Without teacher professionalism, it is quite challenging to determine the success of learning in inclusive classrooms. In co-teaching, collaboration between teachers is an absolute necessity (White, 2020). Collaboration between teachers in co-teaching practices allows for a clear division of tasks, with different expertise complementing each other, thus positively impacting students in achieving learning objectives (Vembye et al., 2024). Through collaboration, teachers can specifically and in detail address students with various needs and characteristics in inclusive classrooms (Mitchell & Sutherland, 2020). The co-teaching model teachers choose will enable teachers to address students individually and pay more attention to their needs (Dehnad et al., 2021; Spörer et al., 2021). Teachers can provide closer and more flexible mentoring and guidance to students, allowing them to accurately and continuously monitor their development and progress.

Implementing co-teaching using the Finnish Education Curriculum provides prospective elementary school teachers with a clear understanding of how selecting the right co-teaching model can support successful learning in inclusive classrooms. Specifically, of the six co-teaching models used, teachers can flexibly modify the models to suit classroom conditions. However, most of the co-teaching models used are station-based, tailored to the abilities and behaviors demonstrated by students. Teachers can flexibly communicate with each other and find ways to share responsibilities in fulfilling their respective roles while still providing services to students according to their needs and characteristics.

CONCLUSIONS

The implementation of the co-teaching model in inclusive classrooms had a positive impact on student teachers during the INCO-Project program. The co-teaching model, within the context of the Finnish curriculum, is highly suitable for inclusive classrooms because it contributes to achieving learning objectives for all students, including students with disabilities. A flexible and effective co-teaching model can only be implemented in inclusive classrooms if all teachers have a strong commitment to collaborating as equal partners, the professional development of teachers is increasingly high, and the school supports them to serve all students in achieving their most significant potential. This research has implications for all stakeholders involved in supporting and providing all the determinants of successful co-teaching, including the competencies of qualified teachers and student teachers in higher education institutions, so that learning objectives can be met for all students in inclusive classrooms. The results of this study indicate that prospective teachers have a positive view of co-teaching as a collaborative and supportive practice in inclusive classrooms, with an emphasis on shared responsibility and professional learning.

These findings answer the research questions by highlighting opportunities (increased confidence, peer support) and challenges (time management, systemic barriers) in the implementation of co-teaching. Theoretically, this study contributes to inclusive pedagogy by adapting a Finnish-inspired co-teaching framework to the Indonesian context, demonstrating the importance of cultural and institutional adaptation. In practice, this study recommends that teacher education programs integrate well-planned co-teaching modules, provide explicit training in collaborative planning, and establish institutional policies that allow time for joint lesson design. Future studies should broaden the participant groups to encompass in-service teachers, school principals, and parents; carry out longitudinal research to investigate the long-term impacts of co-teaching; and evaluate models inspired by Finnish methods directly in schools in Indonesia.

LIMITATION & FURTHER RESEARCH

The main limitation of this study lies in the minimal number of participants, six student teachers, making the results difficult to generalize to a broader context. Furthermore, all participants came from a single university in Indonesia, resulting in a lack of diverse perspectives, even though the INCO program involves international collaboration. The study location was limited to a single international school in Malaysia with a Finnish curriculum, which may not fully represent the conditions of inclusive schools in Indonesia. Future research should utilize mixed methods for more comprehensive results and conduct cross-country comparisons to highlight global relevance. The small sample size of six student teachers limits the generalizability of this study's findings. Future studies should expand the scope by including various stakeholders, such as practicing teachers, school principals, and parents. It is also advisable to use longitudinal designs in order to capture the lasting effects of co-teaching practices. In addition, experimental or action research could be carried out to directly adapt and assess Finnish-inspired co-teaching strategies in

Indonesian classrooms.

REFERENCES

Beege, M., & Schneider, S. (2023). Emotional design of pedagogical agents: The influence of enthusiasm and model-observer similarity. *Educational Technology Research and Development, 71*(3), 859–880. https://doi.org/10.1007/s11423-023-10189-4

Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and becoming a knowing researcher. *International Journal of Transgender Health, 24*(1), 1–6. https://doi.org/10.1080/26895269.2023.2185475

Bungin, B. (2020). *Post-qualitative social research methods: Kuantitatif-kualitatif-mixed methods positivism-postpositivism-phenomenology-postmodern filsafat, paradigma, teori, metode dan lapangan*. Prenada Media.

