

Inclusive Education in Indonesia: Teachers' Perceptions

SOWIYAH¹, RYZAL PERDANA¹

¹Postgraduate Program in Educational Management

University of Lampung

Jl. Prof. Dr. Ir. Soemantri Brojonegoro 1, Bandar Lampung, Lampung 35141
INDONESIA

Abstract: - In recent years, extensive research has been conducted on the management of inclusive education. Globally, ensuring equal educational opportunity for all continues to be a significant challenge, and inclusive education continues to be a complex issue. In regard to inclusive education, teachers' perception, to our knowledge, is surprisingly understudied in the Indonesian context. Therefore, this paper aimed to investigate teachers' perceptions of inclusive education in Indonesia. This study, which enrolled a total of 157 teachers as research subjects, adopted a quantitative approach and collected data via a questionnaire. The collected data were descriptively analysed through descriptive statistics, which was performed using IBM SPSS Statistics Version 25 for Windows, summarising responses of participants to the questionnaire items. The findings indicate that this current study has finally unravelled teachers' perceptions of inclusive education in Indonesia. They have a positive perception of inclusive education regardless of their demographic backgrounds. The findings also imply that it is crucial to continue and expand teacher education as inclusive education is still in its infancy. Professional development for teachers to improve their knowledge of inclusive education, benefiting all students, is required. Suggestions with recommendations for future research are also discussed.

Key-Words: - inclusive education, teachers' perceptions, education, management, qualitative approach, educational development

Received: May 10, 2021. Revised: November 7, 2021. Accepted: December 2, 2021. Published: January 3, 2022.

1 Introduction

In recent years, extensive research has been conducted on the management of inclusive education. This type of education for children with disabilities is frequently overlooked in policymaking; their educational opportunities and engagement in political, economic, and social life are limited [1], whereas inclusion and equity are the basis for high-quality education as emphasised in Sustainable Development Goal 4 on Education and the Education 2030 Framework for Action [2]. As a result, ensuring that everyone has an equal opportunity for educational advancement continues to be a significant challenge on a global scale. Thus, inclusive education continues to be a complex issue [3].

Inclusion has become an educational practice across many countries [3]; while pressures from within schools, teaching associations, and communities typically contribute to each school's unique path, educational systems are under tremendous pressure to adopt an inclusive approach [4]. It is reported that inclusive education has influenced policy, research, and practice, leading to global debates on inclusive education with varied

interpretations, definitions, and reactions [5]. Politicians now emphasise their commitment to social justice and inclusion [6]. In Indonesia, inclusive education is regulated in Act No. 20 of 2003 about national education and Act No. 8 of 2014 about people with disabilities. Children with disabilities can attend conventional or special schools, according to the regulations. It means that under the laws, parents of children with disabilities are granted the authority to choose the best school for their children [7].

In addition, it is reported that the existing findings in the literature show that the majority of research with a closer look at inclusive education focus on specific groups of students and that just a tiny percentage use collaborative, transformative approaches [8]. Inclusive changes are feasible, and that there may be particular methods in which these changes might be fostered. Encouragement of innovations may be a crucial complement to the radical critique of current educational policies that have been ongoing [9]. Incorporating teacher voices into the policymaking process can considerably aid adolescents in achieving academic

success and better adapting to modern community living [10]. However, only about a third of educators in general education believed they were prepared to teach inclusively (Scruggs and Mastropieri, 1996 as cited in [11]).

Teachers' attitudes toward inclusive education in Taiwanese elementary schools were reported to be in the middle of the spectrum, neither strongly negative nor strongly positive. Two factors related to their current teaching situation (at least one disabled student in their classrooms and school size) were discovered to have a significant impact on their perceptions, with the former being positive and the latter being negative [11]. According to other studies, teachers' perceptions of inclusion vary, with some seeing it positively and others negatively [12], [13]. In Malaysia, teachers' attitudes toward the concept of inclusion remain largely positive [14].

Given the importance of perception, which is often referred to by a different name in the literature, such as attitude and perspective [15], in light of the current state of education, the positive perceptions of general education educators were attributed to acquiring consultation assistance from special educators (Olson, Chalmers, and Hoover, 1997 as cited in [11]). Class size and the number of students with disabilities in the classroom also influenced teachers' views on inclusive education [11], [16]. Thus, in regard to inclusive education, the topic under investigation, to our knowledge, is surprisingly understudied in the Indonesian context. Therefore, the aim of this paper was to investigate teachers' perceptions of inclusive education in Indonesia.

