

TEACHERS' READINESS IN INCLUSIVE EDUCATION: LEARNING RESOURCES AND PEDAGOGY IN TEACHING

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Abstract: This research examines the readiness of teachers to adopt inclusive education practices, focusing on their access to learning materials and understanding of differentiated teaching methods to meet diverse learners' needs. Using a random sampling method, 160 permanent teachers with at least three years of service from three districts in the Schools Division of the City of Mati participated. A survey questionnaire assessed their readiness for inclusive education. Results revealed a high level of teacher readiness (mean = 4.23) and strong pedagogical formation (mean = 4.40), with teachers generally perceiving learning resources as adequate (mean = 4.16). Statistical analysis showed significant positive relationships between teacher readiness, pedagogical competence, and resource availability. Age was the only demographic factor with a significant effect on readiness and related variables. The hypothesis of significant relationships among readiness, pedagogy, and resource availability was rejected. The study concludes that enhancing teacher training, improving access to learning materials, and strengthening policy and leadership support are essential for effective inclusive education implementation.

Keywords: inclusive education, pedagogy, learning resources.

I. INTRODUCTION

Inclusive education has been a banner in bridging children irrespective of their physical, mental, intellectual, and socio-cultural background, religious beliefs, and other characteristics (Slee, 2018). Additionally, it is the most effective way to give all children a fair chance to attend school, learn, and develop the skills they need to succeed (Sarpong and Adelekan, 2023). It should be included in the mainstream education system. There is a growing disparity in the preparedness of public-school teachers concerning the accessibility of learning resources and their teaching methodologies, which obstructs their capacity to meet educational goals and objectives.

Many countries show commitment to inclusive education by implementing policies and programs to accomplish the aims of full inclusion in their education systems (Adams, Che Ahmad, & Kolandavelu, 2020). The 48th session of the International Conference on Education (ICE) which took place in Geneva in 2008, and was organized by the UNESCO International Bureau of Education (IBE) there was a discussion on the importance of broadening the concept of inclusion to reach all children, under the assumption that every learner matters equally and has the right to receive effective educational opportunities (Operti et al. 2014).

In the Philippines, Republic Act No. 10533, referred to as the Enhanced Basic Education Act of 2013, aims to transform basic education by catering to the varied needs, intellectual and cultural abilities, circumstances, and unique traits of students, educational institutions, and communities. Section 8 of its Implementing Rules and Regulations (2013) highlights the importance of inclusive education by mandating the creation of at least five (5) programs to guarantee that all learners can access basic education.

Inclusive education is designed to meet the diverse physical, intellectual, psychological, and cultural needs of all learners. It promotes active participation and minimizes barriers to learning by considering each student's unique circumstances

(Ainscow & Miles, 2008). The successful implementation of inclusive education requires the commitment and collaboration of educators, school administrators, families, and communities. It is rooted in the principle that every child, regardless of background or ability, has the right to quality education in a supportive and accepting environment (UNESCO, 2020).

However, despite national efforts to promote inclusive practices, significant challenges remain within the education system. One of the most pressing concerns is the limited preparedness of many teachers to address the needs of students with disabilities. Many educators have not received adequate training in inclusive pedagogies or specialized instruction, such as sign language or Braille literacy (Sharma, Loreman, & Forlin, 2012). This gap in professional development affects their ability to adapt lessons and teaching materials to accommodate students with varied learning profiles, resulting in inconsistent learning outcomes (Florian & Black-Hawkins, 2011).

Another challenge lies in the lack of accessible and adaptive learning resources. Many public schools struggle with outdated materials, inadequate access to assistive technologies, and limited digital tools (Alquraini & Gut, 2012). These constraints hinder the ability of teachers to create a learning environment that is truly inclusive. Additionally, factors such as overcrowded classrooms, a shortage of support personnel, and inadequate infrastructure for students with physical and sensory impairments further complicate the delivery of inclusive education (Peters, 2007; Pantic & Florian, 2015).

Furthermore, there is a need for a cultural shift in attitudes toward learners with disabilities. Some educators and stakeholders still hold implicit biases or lack a clear understanding of inclusive principles, leading to resistance or superficial implementation (Avramidis & Norwich, 2002). Addressing these issues requires systemic change, including continuous professional development, improved funding for inclusive education programs, equitable resource distribution, and strong policy enforcement (Forlin, 2010). Without these structural and cultural adjustments, the full realization of inclusive education remains a significant challenge.

Currently, there is no established method for developing the necessary expertise among teachers, particularly in our division, which this study aims to address. This study is relevant, timely, and significant. Therefore, it will serve as a foundational element for the education sector in enhancing teachers' preparedness for inclusive education.

II. BODY OF ARTICLE

Statement of the Problem

This study seeks to answer the following research questions:

1. What is the level of readiness of teachers to work within inclusive education?
2. What is the level of pedagogical formation of readiness in teachers to work within inclusive education?
3. What is the significant relationship between the availability of learning resources and pedagogy in teaching to teachers' readiness for inclusive education?
4. Is there a significant difference among the demographic profile:
 - a. Age
 - b. Sex
 - c. Length of service
 - d. Highest educational attainment
 - e. Position
 - f. Specialization
 - g. Station\

III. METHODOLOGY

Research Design

This research employed a quantitative correlational research design, which emphasizes objective measurement and statistical analysis of numerical data. Quantitative research is appropriate for studies aiming to measure variables and examine the relationships between them. According to Creswell (2009), this approach enables researchers to systematically collect and analyze data to draw generalizable conclusions.

To gather the necessary data, the study utilized a structured questionnaire as the primary research instrument. The questionnaire was carefully developed to collect measurable responses on the key variables of the study: availability of learning resources, teaching pedagogy, and teachers' readiness for inclusive education. This instrument enabled the researcher to obtain standardized data from a wide sample of teachers, supporting the generalizability of the findings.

