

Teachers' Attitudes towards Inclusion of Blind or Partially-Sighted Students in Secondary Schools in Nigeria

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ABSTRACT

Purpose: *This study investigated the attitudes of secondary school teachers towards students with blindness or partial sight in selected states in Nigeria.*

Method: *The authors utilised the modified version of a previous instrument to collect data from 306 secondary school teachers in Nigeria. Six basic questions were established to address: respondents' attitudes towards inclusion; training acquired related to teaching; knowledge pertaining to policy and legislation; confidence levels to teach students with disabilities.; impact of geographical location; and differences in attitudes by the variables of subject(s) taught, school level taught, and years of teaching experience.*

Results: *Attitudes of participants were mixed but were generally positive. The level of training was low, with teachers showing limited knowledge of policy and legislation. A little over a quarter (27%) of them lacked confidence in teaching. There were differences in attitudes related to the geographical location of respondents. Those who taught at the senior secondary school level tended to have higher attitude scores on average than their counterparts at the junior secondary school level.*

Conclusion and Limitations: *This study used self-report measures, although observations and interviews could be additional ways to evaluate the attitudes of participants throughout the country. Moreover, in-service programmes may need to be implemented to increase teachers' knowledge base and expand their experiences in line with established policies and legislation.*

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INTRODUCTION

In Nigeria, unlike in high-income countries, students with blindness or partial sight (also known as visual impairment) have generally been educated in regular secondary schools — a process popularly known as “inclusion” (UNESCO, 2009). Inclusion implies that students with disabilities will receive quality education among classmates without disabilities who are of a similar age. Therefore, the inclusive process is now seen as a strategy to ensure education for all learners (UNESCO, 1994; Ainscow & Miles, 2009). Inclusionists contend that in an inclusive education setting, the curricula, instructional methods, assessment techniques and documentations need to be adjusted. Thus, teachers are expected to provide students with disabilities with equitable support to enable them to fully participate physically, socially and academically with their peers without disability (United Nations, 2006; UNESCO, 2009; Forber-Pratt & Lyew, 2019).

In Nigeria today, frontline teachers, school administrators, organisations of persons with and without disabilities, parents, and politicians, among others, continue to examine the ramifications of this education practice (Ajuwon, 2008; Adaka, 2013; Olayi, 2016). In furtherance of this philosophy, the Nigerian government has been a signatory to a number of major international treaties that seek to promote inclusion. These include: the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994), the Dakar Framework for Action (United Nations, 2000), and the Convention on the Rights of Persons with Disabilities (United Nations, 2006).

The Federal Republic of Nigeria has initiated four landmark policies in the past five years. These include: the National Policy on Education (2014), the National Policy on Special Needs Education in Nigeria (2015), the National Policy on Inclusive Education in Nigeria (2017), and the Discrimination against Persons with Disabilities (Prohibition) Act (2019). These international treaties and domestic policies emphasise, among other ideas, the implementation of inclusive education within community schools for students with special needs, including those with blindness or partial sight.

As inclusion of students with blindness and partial sight into community-based schools becomes a reality within junior and senior secondary schools, it has

become imperative to evaluate the attitudes, knowledge, roles and responsibilities of teachers. Implementing inclusionary services in an effective manner remains a challenge, even in high-income countries. In most societies today, teachers are known to be powerful agents of change, and they are gradually being seen as vital stakeholders in the implementation of inclusive programmes. However, limited empirical research exists to document the efficacy of the practice of including students who are blind or partially-sighted into Nigeria's secondary schools.

Objective

This study aims to explore teachers' knowledge, attitudes, confidence level of teaching children with diverse needs, and roles in the inclusion process. This is an important initiative, given the numerous secondary schools that now accommodate such learners. In addition, there are state and national pressures to include students with visual impairments in community schools. Therefore it is important to acquire knowledge and gain an understanding of the attitudes, roles and responsibilities of these teachers towards learners who are visually impaired. Such an understanding would provide evidence for needed reform in pre-service and in-service special needs education training that would ultimately enhance teaching and learning in junior secondary school (JSS) and senior secondary school (SSS) levels in the country.

Research Questions

To guide the analyses of project data, the authors formulated the following research questions:

1. What are teachers' attitudes towards including students who are blind or partially-sighted in their classrooms?
2. How much training have teachers received regarding teaching these students?
3. How knowledgeable are teachers regarding policy and legislation on these students?
4. How confident are teachers in educating these students?
5. How do teachers' attitudes towards including students with blindness or partial sight in their classrooms vary by geographic location?

6. How do teachers' attitudes towards including such learners in their classrooms vary by: (a) subject(s) taught, (b) school level taught, (c) education level, and (d) years of teaching?

METHOD

Participants

The participants comprised mainly general education teachers employed in junior and senior secondary schools in 10 states and the Federal Capital Territory Abuja (FCTA). After all the data screening procedures were completed, the sample consisted of 306 participants. The distribution of teachers by gender, school level taught, education level, and years of experience is given in Table 1.

