





Educational collaboration: Different perspectives about regular and special teachers in inclusive school

 Bastiana¹⁺
 Syamsuddin²

^{1,2}Special Education Department, Faculty of Education, Universitas Negeri Makassar, Sulawesi Selatan, Jalan AP Pettarani, Indonesia.

¹Email: bastiana@unm.ac.id

²Email: syamsuddin6270@unm.ac.id



(+ Corresponding author)

ABSTRACT

Article History

Received: 7 October 2024

Revised: 23 January 2025

Accepted: 11 February 2025

Published: 26 February 2025

Keywords

Different perspective
Educational collaboration
Inclusive education
Regular teacher
Special education teacher.

This study aims to assess the importance of collaboration between regular and special education teachers in inclusive classroom settings and to identify the factors that support and hinder effective collaboration between them. A phenomenological method was used to explore how teachers perceive and actively engage in the collaboration process within an inclusive educational setting using purposive sampling to select participants from five primary schools in Makassar City. A total of 36 teachers, including 22 regular and 14 special education teachers participated in this study. Data were collected through detailed online questionnaires and document analysis and then analyzed qualitatively. The results indicate that both regular and special education teachers greatly value the aspect of collaboration and show a high willingness to adjust their teaching strategies to meet the special needs of students. Moreover, the findings show that effective collaboration strengthens interpersonal relationships among teachers contributing to a more inclusive learning environment. The study also identifies several challenges faced by teachers in implementing collaborative strategies such as the lack of time for joint planning, differences in teaching methods and the need for additional resources. In a nutshell, applied collaboration training is essential to enhance mutual understanding and effective collaborative practices among teachers in inclusive schools, thereby supporting the overall success of inclusive education.

Contribution/Originality: This research is original as it explores how differences in teacher perspectives affect collaborative practices in inclusive schools, providing new insights and evidence-based strategies to enhance interactions and address challenges in inclusive education.

1. INTRODUCTION

The integration of children with special needs and other related issues in regular schools is often deliberated by experts. According to [Thompkins and Deloney \(1995\)](#) these deliberations are supported or opposed consistently with an increasing number of students enrolled annually for special education services. The Central Statistics Agency stated that 1.6 million children with special needs were recorded in November 2015 and approximately 10 to 11% received educational services ([Wahyudi & Kristiawati, 2016](#)). Relatively, 115,000 of these children attended special schools while 299,000 received inclusive education ([Ministry of Education and Culture, 2017](#)).

The Indonesian government has enacted various policies to facilitate the educational purposes of children with special needs. A typical example is Law No. 20 of 2003 concerning the implementation of inclusive education to protect the rights of these children ([Wahyudi & Kristiawati, 2016](#)). Inclusive education was founded in 2001 in

Yogyakarta and several other areas. Additionally, the government officially announced the initiation of the program in Indonesia towards inclusive education in 2004 through a declaration in Bandung (Rombot, 2017). This was followed by the Minister of National Education Regulation Number 70 of 2009 concerning inclusive education for students with disorders including potential intelligence and special talents. The implementation policies had not been in line with the laws enacted two decades ago since the pioneering of inclusive education. This was due to the readiness problems of several schools including the low competence of teachers in providing adequate services to students with special needs and parental anxiety. Other problems were associated with the number of children in the class as well as the lack of cooperation between the community, professional experts, and the government (Tarnoto, 2016). Inclusive schools accept normal children and those with special needs promoting collaboration in the classroom. Students with disorders suffer psychological, physical, intellectual, emotional and social specialties as well as a combination of the conditions. This led to the need for special education services to develop future potential. Initially, these children attended special schools distinct from normal students. Enrolment in inclusive schools requires adequate resources, facilities and infrastructure. Every institution that offers inclusive education must have at least a particular teacher to manage the children or seek help from the nearest special school. Similarly, there is a need for the provision of relevant facilities and infrastructure according to respective specificity. For example, children with visual impairments differ from those with speech disorders.

A fundamental objective of the education system is to offer high-quality learning universally demanding efficacious collaboration. This collaboration was mandated by the legislation particularly the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) (Yell, Shriner, & Katsiyannis, 2006). According to IDEIA, members of the Individualized Education Program (IEP) team, consisting mainly of teachers and parents, were compelled to participate in the collaborative process to ensure the engagement of individuals with pertinent experience, irrespective of contextual or professional background in formulating a comprehensive and cohesive intervention regimen. The interplay among members of the team formed the basis for the student's educational regimen and long-term prospects (Griffiths, Alsip, Hart, Round, & Brady, 2021). Both special and general teachers are expected to collaborate in diverse capacities to address requirements in inclusive educational settings. Special and regular teachers cater to the needs of children with disorders and mainstream education, respectively. This led to the essence of effective and restructured collaboration, including the enhancement of educational provisions, thereby facilitating the active participation of children as citizens.

Both categories of teachers occasionally oppose one another, shifting responsibilities particularly when children with special needs do not progress. This implied that the educational services provided are inefficient. Furthermore, a lack of collaboration hindered inclusive education in Malaysia (Khairuddin, Dally, & Foggett, 2016).

Teachers must collaborate when handling normal children and those with special needs irrespective of the differing educational backgrounds and disciplines. This difference hindered the implementation of inclusive education leading to the need for effective, efficient and research-based collaboration between special and regular teachers. Therefore, this research serves as a guideline for implementing collaboration among teachers including aiding in decision-making regarding the education of children with special needs in inclusive schools.

1.1. Research Questions Significance

This research aimed to address the following questions:

1. How do regular and special teachers view and value collaborative activities in inclusive schools?
2. How do these teachers define collaboration based on their respective perspectives?

1.2. Significance

The significance lies in the potential to identify strategies leading to more effective, efficient and inclusive education practices. The exploration of the questions provided a framework that served as the basis for

consideration in policy and decision-making. This led to the successful integration of children with special needs into better more inclusive education settings. This research addresses gaps in the existing literature on collaboration between regular and special teachers while supporting global educational objectives of inclusivity and equality.

2. LITERATURE REVIEW

Inclusive education is the philosophy and practice of tutoring students with special needs in regular academic settings (Ajuwon, 2008). The aim is to ensure the exposure of every child to equal opportunities of school culture. This implied that those with special needs tend to benefit from the classes while normal children are taught diverse characteristics and traits.

