

Teachers' and Parents' Knowledge about Disabilities and Inclusion in Nigeria

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Abstract

There has been a gradual move toward the inclusion of students with disabilities in Nigeria promoted by the National Policy of Education, as well as policies emerging from UNESCO; however, the infrastructure and resources to make inclusion happen are generally lacking. Based on this report and the need for more information on teachers' and parents' understanding about disabilities and inclusion as demonstrated in the literature, this study explored disability-related knowledge and understanding among teachers and parents in Nigeria. Specifically, using an exploratory case study including quantitative and qualitative data, this research was designed to explore teachers' and parents' knowledge about and understanding of students with disabilities and inclusion in the southwest region of Nigeria. Findings revealed that there is a need for more teacher and parent training in Nigeria regarding students with disabilities, especially as their willingness to support students who are struggling is positive. This willingness is a key component and first steps for moving schools and communities in Nigeria toward more inclusive environments.

Key Words: Inclusion, Nigeria, Teacher's knowledge, Parent's knowledge

Nigeria's educational system, as well as its services for those with disabilities have evolved through phases that have included missionary-provided programs, colonial-crafted education systems, social services approaches, to the current universal educational system that is broadly supported by policies and laws. Nigeria's Universal Basic Education Law of 2004 ensures that a nine-year compulsory education is provided to all primary and junior secondary students, including students with disabilities (Ajuwon,

2008). Although inclusion of students with disabilities in the typical education system is a relatively recent phenomenon, policies and guidelines in Nigeria after the 1970s have emphasized the importance of including students with disabilities in the *mainstream* (e.g., National Policy on Education, 1977; The Plateau State Handicapped Law, 1981). While the National Policy on Education (2008) emphasizes inclusive education for students with disabilities, it is recognized that even as policy provisions related

to special education and inclusion have evolved and advanced over time, the implementation of these laws and policies has lagged (Garuba, 2003) due to constraints such as lack of resources and trained teachers (Fakolade & Adeniyi, 2009).

Researchers and scholars investigating inclusion in Nigeria have found a number of factors that impact the inclusion of students with disabilities in general education classrooms. Studies have shown that teachers' attitudes toward inclusion vary, with negative attitudes associated with some disability categories, such as intellectual disabilities (Ajuwon, 2012; Fakolade & Adeniyi, 2009). Research has shown that the understanding of what inclusion means and how it is implemented varies across Nigeria (Nkechi, 2013; Salami, 2014;). Obiakor and Offor (2011) describe the challenges and problems with special education provision in Nigeria and point to the "lack of mandatory legislation" that would facilitate inclusive practices. While there has been a gradual move toward the inclusion of students with disabilities in Nigeria promoted by the National Policy of Education (Federal Republic Nigeria, 2008), as well as policies emerging from United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1994, 2005), the infrastructure and resources to make inclusion happen are generally lacking (Ajuwon, 2008; Nkechi, 2013; Obiakor & Offor, 2011; Salami, 2014).

In addition to the importance of having the infrastructure to implement inclusive practices, teachers' knowledge about and understanding of students with disabilities are critical to the success of inclusive programs, as these factors significantly impact quality of instruction and student achievement (Ajuwon, 2012; Arbeiter & Hartley, 2002; Brownell et al., 2014; Darling-Hammond, 2000; Wayne & Youngs, 2003; Wilson & Floden, 2003).

Teachers' knowledge can influence many facets of their teaching practice (Ruppar, Gaffney, & Dymond, 2015; Stough & Palmer, 2003). Ruppar et al. (2015) found that teachers' decisions about instruction, curriculum, and student potential were influenced by their beliefs, self-efficacy, and expectations. Stough and Palmer (2003) illustrated the powerful effect of teachers' knowledge of students' learning on the decisions made during instruction in their qualitative study of 19 expert special education teachers. Among these experts, the more information the teachers in this study had the more effectively they assessed students and provided instruction that met students' needs. DeSimone and Parmar (2006) found that knowledgeable teachers tend to use more effective teaching strategies in inclusive classrooms. Teachers who are well-informed have been shown to communicate with students more effectively, facilitate meaningful dialogue, and provide accommodations (Mariage, Englert, & Garmon, 2000; Soto, 1997). Teachers have been shown to respond to academic and

behavior issues more effectively if they know their students' learning needs (Eikeseth, 2010). The level of information teachers have can also impact how effectively they teach academics, such as reading, to struggling learners (Washburn, Joshi & Binks-Cantrell, 2011). Knowledge and skills of teachers are also related to effective parent-school partnerships (Ditrano & Silverstein, 2006; Epstein, 2013; Keen, 2007).

In addition to teachers' knowledge about and understanding of students with disabilities and inclusion, parents' attitudes about students with disabilities and their familiarity with inclusion can also impact the quality of educational services received (Boer, Pijl, & Minnaert, 2010). From their meta-analysis of parent attitude research, Boer and colleagues found that many factors, such as education level and disability type, affect parents' attitudes toward inclusion and students with disabilities (Boer et al., 2010). Parents' attitudes about the benefits of inclusion are also related to perceptions of quality of services for students with disabilities (Mutfa, Mpofo, & Chataika, 2007; Palmer, Borthwick-Duffy, & Widaman, 1998). Parents' beliefs and knowledge have the potential to create barriers to successful education and inclusion of students with disabilities (Bannink, Stroedken, Idro, & van Hove, 2015). The literature available regarding the cultural beliefs of parents in Nigeria related to children with disabilities indicates that feelings of shame are associated with disabilities; furthermore, current perceptions of parents may be a barrier to building inclusive settings (Obiakor & Offor, 2011).