Chatzigeorgiadou, S., & Barouta, A. (2022). General and special early childhood educators' attitudes towards co-teaching as a means for inclusive practice. *Early Childhood Education Journal, 50*(8), 1407–1416. https://doi.org/10.1007/s10643-021-01293-8

Cook, S. C., Collins, L. W., Madigan, J., McDuffie Landrum, K., & Cook, L. (2021). Coaching co-teachers: Increasing specialized instruction in inclusive settings. *Teaching Exceptional Children, 54*(2), 134–145. https://doi.org/10.1177/00400599211062549

Dehnad, A., Jalali, M., Shahabi, S., Mojgani, P., & Bigdeli, S. (2021). Students' view on supportive co-teaching in medical sciences: A systematic review. *BMC Medical Education, 21*(1), 1–13. https://doi.org/10.1186/s12909-021-02575-y

Duran, D., Flores, M., Ribas, T., & Ribosa, J. (2021). Student teachers' perceptions and evidence of peer learning through co-teaching: Improving attitudes and willingness towards co-teaching. *European Journal of Psychology of Education, 36*(2), 495–510. https://doi.org/10.1007/s10212-020-00485-3

Er, E., Dimitriadis, Y., & Gašević, D. (2021). A collaborative learning approach to dialogic peer feedback: A theoretical framework. *Assessment & Evaluation in Higher Education, 46*(4), 586–600. https://doi.org/10.1080/02602938.2020.1791504

Friend, M., & Barron, T. (2025). Co-teaching: Are we there yet? *Journal of Educational and Psychological Consultation, 35*(2), 193–218. https://doi.org/10.1080/10474412.2024.2393523

Härkki, T., Vartiainen, H., & Seitamaa-Hakkarainen, P., & Hakkarainen, K. (2021). Co-teaching in non-linear projects: A contextualised model of co-teaching to support educational change. *Teaching and Teacher Education, 97,* 103188. https://doi.org/10.1016/j.tate.2020.103188

Hooda, M., Rana, C., Dahiya, O., Rizwan, A., & Hossain, M. S. (2022). Artificial intelligence for assessment and feedback to enhance student success in higher education. *Mathematical Problems in Engineering, 2022*(1), 5215722. https://doi.org/10.1155/2022/5215722

Hoogerwerf, E.-J., Mavrou, K., & Traina, I. (2021). *The role of assistive technology in fostering inclusive education: Strategies and tools to support change*. Routledge.

Iacono, T., Landry, O., Garcia-Melgar, A., Spong, J., Hyett, N., Bagley, K., & McKinstry, C. (2023). A systematized review of co-teaching efficacy in enhancing inclusive education for students with disability. *International Journal of Inclusive Education, 27*(13), 1454–1468. https://doi.org/10.1080/13603116.2021.2011447

Jortveit, M., & Kovač, V. B. (2022). Co-teaching that works: Special and general educators' perspectives on collaboration. *Teaching Education, 33*(3), 286–300. https://doi.org/10.1080/10476210.2020.1818821

Jurkowski, S., Ulrich, M., & Müller, B. (2023). Co-teaching as a resource for inclusive classes: Teachers' perspectives on conditions for successful collaboration. *International Journal of Inclusive Education, 27*(1), 54–71. https://doi.org/10.1080/13603116.2020.1836824

Kotilainen, N., & Takala, M. (2025). "So much invisible work"–The role of special education teachers in Finnish lower secondary schools. *Scandinavian Journal of Educational Research, 69*(3), 451–465. https://doi.org/10.1080/00313831.2024.2357177

Leithwood, K., Jantzi, D., & Steinbach, R. (2021). Leadership and other conditions that foster organizational learning in schools. In *Organizational learning in schools* (pp. 67–90). Taylor & Francis.

Menteri Pendidikan Nasional Republik Indonesia. (2009). *Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 70 Tahun 2009 tentang pendidikan inklusif bagi peserta didik yang memiliki kelainan dan memiliki potensi kecerdasan dan/atau bakat istimewa*. Kemendikbud.

Mitchell, D., & Sutherland, D. (2020). *What really works in special and inclusive education: Using evidence-based teaching strategies* (3rd ed.). Routledge.