The questionnaire was organized into sections aligned with the specific research objectives, facilitating a structured evaluation of each variable. It was designed to capture teachers' perceptions, experiences, and levels of preparedness in implementing inclusive education. The collected data provided valuable insights into how teaching strategies and resource availability influence the readiness of teachers to work effectively in inclusive classrooms.

Sampling

The study's population comprised 160 public elementary teachers, all of whom were randomly selected and had a minimum of three years of service within the Schools Division of the City of Mati. To create a representative sample, the researchers employed stratified proportionate sampling. Initially, the population was categorized into strata according to the four districts: Mati North, Mati Central, and Mati South. Subsequently, a proportionate sample was drawn, leading to the selection of teachers as participants in the study. This approach ensured that the sample accurately reflected the broader population, facilitating a thorough analysis of the research questions.

Analysis

This study classified, evaluated, and interpreted findings using the appropriate statistical tools.

Quantitative Data Analysis. Quantitative data was utilized to create tallies and frequencies, as well as to employ computer programs for organizing the results. These findings were then presented in tabular and graphical formats, expressed in percentages, using the appropriate statistical tools.

Mean. This was utilized to address statement problems 1, 2, and 3. Problem 1 aims to evaluate the level of readiness of teachers to work within inclusive education. Problem 2 seeks to examine the level of pedagogical formation of readiness in teachers to work within inclusive education. Problem 3 focuses on determining the significant relationship between the availability of learning resources and pedagogy in teaching to teachers' readiness for inclusive education.

Pearson r. This was utilized to address statement problem 4, aiming to identify the significant difference among the demographic profiles: Age, Sex, Length of service, Highest educational attainment, Position, Specialization, and Station.

Statistical software was utilized to calculate the Mean and Pearson r, yielding both the correlation coefficient and the standardized beta coefficient for the quantitative analysis. The Pearson r correlation coefficient (r) is widely recognized as a standard method for assessing linear correlation. This coefficient ranges from -1 to 1, indicating both the strength and direction of the relationship between two variables (Kwak and Kim, 2017). A change in one variable corresponds to a change in the other variable in the same direction.

IV. RESULTS AND DISCUSSION

Level of Teachers' Readiness for Inclusive Education

Table 2: Teachers' Readiness for Inclusive Education

Teachers' Readiness for Inclusive Education		SD	Mean
1.	I am ready to teach in inclusive classes all the time in school.	0.65	4.32
2.	I am ready to support my co-teachers in teaching inclusive classes in this school.	0.68	4.34
3.	I am ready to properly prepare necessary teaching-learning activities for inclusive classes.	0.69	4.28
4.	I am ready to engage the attention of students in the inclusive class through my teaching readiness.	0.67	4.21
5.	I am ready to encourage students to be more active in inclusive classes through my readiness to teach students with special educational needs.	0.67	4.18

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6. I am ready to feel comfortable and confident when teaching students with special educational needs.	0.76	4.14
7. I am ready to influence students to learn more effectively in inclusive classes through my teaching readiness.	0.68	4.19
8. I am ready to contribute effectively to the school's inclusive education programs through my readiness.	0.69	4.24
9. I am ready to motivate other teachers to be prepared and confident in teaching inclusive classes.	0.70	4.19
10. I am ready to make a positive impact on students' academic experiences and learning.	0.71	4.19
11. I am ready to enhance students' readiness to study through my own readiness.	0.68	4.19
12. I am ready to encourage students to be prepared and engaged in my lessons.	0.66	4.27
13. I am ready to inspire students to look forward to their lessons.	0.67	4.28
Overall	0.69	4.23

Note. M = Mean; SD = Standard Deviation.

Table 2 shows teachers' readiness for inclusive education. Indicates that educators typically demonstrate a strong preparedness for inclusive education, with mean scores exceeding 4.0. As Karynbaeva et al. (2019) noted, this readiness is a crucial factor for the successful implementation of inclusive education, as it reflects teachers' willingness to engage with students with disabilities. It has been noted that educators already hold a diverse array of professional knowledge, skills, and competencies essential for effectively organizing the educational process within the framework of inclusive education (Mazova and Khairtdinova, 2017).

Similarly, the average score is 4.23, indicating that teachers exhibit a strong preparedness for inclusive education. The individual mean scores vary between 4.14 and 4.34, reflecting a generally uniform perception of readiness across various dimensions. Consequently, the highest mean score (4.34) is found in item 2. *I am ready to support my co-teachers in teaching in inclusive classes in this school*, suggesting that teachers feel particularly confident in that area, while the lowest mean score (4.14) is seen in item 6. *I am ready feel comfortable and confident when teaching students with special educational needs*, telling that this area might need additional assistance or enhancement.

Moreover, the overall standard deviation (SD) is 0.69, indicating a moderate spread of responses around the mean. Also, the highest SD (0.76) was for item 6. *I am ready feel comfortable and confident when teaching students with special educational needs*, suggesting greater variability in responses, meaning that some teachers feel more prepared than others in this area. The lowest SD (0.65) was in item 1. *I am ready to teach in inclusive classes all the time in school*, indicating a greater level of consensus among educators.

Table 2 also indicates that teachers generally exhibit a high level of readiness for inclusive education with a mean scores above 4.0. Some variability exists across different aspects, with item 6. *I am ready to feel comfortable and confident when teaching students with special educational needs* having the greatest spread in responses. Further training or support may be beneficial in areas with lower mean scores and higher standard deviations to ensure more uniform readiness. This is consistent with the study of Sergeeva (2019), which found that enhancing the professional development of teachers specializing in inclusive education is one of the solutions to strengthening the readiness of teachers in inclusively oriented settings. Item 5. *I am ready to encourage students to be more active in inclusive classes through my readiness to teach students with special educational needs* (mean = 3.93), which may need more attention as it falls slightly below the high adequacy threshold. Additionally, the variability in responses suggests that resource availability and effectiveness may not be uniform across all areas. Items with high agreement (low SD) indicate consistency in perception, while high SD items suggest differing experiences among teachers.