The intent is to provide educational services for those with special needs in public schools exposed to learning and interactive activities with teachers and normal students in the classroom. The relationship developed among normal students differed from the connection between those with special needs affected by the possessed specificity. In this case, normal children slowly understood the spoken words or gestures while special needs students tried to follow every conversation. Moreover, two or three of these students interact uniquely influenced by differences in their respective specialties. The categorization as the minority group implied those attending school in general (Johnsen & Skjorten, 2001).

In accordance with various international journals such as the 1948 Universal Declaration education is the right of every child. Additionally, Article 6, paragraph 1 of the Universal Declaration of Human Rights served as the basis for inclusive education. This does not imply that education was easily accessed by children with special needs at that time but enrolment into proper and meaningful education takes longer.

Several experts reviewed collaboration from different perspectives with some perceiving it as a philosophical interaction and personal lifestyle where individuals are responsible for certain actions including learning and appreciating the abilities of peers (Laal & Ghodsi, 2012). This view focused on the recognized efforts and contributions made by others. Collaboration also refers to a mutual engagement strategy in which all partners voluntarily participate in an activity (Hardy & Phillips, 1998). A term interpreted as attaining and accomplishing some of the agreed-on tasks despite the process helps other partners voluntarily achieve common IOR (interorganizational relationships) and private objectives (Castañer & Oliveira, 2020).

In inclusive education, collaboration requires the active participation of special and regular teachers in the classroom. However, the disciplinary backgrounds of the two categories differ. Special teachers have backgrounds in disciplines that specifically focus on children with disorders. Both categories must work together to provide maximum service in inclusive education. Collaboration of individuals with different educational backgrounds fulfils the academic or social and behavioral needs of students with disabilities in regular classrooms (Van Garderen, Stormont, & Goel, 2012). Idol, Nevin, and Paolucci-Whitcomb (2000) stated that collaboration is an interactive process that enables teachers with diverse skills to work together and engage in joint decision-making towards shared objectives (Venianaki & Zervakis, 2015).

Collaboration creates an avenue for intensive discussion, planning, implementation and evaluation despite the differing professionalism. This leads to considering the degree to which teachers support or transform learning practices in Indonesian inclusive classrooms (Sheehy, Kaye, & Rofiaha, 2020). Meanwhile, collaboration among professionals plays an important role in the successful inclusion of students with special needs (Weiss, Anderson, & Lasker, 2002). It is also an important aspect of teacher professionalism regarded as a measure to continuously reflect and improve teaching practice (De Jong, Meirink, & Admiraal, 2019). Collaboration is like cooperation, which enables the improvement of teaching practices due to the exchange of opinions and the ability to reflect. It can be developed and maintained among professionals with a positive impact benefitting both students and teachers (Miller & Burden, 2007).

3. METHODOLOGY

3.1. Research Design

This phenomenological research investigated collaboration between regular and special teachers. It was conducted in 5 primary schools offering inclusive education in Makassar. The aim was to understand the factors responsible for promoting collaboration and enhancing positive educational outcomes for children with special needs. The two main research questions guiding the investigation include (1) how do regular and special teachers view and value collaboration in inclusive education? (2) How do these teachers define collaboration based on perspectives?

3.2. Population

The research population consisted of 36 teachers (22 regular and 14 special) from 5 schools that offer inclusive education. Respondents who directly participated in the educational activities were selected using purposive sampling.

3.3. Research Instruments

Data were collected through a structured online questionnaire developed with Google Forms based on the model designed by Olore (2017). The questionnaire included open-ended and multiple-choice questions allowing teachers to freely express personal views while facilitating the quantitative analysis of collaborative practices.

3.4. Validity and Reliability

Reliability and validity of the data were determined using the triangulation method. Initially, a literature review was conducted to provide a foundational understanding of the research development including offering insights into various theories related to teacher collaboration. Furthermore, the perspectives of respondents were used to gain a deep understanding of the relationship between regular and special teachers.

Lastly, the research perspective of a special teacher was acknowledged and shared with respondents. The process of relating was performed to remain objective in the data collection and analysis procedure.

4. RESULTS

The first question focused on how regular and special teachers valued collaboration. This question aimed to express mutual respect during the learning preparation and handling of children with special needs in inclusive schools. Respondents were questioned severally to obtain answers to the main question with the results published. The first question concerning how respondents considered collaboration a priority led to the provision of choices in line with personal views. The following chart represents the percentage of teachers who prioritized collaboration.

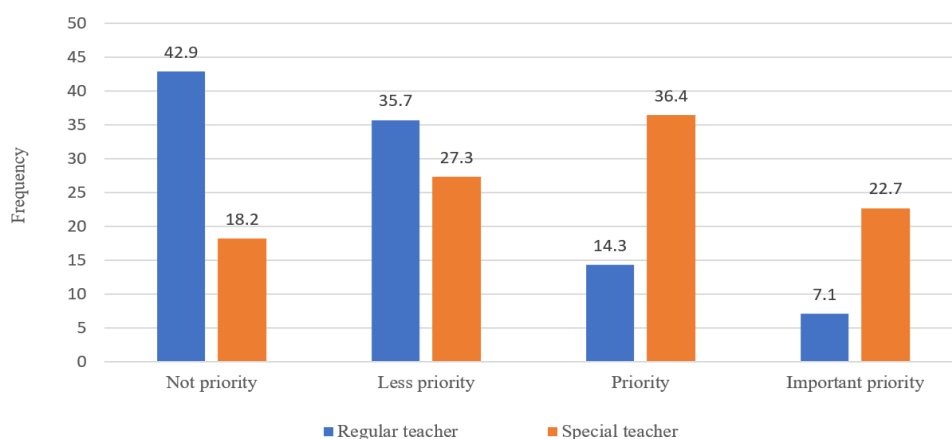


Figure 1. Collaboration as a priority.

Figure 1 shows that 42.9% of regular teachers do not prioritize collaboration while 7.1% regard it as important. However, 59.1% of special teachers prioritized collaboration with the remaining 18.2% not prioritizing the practice. The majority of special teachers and a few regular teachers regarded collaboration as a priority while the rest felt it was unimportant.

The second question focused on the preference of the respondents regarding collaboration with regular and special teachers, school administrators, or parents. Furthermore, of the 14 regular teachers, 64.3% prioritized collaboration with parents and the administrative staff.