Procedure

As a starting point for the investigation, the lead author modified the instrument used in Zimbabwe by Mushoriwa (2001). While the Zimbabwe study focused on the attitudes of teachers towards including children who are blind in regular classrooms, the current research assessed the attitudes of regular secondary school teachers toward inclusion. The instrument comprised three sections. Section 1 consists of items that asked for participants' basic demographic information, including gender, age, highest educational qualification, subject(s) and class level(s) taught, name of school (which was used to determine the state in which the participant was employed), and length of years of teaching. There were questions on whether respondents and their immediate family members had a disability, and the type of disability. In addition, the authors wanted to ascertain how much training participants had in teaching students who are blind or partially-sighted, how they rated their knowledge of policy and legislation related to their students, and their perceptions of their overall level of confidence in teaching these students. The 14 items in the second section of the instrument evaluated the attitudes towards students who are blind or partially-sighted. The last section of the questionnaire elicited additional respondents' comments that were not included in the two previous sections.

Data Collection

About 400 copies of the questionnaire in ink print format and another 100 copies in Braille format, making a total of 500 copies, were distributed in the second half of

2017. Reminder phone calls, text and/or email messages were sent to the Nigerian Association of Exceptional Children (NAEC) and the Nigerian Association of Special Education Teachers (NASSET) at two- and four-month intervals of the six-month survey period. In all, 321 (64.2%) completed questionnaires (52 in Braille format, and 240 in ink print format) were returned to the lead author for data entry and analyses, using SPSS version 24.

Ethics Approval

After obtaining approval from the Institutional Review Board (IRB) of Missouri State University, U.S.A., the major special education organisations in Nigeria were notified on the goals and objectives of the project, and their help was solicited to distribute the questionnaires and collect them after completion.

RESULTS

The distribution of participants by key demographic variables is shown in Table 1. The sample consisted of 306 participants, of whom 46% ($n = 141$) were male and 53.9% ($n = 165$) were female. Of the 296 teachers who indicated their place of employment, 58% ($n = 173$) taught at the junior secondary school (JSS) level and 42% ($n = 123$) taught at the senior secondary school (SSS) level. Most of the teachers at both the JSS and SSS levels had between one and five years of teaching experience.

Table 1: Distribution of Participants by Demographic Variables

	JSS Level	SSS Level	Total
Education Level			
NCE	39.3% (69)	18.7% (23)	31.3% (92)
BED/Bachelors/HND	46.8% (81)	58.5% (72)	51.7% (153)
Masters/PGDE/PhD	13.3% (23)	22.8% (28)	17.2% (51)
Total	100% (173)	100% (123)	100% (296)
Gender			
Male	41.2% (73)	52.8%	46.0% (139)
Female	58.8% (104)	47.2% (59)	54.0% (163)
Total	100% (173)	100 (125)	100 (302)
Years of Experience			
1-5	43.5% (74)	42.6% (52)	43.2% (126)
6-10	22.9% (39)	18.9% (23)	21.2% (62)

11-15	12.4% (21)	15.6% (19)	13.7% (40)
16-20	11.8% (20)	10.7% (13)	11.3% (33)
21-35	9.4% (16)	12.3% (15)	10.6% (31)
Total	100.0% (170)	100.0% (122)	100.0% (292)

Teachers' Attitudes towards Including Students with Visual Impairments in their Classrooms

The first research question sought to ascertain teachers' attitudes towards including students with visual impairments in their classrooms. The survey instrument had 14 items (shown in Figures 1 and 2) which respondents were asked to rate on a 5-point Likert scale. The majority of respondents consistently agreed with each of the positively worded statements, and smaller percentages of the teachers agreed with the negatively worded items.

Figure 1: Percentage of Teachers in Agreement with each Statement about Attitudes towards Including Students with Visual Impairment