While some attention to teachers' knowledge and understanding of students with disabilities and inclusion in Nigeria has resulted in establishing training programs at universities (e.g., University of Ibadan) and requiring Special Education coursework in teacher preparation programs (Fabunmi, 2005; Obiakor & Offor, 2011), there is little information available related to students with disabilities for general education teachers in the field—the very professionals who can facilitate inclusive education. Studies of parents' understanding of disabilities are also lacking, and yet parents' understanding and perceptions are critical to successful inclusion of students with disabilities (Ademokoya & Iheanachor, 2008).

Based on the most recent UNESCO (2010) report regarding the inclusion of students with disabilities in educational settings in Nigeria and the need for more information on teachers' and parents' knowledge about disabilities and inclusion as demonstrated in the literature cited here, this study was designed to explore teachers' and parents' knowledge about students with disabilities and inclusion in Nigeria. Research that explores these factors can help build an informed foundation for moving schools and communities toward more inclusive environments.

METHODS

In order to explore teachers' and parents' knowledge and understanding related to students with disabilities and inclusion, an exploratory case study was employed (Yin, 2003) using both quantitative and qualitative data. Stemming from a qualitative methodology, exploratory case studies can explain the process and outcomes of the phenomenon through the observation, reconfiguration, and analysis of what is being explored (Tellis, 1997) with the inclusion of both quantitative and qualitative data. Furthermore, exploratory case studies facilitate answering research questions that are focused on "what" questions such as the research questions that guided this study: What knowledge about and understanding of students with disabilities and inclusion do teachers and parents have? As an exploratory case study, the research strategy involved obtaining survey data focused on the research question from teachers and parents. In addition, descriptive statistics were used to analyze the data in order to better understand possible patterns. Furthermore, thematic analysis (Braun & Clarke, 2006) was used to explore the qualitative data.

Participants

From a pool of educators and parents attending an unrelated professional development training, 36 teachers and 17 parents volunteered to participate in this case study. The teachers came from schools that were located in one Local Government Area (LGA; Ido Local Government Area of Oyo State in the southwest of Nigeria) inside the state of Oyo in the southwest of Nigeria. The Ido LGA is the largest of the 33 LGAs in Oyo state with a population of 117,129 individuals, and a total of 75 elementary schools, 18 junior schools, and 15 high schools (Ibadanland Net, 2017). The teachers represented two elementary schools and one high school from the Ido LGA. The teachers were asked to complete the survey and return the paper copy to one of the researchers. In addition, 17 parent participants (with and without children with disabilities) from the same region volunteered to complete surveys for this study. Parent participants were selected through purposive sampling (Marshall & Rossman, 2010) from an education and training project that was unrelated to this study.

Teacher demographics. Tables 1 and 2 contain the teachers' responses to the demographic items. This information shows that 13 of the participants had 11-15 years teaching experience and the majority of the teachers who participated in this study (77%) taught students in the middle grades. Over a third of the teachers (36%) indicated that they had 4-6 years of general education teacher training and one quarter of the teachers (25%) responded that they lacked any teacher training. The mean enrollment for the teachers' schools was 329 while the mean class size was 49 students. Most of the teachers indicated that they had struggling learners in their classrooms (94%).

Table 1

Teachers' Responses to Survey Items About Teaching Experience, Context, and Preparation

	Numbers of Teachers (Percent)
Years of teaching experience	
1-5	9 (25)
6-10	0
11-15	13 (36)
16-20	0
>20	5 (14)
Grades teaching now	
Primary	9 (25)
Elementary	0
Middle	28 (78)
High School	0
Teacher Training	
Years of Teacher Training	
No Training	9 (25)
1-3	7 (19)
4-6	13 (36)
Content Area Preparation (Math, English, etc.)	2 (6)
Preparation to Teach Students Who Struggle/Students with Disabilities	0

Note. $n=36$

Parent demographics. Seventeen parents (all females) volunteered to complete the survey, from a group of parents who were participating in an educational program that was unrelated to this study. The mean number of children of the parents in this case study was 2.1 (range of 1-4 total children). Their children had a mean age of 6.2 years (range of 2-20), with 24 boys and 13 girls represented. Parents were asked if their children struggled in school and only one parent indicated that her son struggled with reading, but attended the regular school. None of the parents thought their children had a disability.

Instrumentation

Two paper-based surveys were designed for this study, one survey for teachers and one survey for the parents. The survey items were written in English and were vetted by two native Nigerian researchers in order to validate the use of the survey language for the targeted population. All surveys were given to participants as paper copies in English as approved by the native Nigerian researchers.