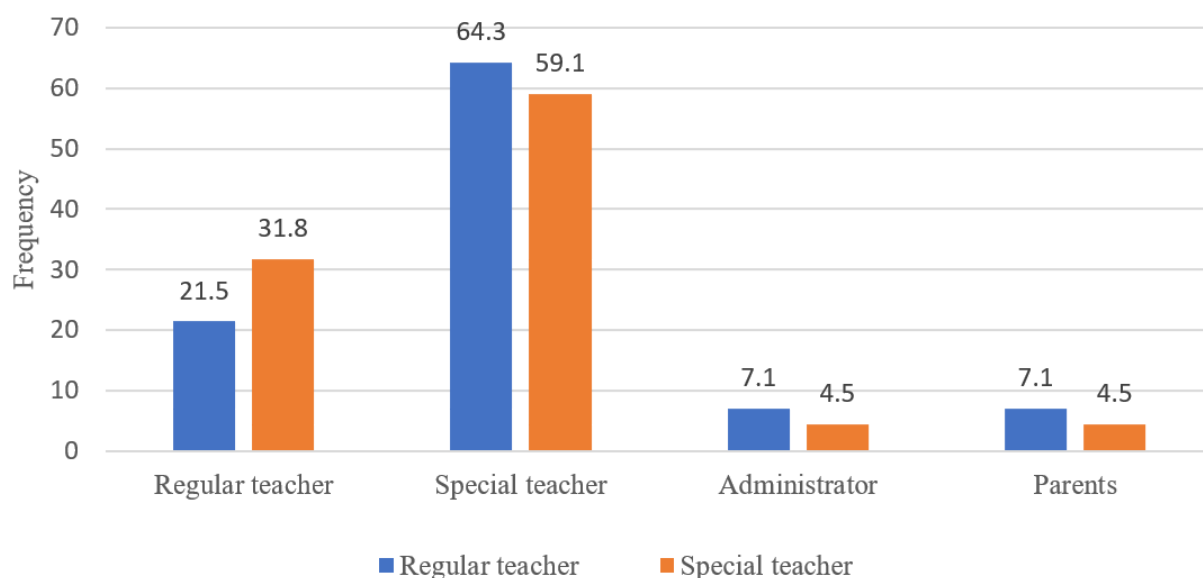


Figure 2. Whom do teachers collaborate with?

Figure 2 shows that of the 22 special teachers who completed the questionnaire, 7 or 31.8% preferred working with regular teachers, 13 respondents or 59.1% preferred working with special teachers, and 1 respondent or 4.5% preferred working with administrative staff and parents, respectively. The data also showed that 59.1% of special teachers preferred to work with colleagues from the same discipline while 38.1% happily collaborated with regular teachers. Some regular and special teachers worked closely with the administrative staff and parents. This depicted that both categories prefer to collaborate with special teachers. Another question centered on how much time was spent during collaboration. Appreciating the entire process depended on the duration teachers spent with one another. In addition, the duration was based on the percentage of time per week as shown in Figure 3.

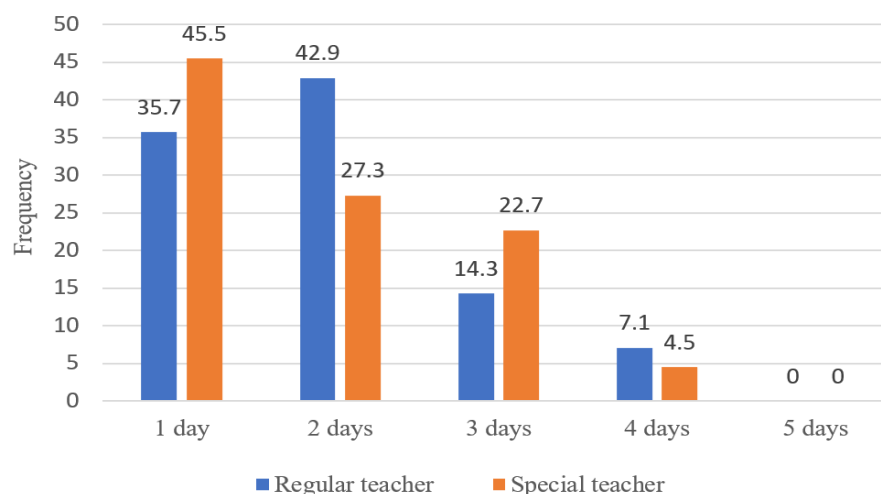


Figure 3. Available time.

Regular and special teachers spent 2 days or 42.9% and 1 day or 45.5% of personal time during collaboration, respectively. None of the respondents spent 5 days collaborating because both regular and special teachers were provided with only 4 days implying that the time devoted was minimal.

The fourth question focused on how much time teachers needed to be prepared for collaboration which showed the duration spent. The question was aimed at determining how much time was required for collaboration as shown in Figure 4.

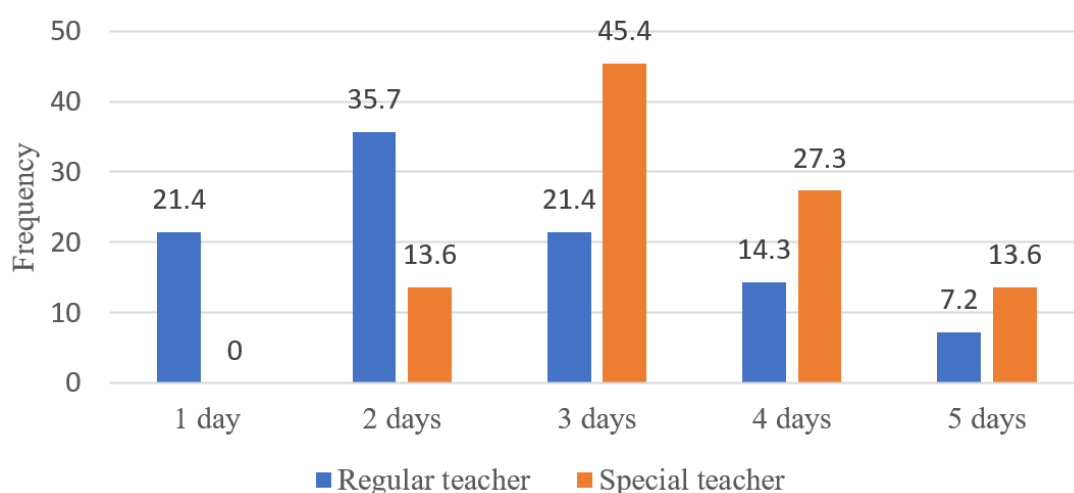


Figure 4. Time wanted to provide.

