

Article

Revealing Teachers Expertise: Empowering Inclusive Education

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Abstract: This study investigates the relationship between teachers' knowledge of inclusive education and their skills in managing inclusive classrooms. Utilizing a descriptive-correlational research design, data were gathered through a modified questionnaire, administered to 32 teachers across day and night programs. The findings reveal that teachers possess a high level of knowledge about inclusive education, with an aggregate weighted mean of 3.94, and demonstrate substantial skills in handling inclusive classes, with an aggregate weighted mean of 4.03. The results also show a moderate positive correlation ($r = 0.604$) between knowledge and skills, which is statistically significant ($p = 0.000$). This indicates that increased knowledge is associated with enhanced skills in inclusive education practices. The study highlights the importance of continuous professional development to further improve teachers' effectiveness in inclusive educational settings.

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 (Kramer et al., 2021). Inclusive education is fundamental in promoting equality and providing all students with equitable learning opportunities (Kauffman & Hornby, 2020). Implementing inclusive education can lead to a more cohesive society by fostering mutual respect and understanding among students from diverse backgrounds (Aderibigbe et al., 2023). The importance of inclusive 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).

The global commitment to inclusive education is underscored by several international agreements and policies (Stubbs, 2018). For instance, the United Nations Convention on the Rights of Persons with Disabilities (CRPD) mandates the right to inclusive education for individuals with disabilities (Armstrong, 2021). Similarly, the Sustainable Development Goals (SDGs), particularly Goal 4, seek to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (Wang et al., 2019). Numerous countries have also enacted national policies and legislation to advance inclusive education. These international and national frameworks emphasize the necessity of eliminating educational barriers and fostering inclusive learning environments. Organizations such as UNESCO and UNICEF are actively involved in advocating for and supporting the global implementation of inclusive education (Dreyer et al., 2020).

The literature reveals significant disparities in implementation across different regions and countries (Hayes & Bulat, 2017). While some countries have made substantial progress in adopting inclusive practices, others lag due to various socio-economic, cultural, and political challenges (Eleweke & Rodda, 2002). Research indicates that students with disabilities, minority groups, and those from low socio-economic backgrounds are less likely to receive inclusive education (Sijuola & Davidova, 2022). Additionally, there is a lack of standardized measures to assess the effectiveness of inclusive education practices, highlighting the need for targeted interventions and policies to address the unique challenges faced by different communities (Savolainen et al., 2012). The ongoing efforts to improve inclusive education must consider these disparities to ensure equitable access for all students (Sharma et al., 2018). 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 profoundly impact 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 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 will help educational systems move closer to achieving the goals of inclusive education.

Future research should focus on exploring 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 design targeted professional development initiatives. Research should also explore the barriers and facilitators to effective inclusive education from the teachers' perspective. Overall, a comprehensive research agenda is needed to address the gaps in knowledge and practice and support the continuous improvement of inclusive education.

Methodology

The study utilizes a descriptive-correlational research design as described by Oh and Pyrczak (2023), with the aim of 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 inclusive environments. To achieve this, the research employs a modified version of the questionnaire originally developed by Pasha, Yousaf, and Ijaz (2021), tailored to more accurately capture data pertinent 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 collected using a 5-point Likert scale, ranging from 'Not knowledgeable' to 'Highly knowledgeable' based on predefined 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 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	4	12.50	0	0.00	4	12.50
44-53	6	18.75	1	3.13	7	21.88
34-43	14	43.75	3	9.38	17	53.13
24-33	2	6.25	2	6.25	4	12.50
Total	26	81.25	6	18.75	32	100.00

The data on the age and gender distribution of teachers indicates a notable predominance of female teachers. Specifically, 81.25% (26 out of 32) of the respondents are female, while only 18.75% (6 out of 32) are male. In terms of age distribution, the majority of respondents fall within the 34-43 age range, with 53.13% (17 out of 32) of the total, comprising 14 females and 3 males. The next largest group is the 44-53 age range, accounting for 21.88% (7 out of 32) of respondents, with 6 females and 1 male. The age group 54 and above has 12.50% (4 out of 32), all female, while the youngest age group, 24-33, also represents 12.50% (4 out of 32) of the respondents, evenly split between genders with 2 females and 2 males. This data highlights the gender imbalance within the teaching staff and suggests a concentration of mid-career professionals within the school.

