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Good Practices, Policy and ICT for Inclusive Education in Teacher Training: A Qualitative Approach

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Abstract

From a qualitative approach, this study gathers the contributions of 28 teachers from a teacher training college in Akwa Ibom State who reflected on how to advance towards a more inclusive college of education. The results indicate barriers to inclusion that Nigerian teachers training colleges must overcome and the strategies that would allow for progress towards a more inclusive best practices, policy and ICT. It concludes with the invitation to an organizational change based on a broader conception of inclusion. Tackling the underlying causes of this situation are the exclusive and inaccessible nature and structure of the school system. Moreover, there is the suggestion for a committed institutional effort that will translate into a greater educational investment that enables the improvement of inclusive learning conditions and the training of teachers in inclusive teaching.

Keywords: Inclusive, Policy, Barriers, ICT, Culture, Good practice

INTRODUCTION

Researchers have not reached a common definition for inclusive education with a distinction from what a regular form of education is defined as, however, inclusive education focuses on the well-being of all pupils and aims to develop classroom where all pupils can learn and participate together (Haug, 2017). Inclusive education is a United Nations (UN) innovation through the United Nations Educational Scientific and Cultural Organization (UNESCO). It is one of the main strategies that UNESCO has applied to address the global challenges of marginalization, discrimination and exclusion in response to the fundamental principle of Education for All (EFA). Inclusive education is involved with a particular emphasis on those groups of learners who may be at risk of marginalization, exclusion, or underachievement, such

students are categorized as those with Special Educational Needs (SEN) (Ainscow, 2020). Regular classroom teachers fundamentally and routinely encounter student diversity. To ensure that all students have access to learning in an inclusive classroom the application of complex and highly skilled content knowledge by the classroom teacher is essential (Florian and Black-Hawkins 2011). Under inclusive education as entrenched in the United Nations Educational, Scientific and Cultural Organization (UNESCO) Sustainable Development Goal 4 (SDG4), Quality Education seeks to “Ensure inclusive and equitable quality education and promotion of lifelong learning opportunities for all” (UNESCO 2019). Access to an all-effective inclusive education within the regular education system falls within this goal, which highlights that the principle of inclusion is far-reaching and applies to all students. UNESCO fact sheet report indicates that over 10m children are out of school in Nigeria, while UNICEF, reports that almost 95% of children with disabilities in developing countries are out of school and 90% of them may never gain access to basic education in their lifetime. The 2030 Agenda for Sustainable Development clearly states that disability cannot be a reason or criteria for lack of access to development programming and the realization of human rights, with the challenge to higher education institutions. The study aims to investigate the perception of teachers in a teacher training college about the inclusion of students with disabilities in a teacher training education setting, it would be beneficial to gather the perspectives of the parents of children with disabilities too, to get a fuller picture of the experiences and challenges related to inclusion in Akwa Ibom State at a tertiary institute.

Policy on Inclusive Education

Inclusive education as defined by United Nations Educational, Scientific and Cultural Organization (UNESCO) is “a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education” (Anderson 2014). In 2006, the United Nations ratified the Convention on the Rights of Persons with Disabilities (CRPD). National policy on Special Needs Education, spells out that Nigeria is involved in Special Needs Education “but the present practices are not fully consistent with existing global best practices”, Special Needs classrooms laboratories in the country are not yet technology driven (SNE, 2015). The Policy further states that the gifted education programme in Nigeria is organized like that of a regular school. In other words, techniques and strategies (such as curriculum compacting, enrichment, bibliotherapy and so on) that drive gifted education are not generally being practiced.