Table 2

Teachers' Responses to Survey Items About Class Size, School Enrollment, and Presence of Struggling Learners in Classroom

Mean number of students per classroom	49
Mean school enrollment	329
Presence of struggling learners in classroom	34 (94%) Yes 2 (6%) No

Note. $n = 36$

Teacher survey. The teacher survey consisted of three parts. Part 1 of the survey included demographic information including items about teaching experience, grades taught, number of students in the classroom, number of students in the school, presence of students in the classroom who struggle, and number of years of teacher training. Part 2 of the teacher survey included 13 items that required numerical responses from the participants. The prompt for these items asked teachers to rate their knowledge about and understanding of various disabilities and struggling learners. The scale used to rate their knowledge included low or no knowledge (coded as 1), some knowledge (coded as 2), and a great deal of knowledge (coded as 3). Most of the disability categories from the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) were included, with the addition of mental illness (substituting for emotional disturbance) and struggling learner categories because of the prevalence of students who either have mental illness and/or struggle learning in schools. Based on culturally relevant input from a Nigerian researcher on the team, the IDEIA term “emotional disturbance” would not be as clear or well understood by the teachers or parents as the term “mental illness.” Part 3 of the survey included forced-choice (e.g., yes, no) and open-ended items (types of support desired, types of support and resources needed to teach students who struggle, beliefs about inclusion, desire for more training, and specific training desired in teaching students with disabilities). The main open-ended questions asked: What types of support and resources would you like to have provided to you that would help you teach students who struggle to learn?

Parent survey. The parent survey developed for this study included forced-choice and open-ended items in three parts. Part 1 of the survey focused on the parents' children (e.g., number of children, learning style) while Part 2 focused on the programs and services in the schools and the community. Part 3 focused on the parents' desire for training. Most survey questions included answers that were in agreement (i.e., yes), disagreement (i.e., no), or they did not know, but they also provided space for open-ended responses. For this study, we focused on three main questions to obtain qualitative data: a) What types of programs would be beneficial in the schools or in your community that would help families and their students who struggle to learn?, b) What types of training and

assistance in parenting would you like to receive?, and c) What would you like to learn about related to children with disabilities and/or special needs?

Data Collection

A native Nigerian educator collected the data during an unrelated professional development training for teachers and parents in schools in the state of Oyo in Nigeria. The paper-based questionnaires written in English were distributed to those participants who volunteered to participate in this study. Data were collected over a two-week period.

Data Analysis

Quantitative data were analyzed using descriptive statistics in order to better understand the participants' demographic information and responses to survey items. Thematic analysis using an inductive approach (Braun & Clarke, 2006) was used to analyze the qualitative data. Inductive thematic analysis identifies themes that are strongly linked to the data, not using a specific theoretical or coding approach. Through this inductive approach, the researchers used a constant-comparison (Boeije, 2002) approach by reading and re-reading the qualitative data. The coding was determined by three researchers, one whom was a native Nigerian researcher and a doctoral student in special education, another researcher with experience and context as a native from an African country with a doctoral degree in special education, and the third coder had over 15 years of experience in international special education also holding a doctoral degree in this area. The researchers explored the data, as themes emerged based on the similarity of words used.

RESULTS

This study explored Nigerian teachers' and parents' knowledge and understanding related to students with disabilities and inclusion. Analyses of the survey data were conducted using two different methods. Descriptive statistics were employed to analyze the quantitative survey data using SPSS (IBM Corporation, 2013). Qualitative data were analyzed using thematic analysis (Braun & Clarke, 2006) with three of the researchers checking the validity of the coding themes.

Table 3
Teachers' Mean Ratings of Their Knowledge About and Understanding of Disabilities

Disability Categories	Knowledge Mean Rating
Attention Disorders	1.68
Autism/Asperger's	1.13
Blindness/Visual Impairments	1.19
Cerebral Palsy	1.22
Deafness/Hard of Hearing	1.29
Hyperactivity Disorder	1.44
Intellectual Disabilities	1.67
Learning Disabilities	2.00
Mental Illness	1.19
Physical Disabilities	1.42
Speech/Language Disorders	1.71
Struggling Learners	1.85
Traumatic Brain Injury	1.11

Note. The means reflect a 1-3 Likert scale where 1=Low or no knowledge/understanding; 2=Some knowledge/understanding; and 3= A great deal of knowledge/understanding

Teacher Survey Results

Professional knowledge and understanding. Teachers were asked to rate their knowledge about various disability categories using a scale of 1 to 3, with 1 corresponding to low or no understanding of or knowledge about a disability, 2 indicating some understanding of or knowledge about a disability, and 3 indicating a great deal of knowledge about and understanding of a disability. Eleven disability categories, mental illness, and the term “struggling learner” were included (Table 3).

Several teachers did not respond to several items. The rate of non-response ranged from 8 teachers (22%) on the item related to knowledge about and understanding of intellectual disabilities, to 16 (44%) non-responders to the item related to struggling learners. The rate of non-responses generally increased through the 13 categories (i.e., the rate of nonresponse to the first category of disability knowledge was lower than the last category the teachers responded to).

Teachers' ratings of their knowledge indicate that they had the most knowledge about and understanding of the two disability categories of Learning Disabilities and Struggling Learners. Five teachers (13.88%) expressed that they had a great deal of knowledge about Learning Disabilities while 13 teachers (36.11%) indicated that they had some knowledge about and understanding of Learning Disabilities. Three teachers (8.33%) responded that they had a great deal of knowledge about and understanding of

Struggling Learners and 11 teachers (30.55%) responded that they had some knowledge about these students.