The figure showed that 35.7% and 45.4% of regular and special teachers preferred to spend two to three days weekly. A regular teacher intended to spend 5 days a week and none intended to spend only a day per week. All special teachers preferred to spend at least 2 days a week. Therefore, the majority of teachers intended to collaborate at least 2 days a week with some willing to use 5 days. The fifth question was how the benefits of collaboration outweighed the barriers. This was aimed to examine the extent the process benefited both regular and special teachers as shown in Figure 5.

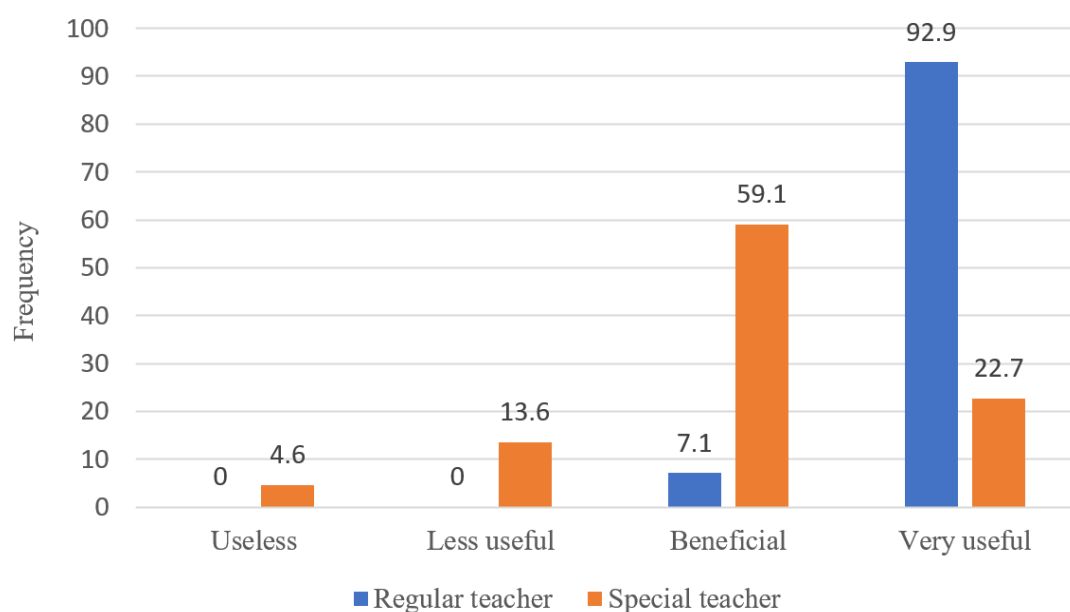


Figure 5. Benefits of Collaboration.

The figure showed that 92.9% of both special and regular teachers considered collaboration very useful and 7.1% believed it was useful. However, 22.7% of special teachers found collaboration with regular teachers beneficial, with 59.2% presuming it was useful. Approximately 4.6% of the special teachers believed collaboration with regular teachers was useless. Regular teachers benefitted greatly from collaborating with special teachers and vice versa.

The sixth question centered on whether the respondents valued special or regular teachers as resources. This was aimed at determining how much collaboration was appreciated while considering teachers as resources.

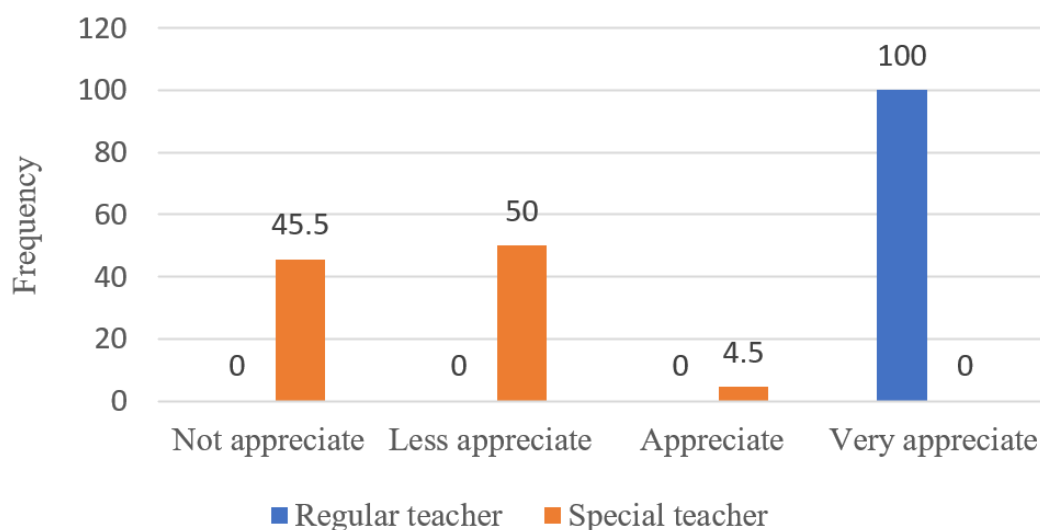


Figure 6. Appreciate as resources.

Figure 6 shows that all regular teachers valued special teachers as resources for understanding children with special needs. However, none of the special teachers considered regular teachers as a knowledge source in collaboration. Majority stated that regular teachers lacked respect and were not resourceful. Only 4.5% consider regular teachers as being resourceful. This depicted that regular teacher highly valued and considered special teachers as a source of information. Meanwhile, special teachers do not appreciate or even value regular teachers. This important information was used as discussion material in the next explanation.

The seventh question focused on how respondents valued any feedback received. This was aimed to reveal the extent to which teachers valued feedback.