Access to appropriate education for Persons with Special Needs is the main thrust of inclusive education. Making appropriate education available to children and youth with Special Needs is one sure way of achieving access and equity as prescribed by UNESCO for inclusive education programmes. It is of great importance that Government of Nigeria urgently makes all levels of education (public and private) schools inclusive of, and accessible to all children

including those with disabilities/gifted/talented. That way there will be a drastic reduction in the number of out of school children, this also will reduce the social burden of unproductive and unskilled population a direct translation to increase the actual human resource

Capacity of the Nigerian Nation

The Special Needs Education (SNE) policy of 2015 highlights that there is no functional legislation on Special Needs Education even though Nigeria had signed and ratified the UN Convention on Rights of Persons with Disabilities (CRPD), Article 24, which provides that all schools must be inclusive of, and accessible to all children including those with disabilities (Ademefun 2020). There are no clear laws or policies today different from the ones that existed then, there were mainly that of “grants-in-aid”. According to the SNE (2015) document some of the laws in some states are now moribund. What exist now are policies with no legislation back up and the role of Special Education teachers in the context of the policy is not highlighted. At the state level in Akwa-Ibom State, Government has to provide all existing and newly established primary and secondary schools with inclusive and accessible infrastructures like classrooms, playgrounds, toilets, etc; adaptive teaching/instructional aids and technologies; well-trained teaching and non-teaching staff; initiate public awareness programmes and strengthen relevant legal and policy frameworks on inclusive education.

Ademefun (2020) points to a list of challenges and poor state in SNE, the confinement of the education of children with disabilities to very few, poorly staffed, poorly equipped and outdated special schools; very low public awareness on issues of inclusive education; inadequate institutional and human capacities required to implement inclusive education; and inadequate, poor implementation or non-availability of appropriate legal and policy frameworks required for the implementation of inclusive education for children with disabilities.

Good Practices

The provision of effective technology-based teaching and learning in Nigerian public schools, tertiary and higher education system would enhance competitive global learning and development. Nigeria’s philosophy of education is based on the development of the individual into a sound and effective citizen whose training would facilitate the understanding of the world; the acquisition of appropriate skills and the development of mental, physical, social abilities and competencies as equipment for the individual to live in and contribute to the development of the society NPE (2004). Such learning could be accessed through various media, like the multimedia electronic technology, classroom devices, the web and Internet, computer applications and online assessment and research resources for all students and teachers, including assistive devices for exceptional student. In recognition of the relevance of technology and quality learning in the public school’s system in Nigeria, the students with disabilities equally require appropriate assistive technology devices, tools, resources and related services to aid their learning, job skill

development, life skills training and transition into adulthood, and the community by special education teachers/qualified professionals Obiozor, (2010).

Going with Anderson et al., (2014)'s, definition of Inclusive education adopted from the United Nations Educational, Scientific and Cultural Organization (UNESCO) as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. But Inclusion as noted by Slee (2018) must involve more than participation of students with disabilities in mainstream classes. There is the need for participation to be accompanied by structural changes in terms of organization, curriculum and teaching and learning strategies, other than that, it cannot be termed as inclusion. Barriers posited by other studies, Zwane and Malale (2018) noted that there is a need for an inclusive curriculum along with in-service and pre-service training for teachers to increase their capacity to teach in inclusive classrooms, teachers' perspectives on the acceptance for inclusion of SEN in general education is only accepted by teachers in theory (Naraian, 2014; Tiwari et al., 2015). Even though the social constructivist perspective suggests that there are socio-cultural factors that mediate in a students' success in school, there are limited studies of how teachers, who are already in the field, are equipped to teach all students and also are willing to implement inclusive education.

ICT in Inclusive Education

Speedy development of Information Age brings possibilities and dangers to people with special needs. Whilst it can be very empowering, providing for a chance to be involved in the society otherwise inaccessible to the disabled, it can also create new threatening barriers excluding them even more. The educational needs of people with disabilities are vastly diverse. In this context, ICT application is very important as it plays an essential role in providing high quality education for students with disabilities. ICTs have been introduced into the teaching-learning process in order to improve quality, support curricular changes and new learning experiences. In this way it is possible to meet the specific learning needs of different learner groups, including students with disabilities. UNESCO (2006).