Table 3: Learning Resources for Inclusive Education

Learning Resources for Inclusive Education	SD	Mean
1. A lot of challenges and difficulties when acquiring learning resources.	0.71	4.34
2. The instructional materials and resources are insufficient.	0.82	4.13
3. The procedures and methods of acquiring the resources for the learning resources process are very rigid and inflexible.	0.77	4.03
4. The need for teaching and learning resources influences the implementation of inclusive education in the school.	0.70	4.29
5. The school lacks government support and assistance; hence, they are unable to procure the required resources for the teachers' and students' needs.	0.89	3.93
6. There is a lack of parental support in the inclusive class.	0.85	3.99
7. The Department of Education should review the new curriculum to cater to and regale the needs of the students and teachers in an inclusive setup.	0.70	4.24
8. There is a need for explicit policy on the concept and schematic diagram of the implementation of inclusive education.	0.66	4.28
9. There is a lack of partnership between the department and stakeholders in ensuring the smooth learning of inclusive education.	0.80	3.96
10. The government should increase the funds/assistance for inclusive education to necessitate the purchase of learning resources and the development of infrastructures.	0.66	4.39
Overall	0.78	4.16

Note. M = Mean; SD = Standard Deviation.

Table 3 presents the results obtained from the preliminary analysis that teachers perceived learning resources for inclusive education as adequate (mean >4.0). According to Goldan and Schwab (2018), resources for inclusive education are important because they empower educators to tailor instruction to meet diverse student needs and create a more dynamic and stimulating learning environment.

The data presented in Table 3 reveals an overall mean of 4.16, suggesting a strong adequacy of learning resources for inclusive education. Individual mean scores range from 3.93 to 4.39, showing variation in the perceived availability and effectiveness of resources. Accordingly, the highest mean (4.39) is found in item 10. *The government should increase the funds/assistance for inclusive education to necessitate the purchase of learning resources and the development of infrastructures*, suggesting that this area is the most well-supported. The lowest mean (3.93) appears in item 5. *The school lacks government support and assistance; hence, they are unable to procure the required resources for the teachers' and students' needs*, indicating that resources in this area may need improvement.

The overall SD is 0.78, meaning there is moderate variability in responses. The highest SD (0.89) was for item 5. *The school lacks government support and assistance; hence, they are unable to procure the required resources for the teachers' and students' needs*, which suggests that teachers' perceptions vary significantly—some may find resources sufficient, while others do not. Teachers' perceived lack of resources is significantly correlated with their self-efficacy and attitudes toward inclusive education (Lambrecht et al., 2016). The lowest SD (0.66) for item 8. *There is a need for an explicit policy on the concept and schematic diagram of the implementation of inclusive education*, and 10. *The government should increase the funds/assistance for inclusive education to necessitate the purchase of learning resources and the development of infrastructures*, suggesting greater agreement among teachers in these areas.

Table 4: Teachers' Pedagogy in Teaching Inclusive Education

Teachers' Pedagogy in Teaching Inclusive Education	SD	Mean
1. Assessing the different skills of students rather than relying solely on a standardized curriculum.	0.71	4.33
2. Promoting the interests of individual children.	0.67	4.42
3. Setting alternative expectations that are suitable for the students.	0.68	4.36

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4. Setting appropriate expectations for each student.	0.69	4.35
5. Determining how to modify home assignments for students.	0.70	4.33
6. Valuing all kinds of skills that students bring to class and not just the academic skills.	0.65	4.47
7. Providing opportunities for daily success for all students.	0.68	4.41
8. Adapting materials and rewriting objectives for a child's specific needs.	0.67	4.35
9. Using a variety of instructional strategies effectively.	0.72	4.38
10. Providing opportunities for student development In the learning process.	0.70	4.41
11. Providing more activity-based teaching than seat-based teaching.	0.70	4.39
12. Praising a student when s/he deserves it.	0.69	4.49
13. Utilizing local resources available that fit the learning situation.	0.71	4.44
14. Designing classroom activities so that all students can participate.	0.67	4.47
15. Being flexible and have maximum tolerance for Ambiguity.	0.68	4.44
Overall	0.69	4.40

Note. M = Mean; SD = Standard Deviation.

On the other hand, Table 4 exhibits that teachers are highly competent in inclusive teaching pedagogy, as all items scored above 4.30. Areas with the highest means (items 12. *Praising a student when s/he deserves it*, item 14. *Designing classroom activities so that all students can participate*, and item 6. *Valuing all kinds of skills that students bring to class and not just the academic skills*) highlight particularly strong teaching practices, while areas for enhancement, items with slightly lower means (items 1. *Assessing the different skills of students rather than relying solely on a standardized curriculum* and item 5. *Determining how to modify home assignments for students*), may benefit from additional training or resource support.

Gradually, variation in responses (higher SD in item 9. *Using a variety of instructional strategies effectively*) suggests that some teachers may have different levels of expertise or confidence in this aspect of inclusive teaching. Subban et al. (2021) stress that many teachers, while fundamentally in favor of inclusion, express concerns regarding their ability and effectiveness in implementing inclusive practices. However, those with more experience tend to feel more assured in their capacity to teach students with disabilities (Chao et al., 2016).

Looking at Table 4, the overall mean is 4.40, indicating a very high level of proficiency in inclusive education pedagogy. Individual mean scores range from 4.33 to 4.49, showing consistent effectiveness in inclusive teaching practices.

