

## Article

## Exploring the Knowledge and Skills of Teachers Towards Inclusive Education

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**Abstract:** This study examines the correlation between teachers' knowledge of inclusive education and their skills in managing inclusive classrooms. Utilizing a modified questionnaire to measure both knowledge and skills, findings from the survey indicate that teachers possess a high level of knowledge, classified as "Highly Knowledgeable." Their skills in applying this knowledge in practical classroom settings are also robust, rated as "Skillful". Statistical analysis reveals a moderate positive correlation between these attributes ( $r=0.520$ ,  $p=0.003$ ), suggesting that enhancing teacher knowledge could further improve their practical skills. The results highlight the critical role of ongoing professional development and targeted training in inclusive education, emphasizing the need to equip educators with both theoretical and practical tools for effectively supporting diverse learning environments. This study underscores the potential benefits of continuous learning and adaptation in educational practices to better serve all students inclusively.

**Keywords:** Inclusive education, knowledge and skills, inclusive classroom, Basic Education Teachers

### Introduction

Inclusive education refers to the educational practice where students of all abilities are educated together in general education classrooms. According to Cerna et al. (2021) inclusive education is fundamental in promoting equality and providing all students with equitable learning opportunities. Sorkos & Hajisoteriou (2021) emphasized that implementing inclusive education can lead to a more cohesive society by fostering mutual respect and understanding among students from diverse backgrounds. The importance of inclusive



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education is increasingly recognized in contemporary educational settings, where diversity in student populations is more pronounced (Graham, 2020). As schools strive to meet the needs of all students, the role of educators in supporting inclusive education becomes crucial (Ni Bhroin and King, 2020). Thus, understanding and developing the necessary skills and knowledge for teachers is essential for the success of inclusive education.

The global commitment to inclusive education is reflected in several international agreements and policies (Ainscow, 2020). For example, the United Nations Convention on the Rights of Persons with Disabilities (CRPD) emphasizes the right to inclusive education for individuals with disabilities (Bryne, 2022). Similarly, the Sustainable Development Goals (SDGs), particularly Goal 4, aim to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (Smith et al., 2020). Various countries have also adopted national policies and legislation to support inclusive education. These international and national frameworks highlight the importance of removing barriers to education and creating inclusive learning environments and organizations such as UNESCO and UNICEF actively advocate for and support the implementation of inclusive education worldwide (Tilawi et al., 2023). Despite these commitments, challenges remain in translating policy into practice.

The current state of inclusive education reveals significant disparities in implementation across different regions and countries (Hernandez-Torrano et al., 2022). While some countries have made substantial progress in adopting inclusive practices, others lag due to various socio-economic, cultural, and political challenges (Bombardelli, 2020). Research indicates that students with disabilities, minority groups, and those from low socio-economic backgrounds are less likely to receive inclusive education (Wahl et al., 2022). Additionally, there is a lack of standardized measures to assess the effectiveness of inclusive education practices and these disparities highlight the need for targeted interventions and policies to address the unique challenges faced by different communities (Salmi & D'Addio, 2021). The ongoing efforts to improve inclusive education must consider these disparities to ensure equitable access for all students (Ainscow, 2022). Comprehensive strategies involving stakeholders at all levels are essential to bridging the gaps in inclusive education.

Teachers play a pivotal role in fostering an inclusive classroom environment. Their attitudes, beliefs, and teaching practices significantly influence the success of inclusive education (Boyle et al., 2020). Effective inclusive teaching requires educators to adapt their instructional strategies to meet the diverse needs of all students (Sanger, 2020). Research shows that teachers who receive adequate training in inclusive practices are more confident and effective in implementing them (Francois, 2020). Collaboration with special education professionals, parents, and the community also enhances the

effectiveness of inclusive education (Villa & Thousand, 2021). Despite the critical role of teachers, many educators report feeling unprepared and unsupported in inclusive settings. Addressing these challenges is crucial for the successful implementation of inclusive education.