The next two categories of disabilities that teachers indicated they had some level of knowledge and understanding were Speech/Language Disorders and Attention Disorders. Four (11.11%) responded that they had a great deal of knowledge about and understanding of Speech/Language Disorders and seven teachers (19.44%) responded to only having some knowledge. Thirteen teachers (36.11%) indicated that they had some knowledge about Attention Disorders while one teacher (2.77%) indicated a great deal of knowledge about and understanding of Attention Disorders.

Teachers' ratings showed they had some knowledge about and understanding of Intellectual Disabilities, Hyperactivity, Physical Disabilities, Deafness/Hard of Hearing, Cerebral Palsy, and Mental Illness. The teachers' mean ratings on their knowledge of these disabilities fell in the middle range of high to low ratings. There was a range of ratings in each category, from 1-3 with the majority of the teachers rating themselves as having low/no, or some knowledge about and understanding of these disabilities.

The two categories of disabilities about which the teachers indicated they were least knowledgeable were Traumatic Brain Injury and Autism/Asperger's Disorders. Twenty-three teachers (63.88%) indicated that they had low or no knowledge about or understanding of Traumatic Brain Injury while 18 teachers (50.00%) responded that they had low or no knowledge about or understanding of Autism/Asperger's. One teacher (2.77%) had a great deal of knowledge about and understanding of Traumatic Brain Injury and two teachers (5.55%) indicated that they had a great deal of knowledge about and understanding of Autism/Asperger's.

Parent Survey Results

School and community programs. Parents were asked a range of questions about the programs in the schools and communities (Table 4). The majority of parents (12) felt that the schools could meet the instructional needs of their children. Nine of the parents were not sure if there were programs in the schools designed to meet the instructional needs of students struggling to learn and 10 parents felt that there was a need for more programs in schools to meet these students' needs. Eight of the parents were not sure if there were programs or services in the community designed to help parents and families with children who struggle to learn or who have a disability, and 10 parents felt that there was a need for more programs in the community.

Parents noted that there was a need for more visual programs for children (e.g., videos), one-on-one programs, training and assistance for special needs, and more programs that individualize instruction (“teach each child

Table 4
Programs and Service in Schools and Community

	Frequency (Percent)			
	Yes	No	Not Sure	NR*
School can meet instructional needs of children	12(70)	1(5)	0	2(11)
Presence of programs in schools to help struggling learners	2(11)	1(5)	9(52)	3(17)
Desire for more programs in schools for struggling learners	10(58)	1(5)	1(5)	3(17)
Presence of programs in community struggling learners/those with disabilities	2(11)	3(17)	8(47)	2(11)
Desire for more programs in community for struggling learners/those with disabilities	10(58)	0	2(11)	3(17)

Note. * NR= No response.

differently”). Parents had a desire for more special schools, specialized teachers, and recreational programs in the community.

Qualitative Results

Thematic analysis (Braun & Clarke, 2006) was used to better understand teachers’ and parents’ perspectives about the supports, resources, and programs needed in schools and the community for students with disabilities in Nigeria. Based on these thematic analyses, the results were broken down by type of the population (i.e., teachers and parents).

Teachers’ perspectives. Results of the qualitative data collected were summarized in four sections: a) supports and resources needed by teachers, b) supports for struggling learners (i.e., based on teachers’ perspectives), c) teachers’ perspectives about inclusion, and d) teachers’ needs for training.

Supports and resources needed by teachers. When asked about the types of supports and resources needed to teach students with disabilities in their classroom, teachers responded candidly with three major themes (Figure 1). The first theme is described as *Encouragement and Moral Support*. As its name implies, this theme describes teachers’ needs for the need of encouragement and moral support by others, especially as they work closely with students with disabilities and their families. For example, *Participant 6* stated, “Encourage them [students] and provide some basic school needs which they need.” The second theme called *High Quality Materials* is focused on the teachers’ expressed need for the provision of appropriate and high quality materials such as textbooks, classroom furniture, visual aids, and other equipment. More specifically, *Participant 28* expressed that “provision of special materials like braille, joy of signing, etc.” and “quality textbooks and other learning materials” were necessary. Similarly, the third and last theme was something discussed by the majority of the teachers: *Financial Assistance*. Specifically, teachers discussed financial need and monetary assistance for themselves, their classrooms, but also for the students

and their families. *Participant 30* stated, “I will give them support in terms of money and encouragement” and others just simply said that “financial support” or “money” could be part of the supports they received.

Support for struggling learners. Teachers were asked to provide ideas about support and resources that would help them teach students with disabilities and struggling learners. Teachers’ responses to this item were coded and categorized with three themes emerging (see Figure 2).

The first theme was related to the materials/equipment that teachers could use to be able to more effectively teach these students. Teachers’ requests included “quality textbooks”, “good classrooms”, “materials for student learning” (e.g., Braille, Joy of Signing), and “student lockers”. The second theme that emerged was related to teaching and instruction. Eight of the teachers said that they desired teaching aides, but they did not provide details about the types of aides needed. The third theme from the teachers’ responses that emerged was related to the personal side of teaching. Ten of the teachers mentioned their desire to have the patience to teach students who struggle to learn. Teachers also mentioned the desire to help these students concentrate and the need to keep encouraging these learners. Several teachers mentioned their desire to do all in their “capacity” to help these struggling learners.