In addition, the highest mean (4.49) is observed in item 12. *Praising a student when s/he deserves it*, suggesting that this aspect of pedagogy is the strongest among teachers. The lowest mean (4.33) appears in items 1. *Assessing the different skills of students rather than relying solely on a standardized curriculum* and item 5. *Determining how to modify home assignments for students*, indicating that while these areas are still rated high, they might need slight reinforcement or further training.

Conversely, the overall SD in Table 4 is 0.69, reflecting a moderate level of consistency in teachers' responses. The lowest SD (0.65 in item 6. *Valuing all kinds of skills that students bring to class and not just the academic skills*) suggests strong teacher agreement, indicating a shared understanding of the concept. Whereas, the highest SD (0.72 in item 9. *Using a variety of instructional strategies effectively*) shows slightly more variation in teachers' responses, meaning that some may have different levels of confidence or experience in this area.

Overall, the data indicates that teachers are well-prepared and confident in their pedagogy for inclusive education, with minimal areas for improvement (McCray et al., 2023). As classrooms increasingly reflect diversity, educators' approaches and decisions are crucial for ensuring that students engage fully in every facet of their learning experience (Molbaek, 2018).

Nonetheless, focused training or professional development can be tailored to enhance further specific areas with slightly lower means or higher response variation (Ajani, 2023). When these technical assistances are utilized effectively and provide high-quality support through structured interventions backed by credible evidence of effectiveness, the outcomes are favorable (Sharples et al., 2018).

Table 5: Correlation Matrix presents the Relationship Between the Availability of Learning Resources and Pedagogy in Teaching to Teachers' Readiness for Inclusive Education

		Teachers' Readiness for Inclusive Education	Learning Resources for Inclusive Education	Teachers' Pedagogy in Teaching Inclusive Education
Teachers' Readiness for Inclusive Education	Pearson's r	—		
	df	—		
	p-value	—		
Learning Resources for Inclusive Education	Pearson's r	0.413	***	—
	df	158	—	—
	p-value	<.001	—	—
Teachers' Pedagogy in Teaching Inclusive Education	Pearson's r	0.616	***	0.588
	df	158	158	—
	p-value	<.001	<.001	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 provides the correlation matrix that presents the relationships between Teachers' Readiness for Inclusive Education, Learning Resources for Inclusive Education, and Teachers' Pedagogy in Teaching Inclusive Education using Pearson's correlation coefficient (r). It presents that teachers' readiness for inclusive education & learning resources for inclusive education is Pearson's $r = 0.413^*$ ($p < .001$), which means a moderate positive correlation.

It can be seen from the data in Table 5 that teachers' readiness for inclusive education increases as learning resources improve. However, Gathumbi et al. (2015) indicated that the physical infrastructure and instructional resources are insufficient to support learners with special needs adequately. Conversely, the p-value ($< .001$) confirms that this relationship is statistically significant.

Teachers' Readiness for Inclusive Education & Teachers' Pedagogy in Teaching Inclusive Education is Pearson's $r = 0.616^*$ ($p < .001$), showing a strong positive correlation. This means that teachers who are more ready for inclusive education tend to have better teaching pedagogy in inclusive settings. The p-value ($< .001$) shows that this relationship is highly significant. This is relevant to Dioso et al.'s (2022) study, which indicated that the preparedness of teachers for inclusive special education was achieved through the in-service training offered for their professional development.

Additionally, the educational materials for inclusive education and the pedagogical approaches employed by teachers in this field yield a Pearson correlation coefficient of $r = 0.588^*$ ($p < .001$). This means a moderate to strong positive correlation. This suggests that better access to learning resources enhances teachers' pedagogical practices for inclusive education. The p-value ($< .001$) indicates statistical significance. Yet, a notable disparity continues to exist in the provision of sufficient teacher training, especially in under-resourced environments (Erni & Dewi, 2024). Poly & Harishma (2023) imply that there is a need for focus assistance from administrators and policymakers, which is crucial in preparing educators to address the demands of inclusivity (Poly & Harishma, 2023).

All three variables are positively correlated, meaning improvements in one area contribute to the others. The strongest relationship is between Teachers' Readiness and Teachers' Pedagogy ($r = 0.616$), suggesting that teacher preparation plays a crucial role in effective inclusive education practices (McCray et al., 2023). Muca et al. (2022) emphasized that learning resources also play a significant but moderate role in enhancing both readiness and pedagogy. These findings highlight the importance of investing in teacher training and learning resources to improve inclusive education (Pozo-Rico et al., 2023).

The findings indicate that teachers' readiness, learning resources, and pedagogy are interconnected. By investing in teacher training, improving access to inclusive learning materials, implementing supportive policies, and strengthening leadership support, schools can create a more effective and sustainable inclusive education system.

Differences in the Demographic Profile

Table 6 demonstrates that there is no statistically significant difference between male and female teachers in terms of their preparedness, access to educational resources, and teaching methods in the context of inclusive education. These findings suggest that gender does not play a major role in shaping teachers' preparedness and teaching strategies for inclusive education (Jury et al., 2023). Much of the literature failed to recognize gender differences in inclusive education (Ediyanto et al. 2022). In their systematic review, Lindner et al. (2023) observed that most of the studies examined on inclusive education did not reveal any gender disparities. Hence, any observed variations are likely due to individual teaching experiences, training, or school resources rather than gender differences (Shi, Qiu, & Ni, 2023).

Table 6: Differences Between Male and Female Teachers

Gender	Statistic	p
Teachers' Readiness for Inclusive Education	Mann-Whitney U	1314
Learning Resources for Inclusive Education	Mann-Whitney U	1150
Teachers' Pedagogy in Teaching Inclusive Education	Mann-Whitney U	1021

Note. $H_a \mu_F \neq \mu_M$

The table indicates that the p-value (0.892) exceeds 0.05, which signifies that there is no significant difference in the readiness of teachers between male and female respondents. This implies that both genders demonstrate comparable levels of preparedness for inclusive education (Lindner et al., 2023).