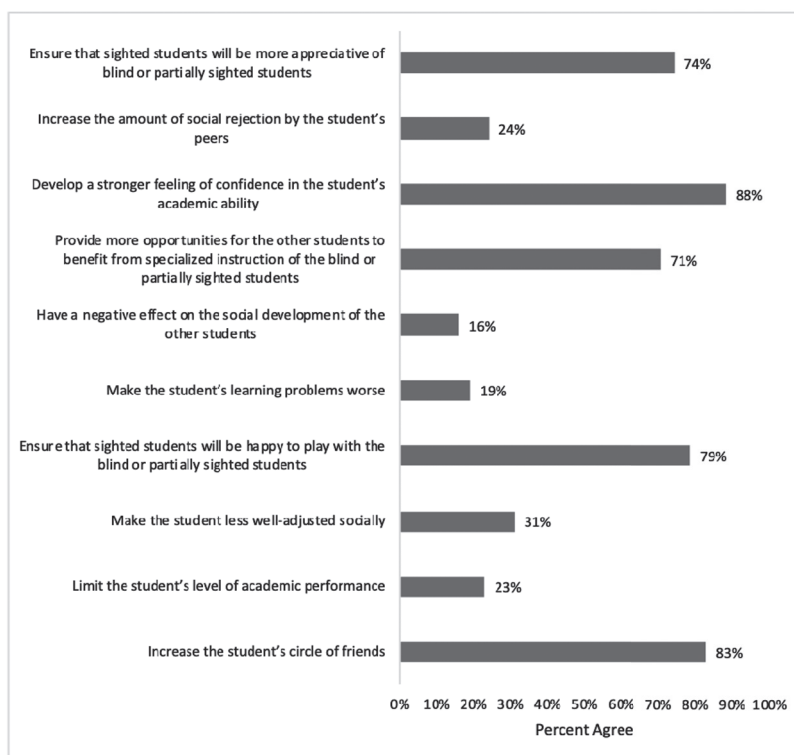


Figure 2: Percentage of Respondents in Agreement with each Statement regarding Regular Teachers' Preparedness to Educate Students with Visual Impairment

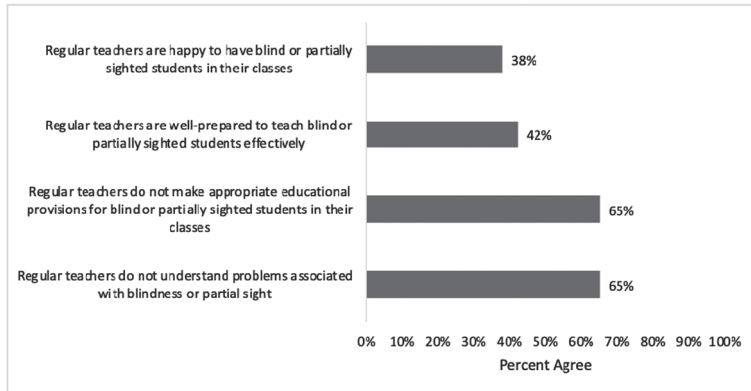
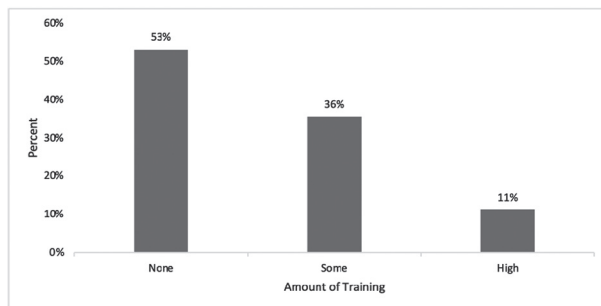


Figure 2 shows responses regarding regular teachers' preparedness to include students with visual impairments in their classrooms. The percentages of positive responses were generally low:

- 38% of teachers indicated that regular education teachers are happy to have students who are blind or partially-sighted in their classes,
- 42% indicated that regular education teachers are well prepared to teach students who are blind or partially-sighted,
- 65% indicated that regular education teachers do not make appropriate educational provisions for blind or partially-sighted students in their classes,
- 65% indicated that regular teachers do not understand problems associated with blindness or partial sightedness.

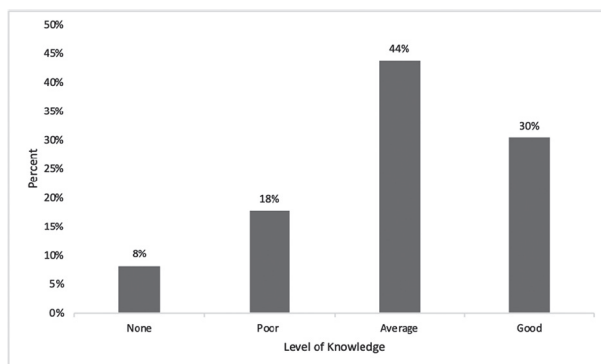
Training regarding Teaching Students who are Blind or Partially-Sighted

The second research question sought to ascertain how much training participants had received related to teaching students who are blind or partially-sighted. As illustrated in Figure 3, more than half (53%) had received no training, 36% had received some training, and 11% indicated a "high" amount of training.

Figure 3: Amount of Training Received

Knowledge of Policy and Legislation

Regarding knowledge of policy and legislation pertaining to students with visual impairments, less than one-third of the participants (30%) indicated having a good amount of knowledge, and slightly less than half (44%) had average knowledge. Some of them (8%) had no knowledge at all, and 18% had poor knowledge. This distribution is shown in Figure 4.

Figure 4: Distribution of Teachers by Level of Knowledge of Policy and Legislation

Level of Confidence in Teaching Students with Visual Impairments

Figure 5 presents the distribution of responses to the study's third research question, about participants' level of confidence in teaching students with visual impairments. Slightly over one-third (38%) of the teachers expressed high (25%) and very high (10%) levels of confidence in teaching students with visual impairments. About 27% had low or very low confidence.