2 Literature Review

2.1 What is Inclusive Education?

The primary principle of inclusive education is that all children should learn together and aim to eliminate "all impediments to school enrolment and achievement" [17], emphasising the importance of recognising and respecting differences in ability, culture, gender, language, social status, and ethnic origin [18]. The literature emphasises the concept of 'inclusive education,' which goes beyond educational policy to ensure that students have access to an education that is appropriate for their needs and abilities [19]–[21].

Inclusive pedagogy is a transformative approach to personal characteristics, emphasising that inclusive education seems to have the ability to reduce social inequality and make a contribution to

a democratic society [22]. As a result, inclusive education is a platform for democratic development since it protects the concept of diversity and individual distinctions as natural characteristics of human variation [22], [23]. In an ideal world, there should be no barriers to learning or citizenship for persons who are labelled as having "disabilities." People with impairments, on the other hand, do have boundaries, which vary depending on where they live [21].

2.2 Teachers' Perceptions of Inclusive Education

Perception, more particularly teachers' perception, plays an important role in inclusive education. [11] who conducted a survey among a total of 484 teachers in elementary schools in Taiwan found that Teachers' attitudes toward inclusive education were ambiguous, ranging from strongly negative to strongly positive. Two variables related to the teachers' current teaching situation were found to have a significant effect on their perceptions (with at least one student with disabilities in their classrooms and size of the school) with the former being favourable and the latter being negative.

[12] who carried out case studies among 12 parents and 12 teachers in two schools in Zimbabwe stated that for various reasons, respondents' perspectives of inclusive education are divided into three primary categories, including favourable, mixed, and unfavourable perceptions. Other studies report that teachers' perceptions of inclusion vary, with some of them perceiving positively and others negatively [12], [13]. In Malaysia, it is reported that teachers' perceptions toward the notion of inclusion remain mostly positive [14].

3 Methods

3.1 Participants and Setting

A total of 157 teachers from primary and secondary schools in Lampung were recruited as research participants. Their demographic information was categorised into several characteristics, including sex, teaching at what education level, length of teaching experience, ever taught in special education, having students with disabilities, special education training, having students with disabilities currently, classroom size, school size, and special education classroom following what was stated by [11]. Table 1 below illustrates the participants' characteristics more clearly.

Table 1. Participants' demographic information (N = 157)

Characteristics	<i>n</i>	%
Sex		
Male	38	24.2
Female	119	75.8
Teaching at		
Junior high school	66	42
Senior high school	91	58
Length of teaching experience (years)		
<10	22	14
10–19	76	48.4
≥20	59	37.6
Having teaching experience in special education		
Yes	4	2.5
No	153	97.5
Having students with disabilities (in the past five years)		
Yes	24	15.3
No	133	84.7
Having attended a special education workshop/training		
Yes	4	2.5
No	153	97.5
Having students with disabilities in the present		
Yes	5	3.2
No	152	96.8
Classroom size (number of students in a classroom)		
26–30 (small)	34	21.7
31–35 (medium)	118	75.2
>35 (large)	5	3.2
School size (number of classrooms)		
≤25 (non-large)	115	73.2
>25 (large)	42	26.8
Having a classroom for special education at your current school		
Yes	0	0
No	157	100

Table 1 above illustrates the participants' demographic information. It can be seen that most of the participants were female with a total of 75.8%, and the rest were male, with a total of 24.2%. More than half of them taught at senior high schools, with the majority of them having a teaching experience of 10 – 19 years. Nearly all of them had never taught in special education (97.5%), with a total of 15.3% of them having students with disabilities in the past five years. Only a tiny number of them had attended special education training (2.5%) and had students with disabilities currently (3.2%). Most of them had a medium-size classroom and a non-large school size, 75.2% and 73.2% respectively, with no special education classroom at their current schools.

3.2 Instruments

Investigating participants' perceptions of inclusive education, this study adopted a questionnaire developed by [11] consisting of 20 items. The questionnaire was developed based on the constructs existing in the literature, including [11]“feelings about inclusion, reactions to inclusive programs, willingness to engage in inclusion, the effect of inclusion on teaching and students, collaboration among teachers, and implementation concerns, e.g., need for supports and resources” [11, p. 76]. Thus, this measure was shown to be reliable and valid because it was used to investigate perceptions of inclusive education in previous studies (see [11]. However, before distribution, we also conducted validity and reliability testing to ensure that the items were acceptable in length and intelligible [24]. Each item in the questionnaire was suitably structured to fulfil the research goals [25].