The p-value of 0.317 exceeds the threshold of 0.05, indicating that there is no significant difference in how male and female teachers perceive the adequacy of learning resources. It appears that both genders have similar access to and views on learning resources for inclusive education (Mulyadi, Huda, & Gusmian, 2022).

The p-value (0.090) is still above 0.05 but closer to statistical significance compared to the other two variables. This suggests a potential trend where male and female teachers may differ slightly in their pedagogical approaches; the difference observed in this study is not statistically significant. This result adds to the existing inconsistencies in the literature regarding gender differences in inclusive education, contrasting with the research of Agavelyan et al. (2020) that indicates female educators exhibit greater tolerance for diversity or emphasizes the prevalence of male superiority in favorable attitudes toward inclusion (Bhatnagar & Das, 2013).

The lack of gender disparities observed in this context can be linked to the limited number of male participants in this study, as well as their general underrepresentation in educational fields. Nevertheless, the absence of gender differences is an encouraging indication for promoting inclusivity, implying that positive attitudes towards inclusion can be cultivated regardless of gender (Buolamwini & Gebru, 2018).

Table 7: Differences in Learning Resources for Inclusive Education Based on School, Highest Educational Attainment, and Length of Service

	Sum of Squares	df	Mean Square	F	p
School	9.614	25	0.385	1.321	0.169
Highest Educational Attainment	0.824	5	0.165	0.566	0.726
Length of Service	12.339	33	0.374	1.284	0.175
Residuals	27.951	96	0.291		

Note. df = degrees of freedom; F = F-statistic; p = p-value.

Accordingly, Table 7 shows that the p-value (0.169) is greater than 0.05, indicating no statistically significant difference in learning resources among teachers from different schools. This suggests that schools provide similar levels of learning resources for inclusive education, regardless of location.

Additionally, the p-value of 0.726 significantly exceeds the threshold of 0.05, indicating that there is no notable difference in the availability of learning resources related to the educational qualifications of teachers. This implies that teachers, whether they hold a bachelor's, master's, or doctoral degree, have comparable access to learning resources.

Consequently, the p-value (0.175) is greater than 0.05, meaning no significant differences exist in access to learning resources based on the number of years a teacher has been in service. This implies that new and experienced teachers receive comparable learning resources for inclusive education (Shutaleva et al., 2023).

Hence, none of the factors (school, education, or experience) show significant differences (p-values all > 0.05), which means that learning resources for inclusive education are fairly distributed across different schools, levels of educational attainment, and years of service. Also, no particular group (by school, education, or experience) has significantly better or worse access to learning resources. This situation can be partially attributed to the funding model for special educational needs in our country (Lambrecht et al., 2016).

However, in the Philippines, numerous public schools, whether located in urban centers or remote rural regions, continue to lack adequate resources (Valenzuela & Buenvinida, 2021). Teachers often perceive a lack of adequate human resources and teaching facilities, which presents considerable obstacles to the effective implementation of inclusive practices (Saro et al., 2022).

Table 8: Difference of Age on Teachers' Readiness for Inclusive Education, Learning Resources, and Pedagogy

Age	95% CI for Difference	t-value	p-value	Remarks
Teachers' Readiness for Inclusive Education	(-39.634, -36.146)	42.59	0.000	Significant
Learning Resources for Inclusive Education	(-39.711, -36.224)	43.00	0.000	Significant
Teachers' Pedagogy in Teaching Inclusive Education	(-39.466, 35.978)	42.72	0.000	Significant

Note. CI = Confidence Interval; t = t-statistic; p = p-value.

Table 8 illustrates that the p-value (0.000) is highly significant, meaning age significantly affects teachers' readiness. The negative confidence interval suggests that older teachers may have lower readiness compared to younger teachers, but further analysis is needed (Afriani et al., 2023). This element may lead teachers to either reject their prior experiences with children who have special needs or to assume erroneously that they have instructed such children when, in fact, they have not (Alnahdi et al. 2021).

Similarly, the significant p-value means that age groups experience differences in access to learning resources. The negative confidence interval suggests that certain age groups (likely younger or older) perceive fewer resources available. One potential reason for this finding could be the relatively young age of the teachers participating in the study, which is often associated with a lack of extensive experience in the field of education, especially regarding inclusive practices (Mukhopadhyay, 2014).

On the other hand, the significance (p = 0.000) indicates that pedagogy varies with age. The slightly different CI range suggests a more complex relationship, influenced by teaching experience and professional development. Younger educators frequently gain from a more comprehensive formal education, which improves their pedagogy for inclusive teaching, whereas their more seasoned counterparts rely on their substantial experience (Parey, 2019). In summary, the collected data indicates that teachers' perspectives on inclusion are shaped by their direct interactions with children who have special needs (Zhang, 2020).

It is apparent from this table further suggests that age has a significant difference in teachers' readiness for inclusive education, learning resources, and pedagogy (Papagiannopoulou et al., 2023). Accordingly, all three factors are statistically significant (p = 0.000, t-values > 42). The 95% Confidence Intervals (CIs) do not contain zero, confirming a significant difference across age groups. Research conducted by Galaterou and Antoniou (2017) indicates that there is a notable age-related variation in teachers' attitudes toward inclusion, with younger educators exhibiting more favorable perspectives.

Table 9: Frequencies of Highest Educational Attainment

Highest Educational Attainment	Counts	% of Total	Cumulative %
BEED	117	73.1 %	73.1 %
MAED	35	21.9 %	95.0 %
MST-MATH	2	1.3 %	96.3 %
EDD	1	0.6 %	96.9 %
BSED	4	2.5 %	99.4 %
MST-GEN SCI	1	0.6 %	100.0 %

Note. Percentages are based on total sample size.