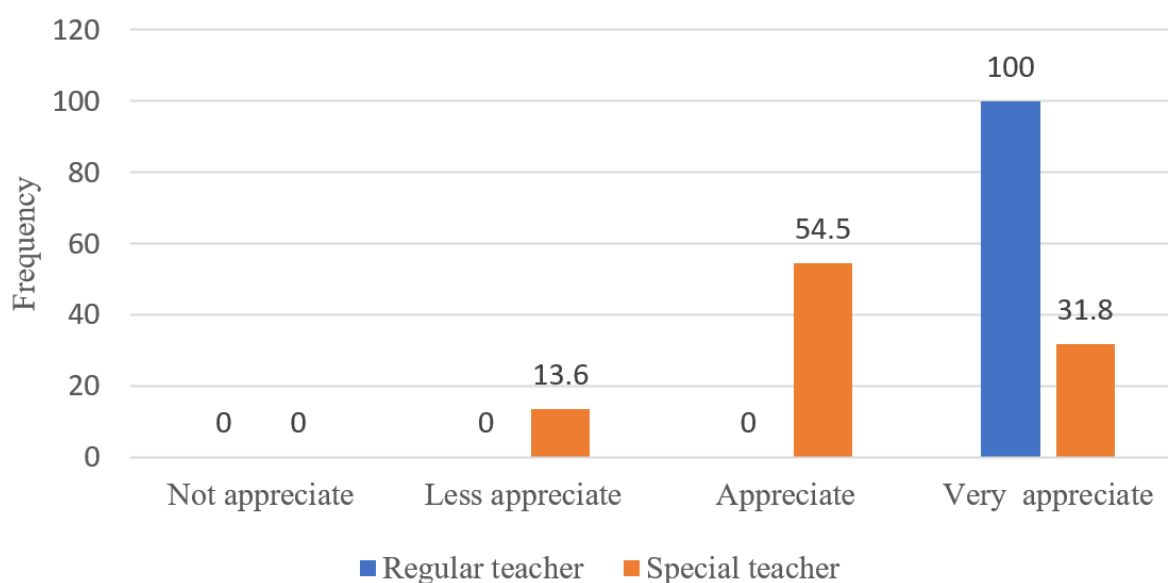


Figure 7. Appreciate feedback.

All regular teachers highly appreciated the feedback provided by the special teacher based on Figure 7. Similarly, 31.8% of special teachers appreciated feedback, 54.4% appreciated it and 13.6% slightly appreciated collaboration process. It implied that the feedback given by special teachers when working together was meaningful to regular colleagues. However, the reverse was the case with only a few special teachers being very appreciative.

The eighth question was on the willingness to adjust the teaching strategy based on feedback received from teachers. This was aimed to examine how much teachers were willing to change according to the feedback received.

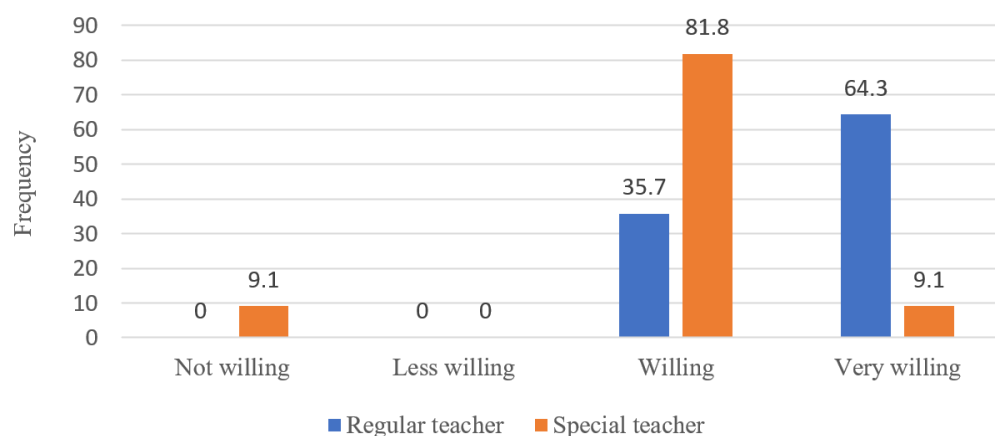


Figure 8. Willing to adjust teaching strategy.

According to Figure 8, 35.7% of regular teachers reported the willingness to adjust strategies based on feedback. A larger percentage stated the absolute willingness to adjust learning strategies based on feedback given by special teachers. However, only 9.1%, 81.1%, and another 9.1% of special teachers were very willing, willing, and unwilling to adjust learning strategies, respectively. This signified that regular and special teachers were willing to adjust learning strategies as feedback was received.

The second research question was how regular and special teachers collaborated in inclusive classrooms. Subsequently, two open and closed questions were asked to reveal how teachers collaborated in this setting.

The first question was how teachers defined collaboration using indicators developed by Olore (2017). It was determined by categorizing collaboration into seven themes, including for working towards a common objective, planning lessons and assessments together as well as maximizing student's achievements. Other themes were sharing information, ideas and expertise, differentiating instruction, allocating responsibilities based on varying perspectives. The seven themes used to describe collaboration.

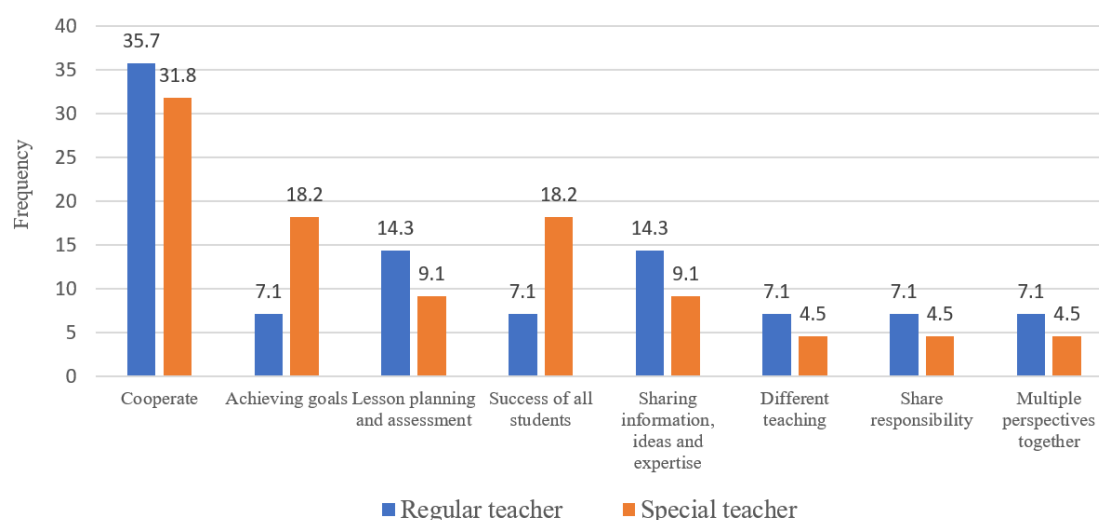


Figure 9. Definition of collaboration.

Figure 9 shows how teachers personally defined or viewed collaboration. Meanwhile, 35.7% of regular teachers, compared to 31.8% of their counterpart's defined collaboration as a form of cooperation. Regular teachers viewed collaboration as an effort in planning, learning and assessment, including the sharing of information and ideas. Similarly, 18.2% of special education teachers decided to collaborate for as the achievement of learning objectives and the success of all students. Therefore, regular teachers viewed collaboration as cooperation and information sharing. The counterpart stated that collaboration was perceived as an avenue for achieving learning objectives, including for students with special needs. The second aimed to ascertain the entire process and the method adopted by teachers during collaboration.