Finally, participants completed a four-point Likert type scale consisting of twenty closed-ended items ranging from 1 to 4 (strongly disagree – strongly agree). In June 2021, the survey was distributed electronically using a free survey tool, Google Form.

3.3 Data Analysis

The collected data were quantitatively analysed using descriptive statistics in IBM SPSS Statistics Version 25 for Windows, summarising responses of participants to the questionnaire items (total mean score $M > 3.5$: High, $M \geq 3 - 3.5$: Medium,

$M < 3$: Low). The findings were then presented in a descriptive manner and interpreted to be both understandable and practical [26].

4 Results

With regard to teachers' perceptions of inclusive education in Indonesia, their questionnaire responses were analysed using descriptive statistics (mean and standard deviation) as shown in Table 2 as follows.

Table 2. Means and standard deviation of participants' perceptions of inclusive education (N = 157)

No.	Item description	N	Mean	Std. Deviation
1	Inclusion is a good idea	157	3.29	.811
2	The advantages of implementing inclusive education outnumber the disadvantages	157	3.10	.769
3	Participating in inclusive education is a beneficial experience for all pupils	157	3.22	.713
4	Inclusive education gives students with and without disabilities equal access to learning opportunities	157	3.29	.698
5	Inclusion provides better role models for pupils with disabilities	157	3.31	.695
6	In my class, inclusion would be beneficial	157	2.84	.738
7	As a result of the inclusion, I love teaching more	157	2.73	.756
8	I have always had the time to effectively implement inclusion	157	2.68	.698
9	I am given the resources I need to fully execute inclusion	157	2.60	.800
10	I have received the necessary training to successfully implement inclusion.	157	2.80	.838
11*	At the primary or secondary educational institutions, inclusive education is not acceptable	157	2.13	.825
12*	Inclusion is challenging to accomplish in the existing academic curriculum	157	2.78	.713
13	In regular classrooms, special education and regular education teachers should cooperate with each other to help children with disabilities	157	3.22	.745
14*	As a result of my inclusion, I perform in a lower-level position	157	2.76	.571
15	Working on a collaborative team has benefited me both professionally and personally	157	3.032	.6447
16	My school is doing a great job with the inclusion	157	2.52	.573
17	In my school, I have been adequately engaged in the inclusion process	157	2.516	.6161
18	After this year, I would like to educate in an inclusive class	157	2.54	.675

19	I would like to participate in in-service training or workshop to increase my knowledge and expertise in teaching children with disabilities	157	2.87	.777
20*	I find it hard to adapt a teaching style to accommodate the requirements of pupils with disabilities	157	2.60	.741

*Scores of Items 11, 12, 14, and 20 are reversed

Table 2 above illustrates that seven of the 20 items in the questionnaire fall into the medium means category ($M \geq 3 - 3.5$). In contrast, the other items fall into the low means category, implying that they become the least prevalent perception, except Items 11, 12, 14, and 20, of which the

meanings of these four items are reversed. In order to ascertain participants' perceptions of inclusive education in Indonesia, their questionnaire responses were also analysed using descriptive statistics to determine the percentage of responses for each item, as shown in Table 3 as follows.

Table 3. The participants' perceptions of inclusive education (N = 157)