Several researches are of the opinion that teaching and learning can successfully take place through the application of electronic communication facilities between teachers and students is one which had generated sometimes, hope and dismay and at other times, excitement and fear (Lugard, 2023; Sofi-Karim, et, al. 2023). Hope when viewed that many more learners can be reached at a more convenient pace that had the infrastructures necessary for deploying an effective ICTs platform is lacking in low- income countries (Cueva and Inga, 2022). However, the use of information and communication technologies in the education process has been divided into broad categories: ICTs for Education and ICTs in Education. ICTs for education connote the development of information and communication technologies specifically for teaching/ learning purposes, while the ICT in educational involves the adoption of general components of information and communication technologies in the teaching/learning processes

The applications of ICTs are extremely diverse and varied; they may be grouped into the following main categories: Compensation uses; that is the use of new technologies as a technical assistance that allows students with special needs to take active part in the process of interaction and communication. Didactic uses; ICTs used as a learning tool have prompted a new dimension of education and launched the transformation of the educational approaches. ICT application brings a variety of new teaching and assessment strategies for students with different educational needs and Communication uses; Technologies can mediate communication with people having disabilities. Assistive devices and software to meet the needs of students with definite communication difficulties are specific to every disability. Moore and Taylor (2000)

On the other hand, gifted and talented children are naturally endowed with special traits (in arts, creativity, music, leadership, intellectual precocity, psychomotor prowess etc.) and therefore find themselves insufficiently challenged by the regular school/college/university programmes in relation to pace and curricula. UNICEF (2022) suggest the introduction of assistive technology including wheelchairs, prosthetics, glasses, hearing aids and screen-reading software to helps in the development and participation of children with disabilities, by enabling their communication, (Joseph, 2003), mobility and self-care.

The use of technology will allow each child to explore the worlds of family relationships, friendships, education, play (Jansens and Bonarini, 2021) and household tasks, enhancing their quality of life and that of their families. For the vast majority of children with disabilities, however, inadequate access to assistive technology, or none at all, excludes them from education, resulting in lifelong consequences for their participation in civic life and employment (UNICEF, 2022). However, there are very few studies on the usage and effectiveness of digital technologies and related assistive technologies by children with disabilities (Lynch, Singhal & Francis, 2021). In a World Health Organization (WHO) report by Shuksin, (2005) it is the believe that children with disabilities are statistically the poorest among the poor, and that it is reasonable to expect, that their disadvantages will tend to be advance prominently through poverty. Studies identifying the barriers prevailing among the poor, such as inadequate internet connectivity, are likely to be relevant to children with disabilities (UNICEF, 2020).

Studies related to teachers' perspectives on inclusive education have suggested that the inclusion of SEN in mainstream education is only accepted by teachers in theory (Tiwari et al., 2015). In developed nations like the United States of America has not yet signed the ratified CRPD, however, Dudley-Marling and Burns (2014) argued there were two dominant perspectives held by educators regarding inclusive education. The first being a deficit position or medical model indicates that students are said to be lacking skills and/or the ability to successfully thrive in general school/education. The second position is a social constructivist perspective, this is grounded in the notion that the burden of the disability does not rest with the student allowing structural reform to take precedence over remediation. Expressed in a different way to mean that social constructivist perspective indicates that there are socio-cultural factors that mediate a students' success in school. Exploring further on how teachers, who are already in the field, are equipped to teach all students as well as their willingness to implement inclusive

education are scarce in literature. This study reflects on how to advance towards a more education, examination to barriers of inclusion that must overcome and the strategies that would allow for progress towards a more inclusive best practices, policy and ICT.

Two research questions serve to guide this study: (1) How is inclusive best practices followed by teachers, with working with diverse learners? (2) What are the policies that allow teachers who participate in inclusive practices function within their development?