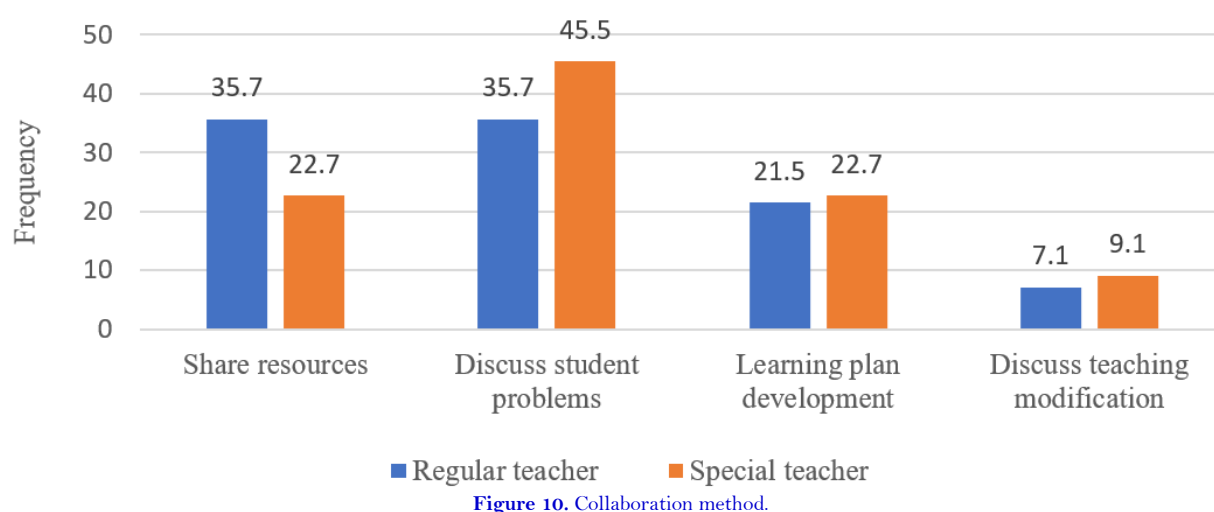


Figure 10. Collaboration method.

Based on Figure 10, 35.7% and 45.5% of regular and special teachers preferred to share learning resources and discuss student problems, respectively. Individuals who preferred to develop a learning plan showed balanced data between regular and special teachers. The methods adopted by special and regular teachers differed. Regular teachers preferred to share learning resources while special teachers enjoyed discussing student problems.

5. DISCUSSION

This section discussed the results obtained in relation to relevant theories with the order adjusted to suit the research question. According to both regular and special teacher perspectives on cooperation, the first question asked how much they regarded it. The question aimed to examine whether regular and special teachers had mutual respect. Several questions were asked as indicators to reveal mutual respect. The deduction from the first question posed was that special teacher's prioritized collaboration. Approximately half of the respondents stated was no cooperation between the two categories even when teaching the same students (Venianaki & Zervakis, 2015).

The various factors considered were prioritized. For example, resource priorities referred to finance allocation, staff time or expertise, institutional capacity and physical measures. Time priority could be considered relative urgency, total period allocated or when activities were performed. Designing the program collaboratively was more time intensive and produced a more coherent program with transparent design, structure and content for students and teachers (Zundans-Fraser & Bain, 2016). Certain claims were in progress, namely when given an opportunity as empowerment or a space to express views. In this case, some privileges were prioritized such as the right of an applicant to select another. Alternatively, there may be a priority that left certain individuals in a worse predicament such as having to wait for an individual with lower needs who is still in bed (Spicker, 2009). Regular teachers did not consider special teachers as being resourceful during collaboration regarding priorities based on resources. These teachers did not prioritize collaboration and believed special teachers were incapable of working

with many students. Special teachers are used to working with only a few children and do not understand that certain events function differently in a larger classroom (Olore, 2017).

In respect to special teachers, these individuals prefer to collaborate with colleagues with similar qualifications to receive specific advice and tangible assistance in educating students with disabilities (Bouillet, 2013). Moreover, teachers provide adequate information about the learning requirements of children with special needs. Collaboration with parents and administrative staff does not provide the relevant information needed. There is also a desire to collaborate with regular teachers though few worked together only 1 or 2 days a week. Regular and special teachers prefer to collaborate latest 2 days a week while some are willing to engage in the practice for 5 days because regular teachers benefit from collaboration leading to increased appreciation as a source of information. Mutual respect is an essential quality for working in teams and collaborating with others. This included respecting the professional character and the abilities of all team members (Zamanzadeh, Irajpour, Valizadeh, & Shohani, 2014).

Another important factor mentioned by respondents was respect. In this case, respecting and trusting the decisions and skills of team members required absolute understanding of the different professional perspectives (Zamanzadeh et al., 2014). Furthermore, professional behavior and activities should contain observable indications of respect. Gender and funding-related issues have impacted professional hierarchies in the health care system have led to territorial wars, mutual disrespect and distrust (Reiger & Lane, 2009). Appreciation from collaboration between regular teachers was depicted by the willingness to adjust learning strategies based on the feedback received. Collaboration plays a critical role in developing individual educational plans that unfold in practice (Ní Bhroin & King, 2020). Moreover, regular teachers provided feedback on learning strategies for children with special needs in the classroom.

The second question considered both teachers collaborating in inclusive classrooms. Three questions were asked and discussed; the first inferred that teacher-defined collaboration is cooperation between colleagues. In special education, professional collaboration is a powerful tool that helps serve students with disabilities (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006). This is a process in which entities share information, resources, and responsibilities to jointly plan, implement, and evaluate activities to achieve a common objective (Camarinha-Matos & Afsarmanesh, 2018). Therefore, collaborative practice is more successful when teachers have a common objective to achieve (Hornýák, 2020). The view of teachers becomes insignificant when collaboration is defined as cooperation without considering the content and objectives to be achieved. The number of teachers working together had a significant impact on students' improvement in skills associated with socio-scientific reasoning and creativity (Laius, Rannikmäe, Rannikmäe, & Rannikmäe, 2011).