Figure 5: Level of Confidence in Teaching Students who are Blind or Partially-Sighted

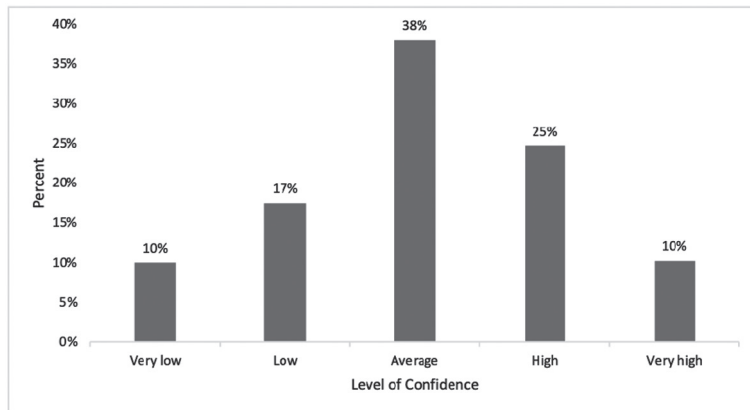
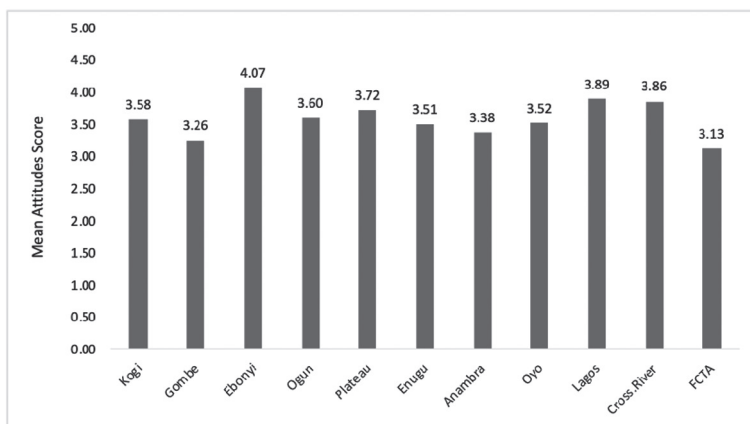


Figure 6: Mean Attitude Score of Teachers teaching Visually Impaired Students (by State)



Attitudes of Teachers by State

Figure 6 shows the mean attitudes of the teachers who teach students with visual impairments in 10 different states and FCTA. From the Figure, it is evident that the mean for Ebonyi is generally higher than for all other states, and that for FCTA is the lowest among the 11 jurisdictions. A one-way analysis of variance was conducted to assess whether these attitudes were significantly different across the various states. The results revealed statistically significant differences in mean attitudes [$F(10,295) = 7.801, p < .05$] among some pairs of states. Tukey's post hoc test showed that mean attitudes for Ebonyi state ($M_{EB} = 4.07$) were significantly higher ($p < .05$) than for Kogi $M_{KO} = 3$; Gombe $M_{GO} = 3.26$; Ogun $M_{OG} = 3.60$; Enugu $M_{EN} = 3.51$; Anambra $M_{AN} = 3.38$; Oyo $M_{GY} = 3.52$; and, FCTA $M_{FC} = 3.13$.

Other differences in means ($p < .05$) were between Gombe and Lagos ($M_{GO} = 3.26$, $M_{LA} = 3.89$), Gombe and Cross River ($M_{GO} = 3.26$, $M_{CR} = 3.86$); Ogun and FCTA [$(M_{OG} = 3.6019$, $M_{FC} = 3.13)$]; Plateau and FCTA ($M_{PL} = 3.72$, $M_{FC} = 3.13$); Anambra and Lagos ($M_{AN} = 3.38$, $M_{LA} = 3.89$); Anambra and Cross River ($M_{AN} = 3.38$, $M_{CR} = 3.86$); Lagos and FCTA ($M_{LA} = 3.89$, $M_{FC} = 3.13$); and lastly, Cross River and FCTA ($M_{CR} = 3.86$, $M_{FC} = 3.13$).

Testing for Differences in Attitudes

An average attitude score was computed using all 14 items presented in Figures 1 and 2. The mean attitude score was $M = 3.57$, with a standard deviation of .49, a minimum score of 1.93 and a maximum of 4.79. A four-way analysis of variance was conducted to test for differences in attitudes using the independent variables of school level taught, years of teaching, education level, and subject taught. The main effect of the school level taught was statistically significant [$F(1,276) = 5.95$, $p < .05$]. Teachers who taught at the SSS had a higher adjusted mean ($M_{SSS} = 3.66$) than those who taught at the JSS level ($M_{JSS} = 3.52$), controlling for the other variables.