No.	Statement	Response			
		SD	D	A	SA
1	Inclusion is a good idea	7 (4.5%)	14 (8.9%)	62 (39.5%)	74 (47.1%)
2	The advantages of implementing inclusive education outnumber the disadvantages	4 (2.5%)	27 (17.2%)	75 (47.8%)	51 (32.5%)
3	Participating in inclusive education is a beneficial experience for all pupils	2 (1.3%)	20 (12.7%)	76 (48.4%)	59 (37.6%)
4	Inclusive education gives students with and without disabilities equal access to learning opportunities	2 (1.3%)	16 (10.2%)	74 (47.1%)	65 (41.4%)
5	Inclusion provides better role models for pupils with disabilities	2 (1.3%)	15 (9.6%)	73 (46.5%)	67 (42.7%)
6	In my class, inclusion would be beneficial	7 (4.5%)	36 (22.9%)	89 (56.7%)	25 (15.9%)
7	As a result of inclusion, I love teaching more	9 (5.7%)	45 (28.7%)	83 (52.9%)	20 (12.7%)
8	I have always had the time to effectively implement inclusion	7 (4.5%)	50 (31.8%)	86 (54.8%)	14 (8.9%)
9	I am given the resources I need to fully execute inclusion	12 (7.6%)	58 (36.9%)	68 (43.3%)	19 (12.1%)
10	I have received the necessary training to successfully implement inclusion.	12 (7.6%)	38 (24.2%)	77 (49%)	30 (19.1%)
11*	At the primary or secondary educational institutions, inclusive education is not acceptable	37 (23.6%)	69 (43.9%)	44 (28%)	7 (4.5%)
12*	Inclusion is challenging to accomplish in the existing academic curriculum	4 (2.5%)	49 (31.2%)	82 (52.5%)	22 (14%)
13	In regular classrooms, special education and regular education teachers should cooperate with each other to help children with disabilities	2 (1.3%)	24 (15.3%)	69 (43.9%)	62 (39.5%)
14*	As a result of my inclusion, I perform in a lower-level position	2 (1.3%)	43 (27.4%)	103 (65.6%)	9 (5.7%)
15	Working on a collaborative team has benefited me both professionally and personally	0 (0%)	30 (19.1%)	92 (58.6%)	35 (22.3%)

16	My school is doing a great job with inclusion	2 (1.3%)	76 (48.4%)	75 (47.8%)	4 (2.5%)
17	In my school, I have been adequately engaged in the inclusion process	4 (2.5%)	74 (47.1%)	73 (46.5%)	6 (3.8%)
18	After this year, I would like to educate in an inclusive class	11 (7%)	56 (35.7%)	85 (54.1%)	5 (3.2%)
19	I would like to participate in in-service training or workshop to increase my knowledge and expertise in teaching children with disabilities	6 (3.8%)	41 (26.1%)	78 (49.7%)	32 (20.4%)
20*	I find it hard to adapt a teaching style to accommodate the requirements of pupils with disabilities	10 (6.4%)	57 (36.3%)	76 (48.4%)	14 (8.9%)

SD: Strongly Disagree, D: Disagree, A: Agree, SA: Strongly Agree

**Scores of Items 11, 12, 14, and 20 are reversed*

Table 3 gives information about the participants' perceptions of inclusive education. It is apparent that most of them positively respond to the statements measuring their perceptions of inclusive education. They agree and strongly agree with the idea of inclusion (39.5% and 47.1%, respectively) since they believe that the strengths of the implementation of inclusive education outweigh the weaknesses, 47.8% and 32.5%, respectively.

They also believe that students can gain valuable experience from the inclusive education experience, with a total of 48.4% agreeing and 37.6% strongly agreeing since it provides educational opportunities to all students, whether they have or do not have disabilities, as perceived by the majority of the participants. They agree and strongly agree that students with disabilities can gain positive role models from the inclusion, 46.5% and 42.7%, respectively. Most of them also agree and strongly agree that inclusion can work well in their classes (56.7% and 15.9% respectively), with their agreement and strong agreement with more teaching loads due to inclusion (53% and 12.1% respectively) and time management (54.8% and 8.9%, respectively).

An almost similar pattern also applies in other statements. They agree and strongly agree that they have received necessary resources (43.3% and 12.1%, respectively) and training for the successful implementation of inclusion (49% and 19.1%, respectively). Therefore, they disagree (43.9%) and strongly disagree (23.6%) that inclusion is inappropriate, although they think it is hard to implement inclusion due to the current curriculum. They agree, and they agree strongly, that all teachers should be willing to collaborate in the

general education classroom to educate students with disabilities, 43.9% and 39.5%, respectively. They can derive both personal and professional benefits from working together. More than 70% of them believe that they are willing to perform a subordinate role in inclusive education.

More than half of them also have reverse responses when responding to the statements that their school implement inclusion well and They have been sufficiently involved in their school's inclusion process. The majority of them agree that they would like to teach an inclusion class and are very enthusiastic about it and attend in-service workshops on managing inclusion. At the current time, they agree and strongly agree they find it difficult to implement appropriate teaching styles to fulfil the needs of students with disabilities, 48.4% and 8.9%, respectively.

5 Discussion

The findings in the current study indicate that the participants under investigation positively perceive that inclusion is a good idea. The advantages of implementing inclusive education outnumber the disadvantages. Students with and without disabilities benefit from inclusive education because it provides equal access to educational opportunities. Inclusion provides more positive role models for students with disabilities. They also believe that special education and general education teachers should work together to help disabled children in regular classrooms. Working as a collaborative team can benefit them professionally and personally.