RESEARCH METHODOLOGY

The research is advanced by a social constructivist epistemology that acknowledges meaning as emerging through conscious engagement (Crotty 1998). Employing an ethnographic methodology, the research draws on qualitative approach derived from interactions, observations (by participants), and conversations with each of the teachers in the study. Qualitative methodologies allow researchers to probe into meanings, structures, and thoughts associated with human interactions (Greene and Hogan 2005). Twenty-eight teachers at a teacher training college in Akwa Ibom State participated in the study. All twenty-eight participants who have taught at the college for more than 15 years, within the period they have supervised student's teachers and have been exposed to many schools' system in the course of student teaching practice supervision. They also have first-hand knowledge of whether a school runs an inclusive education or not. Data from this study consist of descriptions to facilitate deep understanding about the participants' professional teaching life's, their knowledge of policy, culture and best practices experiences, challenges, and supports for inclusive education.

The data were collected through semi-structured qualitative pair interviews during free times of the participants. The interviews were conducted in pairs with the intention to increase the informant's participation and reflection (Denscombe, 2017). Since the researchers are staff of the teacher training college the interviews were conducted at the convenience and schedule time to all. This approach was chosen for according to Cohen et al., (2013), "the major justification of using interview in research is that it is believed that an interpersonal encounter with people, they are more likely to disclose aspects of themselves, their thoughts, their feelings and values" (p.282).

Central themes in the interview guide were the (a) Special Needs Education (SNE) policy, (b) culture of school/society. (c) best practices for inclusive education, (d) ICT/assistive technology, (e) their positive experienced and challenging aspects concerning common planning and the meeting of diverse needs for inclusive education. The interviews lasted from 30 to 45 min and were recorded. In addition, the participants completed an individual questionnaire with open-ended questions focusing on experience and expectations. The questionnaire offered the participants the possibility to put forward perspectives that they might not have been comfortable mentioning during the pair interviews.

Data Analysis

The recorded interviews were transcribed. Analyses of the interviews and questionnaires were conducted through thematic analysis, described by Braun and Clarke (2006). In order to enhance the trustworthiness of the results, data from the interviews and questionnaires were analyzed (Denscombe, 2017). However, each data set was independently coded before the data could be relatively understood and connected into themes. Despite this, the analysis proceeded according to the following steps, as described by Braun and Clarke (2006). The analysis started with familiarization of the data.

The transcripts and the answers in the questionnaire were read a few times to reach familiarization. Sub heads in the data that had relevance to the topic were marked. After that a manual coding began, using the questionnaire as a guide. Manual coding was individually performed through the use of an inductive approach. In this phase, the analysis was close to the participants' descriptions. In the next step, themes were put together and compared, reflectively discussed and sampled into a thematic map. Some initial themes collapsed into other themes from the initial transcripts and the codes identified at the beginning of the analysis. Each theme and its relation to other themes were discussed, and subthemes were identified. Eventually, two overall themes regarding possibilities for inclusive education as well as six overall themes regarding challenges were identified. Two sub-themes for each theme were also identified that can be linked to the research objective.

Table 1: Emerging Categories and Themes

Categories	Primary Theme	Secondary Themes
Policy		
Challenges of the Profession	Severity of disabilities	
Physical	Physical disabilities	Autism
2wce exceptional	Wheelchair bound	Blind/deaf/dumb
Psychological		
Negative pattern	Acceptance	Family background
Assistive Technology	Equipment	Aids and Devices
Professional Development	Special Needs Training	

RESULTS AND DISCUSSION

The results provide insight into what the participating teachers know, do, and believe, and how these teacher knowledge and actions impact on their capacity to implement inclusive practices in their schools and classrooms. Participants actively seek to identify and break down the barriers to learning and participation that students encounter not only Special Needs (SN) Students. When

teachers adopt an inclusive pedagogical approach and assume responsibility for teaching everyone (Florian and Spratt 2013), they are also embracing effective practices that align with quality teaching and learning for all members of the classroom community (UNESCO 2009,). Also, the practices of providing access to learning for all students enable the realization of SDG4 Quality Education to ensure inclusive and quality education for all and set learners on the path to lifelong learning (Elvey & Burke, 2023).

Interview

No Professional Training

Findings from the interview sessions indicate that all the participants perceived a lack of adequate professional training as a challenge to effectively teach children with disabilities in an inclusive classroom. Participants during the interview admitted that they have participated in training sessions, seminars, and workshops, but that these training programs had nothing to do with Special needs (SN) children, but for ICT or their areas of specialty, even when their training failed to produce the desired outcomes.