Regarding education level, the mean for NCE ($M_{NCE} = 3.69$) was higher than that for teachers with Bachelor's degrees/HND ($M_{Bach} = 3.63$) and advanced degrees ($M_{ADV} = 3.44$). Although, the omnibus F statistic showed significance for this variable [$F(2,276) = 3.925$, $p < .05$], Tukey's post hoc test only showed a **near significant** difference between the NCE and advanced degrees (Masters/PGDE/PhD) ($p = .079$). The mean differences among the other pairs were not significant. The main effects of years of teaching ($F(4,276) = 1.614$, $p > .05$) and subject taught ($F(2,276) = 2.665$, $p > .05$) were both not statistically significant.

In summary, attitudes among teachers were mixed, but generally pointed in the positive direction. The level of training among teachers working with students with visual impairments was low. Teachers had limited knowledge of policy and legislation regarding students with visual impairments. Ideally, all teachers should have minimally an "average" amount of knowledge regarding students with disabilities. A little over a quarter (27%) of them were not confident about teaching students who are blind or partially-sighted.

There were differences in attitudes among some states, with Ebonyi having the highest mean attitude score and FCTA having the lowest. The range of mean scores was thus .91. Holding other factors constant, mean attitudes did not differ due to years of teaching or subject taught.

Teachers who taught at the SSS tended to have better, more positive attitudes towards blind and partially sighted students on average than those who taught at the JSS level. No meaningful conclusion can be made about differences in education level when controlling for subject taught, years of teaching, and school level taught.

DISCUSSION

It is important to investigate the attitudes of classroom teachers towards the practice of inclusion because attitudes have the potential to impact the educational outcomes of learners with and without disabilities. Clearly, for this paradigm of education to be effective, all educators must be fully involved in the conceptualisation and implementation of inclusion (Snyder, 1999).

Educators in various countries are now expected to rise to the challenge of an increasingly diverse classroom culture (Peterson & Beloin, 1992), adjust their teaching strategies to accommodate varying learning styles, and be psychologically and pedagogically prepared to assume the dynamic role of an inclusive educator (Hunter-Johnson et al, 2014). Having recognised the fact that teachers are the primary agents in the implementation of the curriculum in inclusive classrooms, there is need to consider how their attitudes will influence their behaviour towards, and their acceptance of, students with disabilities. Besides, the attitudes of teachers instructing students with disabilities may have some bearing on the success of inclusive educational programmes (Van Reusen et al, 2001; Boyle et al, 2013).

Based on the pattern of responses, the study data indicated that teachers' attitudes towards inclusion of students were generally positive; however, several teachers still displayed some negative feelings. This finding is supported by previous studies which show teachers' positive attitudes towards inclusion of students with disabilities (York et al, 1992; Ward et al, 1994; Villa et al, 1996; Avramidis et al, 2000). Conversely, other studies have shown teachers' negative attitudes towards students with disabilities in inclusive settings (Larrivee & Cook, 1979; Gersten et al, 1988; Coates, 1989; Semmel et al, 1991; Jelagat & Ondigi, 2017). The generally positive trend found in the current study showed that the teachers in Nigeria have a fairly sound understanding that inclusion has both social and academic benefits, not only to the students with disabilities, but also to students without disabilities. This improvement in attitudes may be attributed to recent in-service training for teachers. When teachers acquire information and knowledge, there is a tendency that they will develop positive attitudes.

Although some of the teachers have been exposed to some form of training, it is possible that many have not received the training specifically tailored to teaching students who are blind or partially-sighted. This fact is corroborated by a Cameroonian study (Mngo & Mngo, 2018) which showed a serious shortage of trained specialists required to work with students with disabilities in inclusive settings. This may suggest that inclusion of students with visual impairments could be fraught with challenges because teachers must acquire specialised and unique competencies to teach students who are blind or partially-sighted.

In spite of the mandate given to teacher training institutions to introduce into their curriculum Elements of Special Education, a large number of teachers have not received the appropriate training on how to teach students with visual impairments. This may be because the mandate is yet to be implemented in some tertiary institutions, resulting in some of their teacher candidates graduating without the requisite knowledge and skills. It is also possible that the visual impairment emphasis in the course on Elements of Special Education is insufficient to inculcate adequate knowledge and skills that will enable trainees to teach effectively. In order to alleviate these challenges, the National Teachers Institute (NTI) under the Millennium Development Goals (MDGs) incorporated Special Education Needs and Disabilities (SEND) training into their annual programme in 2012 (National Teachers Institute, 2012). However, it is likely that many of the currently employed teachers might not have had the opportunity to participate in the training programmes. Those that reported “high” amounts of training would most likely be teachers who specifically studied Special Education.