Additionally, as evidenced by Items 11, 12, 14, and 20, participants disagree with the statement that

inclusive education is incompatible with primary or secondary educational institutions. They refute the assertion that inclusion is difficult to achieve within the existing academic curriculum. In other words, they do not agree that their inclusion requires them to perform at a lower level. Thus, it is not difficult for them to adapt a teaching style to meet the needs of students with disabilities. The findings are in line with previous findings on teachers' perspectives in the Bhutanese context [27], in Zimbabwe [11], in Malaysia [28], and other settings (see, among others, [29]–[32]).

Thus, the participants under investigation have a positive perception of inclusive education [14], [33]. As it is reported in the literature that one of the most important factors influencing the success of inclusive education is positive perception [11], [34], [35] since the positive perception has a positive impact on classroom practices [36], [37]. The other findings of this study are also in line with other previous findings. All students can derive benefits of inclusive education [11], [35], with this in mind implying support for inclusive education [11].

Despite the fact that the majority of those polled support inclusive education initiatives in principle, they imply a number of obstacles that must be overcome [21], [38]–[40]. The supporting resources, e.g. staff members, training, and teachers' collaboration (see, among others, [11], [41]–[43], really are essential to inclusive education and the participants in this study pay careful attention to them, believing that they play a significant role for supporting inclusive education. In addition, training for teachers also plays an important role in inclusive education, as has been found by [40], [44].

Although the correlation of participants' demographic backgrounds and their perceptions of inclusive education variables have not been statistically tested, it is apparent that their demographic information is not related to their perceptions of inclusive education [11]. In other words, the length of teaching experience, the experience of teaching in special education, special education training, and the availability of special education classrooms in their schools do not likely seem to impact the participants' perceptions of inclusive education negatively. The previous studies that have statistically proved this report that the length of teaching experience, the experience of teaching in special education, and special education training have a significant correlation with their research participants' perceptions of inclusive education (see, among others, [35], [41]–[43]).

Therefore, in line with what has been found by [16], the findings in this current study imply and suggest that the implementation of inclusive education is still in its early stages and is problematic, emphasising the importance of continuing and expanding teacher education. Teachers can enhance their competence and knowledge of inclusive education through professional development, which benefits all students in the classroom.

6 Conclusion

Based on the findings and discussion above, this current study has finally unravelled teachers' perceptions of inclusive education in Indonesia. They have a positive perception of inclusive education regardless of their demographic backgrounds. The findings also imply that it is crucial to continue and expand teacher education as inclusive education is still in its infancy. Teachers' professional development can help them gain a better understanding of inclusive education strategies, which will benefit all students.

Therefore, the findings of this study have several implications. We believe that we all agree that there is still much work to attain the objective of equity and suitable education for all [16]. Reform efforts should be bolstered in order to support a more equitable educational system, including improved training and support for inclusive teachers and schools [39], [45], although barriers continue to exist [21], [46], [47]. Future public policies should look into how schools are structured and organised when providing education to students with disabilities [21]. Teachers should be provided with adequate resources, e.g., professional training in how to effectively educate students with disabilities, plan a special instructional design, to prepare them for inclusive education [37], [48].

However, this study is also with its limitations. Due to its limited number of participants participating in the current study, we have cautiously assumed the phenomenon we were looking into. We have at least provided insight into a relatively complete picture of inclusive education in the Indonesian context. Therefore, future studies should utilise more instruments for data collection with more sophisticated data analyses, using either quantitative, qualitative, or mixed-methods approach and involving more stakeholders as key participants, e.g. parents, teachers, students, and governments. The current study and other previous

studies have focused on teachers' perceptions of inclusive education (see, among others, [11], [13], [14], [33], [37], [48]–[51], future research should be focused on classroom practices to get more valid empirical evidence. In so doing, it is believed we would be able to gain more valid and reliable findings and conclusions.

Conflict of Interest:

The authors declare that there is no conflict of interest.