Mogas, J., Palau, R., Fuentes, M., & Cebrián, G. (2022). Smart schools on the way: How school principals from Catalonia approach the future of education within the fourth industrial revolution. *Learning Environments Research, 25*(3), 875–893. https://doi.org/10.1007/s10984-022-09426-y

Nguyen, D., & Ng, D. (2022). Teacher collaboration for change: Sharing, improving, and spreading. In *Leadership for professional learning* (pp. 178–191). Routledge.

Page, A., Anderson, J., & Charteris, J. (2023). Including students with disabilities in innovative learning environments: A model for inclusive practices. *International Journal of Inclusive Education, 27*(14), 1696–1711. https://doi.org/10.1080/13603116.2021.1916105

Paulsrud, D., & Nilholm, C. (2023). Teaching for inclusion–A review of research on the cooperation between regular teachers and special educators in the work with students in need of special support. *International Journal of Inclusive Education, 27*(4), 541–555. https://doi.org/10.1080/13603116.2020.1846799

Rasmitadila, Efendi, I., Rajagukguk, Z. F., Safari, Y., & Tambunan, A. R. S. (2023). The perspectives of Indonesian teachers toward co-teaching experiences in the inclusive classroom: Classroom internal support and instructional goals. *Education 3-13*, 1–19. https://doi.org/10.1080/03004279.2023.2205950

Rasmitadila, R., Humaira, M. A., Laeli, S., Rachmadtullah, R., & Jauhari, M. N. (2023). The education stakeholders' perspective of a mentoring programme for inclusive elementary schools in Indonesia: Mutual of need and input, and mentoring support system. *Education 3-13*, 1–17. https://doi.org/10.1080/03004279.2023.2209870

Ruhiyat, M. D., Adri, H. T., & Laeli, S. (2024). Implementasi co-teaching pada pembelajaran di dalam kelas inklusif. *Karimah Tauhid, 3*(4), 5077–5091. https://doi.org/10.59188/kt.v3i4.1293

Rytivaara, A., Pulkkinen, J., & Palmu, I. (2023). Learning about students in co-teaching teams. *International Journal of Inclusive Education, 27*(7), 803–818. https://doi.org/10.1080/13603116.2020.1836823

Slowík, J., Šafránková, D., & Zachová, M. (2022). Support for teachers in the inclusive education of pupils with special educational needs: Experience from primary schools in the Czech Republic. *European Journal of Special Needs Education, 37*(3), 447–460. https://doi.org/10.1080/08856257.2021.1953564

Spörer, N., Henke, T., & Bosse, S. (2021). Is there a dark side to co-teaching? A study on the social participation of primary school students and their interactions with teachers and

classmates. *Learning and Instruction, 71,* 101393. https://doi.org/10.1016/j.learninstruc.2020.101393

Sundqvist, C., Björk-Åman, C., & Ström, K. (2023). Co-teaching during teacher training periods: Experiences of Finnish special education and general education teacher candidates. *Scandinavian Journal of Educational Research, 67*(1), 20–34. https://doi.org/10.1080/00313831.2021.1971784

Vembye, M. H., Weiss, F., & Hamilton Bhat, B. (2024). The effects of co-teaching and related collaborative models of instruction on student achievement: A systematic review and meta-analysis. Review of Educational Research, 94(3), 376–422. https://doi.org/10.3102/00346543241231565

White, L. J. (2020). A basic interpretive study of co-teaching perceptions: Collaboration of general and special education elementary school teachers (Doctoral dissertation, Liberty University). ProQuest Dissertations Publishing.

Widayanti, C. G., & Fletcher, J. (2023). 'Everybody knows': Students labelled as having learning disabilities in the Indonesian education setting. Education 3-13, 51(8), 1354–1366. https://doi.org/10.1080/03004279.2022.2126934

Wiltshire, G., & Ronkainen, N. (2021). A realist approach to thematic analysis: Making sense of qualitative data through experiential, inferential, and dispositional themes. Journal of Critical Realism, 20(2), 159–180. https://doi.org/10.1080/14767430.2021.1894909

Yenduri, A., Singh, A., Alzubaidi, M. S., Alshahrani, H., Alenezi, F., & Alofi, A. (2023). From assistive technologies to metaverse—Technologies in inclusive higher education for students with specific learning difficulties: A review. IEEE Access, 11, 64907–64927. https://doi.org/10.1109/ACCESS.2023.3286558