The teachers expressed the need to participate in a well-designed and well-executed professional training programs that would enable them to incorporate new and improved practices in their inclusive classrooms.

What is the level of your professional training inclusive education?

Interviewee 19

I have received so many in-service training sessions that I cannot apply in practice. If the inclusive has to be, we teachers need to have the special needs training, or on that specifically, focusing on new and advanced teaching practices in inclusive classrooms, as what we are taught would reflect practices that can make a negative or a positive difference for children learning in an inclusive setting. Such training has to be really focused on Special Needs.

Interviewee 12

This college has no such training for its student teachers, so it is right to say teachers in general have not been invited to attend training sessions on the nature and severity of disabilities and inclusion by the Ministry of Education, agents, companies. This will be difficult, it is like going back for a degree program to build the practical ability or skills to identify children with disabilities, distinguish between different behaviors.

Teachers have to adjust teaching practices to meet these children's learning needs, and the needs of other children without any form of disability in the same class, to also adequately address these children's challenging behavior in an inclusive classroom, teachers must be provided with routine professional in-service training. Teachers who lack knowledge of disabilities and inclusive education usually perceive children with disabilities negatively.

Large Class Size

All the participants identified large class sizes as a barrier if they have to effectively teach children with disabilities in an inclusive classroom. They find their present classes with 50 or more students too large to accommodate children with different types of disabilities as challenging to manage, which will prevent them from effectively focusing on children's individual needs, and which takes the focus away from the children and the quality of the lessons.

According to interviewee # 8,

Inclusive classroom is difficult. I am a general education teacher, “In my class, the number of students is over 90 in my group; one of them has disabilities, he is blind and with this large number of students, it is challenging to control and manage the class and pay attention on their needs and to teach them effectively.

Another general education teacher, added,

It has a huge impact on the student's learning if the number of students is too large, this is even in a college talk less of secondary schools and primary schools. They ignore the teacher; some do not pay attention and distract others. This situation increases the pressure on the teachers, especially with the absence of teacher aides and the lack of special education teachers.”

Lack of Special Education Aides

The participants' responses illustrate that the absence of special education aides for an inclusive classroom is a barrier to the success of inclusive teacher education. They discussed the need for teacher aides to encourage the involvement of children with disabilities in the classroom, manage large classes, and support individual children with disabilities.

Interviewee 7,

Stated, “children with disabilities need a one-to-one aide, and special needs child inclusion is impossible to be implemented considering the absence of teacher aides and a large number of children in the classroom.

Severity and Nature of Children's Disabilities

Children with disabilities were traditionally not enrolled in education, and when such enrolment became available, they were automatically placed in segregated settings. The belief was that those children needed an education that was different and separate from that of their peers (Francisco et al., 2020). In the interviews, almost all the teachers highlighted the nature and severity of children's disabilities as one of the most significant barriers to implementing successful inclusive education in a teacher training setting.

Teachers felt they were better equipped to manage certain types of disabilities than

others, blindness, wheelchair bound. teachers felt they could address the learning needs of children with this type's disabilities, but found it difficult to meet the learning needs of students with other types of disabilities.

Interviewee 6

An English education teacher, noted that some children with severe disabilities, such as intellectual disabilities, autism, and behavioral disorders, are the ones of the greatest challenges teachers will face in our inclusive class, because it is not an appropriate placement for them. I and other teachers are not qualified or trained to meet their learning needs in any inclusive setting, and I believe these children need to receive their learning and training in a special class, center or school where they will be in an appropriate environment with qualified specialists who can manage their behavior and meet their learning needs."

Inappropriate Physical Environment

All teachers who were interviewed indicated that an inappropriate physical environment is one of the significant barriers to implementing inclusive classrooms. They indicated that their classrooms and facilities do not support inclusion; some buildings are too old, have small doorways, have inappropriate layout and classroom spacing, lack of stairways and ramp for wheelchairs.