References:

- [1] UNICEF, "Inclusive education: Every child has the right to quality education and learning," *Education*, 2021. <https://www.unicef.org/education/inclusive-education> (accessed Jun. 03, 2021).
- [2] UNESCO, "Inclusion in education," 2021. <https://en.unesco.org/themes/inclusion-in-education> (accessed Jun. 03, 2021).
- [3] P. Kantavong, "Understanding inclusive education practices in schools under local government jurisdiction: a study of Khon Kaen Municipality in Thailand," *Int. J. Incl. Educ.*, vol. 22, no. 7, pp. 767–786, 2018, doi: 10.1080/13603116.2017.1412509.
- [4] C. Forlin, Ed., "Future directions for inclusive teacher education: An international perspective," in *Diversity and Its Challengers*, 1st ed., Abingdon: Routledge, 2012, pp. 83–92.
- [5] H. Daniels and P. Gamer, "Inclusive education," *Incl. Educ.*, pp. 1–268, 2013, doi: 10.4324/9780203062449.
- [6] J. Evans and I. Lunt, "Inclusive education: Are there limits?," *Eur. J. Spec. Needs Educ.*, vol. 17, no. 1, pp. 1–14, 2002, doi: 10.1080/08856250110098980.
- [7] A. R. Junaidi, "Inclusive Education in East Java: The Case of Inclusive Education Policy and Practice in East Java, Indonesia," in *Advances in Social Science Education and Humanities Research*, 2019, vol. 382, no. 5th International Conference on Education and Technology, pp. 544–549, doi: 10.2991/icet-19.2019.137.
- [8] K. Messiou, "Research in the field of inclusive education: time for a rethink?," *Int. J. Incl. Educ.*, vol. 21, no. 2, pp. 146–159, 2017, doi: 10.1080/13603116.2016.1223184.
- [9] M. Ainscow, T. Booth, and A. Dyson, "Inclusion and the standards agenda: negotiating policy pressures in England," *Int. J. Incl. Educ.*, vol. 10, no. 4–5, pp. 295–308, 2006, doi: 10.1080/13603110500430633.
- [10] C. Mueller, "Creating a joint partnership: including Qallunaat teacher voices within Nunavik education policy," *Int. J. Incl. Educ.*, vol. 10, no. 4–5, pp. 429–447, 2006, doi: 10.1080/13603110600578281.
- [11] W. Y. Hsieh, C. M. Hsieh, M. Ostrosky, and J. McCollum, "Taiwanese first-grade teachers' perceptions of inclusive education," *Int. J. Incl. Educ.*, vol. 16, no. 1, pp. 71–88, 2012, doi: 10.1080/13603111003592283.
- [12] J. Magumise and M. M. Sefotho, "Parent and teacher perceptions of inclusive education in Zimbabwe," *Int. J. Incl. Educ.*, vol. 24, no. 5, pp. 544–560, 2020, doi: 10.1080/13603116.2018.1468497.
- [13] D. Galović, B. Brojčin, and N. Glumbić, "The attitudes of teachers towards inclusive education in Vojvodina," *Int. J. Incl. Educ.*, vol. 18, no. 12, pp. 1262–1282, 2014, doi: 10.1080/13603116.2014.886307.
- [14] L. Bailey, A. Nomanbhoy, and T. Tubpun, "Inclusive education: Teacher perspectives from Malaysia," *Int. J. Incl. Educ.*, vol. 19, no. 5, pp. 547–559, 2015, doi: 10.1080/13603116.2014.957739.
- [15] M. F. Pajares, "Teachers' Beliefs and Educational Research: Cleaning Up a Messy Construct," *Rev. Educ. Res.*, vol. 62, no. 3, pp. 307–332, 1992, doi: 10.3102/00346543062003307.
- [16] F. Kurniawati, "Exploring teachers' inclusive education strategies in rural Indonesian primary schools," *Educ. Res.*, vol. 63, no. 2, pp. 198–211, 2021, doi: 10.1080/00131881.2021.1915698.
- [17] UNESCO, *A guide for ensuring inclusion and equity in education*. Paris: United Nations Educational, Scientific and Cultural Organization, 2017.
- [18] A. B. Subba *et al.*, "Supporting students with disability in schools in Bhutan: perspectives from school principals," *Int. J. Incl. Educ.*, vol. 23, no. 1, pp. 42–64, 2019, doi: 10.1080/13603116.2018.1514744.
- [19] W. Sailor, "Equity as a basis for inclusive educational systems change," *Australas. J. Spec. Educ.*, vol. 41, no. 1, pp. 1–17, 2017, doi: 10.1017/jse.2016.12.
- [20] M. Ainscow, "Developing inclusive