Table 9 shows the frequencies of highest educational attainment. It presents that the majority (73.1%) of respondents hold a Bachelor of Elementary Education (BEED), indicating that most participants have an undergraduate degree in education. A significant portion (21.9%) have obtained a Master of Arts in Education (MAED), showing that a notable number have pursued graduate studies. Cumulatively, 95% of respondents have a BEED or MAED, suggesting that most educators in the sample have at least an undergraduate or a master's degree.

In addition, Table 9 connotes that the workforce of the study predominantly comprises BEED graduates, aligning with an elementary education setting (Punla & Farro, 2022). Following this, a study by Dela Cruz (2022) investigated the employability and career success of education graduates. The findings revealed an exceptionally high employability rate among BEED graduates, highlighting the substantial application of the skills and competencies acquired during their education to their professional advancement.

A smaller but significant portion has pursued higher education (MAED, MST, or EDD), which could influence professional development and teaching methodologies (Chan & Hu, 2023). On the other hand, very few respondents hold doctoral degrees, indicating limited representation of advanced education in the group.

Table 10: Frequencies of Position

Position	Counts	% of Total	Cumulative %
T-II	47	29.4 %	29.4 %
T-I	70	43.8 %	73.1 %
T-III	31	19.4 %	92.5 %
MT-II	6	3.8 %	96.3 %
MT-III	1	0.6 %	96.9 %
MT-I	4	2.5 %	99.4 %
SPET-II	1	0.6 %	100.0 %

Note. Percentages are based on the total sample size.

Table 10 displays the frequencies of position. It shows that the majority (43.8%) of respondents hold the position of Teacher I (T-I), making it the most common designation among the participants. Teacher II (T-II) follows at 29.4%, indicating a significant number have progressed beyond the entry-level position. Teacher III (T-III) accounts for 19.4%, showing a notable portion of respondents have reached a higher teaching level. Master Teacher (MT) and Special Education Teacher (SPET) roles are less common.

Cumulatively, 92.5% of respondents are in the Teacher I-III ranks. The large percentage of Teacher I (43.8%) suggests many educators are still in the early stages of their teaching careers. This means the entry-level teaching position is most commonly represented in the group of individuals participating in a study, survey, or other data collection activity (Poindexter, 2013). While only 7.5% hold Master Teacher or Special Education positions, suggesting that most respondents are in the earlier stages of their careers. Next, the lower proportion of Master Teachers (MT-I to MT-III) indicates fewer have advanced to leadership or mentoring roles. Finally, the Special Education Teacher (SPET) position is underrepresented, implying that specialized teaching roles are not widely held in this sample.

Table 11: Frequencies of Specialization

Specialization	Counts	% of Total	Cumulative %
MATH	20	12.5 %	12.5 %
GENERALIST	49	30.6 %	43.1 %
GENERAL SCIENCE	67	41.9 %	85.0 %
GENEREALIST	1	0.6 %	85.6 %
SOCIAL STUDIES	4	2.5 %	88.1 %
PRESCHOOL	2	1.3 %	89.4 %
GENERAL	1	0.6 %	90.0 %
EDUCATIONAL MANAGEMENT	1	0.6 %	90.6 %
PHYSICAL SCIENCE	1	0.6 %	91.3 %
PHYSICAL EDUCATION	1	0.6 %	91.9 %
TLE	1	0.6 %	92.5 %
ENGLISH	4	2.5 %	95.0 %
GEBERALIST	1	0.6 %	95.6 %
SPECIAL EDUCATION	1	0.6 %	96.3 %
ARAL PAN	1	0.6 %	96.9 %
HISTORY	1	0.6 %	97.5 %
BIOLOGY	1	0.6 %	98.1 %
INCLUSIVE EDUCATION	1	0.6 %	98.8 %
EARLY CHILDHOOD	1	0.6 %	99.4 %
BIOLOGICAL SCIENCE	1	0.6 %	100.0 %

Note. Percentages are based on the total sample size.

Accordingly, Table 11 shows the frequencies of specialization. It denotes that the General Science (41.9%) and Generalist teachers (30.6%) make up the majority (72.5%), indicating a strong presence of educators handling broad subject areas rather than focusing on specific disciplines. Mathematics is the most common specialized subject (12.5%), suggesting a solid representation of math educators.

Moreover, the table illustrates that Social Studies (2.5%) and English (2.5%) are the next most represented specialized subjects. Several specializations, such as Preschool Education, Physical Science, Physical Education, TLE, Special Education, and Inclusive Education, each have only one respondent (0.6%), highlighting minimal representation in these areas.

Consequently, the dominance of generalist teachers suggests that many educators handle multiple subjects rather than focusing on one specialization. This can be observed in various contexts, particularly in elementary schools where one teacher might cover all major subjects. Generally, in public schools there is a shortage of teachers specializing in inclusive education, forcing schools to rely on generalist teachers (Hernández & Izquierdo, 2023). Moreover, certain curricula, especially in primary education, may require teachers to be knowledgeable in a wide range of subjects, making specialization less feasible (Lozano & Blanco Fontao, 2023).

Hence, a low number of specialized teachers in fields like Special Education, Early Childhood, and Inclusive Education may indicate a need for more trained educators in these areas (Shutaleva et al., 2023). As a result, teachers are assigned to teach subjects outside their area of expertise, which is a common issue in education and is often linked to the dominance of generalist teachers.

V. CONCLUSION

The findings of this study demonstrate a significant positive relationship between teachers' readiness for inclusive education and the availability of learning resources and pedagogical strategies. This underscores the critical role that well-equipped and pedagogically prepared teachers play in fostering inclusive learning environments. Specifically, the study reveals that pedagogical formation and access to instructional materials are essential components in enhancing teacher preparedness for inclusive education.

Furthermore, the analysis of demographic factors—such as age, sex, length of service, educational attainment, position, specialization, and station—shows meaningful differences in levels of readiness. These variations suggest that targeted interventions may be necessary to address specific gaps and strengthen inclusivity across diverse educator profiles.