This result impacted the need to reconstruct the knowledge of teachers regarding collaboration. Applied collaboration refers to a model of professional development training intended to be interactive and dynamic. In this case, regular and special teachers worked together to identify common objectives including using negotiation skills to fulfil the needs of students (Sharpe & Hawes, 2003). In the general framework of the training, teams were provided with collaborative strategies to improve communication as well as facilitate cooperative working relationships. Furthermore, various teaching strategies were learnt such as differentiated instruction and shared classroom management (Sharpe & Hawes, 2003).

Based on the second question, it was deduced that the manner of collaboration between teachers differed. Regular teachers shared resources and discussed student problems while special teachers focused on related issues. This collaboration is characterized by professional exchange and joint problem-solving (Pettersson & Ström, 2019) which is functional when resources are shared. According to Wolff (2005) a specific difficulty encountered during collaboration was the sharing of resources (Camarinha-Matos & Afsarmanesh, 2018). Each teacher who participated in collaboration had resources that could be shared to achieve a common objective.

Special teachers must be more proficient in content knowledge and curriculum development while understanding the respective roles in implementing the objectives of IEP. This includes accommodating students

with disabilities in regular education classrooms (Sharpe & Hawes, 2003). Teachers should share and discuss individual and modified learning as well as student problems. The educational staff and policymakers must participate in planning and managing related strategies and teacher schedules (Buskila & Chen-Levi, 2021) to ensure understanding and collaborative implementation in the classroom. Some dissimilarity was caused by educational or academic background. A special teacher must take courses at the Ministry of Special Education for a minimum of 4 years or possess a competent undergraduate qualification. Additionally, regular teachers should have educational backgrounds appropriate to their respective fields. For example, elementary school teachers must be Alumni of Elementary School Teacher Education (ESTE) equivalent to S1. Teachers should educate special and normal children while handling forms discretely based on the intervention level. All learning was exclusively designed through the Individual Teaching Program (ITP). Teachers attend to not more than 5 students with only two types of specialties in a class.

This research re-examined how often teachers collaborated to discuss learning modifications, exchange knowledge and skills and analyze student achievement. The results showed that the highest percentage appeared at the frequency level, implying teachers often collaborated on five important aspects. Although effective ideas and strategies abound, the real problem is the employment of regular and special teachers with opportunities to apply collaborative and instructional strategies.

A long-term commitment should be made to providing the necessary training and technical assistance. This required the active participation of regular and special teachers and support from school administrators (Sharpe & Hawes, 2003). There is no significant difference in the perception of teamwork between the categories. The efficiency of teamwork depended on how many special teachers possessed the necessary competencies and perception of the effects (Radić-Šestić, Radovanović, Milanović-Dobrota, Slavković, & Langović-Milicević, 2013). Collaboration beyond institutionalized meetings for syllabus and exams is required for the successful inclusion of objectives. Furthermore, there must be a schedule for information exchange, activities, and lesson planning for students in the same class (Venianaki & Zervakis, 2015). The provision of an effective, efficient, and research-based collaboration model between special and regular teachers is crucial.

6. CONCLUSION

Both categories of teachers respected each other with regular teachers not prioritizing collaboration but viewing it as important. Therefore, collaboration took place two days a week due to the numerous benefits. Special teachers had not adopted an absolute advantage of collaboration and were unappreciative of their regular counterparts. The reverse was the case for regular teachers due to the many benefits of collaboration. Teachers expressed the willingness to adapt learning strategies according to feedback.

Collaboration was defined as a form of cooperation but practiced differed. For example, regular teachers shared resources and discussed student problems while special teachers evaluated related issues. In general, teachers collaborated to discuss learning modifications, exchanged knowledge and skills as well as analyzed student achievement. This showed that the highest percentage appeared at the frequency level. Teachers often collaborated based on five important aspects with some frequently exhibiting this behavior.

The results showed the teachers had differing views of collaboration. These served as the basis for identifying solutions to minimize differences while preparing a follow-up plan for implementation.

Special teachers had to take advantage of collaborating with regular counterparts by sharing resources, planning lessons, or solving students' problems. In this case, the feedback received by both parties were thoroughly used. Balanced collaboration of regular and special teachers should be reconstructed by conducting applied collaboration training for professional development. This required strategies that led to improved communication, facilitating cooperative working relationships between the staff. Furthermore, the teams learned about various teaching strategies such as different instructions and shared classroom management.

An important finding of this study is that there are differences in the ways and views of collaboration between regular teachers and special education teachers based on their respective perspectives. These findings are the basis for identifying solutions to minimize differences, as well as prepare a follow-up plan for its implementation.

6.1. Limitations

Some limitations included perspective bias where regular and special teachers had different subjective views regarding the effectiveness and prioritization of collaboration which affected the results obtained. Although collaboration was identified as beneficial, the actual frequency limited to 2 days per week is not enough to achieve maximum output. The different ways of collaboration adopted by teachers could lead to inconsistencies in data collection and results.

6.2. Implications

The lack of collaboration demanded a policy that mandated the practice at least 2 days a week. This policy must be implemented to ensure both parties actively engage in the exchange of knowledge and developing teaching strategies. As reinforcement, it is necessary to implement a professional training program regularly focusing on applied collaboration including joint classroom management and various instructional strategies. To facilitate the collaboration, policymakers must establish a joint repository to enable the easy sharing of knowledge, inclusive learning tools, and media.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Universitas Negeri Makassar Makassar, Indonesia has granted approval for this study on 1 August 2023 (Ref. No. 3018/UN36.11/TU/2023).

Transparency: The authors declare that the manuscript is honest, truthful and transparent, that no important aspects of the study have been omitted and that all deviations from the planned study have been made clear. This study followed all rules of writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

REFERENCES

- Ajuwon, P. M. (2008). Inclusive education for students with disabilities in Nigeria: Benefits, challenges and policy implications. *International Journal of Special Education*, 23(3), 11-16.
- Bouillet, D. (2013). Some aspects of collaboration in inclusive education –teachers’ experiences. *Center for Educational Policy Studies Journal*, 3(2), 93-117.
- Brownell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children*, 72(2), 169-185. <https://doi.org/10.1177/001440290607200203>
- Buskila, Y., & Chen-Levi, T. (2021). Intense teaching schedule in Israeli teachers. *Athens Journal of Education*, 8(3), 329-348. <https://doi.org/10.30958/aje.8-3-5>
- Camarinha-Matos, L. M., & Afsarmanesh, H. (2018). Roots of collaboration: Nature-inspired solutions for collaborative networks. *IEEE Access*, 6, 30829-30843. <https://doi.org/10.1109/ACCESS.2018.2845119>
- Castañer, X., & Oliveira, N. (2020). Collaboration, coordination, and cooperation among organizations: Establishing the distinctive meanings of these terms through a systematic literature review. *Journal of Management*, 46(6), 965-1001.
- De Jong, L., Meirink, J., & Admiraal, W. (2019). School-based teacher collaboration: Different learning opportunities across various contexts. *Teaching and Teacher Education*, 86, 102925. <https://doi.org/10.1016/j.tate.2019.102925>
- Griffiths, A.-J., Alsip, J., Hart, S. R., Round, R. L., & Brady, J. (2021). Together we can do so much: A systematic review and conceptual framework of collaboration in schools. *Canadian Journal of School Psychology*, 36(1), 59-85.
- Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organization Science*, 9(2), 217-230.