With regard to knowledge of policy and legislation, 44% of respondents stated that they had “average” knowledge, 30% had “good”, and 18% had “poor”, while 8% had “none”. Based on this data, it is evident that many teachers possess limited knowledge of policy and legislation related to inclusive education. This finding is not surprising considering that many teachers, especially in Nigeria, are concerned that including students with blindness or low vision would lower school standards because these students would be unable to pass national examinations. Anecdotal evidence suggests that this is a real concern among administrators and teachers because adequate funding options are often unavailable to sustain inclusionary programmes in community-based schools. In other words, teachers usually view policies and legislation as documents that only influence the government, while their responsibility as teachers is only to teach the academic components in the curriculum. This attitude towards policies and legislation could explain the current findings illustrated in the project data.

The data indicated that slightly over a quarter (27%) of the participants lacked confidence to teach students who are blind or partially-sighted. By implication, the majority of teachers (73%) are confident about teaching such students. This might seem in contrast to a previous study conducted by Ajuwon (2012) which showed that teachers were less confident in managing behaviours of students with special needs, including those with visual impairments. The high level of confidence seen in the current investigation could be attributed to the mandatory course on Introduction to Special Education in all tertiary institutions. This course provides a platform for teacher trainees to acquire the knowledge, information and skills that will increase their confidence in the classroom. Such training could have provided teachers with ample knowledge of the characteristics and behaviours of students with visual impairment, as well as some strategies they could apply in inclusive classrooms. This underscores the need for continuous professional training of teachers, since training will no doubt equip them with the necessary skills. Given the importance of professional development training, it will behove the authorities to streamline the selection of candidates for such training in order to guarantee that as many teachers as possible are given the opportunity to participate in the process.

The finding on the attitudes of teachers based on geographical location showed that there were differences in attitudes amongst some states, with Ebonyi having the highest mean attitude score and FCTA having the lowest score. This is an unexpected outcome, given that FCTA is a cosmopolitan city with a considerable number of educated and heterogeneous citizens from various parts of the country. One might have expected that the very high levels of educational and social attainment of the people in FCTA would translate into a more positive attitude. In comparison, people in Ebonyi state are known to be communally oriented, accommodating and favourably disposed towards persons in the general community. It is conceivable that such open-mindedness could have also influenced the teachers' attitudes towards including students with disabilities in their community schools.

Respondents at the senior secondary schools tended to have attitudes that were more positive, compared to those who taught at the JSS level. This finding is in consonance with previous studies conducted by Leyser et al (1994) who found that senior high school teachers displayed significantly more positive attitudes towards integration than did junior high school and elementary school teachers. However, this finding contradicts the assumption of Salvia and Munson (1986)

who concluded that as children's age increased, teacher attitudes became less positive to integration.

The lack of significant findings on years of teaching experience is at variance with the finding on educational level taught by the teachers. This is congruent with another study conducted by Dukmak (2013), which showed that teachers' years of experience had no influence on their attitudes towards inclusion. This is in contrast to the findings of Offor and Akinlosotu (2017), which revealed that the years of teaching experience had significant influence on teachers' attitudes towards students with special needs in secondary schools.

Limitations

This study is not without some limitations. First, the reliance on self-report measures in investigating teachers' attitudes in inclusive classrooms may have limited validity. Although self-reports are very relevant due to the obvious relationship between beliefs and actions, observations and interviews may serve as additional sources of information that researchers can rely on to measure the attitudes of teachers. Observing teachers' behaviours and reactions to students in inclusive classrooms could provide a better understanding of their attitudes. Future research should go beyond using only self-report questionnaires and employ other measures.

One other limitation is the generalisation of the findings pertaining to the respondents who were drawn from 10 of the 36 states, as well as the Federal Capital Territory of Abuja. A larger sample comprising teachers from all the 36 states would provide a better representation of Nigerian teachers, especially as inclusion of students with visual impairment is implemented throughout the country.

CONCLUSION

The purpose of this study was to examine the attitudes of teachers towards the inclusion of students who are blind or partially-sighted in regular secondary schools in Nigeria. There were differences in the attitudes of teachers towards inclusion of learners with visual impairment. While some teachers showed negative attitudes, many demonstrated positive attitudes. Because training has an influence on the attitudes of teachers as well as on their level of confidence in teaching students who are blind or partially-sighted, the government should implement practical measures to train more teachers, and provide adequate resources and greater incentives for participants.

RECOMMENDATIONS AND IMPLICATIONS

From their personal and professional perspectives, the authors believe that an inclusive system of education can only evolve if ordinary schools within the communities become truly inclusive, that is, if they become better at meeting the academic, social, physical and societal needs of diverse learners, including those with blindness or partial sight. This implies putting in place the necessary structures and systems, including dedicated teachers and administrators, an effective peer support system, sustained professional development for all the stakeholders, and a robust budgetary allocation annually for implementing and monitoring programmes. Already, Nigeria's newest legislation - Discrimination Against Persons with Disabilities (Prohibition) Act (2018) -affirms two salient points in support of this notion, namely: "A person with disability shall have unfettered right to education without discrimination in any form", and, "All public schools, whether primary, secondary or tertiary shall be run to be inclusive or accessible to persons with disabilities". This legislation further attests to the need for policy-makers to move from rhetoric to action, so as to create a rights-based environment for all learners in their neighbourhood schools.