Table 2. Highest Educational Attainment of the Respondents

Educational Attainment	f	%
Doctorate Graduate	2	6.25
With Doctorate Units	0	0.00
Master's Graduate	7	21.88
With Master's Units	16	50.00
Bachelor's Degree	7	21.88
Total	32	100.00

The table presents the highest educational attainment of the teachers. The majority of the respondents, 50% (16 out of 32), have completed some coursework towards a master's degree but have not yet graduated. A significant portion, 21.88% (7 out of 32), have obtained a master's degree, and an equal percentage holds a bachelor's degree. Only 6.25% (2 out of 32) of the respondents have attained a doctorate degree, while none are currently pursuing doctoral units. This distribution indicates a high level of advanced education among the teaching staff, with a substantial number of respondents having pursued graduate-level education.

Table 3. Length of Service of the Respondents

Length of Service (in years)	f	%
16 and above	12	37.50
11-15	8	25.00
6-10	10	31.25
1-5	2	6.25
Total	32	100.00

The table provides an overview of the length of service of teachers. The majority of respondents, 37.50% (12 out of 32), have served for 16 years or more, indicating a significant portion of experienced teachers. This is followed by 31.25% (10 out of 32) of respondents who have been in service for 6 to 10 years. Another 25.00% (8 out of 32) have served between 11 to 15 years. The smallest group, representing 6.25% (2 out of 32), consists of teachers with 1 to 5 years of service. This distribution suggests that a considerable number of the teaching staff have substantial experience in the field.

The table presents the level of knowledge of respondents towards inclusive education, measured through various indicators. The aggregate weighted mean of 3.94 indicates that, overall, respondents are knowledgeable about inclusive education.

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".	4.19	Knowledgeable

2	Every child regardless of disabilities has the right to be educated in the regular class.	4.19	Knowledgeable
3	Students with special needs can best be served in the general education classroom.	3.78	Knowledgeable
4	The inclusion of students with special needs in the class can be beneficial for students without disabilities.	3.84	Knowledgeable
5	Students with special needs benefit both academically and socially from being placed in an inclusive setting.	4.13	Knowledgeable
6	Inclusive teaching is a successful education system to address learners' needs.	4.06	Knowledgeable
7	Inclusive teaching requires collaboration among teachers (General & special).	4.09	Knowledgeable
8	Successful implementation of inclusive education requires special training for teachers.	4.09	Knowledgeable
9	Teachers should use different methods of teaching to satisfy the needs of disabled students.	4.13	Knowledgeable
10	Teachers should have opportunities to adapt the syllabus and teaching materials while teaching in inclusive classes.	3.97	Knowledgeable
11	The teacher should encourage cooperative learning to make all students support each other.	4.00	Knowledgeable
12	The teacher must design the individualized education plan (IEP) for children with special needs.	3.31	Moderately Knowledgeable
13	Inclusive teaching makes the teacher feel more responsible for students with special needs.	3.94	Knowledgeable
14	Teacher should manage the classroom layout and setting plan for the children with special needs.	3.94	Knowledgeable
15	Teachers should use differentiated instruction in an inclusive classroom.	4.09	Knowledgeable
16	Teachers should collaborate with other professionals in designing individualized educational plans (IEP) for students with disabilities.	3.50	Knowledgeable
17	Teaching strategies (Task Analysis, shaping, Chaining Prompting, Fading) should be used in an inclusive classroom.	3.81	Knowledgeable
Aggregate Weighted Mean		3.94	Knowledgeable