Teachers’ perceptions about inclusion. Another item in the survey requested teachers’ opinions about where students who struggle to learn or who have disabilities should be educated. Thirteen of the teachers felt that these students should be included in classrooms with students without disabilities and with students who are not struggling to learn. Three teachers felt students with disabilities should be included in schools with students who do not have disabilities and who are not struggling learners, but that they should be educated in separate classrooms. Eight teachers felt that students with disabilities and those struggling to learn should be educated in separate schools, while two teachers indicated that these students should not

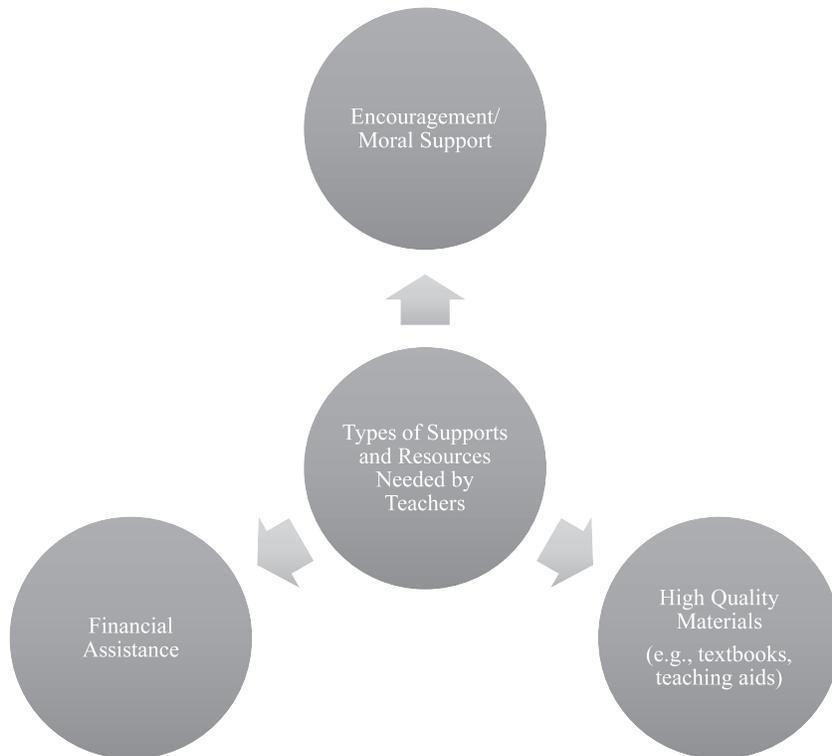


Figure 1. Types of Supports and Resources Needed by Teachers

be educated with other students but did not indicate what school environment they felt would be best. The remaining 23 teachers did not respond to this item.

Teachers' training needs. The final items explored the teachers' desires for more training on how to teach students who struggle to learn and how to teach students with disabilities. Twenty-seven of the teachers desired more

training to improve their teaching with students who struggle to learn, 24 of the teachers indicated that they would like more training for working with students with disabilities, and 4 teachers had no desire for this type of training. Six teachers left these two items blank.

Parents' perspectives. Parental perspectives explored for this study include three main sections: a) needs for