The authors stress that the practice of successful inclusion must transcend government policy; hence, the need for a concerted effort for its practical implementation at all levels. This will require more professional development opportunities and the creation of awareness amongst the stakeholders. Teachers must be cognisant of policies and legislation to allow for proper implementation of inclusive programmes and services. Failure to do this will make it difficult to achieve equity and justice for learners with and without disabilities.

Higher institutions that offer courses related to Introduction to Special Education must ensure that all candidates acquire the fundamental skills needed to teach students who are blind or partially-sighted. Based on the identified needs of participants in this project, it will be necessary to diversify the visual impairment component of the introductory course on Special Education to include such specialised topics as Braille reading and writing, orientation and mobility, and assistive technology applications. Furthermore, and to maximise outcomes, the introductory course should be mandatory for all novice teachers.

Teachers are central to the successful implementation of inclusive education, and their attitudes towards the inclusion process must be evaluated periodically. It is known that teacher attitudes and beliefs can affect the learning environment and will somehow determine whether students with disabilities will be socially

accepted, or academically successful. The teachers' attitudes will determine the inclusivity of any child. Teachers' attitudes will also affect the other students and how they perceive inclusive practices, hence the need for all teachers to cultivate positive attitudes.

Lack of adequately trained teachers has been perceived as one of the major challenges that inclusion of students with disabilities face (Mngo & Mngo, 2018). The absence of proper training of teachers would negatively affect inclusive education. It may adversely influence school learning outcomes and the available educational opportunities for all students. In addition, inadequate training of teachers will result in diminished confidence in their ability to teach students with visual impairment and undermine their adjustment process.

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REFERENCES

- Adaka TA (2013). Inclusive education: The Nigerian attempt. In C. Sunal & K. Mutua (eds.): Influences of educational policy on teaching and learning. Charlotte: IAP Information Age Publishing.
- Ainscow M, Miles S (2009). Developing inclusive education systems: How can we move policies forward? *La educación inclusiva: de la exclusión a la plena participación de todo el alumnado*; 167-170.
- Ajuwon PM (2008). Inclusive education for students with disabilities in Nigeria: Benefits, challenges, and policy implications. *International Journal of Special Education*; 23(3): 11-16
- Ajuwon PM (2012). Making inclusive education work in Nigeria: Evaluation of special educators' attitudes. *Disabilities Studies Quarterly*; 32(2). Available at: <https://dsq-sds.org/article/view/3198>. <https://doi.org/10.18061/dsq.v32i2.3198>
- Avramidis E, Bayliss P, Burden R (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local educational authority. *Educational Psychology*; 20(2): 193-213. <https://doi.org/10.1080/713663717>
- Bender WN, Vail CO, Scott K (1995). Teachers' attitudes toward increased mainstreaming: Implementing effective instruction for students with learning disabilities. *Journal of Learning Disabilities*; 28(2): 87-94. <https://doi.org/10.1177/002221949502800203>. PMID:7884302
- Bennett T, Deluca D, Bruns D (1997). Putting inclusion into practice: Perspectives of teachers and parents. *Exceptional children*; 64(1): 115-131. <https://doi.org/10.1177/001440299706400108>