The highest weighted means of 4.19 were observed for the concepts of inclusion and the belief that every child, regardless of disabilities, has the right to be educated in a regular class. Respondents also showed a high level of agreement (WM = 4.13) on the benefits of inclusive settings for students with special needs, both academically and socially, and the necessity of using different teaching methods to meet the needs of disabled students. Knowledgeable ratings (WM = 4.06 - 4.09) were noted in the importance of collaboration among teachers, the requirement for special training for successful implementation, and the use of differentiated instruction. The need for teachers to adapt syllabi and teaching materials (WM = 3.97) and the encouragement of cooperative learning (WM = 4.00) also received knowledgeable ratings. The lowest rating was for the necessity of designing individualized education plans (IEP) (WM = 3.31), indicating that respondents felt moderately knowledgeable about this aspect. Other indicators, such as the use of specific teaching strategies (WM = 3.81) and collaboration with other professionals in designing IEPs (WM = 3.50), were also rated

as knowledgeable but on the lower end of the spectrum. Overall, the data suggests that while respondents are well-informed about many aspects of inclusive education, there are areas, particularly related to IEPs, where further training and knowledge enhancement may be beneficial.

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.	4.03	Skillful
2	I am prepared to use reinforcement strategies in an inclusive classroom.	4.13	Skillful
3	I can provide an alternate explanation for example when students are confused.	4.19	Skillful
4	I am confident in designing learning tasks for the individual needs of students with disabilities.	4.06	Skillful
5	I can use a variety of assessment strategies (e.g., portfolio, assessment, modified tests, performance-based assessment, etc.).	4.06	Skillful
6	I am prepared to deal with students who are behavioral problems in an inclusive classroom.	3.88	Skillful
7	I am confident in my ability to get students to work together in pairs or small groups with peers	3.84	Skillful
Aggregate Weighted Mean		4.03	Skillful

The table outlines the extent of respondents' skills in handling inclusive classes, as measured by various indicators. The aggregate weighted mean of 4.03 indicates that, overall, respondents are skillful in managing inclusive educational settings. The highest weighted mean of 4.19 was for the ability to provide alternative explanations when students are confused, suggesting strong skills in adaptive teaching methods. Respondents also rated themselves highly (WM = 4.13) on being prepared to use reinforcement strategies in inclusive classrooms. Other areas where respondents felt skillful include designing learning tasks tailored to individual needs (WM = 4.06) and using a variety of assessment strategies (WM = 4.06). The use of different teaching approaches to support students with diverse learning needs also received a high rating (WM = 4.03). The lowest skill rating was for dealing with behavioral problems (WM = 3.88) and getting students to work together in pairs or small groups (WM = 3.84), though these still fall within the skillful range. These results suggest that while respondents generally feel competent in their skills to handle inclusive classrooms, there is slightly less confidence in managing behavioral issues and facilitating group work among students. Overall, the data reflects a positive self-assessment of skills in inclusive education, with potential areas for targeted professional development.

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	0.604*	Moderate Positive	0.000	Reject Ho	Significant

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

The table presents the results of a test examining the relationship between the respondents' knowledge and skills in handling inclusive classes. The r-value of 0.604 indicates a moderate positive correlation between the two variables, suggesting that as the respondents' knowledge about inclusive education increases, their skills in managing inclusive classrooms also improve. The p-value of 0.000, which is less than the significance level of 0.05, leads to the rejection of the null hypothesis (Ho). This indicates that the observed correlation is statistically significant. These results imply that there is a meaningful and positive relationship between the knowledge teachers possess regarding inclusive education and their practical skills in implementing inclusive practices in the classroom. Enhancing teachers' knowledge through targeted training and professional development is likely to have a beneficial impact on their ability to effectively manage inclusive educational environments.

Conclusion

The study's findings reveal a comprehensive understanding and skill set among teachers regarding inclusive education. Teachers demonstrated a high level of knowledge across various indicators, indicating they are well-versed in inclusive education principles and practices. They are particularly knowledgeable about the benefits and requirements of inclusive education, although there is a moderate need for improvement in designing individualized education plans (IEPs). In terms of skills, the respondents also rated themselves highly, showing they are proficient in handling diverse learning needs and implementing various teaching and assessment strategies in inclusive classrooms. Furthermore, the test of the relationship between knowledge and skills revealed a moderate positive correlation ($r = 0.604$) that is statistically significant ($p = 0.000$), suggesting that enhanced knowledge is associated with better skills in managing inclusive settings. These results underscore the importance of continuous professional development to further strengthen teachers' capabilities in inclusive education, thereby promoting more effective and equitable learning environments for all students.

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