- Hornyák, Á. (2020). Teacher collaboration in perspective. A guide to research. *Hungarian Educational Research Journal*, 10(1), 95-96. <https://doi.org/10.1556/063.2020.00008>
- Idol, L., Nevin, A., & Paolucci-Whitcomb, P. (2000). Learning process in the classroom. *Colaborative Consultation. Pro-Ed*.
- Johnsen, B. H., & Skjorten, M. D. (2001). *Education - special needs education: An introduction*. Oslo: Unipub.
- Khairuddin, K. F., Dally, K., & Foggett, J. (2016). Collaboration between general and special education teachers in Malaysia. *Journal of Research in Special Educational Needs*, 16, 909-913. <https://doi.org/10.1111/1471-3802.12230>
- Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia-Social and Behavioral Sciences*, 31, 486-490. <https://doi.org/10.1016/j.sbspro.2011.12.091>
- Laius, A., Rannikmäe, M., Rannikmäe, M., & Rannikmäe, M. (2011). Impact on student change in scientific creativity and socio-scientific reasoning skills from teacher collaboration and gains from professional in-service. *Journal of Baltic Science Education*, 10(2), 127-137.
- Miller, P. D., Maurice, & Burden, R. (2007). Teacher-teacher collaboration. *Electronic Journal For Inclusive Education*, 2(1), 5.
- Ministry of Education and Culture. (2017). *Inclusive schools and special school development support inclusive education ministry of education and culture*.
- Ní Bhroin, Ó., & King, F. (2020). Teacher education for inclusive education: A framework for developing collaboration for the inclusion of students with support plans. *European Journal of Teacher Education*, 43(1), 38-63.
- Olore, K. (2017). *The effectiveness of general and special education collaboration in middle schools Lesley university*. Retrieved from https://digitalcommons.lesley.edu/cgi/viewcontent.cgi?article=1130&context=education_dissertations
- Pettersson, G., & Ström, K. (2019). Professional collaboration between class teachers and special educators in Swedish rural schools. *British Journal of Special Education*, 46(2), 180-200. <https://doi.org/10.1111/1467-8578.12266>
- Radiač-Sestic, M., Radovanovic, V., Milanovic-Dobrota, B., Slavkovic, S., & Langoviae-Milicvic, A. (2013). General and special education teachers' relations within teamwork in inclusive education: Socio-demographic characteristics. *South African Journal of Education*, 33(3), 1-15.
- Reiger, K. M., & Lane, K. L. (2009). Working together: Collaboration between midwives and doctors in public hospitals. *Australian Health Review*, 33(2), 315-324. <https://doi.org/10.1071/AH090315>
- Rombot, O. (2017). *Inclusive education Binus university*. Retrieved from <https://pgsd.binus.ac.id/2017/04/10/pendidikan-inklusi/>
- Sharpe, M. N., & Hawes, M. E. (2003). *Collaboration between general and special education: Making it work*. Issue brief. National Center on Secondary Education and Transition, Institute on Community Integration, University of Minnesota, 6 Pattee Hall, 150 Pillsbury Dr.
- Sheehy, K., Kaye, H., & Rofiaha, K. (2020). Indonesian educators' knowledge and beliefs about teaching children with autism. *Athens Journal of Education*, 7(1), 77-98.
- Spicker, P. (2009). What is a priority? *Journal of Health Services Research & Policy*, 14(2), 112-116. <https://doi.org/10.1258/jhsrp.2008.008056>
- Tarnoto, N. (2016). Problems faced by schools providing inclusive education at the elementary school level. *Humanitas*, 13(1), 50-61.
- Thompkins, R., & Deloney, P. (1995). *Inclusion: The pros and cons*. Retrieved from <https://api.semanticscholar.org/CorpusID:155692448>
- Van Garderen, D., Stormont, M., & Goel, N. (2012). Collaboration between general and special educators and student outcomes: A need for more research. *Psychology in the Schools*, 49(5), 483-497.
- Venianaki, A., & Zervakis, S. (2015). Collaboration practices between special education teachers and mainstream teachers in secondary education. *Journal of Education & Social Policy*, 2(6), 42-46.
- Wahyudi, W., & Kristiawati, R. (2016). *Overview of inclusive schools in indonesia overview of junior high schools ministry of education and culture center for education and culture data and statistics*.

- Weiss, E. S., Anderson, R. M., & Lasker, R. D. (2002). Making the most of collaboration: Exploring the relationship between partnership synergy and partnership functioning. *Health Education & Behavior*, 29(6), 683-698. <https://doi.org/10.1177/109019802237938>
- Wolff, W. J. (2005). The exploitation of living resources in the Dutch Wadden Sea: A historical overview. *Helgoland Marine Research*, 59, 31-38. <https://doi.org/10.1007/s10152-004-0204-4>
- Yell, M. L., Shriner, J. G., & Katsiyannis, A. (2006). Individuals with disabilities education improvement act of 2004 and IDEA regulations of 2006: Implications for educators, administrators, and teacher trainers. *Focus on Exceptional Children*, 39(1), 1-24. <https://doi.org/10.17161/foec.v39i1.6824>
- Zamanzadeh, V., Irajpour, A., Valizadeh, L., & Shohani, M. (2014). The meaning of collaboration, from the perspective of Iranian nurses: A qualitative study. *The Scientific World Journal*, 2014(1), 785942. <https://doi.org/10.1155/2014/785942>
- Zundans-Fraser, L., & Bain, A. (2016). The role of collaboration in a comprehensive programme design process in inclusive education. *International Journal of Inclusive Education*, 20(2), 136-148. <https://doi.org/10.1080/13603116.2015.1075610>

Views and opinions expressed in this article are the views and opinions of the author(s), Humanities and Social Sciences Letters shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.