Despite the recognized importance of inclusive education, there is a limited understanding of the specific knowledge and skills teachers need to effectively implement inclusive practices. Teacher training programs often show inconsistencies regarding inclusivity, leading to varied levels of preparedness among educators. Many programs do not adequately cover inclusive education principles or practical strategies for managing diverse classrooms. Teachers also face difficulties in balancing the needs of all students while ensuring that each student receives appropriate attention and instruction. Additionally, there are inconsistencies in the policies and standards for inclusive education across different educational systems. These issues highlight the need for comprehensive and consistent teacher training programs that focus on inclusive education. Enhancing the preparation and support for teachers is vital for overcoming these challenges and promoting successful inclusive practices.

Equipping teachers with the necessary knowledge and skills for inclusive education can have a profound impact on student outcomes and the overall educational environment. Well-prepared teachers are better able to create inclusive classrooms where all students feel valued and supported. This, in turn, can lead to improved academic achievement, social skills, and emotional well-being for all students. Teachers who are confident in their ability to implement inclusive practices are more likely to engage in innovative and effective teaching methods. Additionally, a well-prepared teaching workforce can contribute to a more inclusive school culture, promoting acceptance and understanding among students. However, current research indicates gaps in the general education teachers' knowledge and skills towards inclusive education. Studies have shown that many teachers lack a deep understanding of inclusive education principles and practical strategies for implementation. Addressing these gaps through targeted professional development and training programs is essential. Enhancing teachers' knowledge and skills, educational systems can move closer to achieving the goals of inclusive education.

Future research should focus on exploring the general education teachers' knowledge and skills towards inclusive education, particularly their understanding and implementation of inclusive practices. Investigating the level of knowledge among teachers regarding inclusive education can provide insights into the effectiveness of current training programs. Additionally, research should examine the extent of teachers' skills in handling inclusive classrooms and the impact of these skills on student outcomes. Identifying the specific areas where teachers feel least prepared can help in designing targeted professional development initiatives.

Research should also explore the barriers and facilitators to effective inclusive education from the teachers' perspective. Comparative studies across different educational systems and cultural contexts can provide valuable insights into best practices and common challenges. Longitudinal studies could assess the long-term impact of enhanced teacher preparation on the success of inclusive education. Overall, a comprehensive research agenda is needed to address the gaps in knowledge and practice and to support the continuous improvement of inclusive education.

## Methodology

The study employs a descriptive-correlational research design as outlined by Oh & Pyrczak (2023), aimed at identifying and elucidating the relationships and mutual influences among various educational variables. Specifically, it examines the correlation between teachers' understanding of inclusive education and their proficiency in managing such environments. To this end, the research utilizes a modified version of the questionnaire originally developed by Pasha, S., Yousaf, F., & Ijaz, M. (2021), adapted to more precisely capture the pertinent data related to the study's objectives. The survey, which will be administered to all teachers involved in the day and night programs at Talamban National High School, consists of 17 items assessing knowledge of inclusive education and 7 items focused on evaluating skills in managing inclusive settings. Responses will be gathered using a 5-point Likert scale, ranging from 'Not knowledgeable' to 'Highly knowledgeable' based on pre-defined scoring criteria. This methodology ensures a comprehensive understanding of the current landscape of inclusive education practices among educators at the selected site, adhering strictly to the Data Privacy Act to maintain the confidentiality of the respondents' information.

## Results and Discussion

Table 1. Age and Gender of the Respondents

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
54 and above	3	9.68	1	3.23	4	12.90
44-53	8	25.81	2	6.45	10	32.26
34-43	5	16.13	0	0.00	5	16.13
24-33	9	29.03	3	9.68	12	38.71
Total	25	80.65	6	19.35	31	100.00

Table 1 provides a demographic breakdown of the respondents by age and gender for the study conducted at Talamban National High School. The data reveals a predominantly female participation rate, with 25 female teachers (80.65%) compared to 6 male teachers (19.35%). The age group with the highest representation is 24-33 years, accounting for

38.71% of the total respondents, followed closely by the 44-53 age group which represents 32.26%. Interestingly, there are no male respondents in the 34-43 age group. The least represented age group is 54 and above, comprising 12.90% of the sample.