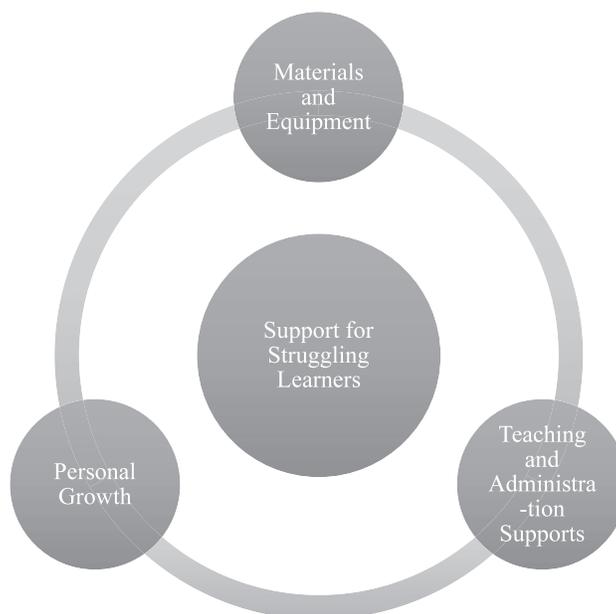


Figure 2. Supports for Struggling Learners Based on Teachers' Perspectives

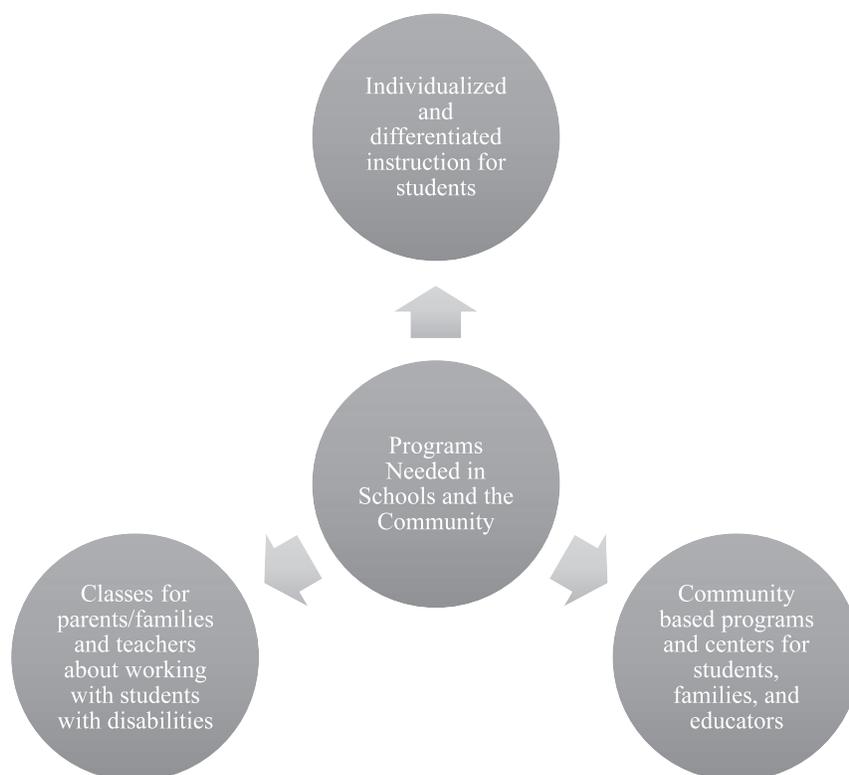


Figure 3. Programs Needed in Schools and the Community According to Parents

schools and the community, b) needs to relate to and assist students with disabilities, and c) desire for training and overall assistance. Results indicate a great need for desired assistance, training, and ways to relate to students with disabilities, although parents did not disclose whether they had children with disabilities or not.

Parent's desired needs for schools and the community. Parents expressed similar needs as the teachers surveyed in this study (Figure 3).

A central theme for parents' responses was *Community-Based Programs and Centers*. This theme focused on appropriate and high quality programs and centers for children with disabilities, their families, and their teachers as spaces for them to work together and as recreational environments for students. *Parent 2* discussed that a "community approach through lessons from educated ones" was a need. Similarly, *Parent 11* expressed that "creating recreational centers and other activities or programs that will enable them [to] mix, or interact with other children." In addition, the theme of *Classes for Parents and Families* focused on parents' seeking further knowledge in order to better understand and learn more about disabilities and possible supports and interventions. More specifically, some parents asked for individualized and differentiated instruction for students with disabilities in schools, although inclusive settings were not directly discussed. For example, *Parent 3* said, "I would like to

learn how to relate with children [with disabilities] and how to make them relevant to their world."

Parents' learning needs on how relate to and assist children reach full potential. Parents were also asked ways on how to relate to and assist children with disabilities reach their full potential. Although not enough data were obtained to fully understand parents' needs, some parents expressed that they wanted to learn more about how to cope with the disability and its issues by asking, "How best the parent can cope with them? How parent can give them maximum support to bring out their potentials and compete with other children who are 'normal'? How best they can be helped at school and for them not to be written off?" (*Parent 15*). Interestingly, parents did not respond to more personal questions such as those related to having children with disabilities, inclusive practices in schools or the community, or the desire to learn more about children with disabilities.

Desire for training and assistance. In Part 3 of the parent survey parents were asked if they would like training and assistance in parenting their children who struggle with learning or who have a disability. Two parents responded that they would like training and assistance, eight parents indicated that they had no desire for more training, two parents were not sure, and three parents did not respond to this item. Parents were also asked if they would like to learn more about children with disabilities and special needs. The five parents who responded indicated that they

would like to learn more about how to relate to children with disabilities, and they desired training on how parents can cope with a child with disabilities, how disabilities manifest themselves, what supports are available that bring out these children's potential, and what can be done to assist students with disabilities.

DISCUSSION

This case study examined teachers' perceptions of their knowledge about and understanding of disabilities and inclusion. The study also explored parents' perceptions, needs, and awareness of school and community services for students with disabilities and those who struggle to learn.

Teachers, Inclusion, and School Supports

Teachers' responses show that this group of teachers feels that they have little knowledge about or understanding of students with disabilities. Ideally, for inclusion to be successful, general education teachers would all rate themselves as having some or a great deal of knowledge about students with disabilities and those who struggle to learn, as we know that teachers' knowledge and understanding impact quality of instruction and student achievement (Brownell et al., 2014). The high number of teachers showing low or only some knowledge about or understanding of most of the disabilities listed in the survey seems to suggest that general education teachers get little to no preparation related to disabilities during their pre-service teacher education program. If inclusion is a goal of Nigeria, and if these results reflect the broader population of general education teachers in Nigeria, then a great deal of in-service and pre-service education and support will be needed for inclusion to be successful. For the most part, the teachers in this case study seemed very interested in obtaining more education and training. Further research is needed that includes a broader representation of teachers to better assess teachers' knowledge of disabilities, the extent of teacher preparation needed for working with students with disabilities, and also current needs for in-service training.