- education systems: What are the levers for change?," *J. Educ. Chang.*, vol. 6, no. 2, pp. 109–124, 2005, doi: 10.1007/s10833-005-1298-4.
- [21] I. Stepaniuk, "Inclusive education in Eastern European countries: A current state and future directions," *Int. J. Incl. Educ.*, vol. 23, no. 3, pp. 328–352, 2019, doi: 10.1080/13603116.2018.1430180.
- [22] L. Florian, "Inclusive pedagogy: A transformative approach to individual differences but can it help reduce educational inequalities?," *Scott. Edu. Rev.*, vol. 47, pp. 5–14, 2015.
- [23] F. R. Waitoller and E. B. Kozleski, "Working in boundary practices: Identity development and learning in partnerships for inclusive education," *Teach. Teach. Educ.*, vol. 31, pp. 35–45, 2013, doi: <https://doi.org/10.1016/j.tate.2012.11.006>.
- [24] E. Schleef, "Written surveys and questionnaires in sociolinguistics," in *Research methods in sociolinguistics: A practical guide*, First., John Wiley & Sons, Inc., 2014, pp. 42–57.
- [25] P. M. McQuirk and P. O'Neill, "Using questionnaires in qualitative human geography," in *Qualitative Research Methods in Human Geography*, I. Hay, Ed. Don Mills, Canada: Oxford University Press, 2016, pp. 246–273.
- [26] R. Ho, *Handbook of univariate and multivariate data analysis with IBM SPSS*, 2nd ed. Boca Raton: CRC Press, 2014.
- [27] R. Dorji, J. Bailey, D. Paterson, L. Graham, and J. Miller, "Bhutanese teachers' attitudes towards inclusive education," *Int. J. Incl. Educ.*, vol. 25, no. 5, pp. 545–564, 2021, doi: 10.1080/13603116.2018.1563645.
- [28] M. M. Ali, R. Mustapha, and Z. M. Jelas, "An empirical study on teachers' perceptions towards inclusive education in Malaysia," *Int. J. Spec. Educ.*, vol. 21, no. 3, pp. 36–44, 2006.
- [29] D. Donohue and J. Bornman, "The challenges of realising inclusive education in South Africa," *Learn. Teach. Around World Comp. Int. Stud. Prim. Educ.*, vol. 34, no. 2, pp. 120–126, 2018, doi: 10.4324/9780429491498-15.
- [30] I. Halinen and R. Järvinen, "Towards inclusive education: The case of Finland," *Prospects*, vol. 38, no. 1, pp. 77–97, 2008, doi: 10.1007/s11125-008-9061-2.
- [31] K. Göransson, C. Nilholm, and K. Karlsson, "Inclusive education in Sweden? A critical analysis," *Int. J. Incl. Educ.*, vol. 15, no. 5, pp. 541–555, 2011, doi: 10.1080/13603110903165141.
- [32] E. Chiner and M. C. Cardona, "Inclusive education in Spain: How do skills, resources, and supports affect regular education teachers perceptions of inclusion?," *Int. J. Incl. Educ.*, vol. 17, no. 5, pp. 526–541, 2013, doi: 10.1080/13603116.2012.689864.
- [33] P. Subban and D. Mahlo, "'My attitude, my responsibility' Investigating the attitudes and intentions of pre-service teachers toward inclusive education between teacher preparation cohorts in Melbourne and Pretoria," *Int. J. Incl. Educ.*, vol. 21, no. 4, pp. 441–461, 2017, doi: 10.1080/13603116.2016.1197322.
- [34] B. J. D'Alonzo, G. Giordano, and D. M. Vanleeuwen, "Perceptions by teachers about the benefits and liabilities of inclusion," *Prev. Sch. Fail. Altern. Educ. Child. Youth*, vol. 42, no. 1, pp. 4–11, 1998, doi: 10.1080/10459889809603162.
- [35] R. A. Villa, J. S. Thousand, H. Meyers, and A. Nevin, "Teacher and administrator perceptions of heterogeneous education," *Except. Child.*, vol. 63, no. 1, pp. 29–45, 1996, doi: 10.1177/001440299606300103.
- [36] M. T. Brownell and F. Pajares, "Teacher efficacy and perceived success in mainstreaming students with learning and behavior problems," *Teach. Educ. Spec. Educ.*, vol. 22, no. 3, pp. 154–164, 1999, doi: 10.1177/088840649902200303.
- [37] I. Vanderpuye, G. K. Obosu, and M. Nishimuko, "Sustainability of inclusive education in Ghana: teachers' attitude, perception of resources needed and perception of possible impact on pupils," *Int. J. Incl. Educ.*, vol. 24, no. 14, pp. 1527–1539, 2020, doi: 10.1080/13603116.2018.1544299.
- [38] O. Aktan, "Teachers' Opinions towards Inclusive Education Interventions in Turkey," *Anatol. J. Educ.*, vol. 6, no. 1, pp. 29–50, 2021, doi: 10.29333/aje.2021.613a.
- [39] T. Yan, M. Deng, and Y. Ma, "Chinese regular education teachers' perceptions of the holistic development of students with special educational needs in inclusive schools," *Int. J. Incl. Educ.*, vol. 25, no. 6, pp. 686–704, 2021, doi: 10.1080/13603116.2019.1572233.