Table 2. Highest Educational Attainment of the Respondents

Educational Attainment	f	%
Doctorate Graduate	1	3.23
With Doctorate Units	1	3.23
Master's Graduate	7	22.58
With Master's Units	15	48.39
Bachelor's Degree	7	22.58
Total	31	100.00

Table 2 outlines the highest educational attainment teachers. The distribution shows a predominant presence of educators who have undertaken postgraduate studies. Specifically, 15 respondents, representing 48.39% of the total, have completed some units towards a Master's degree, making it the most common level of educational attainment among the participants. A further 7 respondents (22.58%) have completed a Master's degree. The same percentage, 22.58%, hold a Bachelor's degree as their highest qualification. At the higher end of academic achievement, both the categories 'Doctorate Graduate' and 'With Doctorate Units' are represented by a single respondent, accounting for 3.23% each. This profile suggests a highly educated workforce, with a substantial proportion engaged in or having completed advanced degree programs, highlighting the emphasis on continuing education among the teaching staff at this institution.

Table 3. Length of Service of the Respondents

Length of Service (in years)	f	%
16 and above	5	16.13
11-15	5	16.13
6-10	15	48.39
1-5	6	19.35
Total	31	100.00

Table 3 provides insights into the length of service of teachers. The data indicates that the majority of respondents, 15 out of 31 or 48.39%, have a service length ranging from 6 to 10 years. This suggests a significant proportion of the staff are relatively established in their careers but not nearing retirement. Another 6 respondents, representing 19.35% of the total, have been in service for 1 to 5 years, indicating a smaller group of newer educators. Both the 11-15 years and 16 years and above categories have an equal number of respondents, 5 each, accounting for 16.13% of the total for each group. This distribution underscores a blend of experience levels among the teachers, with a strong core of mid-

career professionals complemented by smaller contingents of both newer and more veteran educators.

Table 4. Level of Knowledge of the Respondents towards Inclusive Education

S/N	Indicators	WM	Verbal Description
1	I have clear concepts of the term "Inclusion".	4.35	Highly Knowledgeable
2	Every child regardless of disabilities has the right to be educated in the regular class.	4.35	Highly Knowledgeable
3	Students with special needs can best be served in the general education classroom.	3.65	Knowledgeable
4	The inclusion of students with special needs in the class can be beneficial for students without disabilities.	3.48	Knowledgeable
5	Students with special needs benefit both academically and socially from being placed in an inclusive setting.	3.97	Knowledgeable
6	Inclusive teaching is a successful education system to address learners' needs.	3.87	Knowledgeable
7	Inclusive teaching requires collaboration among teachers (General & special).	4.39	Highly Knowledgeable
8	Successful implementation of inclusive education requires special training for teachers.	4.58	Highly Knowledgeable
9	Teachers should use different methods of teaching to satisfy the needs of disabled students.	4.55	Highly Knowledgeable
10	Teachers should have opportunities to adapt the syllabus and teaching materials while teaching in inclusive classes.	4.32	Highly Knowledgeable
11	The teacher should encourage cooperative learning to make all students support each other.	4.45	Highly Knowledgeable
12	The teacher must design the individualized education plan (IEP) for children with special needs.	4.23	Highly Knowledgeable
13	Inclusive teaching makes the teacher feel more responsible for students with special needs.	4.23	Highly Knowledgeable
14	Teacher should manage the classroom layout and setting plan for the children with special needs.	4.29	Highly Knowledgeable
15	Teachers should use differentiated instruction in an inclusive classroom.	4.42	Highly Knowledgeable
16	Teachers should collaborate with other professionals in designing individualized educational plans (IEP) for students with disabilities.	4.35	Highly Knowledgeable
17	Teaching strategies (Task Analysis, shaping, Chaining Prompting, Fading) should be used in an inclusive classroom.	4.32	Highly Knowledgeable
Aggregate Weighted Mean		4.22	Highly Knowledgeable

Table 4 presents the levels of knowledge towards various aspects of inclusive education. The data highlights a strong understanding and support for inclusive educational practices, with an overall aggregate weighted mean (WM) of 4.22, categorizing the collective knowledge level as "Highly Knowledgeable." Notably, specific indicators such as the effectiveness of inclusive teaching, the need for special training, and the use of differentiated teaching methods scored particularly high, with verbal descriptions consistently ranking as "Highly Knowledgeable." For example, the recognition of the need for specialized training for teachers in inclusive settings scored a WM of 4.58, and the application of various teaching strategies suited for

inclusive classrooms scored a WM of 4.32. Lesser, but still substantial, knowledge was noted in areas such as the benefits of inclusion for students without disabilities and the role of inclusive settings in serving students with special needs, which were deemed "Knowledgeable." This pattern underscores a strong endorsement of inclusion principles among the faculty, paired with an acknowledgment of the complexities and challenges inherent in effectively implementing such practices. This informed perspective is critical for fostering an educational environment that is truly accommodating and beneficial for all students.