As interviewee 16, stated

"An inadequate physical and educational environment is also a significant barrier to inclusive teaching and learning, government should consider all these buildings when the talk is on implementing inclusive education. This college is not a welcoming environment for students with disabilities, take a look around you, does this place look right? It is out of order and has been for more years. Classrooms have small spaces and doorways, which do not allow any child with a walker or a wheelchair to pass through easily, and the toilets are not adapted for children with disabilities. How will the use their wheelchairs when the access roads are not conducive"

ICT and Special Education Teachers

Special education teachers have to teach children with disabilities, to make teachers to teacher children in the inclusive classroom is outside their specialization. Teachers have strong concerns, and these were raised by almost all the interviewees about a shortage of special education teachers who are specialized in multiple subjects. They made a case for ICT training and intervention on all tools and devices for an all-inclusive teaching and learning. The participants mentioned that only a few schools in the State have experts at this level; generally, most schools

recruit special education teachers for a specific subject.

Where the schools are located for the SN students is far off from urban areas, internet connectivity are issues they face. All participants support new policy frameworks for inclusive education.

Limitation

In addition to the mentioned implications, the findings of this study have several limitations. The sample of participants interviewed is small to serve as representative of all teachers of children with disabilities in Akwa Ibom State. Reason for the small sample was non availability of experts with a strong command of the study topic. While the study only investigated teachers in a teacher training college perception of the inclusion of students with disabilities in a teacher training education setting, it would be beneficial to gather the perspectives of the parents of children with disabilities too, to get a fuller picture of the experiences and challenges related to inclusion in Akwa Ibom State at a tertiary institute.

Implication

Several implications for school policy, teachers' professional development, research, and practice were derived to guide and help advance knowledge in this field of education. The most important social implication is that there are negative attitudes towards the inclusion of students with disabilities among educators in our education system. There is the suggestion for a committed institutional effort that will translate into a greater educational investment that enables the improvement of inclusive learning conditions and the training of teachers in inclusive teaching.

Furthermore, the implications for policy and best practice are that further work is needed to support the inclusion of children with disabilities in teacher training institutions as they will be best fit for the job of teaching and learning.

Conclusion and Recommendation

Findings indicate that, teachers in the teacher training college perceived several barriers to the successful participation of children with disabilities in inclusive education in their college. The outstanding barriers were the nature and severity of the child's disability, the absence of special aides in inclusive classrooms, and their lack of adequate professional training.

The current findings, the voices of teachers are to shape recommendations that could assist education officials to effect the necessary changes in policy, resourcing, and good practice to successfully implement effective inclusivity in teacher training settings. Such policy and practice shifts could assist government realize its 2030 vision to ensure a fair, good quality, and inclusive education for all children with disabilities.

Government on the other hand has to be committed to Special Needs Education for a successful admission of disable children into classrooms across school levels in the country.

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REFERENCES

- Ademefun, D., (2020). Policy briefs on inclusive and accessible basic education for children with disabilities in Akwa-Ibom State. National Women Development Centre, CBD, Abuja. www.jonapwd.org
- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16.
- Anderson, S. 2014. *Climbing Every Mountain: Barriers, Opportunities and Experiences of Jamaican Students with Disabilities in Their Pursuit of Personal Excellence*. Kingston, Jamaica: Arawak Publishers
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Crotty, M. J. (1998). *The foundations of social research: Meaning and perspective in the research process*. The foundations of social research, 1-256.
- Cueva A, & Inga E. (2022). Information and communication technologies for education. *Educational Science* (12), 207. DOI:<https://doi.org/10.3390/educsci12030207>
- Denscombe, M. (2017). *The good research guide: For small-scale social research projects* (6th ed.). Open University Press.
- Elvey, M., & Burke, J. (2023). Implementing inclusive pedagogies: what regular primary classroom teachers know and do. In *Inclusion, Equity, Diversity, and Social Justice in Education: A Critical Exploration of the Sustainable Development Goals* (199-215). Singapore: Springer Nature Singapore.
- Federal Ministry of Education, National Policy on Special Needs Education in Nigeria (2015). Special Needs Education and Services Branch, Special Education Division, Basic and Secondary Education Department, Federal Ministry of Education.
- Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British educational research journal*, 37(5), 813-828.
- Florian, L., & Spratt, J. (2013). Enacting inclusion: A framework for interrogating inclusive practice. *European Journal of Special Needs Education*, 28(2), 119-135.
- Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and special education. *Education Sciences*, 10(9), 238. <https://doi.org/10.3390/educsci10090238>.
- Greene, Sheila, Hogan, Diane (Eds.), 2005. *Researching Children's Experience – Approaches and Methods*. Sage, London.