To improve overall teacher readiness, it is essential to invest in continuous professional development and specialized training programs that focus on inclusive teaching strategies. By equipping teachers with the necessary skills, knowledge, and resources, educational institutions can better support students with special educational needs and foster equitable learning outcomes. Policymakers and educational leaders must prioritize strategic reforms in teacher training, resource allocation, and curriculum design to ensure sustainable improvements in inclusive education practices.

REFERENCES

- [1] Adams, D., Moosa, V., Shareefa, M., Mohamed, A., & Tan, K. L. (2024). Assessing Inclusive School Leadership Practices in Malaysia: Instrument Adaptation and Validation. *International Journal of Disability, Development and Education*, 72(2), 263–281. <https://doi.org/10.1080/1034912X.2024.2354895>
- [2] Afriani, C., Gimin, G., & Hendripides, H. (2023). Analysis of Teacher Readiness in Implementing the Independent Learning Curriculum. *JETISH: Journal of Education Technology Information Social Sciences and Health*.
- [3] Agavelyan, R. O., S. Aubakirova, A. D. Zhomartova, and E. I. Burdina. 2020. “Teachers’ Attitudes Towards Inclusive Education in Kazakhstan.” *Integration of Education* 24 (1): 8–19. <https://doi.org/10.15507/1991-9468.098.024.202001.008-019>.
- [4] Ainscow, M., & Miles, S. (2008). Making education for all inclusive: Where next? *Prospects*, 38(1), 15–34. <https://doi.org/10.1007/s11125-008-9055-0>
- [5] Alnahdi, G. H., S. Schwab, A. Elahdi, and A. H. Alnahdi. 2021. “The Positive Impact of Joint Activities on Students Attitudes Toward Peers with Disabilities.” *Frontiers in Psychology* 12:690546. <https://doi.org/10.3389/fpsyg.2021.690546>.
- [6] Alquraini, T., & Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education*, 27(1), 42–59.
- [7] Avramidis, E., & Norwich, B. (2002). Teachers’ attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147. <https://doi.org/10.1080/08856250210129056>
- [8] Bhatnagar, N., and A. Das. 2013. “Attitudes of Secondary School Teachers Towards Inclusive Education in New Delhi, India.” *International Journal of Disability, Development and Education* 60 (4): 377–394. <https://doi.org/10.1111/1471-3802.12016>.
- [9] Buolamwini, J., & Gebru, T. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. In *FAT* (pp. 77-91).
- [10] Chan, C., & Hu, W. (2023). Students’ voices on generative AI: perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20.
- [11] Chao, C.N.G.; Forlin, C.; Ho, F.C. 2016. Improving teaching self-efficacy for teachers in inclusive classrooms in Hong Kong. *Int. J. Incl. Educ.* , 20, 1142–1154.
- [12] Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications, Inc.
- [13] Dela Cruz, J. L. (2022). Tracer study of graduate school graduates of a state higher education institution in the Philippines from 2016 to 2020. *International Journal of Education and Literacy Studies*.
- [14] Dioso, M. et. al (2022) Readiness for Inclusive Special Education: A Survey among Inservice Teachers in Zamboanga City, Philippines
- [15] Ediyanto, E., D. A. Dewantoro, D. M. Pratiwi, I. Octavianis, S. Mas’ula, M. Barida, and R. Novianti. 2022. “Science Teacher Attitudes Towards Inclusive Education in Malang City: A Cross-Sectional Analysis with Their Gender.” *Advances in Social Science, Education and Humanities Research* 682:111–117. <https://doi.org/10.2991/assehr.k.220304.030>.

- [16] Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal*, 37(5), 813–828. <https://doi.org/10.1080/01411926.2010.501096>
- [17] Forlin, C. (2010). *Teacher education for inclusion: Changing paradigms and innovative approaches*. Routledge.
- [18] Galaterou, J., and A.-S. Antoniou. 2017. “Teachers’ Attitudes Towards Inclusive Education: The Role of Job Stressors and Demographic Parameters.” *International Journal of Special Education* 32 (4): 643–658.
- [19] Gathumbi A. et. al. (2015) Teachers’ and School Administrators’ Preparedness in Handling Students with Special Needs In Inclusive Education In Kenya retrieved from <https://files.eric.ed.gov/fulltext/EJ1078812.pdf>
- [20] Goldan, J., and S. Schwab. 2018. “Measuring Students’ and Teachers’ Perceptions of Resources in Inclusive Education – Validation of a Newly Developed Instrument.” *International Journal of Inclusive Education*. doi:<https://doi.org/10.1080/13603116.2018.1515270>(open in a new window)
- [21] Hernández, M., & Izquierdo, J. (2023). Teachers’ Perceptions and Appropriation of EFL Educational Reforms: Insights from Generalist Teachers Teaching English in Mexican Rural Schools. **Education Sciences**.
- [22] Jury, M., Laurence, A., Cèbe, S., & Desombre, C. (2023). Teachers’ concerns about inclusive education and the links with teachers’ attitudes. In **Frontiers in Education** (Vol. 7).
- [23] Karynbaeva, O. V., Shapovalova, O. E., Shklyar, N. V., Borisova, E. A., & Emelyanova, I. A. (2017). Formation of professional readiness in teachers for inclusive educations of children with health limitations. *Man in India*, 97(16), 263-274.
- [24] Kwak SK, Kim JH. Statistical data preparation: management of missing values and outliers. *Korean J Anesthesiol*. 2017;70:407–411.
- [25] Lambrecht, J., S. Bosse, T. Henke, C. Jäntschi, and N. Spörer. 2016. Teaching children with and without special educational needs in one school and the same class causes a need of additional resources. 6 (2): 135–150.
- [26] Lindner, K. T., S. Schwab, M. Emara, and E. Avramidis. 2023. “Do Teachers Favor the Inclusion of All Students? A Systematic Review of Primary Schoolteachers’ Attitudes Towards Inclusive Education.” *European Journal of Special Needs Education* 38 (6):766–787. <https://doi.org/10.1080/08856257.2023.2172894>.
- [27] Lozano, A., & Blanco Fontao, C. (2023). Is the Education System Prepared for the Irruption of Artificial Intelligence? A Study on the Perceptions of Students of Primary Education Degree from a Dual Perspective: Current Pupils and Future Teachers. **Education Sciences**, 2023
- [28] Mazova, E. M., & Khairtdinova, L. F. (2017). Training defectology students to work with children]. *Questions of pedagogy*, 11, 42-45.
- [29] McCray, E. D., Bettini, E., Brownell, M. T., McLeskey, J., & Sindelar, P. (2023). *Handbook of Research on Special Education Teacher Preparation*.
- [30] Molbaek, M. (2018). Inclusive teaching strategies – dimensions and agendas. *International Journal of Inclusive Education*, 22(10), 1048–1061. <https://doi.org/10.1080/13603116.2017.1414578>.
- [31] Mukhopadhyay, S. 2014. “Botswana Primary Schools teachers’ Perception of Inclusion of Learners with Special Educational Needs.” *Journal of Research in Special Educational Needs* 14 (1): 33–42. <https://doi.org/10.1111/j.1471-3802.2012.01269.x>.
- [32] Mulyadi, D., Huda, M., & Gusmian, I. (2022). Smart Learning Environment (SLE) in the Fourth Industrial Revolution (IR 4.0): Practical Insights Into Online Learning Resources. *International Journal of Asian Business and Information Management*, 13, 1-23.
- [33] Opertti, R., Walker, Z., & Zhang, Y. (2014). Inclusive education: From targeting groups and schools to achieving quality education as the core of EFA. In L. Florian (Ed.), *The Sage handbook of Special Education* (2nd revised ed., pp. 149–170). London: Sage.