Teachers described supports and resources needed to teach students with disabilities and those who struggle to learn, but only at a very basic level. The responses indicate that they have some cursory knowledge about resources needed to teach these students, but they do not have a depth of knowledge about what schools and teachers need in order to make inclusion work. The need for basic resources, such as textbooks and learning materials connotes a poverty level aligned with Oshewolo's (2010) findings; that the poverty level in Nigeria is high and "upsetting" (p. 264). Nigerian schools attempting to implement inclusion practices will have to provide the financial support for teachers to obtain the required materials and for students with disabilities to have the curricula and materials they need to learn.

In addition, these outcomes are consistent with the propositions by scholars and authors on the importance of support services for children with special needs. For instance, Hernandez and Naccarato (2010) pointed out major themes pertaining to helpful benefits to inclusion that included educational support and contingent financial help. They found that financial support is especially beneficial and has positive effects on the educational success and achievement of all students. Similarly, according to Sim, Emerson, O'Brien, Pecora, and Silva (2008), the best types of support programs are those that render monetary aid and emotional support.

Parents, Inclusion, and Community Needs

Although most parents in this study indicated that they did not have a child with a disability, their suggestions to make education more successful for students who struggle to learn included teaching according to ability levels, use of visual/video programs, and training assistance to help students who struggle to learn. By not responding to the question about having a child with a disability, it shows consistency with literature that includes discussions about the cultural beliefs in Nigeria regarding children or people with disabilities (Obiakor & Offor, 2011) that often include negative perspectives or feeling shame about them. These beliefs and perceptions could be the opposite of what is needed to build inclusive settings for students with disabilities (Obiakor & Offor, 2011).

The parents also indicated desire for more community services and more parent training initiatives. If inclusion is to be effective in Nigeria, these parent suggestions and requests for more training should be considered, as parents' attitudes and knowledge impact the quality of education that students receive (Boer et al., 2010).

Limitations

The small number of participants in this study represents a snap shot of the population; therefore, the results of this study may not be reflective of all teachers and parents. It should be noted that only one parent indicated that her child struggled with reading while the remaining parents did not think their children had disabilities. Acknowledging that with the variety of regions and cultural environments across Nigeria, teachers' and parents' views of students with disabilities may vary substantially from region to region. Also, females made up the majority of the respondents, which reflects the gendered nature of both the teaching profession and parenting context in Nigeria. Finally, limitations on qualitative data collected must be taken into consideration, as only paper surveys were provided and the participants were limited to a written form of open-ended questions, making it difficult to obtain the true voices of all participants in the study.

Future research efforts to explore teachers' and parents' knowledge and understanding of students with disabilities will need to include both males' and females' perspectives from various regions and representing a diversity of economic and educational levels. In these future studies, parents of children with disabilities should also be included. The results of this study provide the groundwork for further exploration of teachers' and parents' knowledge and understanding of students with disabilities with the goal of more inclusive and equitable school programs for these students.

CONCLUSION AND IMPLICATIONS FOR FUTURE RESEARCH AND PRACTICE

This exploratory case study revealed the need for more teacher and parent training in Nigeria. As the teachers in this study were primarily teachers of middle grades, a more thorough study of teachers' knowledge and understanding should be conducted with educators at the preschool through high school levels. Doing such a needs assessment to see what the state of teachers' knowledge is would help teacher preparation programs, community and school service organizations, and policy-makers at the federal government level in Nigeria. A study of a broader population of parents could also provide useful information to school and community agencies about parents' knowledge and understanding of disabilities, as well as what supports and training are needed.

In the long term, higher education programs may need to provide more teacher preparation in the areas of disabilities, struggling learners, and inclusion practices. Perhaps as better-prepared general education teachers enter the school systems, inclusion programs could be more likely to succeed. In the short term, in-service teacher training that is focused on appropriate curriculum and instruction for students with disabilities and those struggling to learn may facilitate inclusion efforts. Involving parents in these and other training initiatives would support school-parent collaboration and partnerships in the endeavor to develop more inclusive schools.

REFERENCES

Ademokoya, J. A., & Iheanachor, C. N. (2008). Home-school partnerships with Nigerian parents of school children with disabilities. *Journal of the International Association of Special Education*, 9(1), 57-67.

Ajuwon, P. M. (2008). Inclusive education for students with disabilities in Nigeria: Benefits, challenges and policy implications. *International Journal of Special Education*, 23(3), 11-16.

Ajuwon, P. M. (2012). Making inclusive education work in Nigeria: Evaluation of special educators' attitudes. *Disability Studies Quarterly*, 32(2), 2-20.

Arbeiter, S., & Hartley, S. (2002). Teachers' and pupils' experiences of integrated education in Uganda. *International Journal of Disability, Development, and Education*, 49(1), 61-78.

Bannink, F., Stroedken, K., Idro, R., & van Hove, G. (2015). Community knowledge, beliefs, attitudes, and practices towards children with Spina Bifida and Hydrocephalus in Uganda. *International Journal of Disability, Development, and Education*, 62(2), 182-201.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, 36(4), 391-409.

Boer, A., Pijl, S. J., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education*, 25(2), 17-25.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. doi:10.1191/1478-088706qp063oa

Brownell, M. T., Lauterback, A. A., Dingle, M. P., Boardman, A. G., Urback, J. E., Leko, M. M., Benedict, A. E., & Park, Y. (2014). Individual and contextual factors influencing special education teacher learning in literacy learning cohorts. *Learning Disability Quarterly*, 37(1), 31-44.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8, 142. Retrieved from <http://epaa.asu.edu>

DeSimone, J. R., & Parmar, R. S. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. *Learning Disabilities Research & Practice*, 21(2), 98-110.