- Haug, P. (2017). Understanding inclusive education: Ideals and reality. *Scandinavian Journal of Disability Research*, 19(3), 206–217.
- Jansens, R., & Andrea B. (2021). Usability and Accessibility of Toys and Technologies for Play for Children with Disabilities: Scoping review of guidelines and tools, ch. 5 in *Perspectives and Research on Play for Children with Disabilities*, Daniela Bulgarelli, Sciendo, 83–105, doi: 10.1515/9788395669613- 007.
- Joseph, P., (2003). A Study on Certain Factors Influencing Language Performance of Hearing-Impaired Students’, *Asia Pacific Disability Rehabilitation Journal*, 14, (2), 201–208.
- Lugard, I. A. (2023). Assessment of Information and Communication Technologies Awareness Level among Secondary School Students in Delta State, Nigeria. *Asian Journal of Education and Social Studies*, 39(3), 15-33.
- Lynch, P., Singhal, N., & Francis, G. A. (2021). EdTech for learners with disabilities in primary school settings in LMICs: A systematic literature review.
- Naraian, S. (2014). Agency in real time? Situating teachers’ efforts toward inclusion in the context of local and enduring struggles. *Teachers College Record*, 116(6), 1-38.
- National Policy on Education (NPE, 4th edition) (2004) Special education. Lagos: NERDC Press.
- National policy on Special Needs Education (SEN), (2015). Federal Ministry of Education.
- Obiozor, W. E. (2010). Technology, quality learning and student disabilities: Challenges for. *International Journal of Educational Research*, 11(4).
- Shukshin, A, (2005). ‘Disabled Often Among the ‘Poorest of Poor’’, *Bulletin of the World Health Organization*. 83, (4), 246, PMID: 15868012.
- Slee, R. (2019). Defining the scope of inclusive Education. Technical report, 2020 Global Education Monitoring Report Inclusion and education 2. <https://www.researchgate.net/publication/330741940>
- Sofi-Karim, M., Bali, A.O. & Rached, K. (2023). Online education via media platforms and applications as an innovative teaching method. *Education and Information Technologies* 28, 507–523

Tiwari, A., Das, A., & Sharma, M. (2015). Inclusive education a “rhetoric” or “reality”? Teachers' perspectives and beliefs. *Teaching and Teacher Education*, 52, 128-136.

UNESCO (2019) UNESCO and sustainable development goals. <https://en.unesco.org/sustainabledevelopmentgoals>

UNESCO. (2006). World Declaration on Education for All. New York: Retrieved from www.unesco.org/education/efa/somtien_declaration (July, 2023).

United Nations Educational, Scientific, and Cultural Organization. 2009. Policy Guidelines on Inclusion in Education. Washington, DC.

Unicef. (2020). Two thirds of the world’s school-age children have no internet access at home, new UNICEF-ITU report says. Press release. Retrieved from: www.unicef.org/press-releases/two-thirds-worlds-school-age-children-have-no-internet-access-home-new-unicef-itu.

World Health Organization and United Nations Children’s Fund, (2012). ‘Early Childhood Development and Disability: A discussion paper’, World Health Organization, Geneva.

Zwane, S. L., & Malale, M. M. (2018). Investigating barriers teachers face in the implementation of inclusive education in high schools in Gege branch, Swaziland. *African journal of disability*, 7(1), 1-12.