Table 5. Extent of Respondents' Skills towards Handling Inclusive Classes

S/N	Indicators	WM	Verbal Description
1	I can use different approaches (e.g. Response to intervention & inquiry-based learning) for the support of students with diverse learning needs.	3.90	Skillful
2	I am prepared to use reinforcement strategies in an inclusive classroom.	3.55	Skillful
3	I can provide an alternate explanation for example when students are confused.	4.13	Skillful
4	I am confident in designing learning tasks for the individual needs of students with disabilities.	3.48	Skillful
5	I can use a variety of assessment strategies (e.g., portfolio, assessment, modified tests, performance-based assessment, etc.).	3.94	Skillful
6	I am prepared to deal with students who are behavioral problems in an inclusive classroom.	3.39	Moderately Skillful
7	I am confident in my ability to get students to work together in pairs or small groups with peers	3.97	Skillful
Aggregate Weighted Mean		3.76	Skillful

Table 5 assesses the skill level of respondents in managing inclusive classrooms. The overall competency across various key teaching skills is strong, with an aggregate weighted mean (WM) of 3.76, classifying the general skill level as "Skillful." This indicates a robust capacity among teachers to effectively implement inclusive educational practices. Notably, the ability to provide alternate explanations when students are confused scored the highest, with a WM of 4.13, suggesting a high level of adaptability and responsiveness in instructional methods. Similarly, skills in using a variety of assessment strategies and fostering cooperative learning among students are also rated highly, with WMs of 3.94 and 3.97 respectively. However, there are areas where proficiency is less pronounced. Handling students with behavioral issues in inclusive settings presented a challenge, as indicated by a lower WM of 3.39, falling under "Moderately Skillful." This suggests a need for enhanced training or support in behavior management strategies within inclusive contexts. The data reveals a generally high level of preparedness and confidence among teachers in employing diverse educational approaches and assessments but also highlights

specific areas where further professional development could enhance their effectiveness in supporting all students.

Table 6. Test of Relationship between the Respondents' Knowledge and Skills towards Handling Inclusive Classes

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
Knowledge and Skills	0.520*	Moderate Positive	0.003	Reject Ho	Significant

\*significant at  $p < 0.05$  (two-tailed)

Table 6 presents the findings from a statistical analysis testing the relationship between the knowledge and skills and handling inclusive classes. The correlation coefficient (r-value) between these variables is 0.520, indicating a moderate positive correlation. This suggests that as the knowledge about inclusive education among the teachers increases, their skills in handling inclusive classes also tend to improve. The p-value of 0.003 is significant at less than the 0.05 threshold, leading to the rejection of the null hypothesis ( $H_0$ ). This confirms that the observed relationship between knowledge and skills is statistically significant and not due to random chance. The significance of this relationship underscores the interconnected nature of theoretical understanding and practical application in educational settings. Teachers who are better informed about inclusive education principles are more likely to be adept at implementing these practices effectively, which can enhance the learning environment for students with diverse needs. This result highlights the importance of continued professional development and training in inclusive education strategies to bolster both the knowledge and practical skills of educators.

## Conclusion

The findings indicate that teachers generally possess a high level of knowledge about inclusive education. This comprehensive understanding is reflected across various facets of inclusive education, from the basics of inclusion to the application of specific teaching strategies designed to accommodate diverse learning needs. Similarly, the teachers' skills in handling inclusive classes are rated as "Skillful", suggesting a competent application of their knowledge in practical settings. The statistical analysis further supports a significant, moderate positive correlation between the knowledge and skills of the teachers, with a correlation coefficient of 0.520 and a p-value of 0.003, indicating that improvements in teachers' knowledge about inclusive practices are likely to enhance their practical skills. These results underscore the importance of continued professional development and targeted training in inclusive education techniques to further empower

educators to effectively support all students in a truly inclusive environment.

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