- [40] M. A. Ocloo and M. Subbey, "Perception of basic education school teachers towards inclusive education in the Hohoe District of Ghana," *Int. J. Incl. Educ.*, vol. 12, no. 5–6, pp. 639–650, 2008, doi: 10.1080/13603110802377680.
- [41] E. L. Pearman, A. M. Huang, and C. I. Mellblom, "The inclusion of all students: Concerns and incentives of educators," *Educ. Train. Ment. Retard. Dev. Disabil.*, vol. 32, no. 1, pp. 11–20, 1997, [Online]. Available: <http://www.jstor.org/stable/24481561>.
- [42] M. K. Smith and K. E. Smith, "'I Believe in Inclusion, But...': Regular education early childhood teachers' perceptions of successful inclusion," *J. Res. Child. Educ.*, vol. 14, no. 2, pp. 161–180, 2000, doi: 10.1080/02568540009594761.
- [43] R. G. Monahan, S. B. Marino, and R. Miller, "Teacher attitudes toward inclusion: Implications for teacher education in Schools 2000," *Educ. 3-13*, vol. 117, pp. 316–321, 1996.
- [44] M. Nel, P. Engelbrecht, N. Nel, and D. Tlale, "South African teachers' views of collaboration within an inclusive education system," *Int. J. Incl. Educ.*, vol. 18, no. 9, pp. 903–917, 2014, doi: 10.1080/13603116.2013.858779.
- [45] C. Forlina and D. Chambersb, "Teacher preparation for inclusive education: Increasing knowledge but raising concerns," *Asia-Pacific J. Teach. Educ.*, vol. 39, no. 1, pp. 17–32, 2011, doi: 10.1080/1359866X.2010.540850.
- [46] S. B. Wibowo and J. A. Muin, "Inclusive education in Indonesia: Equality education access for disabilities," *1st Int. Conf. South East Asia Stud. 2016*, pp. 484–493, 2018, doi: 10.18502/kss.v3i5.2351.
- [47] Sunardi, M. Yusuf, Gunarhadi, Priyono, and J. L. Yeager, "The implementation of inclusive education for students with special needs in Indonesia," *Excell. High. Educ.*, vol. 2, no. 1, pp. 1–10, 2011, doi: 10.5195/ehe.2011.27.
- [48] K. Chhetri, N. Spina, and S. Carrington, "Teacher education for inclusive education in Bhutan: perspectives of pre-service and beginning teachers," *Int. J. Incl. Educ.*, vol. 0, no. 0, pp. 1–16, 2020, doi: 10.1080/13603116.2020.1841840.
- [49] D. C. Friesen and D. Cunning, "Making explicit pre-service teachers' implicit beliefs about inclusive education," *Int. J. Incl. Educ.*, vol. 24, no. 14, pp. 1494–1508, 2020, doi: 10.1080/13603116.2018.1543730.
- [50] A. B. Kuyini, I. Desai, and U. Sharma, "Teachers' self-efficacy beliefs, attitudes and concerns about implementing inclusive education in Ghana," *Int. J. Incl. Educ.*, vol. 24, no. 14, pp. 1509–1526, 2020, doi: 10.1080/13603116.2018.1544298.
- [51] P. K. Butakor, E. Ampadu, and S. J. Suleiman, "Analysis of Ghanaian teachers' attitudes toward inclusive education," *Int. J. Incl. Educ.*, vol. 24, no. 11, pp. 1237–1252, 2020, doi: 10.1080/13603116.2018.1512661.

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The presented concept was conceived by Sowiyah and Ryzal Perdana. Sowiyah conceptualised and carried out the computations. Ryzal Perdana verified the analytical procedures. Sowiyah and Ryzal Perdana discussed the findings and collaborated on the final manuscript.

Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US