- Boyle C, Topping K, Jindal-Snape D (2013). Teachers' attitudes towards inclusion in high schools. *Teachers and Teaching*; 19(5): 527-542. <https://doi.org/10.1080/13540602.2013.827361>
- Coates RD (1989). The regular education initiative and opinions of regular classroom teachers. *Journal of Learning Disabilities*; 22: 532-536. <https://doi.org/10.1177/002221948902200902> PMID:2530295
- Dukmak SJ (2013). Classroom teachers' attitude towards including students with disabilities in the regular classroom in the United Emirates. *The Journal of Human Resource and Adult Learning*; 9(1): 26-39
- Federal Ministry of Education (2015). National Policy on Special Needs Education in Nigeria. Abuja, Nigeria.
- Federal Ministry of Education (2017). National Policy on Inclusive Education in Nigeria. Abuja, Nigeria.
- Federal Republic of Nigeria (2014). National Policy on Education, 6th edition. Lagos, Nigeria. NERDC Press.
- Federal Republic of Nigeria (2019). Discrimination against Persons with Disabilities (Prohibition) Act 2018. Official gazette No. 10. Lagos 21st January, 2019. 106: A97-122.
- Forber-Pratt AJ, Lyew DA (2019). A model case: Specialized group home for girls with disabilities in India. *Child and Adolescent Social Work Journal*; 1-13. <https://doi.org/10.1007/s10560-019-00633-8>
- Gersten R, Walker H, Darch C (1988). Relationships between teachers' effectiveness and their tolerance for handicapped students. *Exceptional Children*; 54: 433-438. <https://doi.org/10.1177/001440298805400506> PMID:2963747
- Hunter-Johnson Y, Newton NGL, Cambridge-Johnson J (2014). What does teachers' perception have to do with inclusive education: A Bahamian context. *International Journal of Special Education*; 29(1): 143-157.
- Jelagat KJ, Ondigi SR (2017). Influence of socio-cultural factors on inclusive education among students and teachers in Nairobi integrated educational programme. *Kenya IOSR Journal of Research & Method in Education (IOSR-JRME)* e-ISSN: 2320-7388, p-ISSN: 2320-737X 7, (I), Ver. II (Jan. - Feb. 2017): 49-55. <https://doi.org/10.9790/7388-0701024955>
- Larrivee B, Cook L (1979). Mainstreaming: A study of variables affecting teacher attitudes. *Journal of Special Education*; 13: 315-324. <https://doi.org/10.1177/002246697901300310>
- Leyser Y, Kapperman G, Keller R (1994). Teacher attitudes toward mainstreaming: A cross-cultural study in six nations. *European Journal of Special Needs Education*; 9: 1-15. <https://doi.org/10.1080/0885625940090101>
- Mngo ZY, Mngo AY (2018). Teachers' perceptions of inclusion in a pilot inclusive education program: Implications for instructional leadership. *Hindawi Education Research International*; 2018: 1-13. <https://doi.org/10.1155/2018/3524879>
- Mushoriwa T (2001). A study of the attitudes of primary school teachers in Harare towards the inclusion of blind children in regular classes. *British Journal of Special Education*; 28(3).

<https://doi.org/10.1111/1467-8527.00214>

National Teachers Institute (2012). *Special educational needs and disabilities (SEND) in Nigeria: Manual of special educational needs and disabilities (SEND)*. Lagos, Nigeria: Axiom Learning Solutions, Ltd.

Offor DI, Akinlosotu NT (2017). Teachers' attitude towards special needs students in secondary schools in North senatorial district of Edo State, Nigeria. *Journal of Education and Practice*; 8(4): 6-12.

Olayi JE (2016). *Inclusive education and its impact on the society and students who are blind and visually impaired: A survey of Nigeria*. A Ph.D. thesis submitted to the Institute of Special Education, Faculty of Education, Palacky University, Olomouc, Czech Republic. Unpublished.

Peterson M, Beloin KS (1992). Teaching the inclusive teacher: Restructuring the mainstreaming course in teacher education. *Teacher Education and Special Education*; 21(4): 306-318. <https://doi.org/10.1177/088840649802100406>

Salvia J, Munson S (1986). Attitudes of regular education teachers toward mainstreaming mildly handicapped students. In MEISEL, C. J. (Ed.): *Mainstreaming Handicapped Children: Outcomes, Controversies, and New Directions*. London: Lawrence Erlbaum: 111-128.

Semmel M, Abernathy T, Butera G, Lesar S (1991). Teacher perceptions of the regular education initiative. *Exceptional Children*; 57: 9-22. <https://doi.org/10.1177/001440299105800102>. PMID:1954974

Snyder RF (1999). Inclusion: A qualitative study of in-service general education teachers' attitudes and concerns. *Education*; 120(1): 173-182.

United Nations (2000). *The Dakar Framework for Action*. Retrieved from: <https://sustainabledevelopment.un.org/content/documents/1681Dakar%20Framework%20for%20Action.pdf>

United Nations (2006). *Convention on the Rights of Persons with Disabilities*. Retrieved from: <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>

UNESCO (1994). *Salamanca statement and framework for action on special needs education. World Conference on Special Needs Education: Access and Quality*. Paris, France. 5.43.

UNESCO (2009). *Policy guidelines on inclusion in education*. Retrieved from: <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>

Van Reusen AK, Shoho AR, Barker KS (2000). High school teacher attitudes toward inclusion. *High School Journal*; 84: 2

Villa BA, Thousand JS, Meyers H, Navin A (1996). Teacher and administrator perceptions of heterogeneous education. *Exceptional Children*; 63: 29-45. <https://doi.org/10.1177/001440299606300103>

Ward J, Center Y, Bochner S (1994). A question of attitudes: Integrating children with disabilities into regular classrooms? *British Journal of Special Education*; 21: 34-39. <https://doi.org/10.1111/j.1467-8578.1994.tb00081.x>

York J, Vandercook T, MacDonald C, Hiese-Neff C, Caughey E (1992). Feedback about integrating middle-school students with severe disabilities in general education classes. *Exceptional Children*; 58: 244-258. <https://doi.org/10.1177/001440299105800307>. PMID:1839896