- [34] Papagiannopoulou, T., Vaiopoulou, J., & Stamovlasis, D. (2023). Teachers' Readiness to Implement STEM Education: Psychometric Properties of TRi-STEM Scale and Measurement Invariance across Individual Characteristics of Greek In-Service Teachers.
- [35] Parey, B. 2019. "Accommodations for the Inclusion of Children with Disabilities in Regular Schools in Trinidad: A Mixed Methods Approach." *International Journal of Inclusive Education* 26 (6): 559–575. <https://doi.org/10.1080/13603116.2019.1701719>.
- [36] Peters, S. (2007). "Education for all?" A historical analysis of international inclusive education policy and individuals with disabilities. *Journal of Disability Policy Studies*, 18(2), 98–108. <https://doi.org/10.1177/10442073070180020601>
- [37] Poindexter, C.C., Henrickson, M., Fouché, C., Brown, D.B., & Scott, K. (2013. New Zealand. *Journal of HIV/AIDS and Social Services: Research, Practice, and Policy*, 12(1), 44-65
- [38] Poly, N., & Harishma, K. R. (2023). Inclusive education strategies and challenges. *Shanlax International Journal of Arts, Science and Humanities*, 11(1), 1-15.
- [39] Pozo-Rico, T., Poveda, R., Gutiérrez-Fresneda, R., Castejón, J., & Gilar-Corbí, R. (2023). Revamping Teacher Training for Challenging Times: Teachers' Well-Being, Resilience, Emotional Intelligence, and Innovative Methodologies as Key Teaching Competencies. *Psychology Research and Behavior Management*, 16, 1-18.
- [40] Punla, C. S., & Farro, R. C. (2022). Are We There Yet?: An Analysis of the Competencies of BEED Graduates of BPSU-DC. **International Multidisciplinary Research Journal**.
- [41] Saro, J., Manliguez, M., Buar, I. J., Buao, A., & Almonicar, A. (2022). New Normal Education: Strategies, Methods, and Trends of Teaching-Learning on Students' Perspectives and its Effectiveness. *Psychology and Education: A Multidisciplinary Journal*, 5(4), 259-265. doi: 10.5281/zenodo.7242770
- [42] Sarpong, J., & Adelekan, T. (2023). Globalisation and education equity: The impact of neoliberalism on universities' mission. *Policy Futures in Education*, 22(6), 1114-1129. <https://doi.org/10.1177/14782103231184657> (Original work published 2024)
- [43] Sergeeva, A. I. (2019). Inclusive oriented training of defectology teachers at the university at the undergraduate level: theoretical justification and modeling. *Scientific and pedagogical review*, 4(26), 84-91.
- [44] Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12–21. <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
- [45] Shi, J., Qiu, H., & Ni, A. (2023). The Moderating Role of School Resources on the Relationship Between Student Socioeconomic Status and Social-Emotional Skills: Empirical Evidence from China. *Applied Research in Quality of Life*, 18, 2349-2370.
- [46] Slee, R. (2018). *Inclusive Education isn't Dead, it Just Smells Funny*. London: Routledge. doi: 10.4324/9780429486869
- [47] Subban, P.; Round, P.; Sharma, U. 2021. 'I can because I think I can': An investigation into Victorian secondary school teacher's self-efficacy beliefs regarding the inclusion of students with disabilities. *Int. J. Incl. Educ.*, 25, 348–361.
- [48] UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education – All means all*. UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000373718>
- [49] Valenzuela, E. S., & Buenvinida, L. P. (2021). Managing School Operations and Resources in the New Normal and Performance of Public Schools in One School Division in the Philippines. *International Multidisciplinary Research Journal*
- [50] Zhang, R. (2020). Do Managers Learn from Institutional Investors Through Direct Interactions? *Social Science Research Network, Jacobs Levy Equity Management Center for Quantitative Financial Research Paper Series*.