Ditrano, C. J., & Silverstein, L. B. (2006). Listening to parents' voices: Participatory action research in the schools. *Professional Psychology: Research and Practice*, 37(4), 359.

Eikeseth, S. (2010). Examination of qualifications required of an EIBI professional. *European Journal of Behavior Analysis*, 2, 239-246.

Epstein, J. L. (2013). Ready or not? Preparing future educators for school, family, and community partnerships. *Teaching Education*, 24(2), 115-118.

Fabunmi, M. (2005). Historical analysis of educational policy formulation in Nigeria: Implications for educational planning and policy. *International Journal of African and American Studies*, 4(2), 1-6.

Fakolade, O. A., & Adeniyi, S. O. (2009). Attitudes of teachers toward the inclusion of children with special

- needs in the general education classroom: The case of teachers in selected schools in Nigeria. *The Journal of the International Association of Special Education*, 10(1), 60-64.
- Federal Republic of Nigeria. (2008). *National policy of education*. Lagos: Nigerian Education Research and Development Council.
- Garuba, A. (2003). Inclusive education in the 21st century: Challenges and opportunities for Nigeria. *Asia Pacific Rehabilitation Journal*, 14(2), 191-200.
- Hernandez, L., & Naccarato, T. (2010). Scholarships and supports available to foster care alumni: A study of 12 programs across the US. *Children and Youth Services Review*, 32(5), 758-766.
- Ibadanland Net (2017). Welcome to IBA 2. Retrieved from: <http://ibadanland.com/ido.htm>
- IBM Corporation. (2013). *IBM SPSS Statistics for Windows*, Version 22.0. Armonk, NY: IBM Corporation.
- Keen, D. (2007). Parents, families, and partnerships: Issues and considerations. *International Journal of Disability, Development and Education*, 54(3), 339-349.
- Mariage, T. V., Englert, C. S., & Garmon, M.A. (2000). Teachers as “more knowledgeable than other: In assisting literacy learning with special needs students. *Reading and Writing Quarterly*, 16(4), 299-336.
- Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Mutfa, M. M., Mpofo, E., & Chataika, T. (2007). Inclusive education in Zimbabwe: Policy, curriculum, practice, family, and teacher education issues. *Childhood Education*, 83(6), 342-346.
- Nkechi, C. M. (2013). Education of the disabled in Nigeria: Access and perception. *Journal Plus Education*, 9(1), 133-142.
- Obiakor, F. E., & Offor, M. T. (2011). Special education provision in Nigeria: Analyzing contexts, problems, and prospects. *International Journal of Special Education*, 26(1), 25-32.
- Oshewolo, S. (2010). Galloping poverty in Nigeria: An appraisal of government interventionist policies. *Journal of Sustainable Development in Africa*, 12(6), 264-274.
- Palmer, D. S., Borthwick-Duffy, S. A., & Widaman, K. F. (1998). Parent perceptions of inclusive practices for their children with significant cognitive disabilities. *Exceptional Children*, 64, 271-282.
- Ruppar, A. L., Gaffney, J. S., & Dymond, S. K. (2015). Influences on teachers’ decisions about literacy for secondary students with severe disabilities. *Exceptional Children*, 81, 209-226.
- Salami, I. A. (2014). Inclusive early childhood education in Nigeria: The journey so far. *The Journal of the International Association of Special Education*, 15(2), 118-127.
- Sim, K. E., Emerson, J., O’Brien, K., Pecora, P. J., & Silva, L. (2008). Post-secondary education and training support utilization by students from foster care: Findings from scholarship recipient interviews. *Journal of Public Child Welfare*, 2(1), 109-129.
- Soto, G. (1997). Special education teacher attitudes toward AAC: Preliminary survey. *Augmentative and Alternative Communication*, 13, 186-196.
- Stough, L. M., & Palmer, D. J. (2003). Special thinking in special settings: A qualitative study of expert special educators. *Journal of Special Education*, 36(4), 206-222.
- Tellis, W. (1997). Introduction to case study. *The Qualitative Report*, 3(2), 1-14.
- UNESCO. (1994). *The Salamanca Statement and Framework for action on special needs education: Adopted by the World Conference on Special Needs Education; Access and Quality. Salamanca, Spain, 7-10 June 1994*. UNESCO.
- UNESCO. (2005). *Guidelines for inclusion: Ensuring access to education for all*. Paris: UNESCO.
- UNESCO. (2010). *World data on education*. Retrieved from: http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Nigeria.pdf
- Washburn, E. K., Joshi, R., & Binks-Cantrell, E. S. (2011). Teacher knowledge of basic language concepts and dyslexia. *Dyslexia*, 17(2), 165-183.
- Wayne, A. J., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89-122.
- Wilson, S. & Floden, R. E. (2003). *Creating effective teachers: Concise answers for hard questions. An addendum to the report “Teacher preparation research: Current knowledge, gaps, and recommendations”*. Washington, DC: AACTE Publications.
- Yin, R. K. (2003). *Case study research design and methods* (3rd ed.). *Applied Social Research Methods Series (Volume 5)*. Thousand Oaks, CA: Sage.

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