

Teachers' Preparedness for Pupils with Visual Impairment Inclusive Education in Cross River State, Nigeria

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Abstract: *The study investigated the teachers' preparedness in the background information in inclusive education and acquired skills in use of technological facilities for teaching pupils with visual impairment in inclusive setting in Cross River State, Nigeria. The study adopted survey design. One thousand five hundred (1,500) served as sample. Multi-stage sampling techniques were used to arrive at the sample. Structured questionnaire named "Teachers' Professional Preparedness for Inclusivity Questionnaire (TPPFIQ) was constructed by the researcher. Two research questions guided the study while one hypothesis was used to test the study. Modified four point Likert type scale was adopted for the 10 item-statement instrument. The instrument was validated by three experts and internal consistency was done using Cronbach Alfa where .86 estimate was established. The data collected was analyzed using statistical such as Means, standard deviation and t-test. The findings in the study showed that the teachers lack background knowledge of principle and practice of inclusive education and lag far behind in acquired skills in the use of educational technology oriented facilities on pupils with visual impairment inclusive education. It is therefore recommended among others, the need of training and retraining teachers on inclusive education and acquiring skills on educational technology facilities.*

Keywords: *pupils with visual impairment, inclusive education, profession, teachers, technology.*

I. Introduction

Education has substantial impact on individuals and the society. Education is all about knowledge. Teachers are the custodians of knowledge. Federal Republic of Nigeria (FRN, 2004) disclosed that no standard of education can rise above quality of its teachers. Webster's Comprehensive Dictionary (WCD, 2013) perceived Teachers as one who teaches especially one whose occupation is teaching. Teaching (W.C.D) is impacting knowledge, giving instruction, guiding, of precept or example. Teaching is a profession. National Teachers' Institute (NTI, 2000) stated that profession is any occupation which demands all who work in it a prolonged and specialized knowledge, skills and attitude that are necessary for providing particular service in the community.

Every community needs the service of teacher. Community is made up of individuals that opt for education. The first stage of education for most children is primary school. FRN (2013) listed objectives of primary education which includes among others (a) permanent literacy, numeracy and the ability to communicate effectively (b) lay a sound basis for scientific, critical and reflective thinking... (c) Provide opportunities for the child to develop life, manipulative skills, that will enable the child function effectively in the society within the limit of the child's capacity.

The above has to be exposed to pupils. The pupils include all children with special needs. FRN (2013; 65) defined special education as, "a customized educational programme designed to meet the unique needs of persons with special needs that general education cannot cater for". FRN added that persons with special needs shall be provided with inclusive education services in schools which normal pupils attend, in age appropriate special education classes directly supervised by special teachers.

Among persons with special needs are pupils with visual impairment. FRN (2013) identified persons with visual impairment to include the Blind and the partially sighted. They are therefore billed to benefit from inclusive education. Ozoji in Chukuka (2013) perceived inclusive education as programme that allows children with disabilities to learn together with other children in regular school. Inclusion education is normalization of learning condition for learners with disabilities so that they can learn and develop alongside with their able bodies counterparts in school and community.

Today, there seem to be doubt in workability of inclusive education. No wonder FRN, (2013; 66) remarked that special need persons who cannot benefit from inclusive education, special classes, and units shall remain in special school..." The foregoing introduced confusion in the popular campaign for inclusive education.

The above is not all. It is important to address professional preparedness of teachers for inclusivity in the face of today's technological growth, WCD (2013) said that Technology is application of science to arts.

Messican (2013) perceived technology as application of knowledge to the practical aim of human life or to changing and manipulating the human environment. According to the author science is concerned with how and why things happen while technology focuses on making things happen. He added that technology include the use of materials, tools, technique, and sources of power to make life easier or more pleasant and work more productively. No wonder why Adeniyi (2012) remarked that effort to tackle new problem leads to the use of science to develop technology or leads to a modification of previous technology to solve the problem to the benefit of the society.

Technology changes life for persons with visual impairment. Abang in Eke (2006) recalled the lamentation of blind person who regretted that his ambition to become educated was jeopardized. Abang in Eke asserted that 80% of school activities comes from sense of sight. Eke (2006) in his study of pupils with visual impairment at school for the blind Oji River found that they were affected by academic stress related to worry, pressure, impediment and disappointment.

The pangs of visual loss can be limited by technology. In line with the view of Messican (2013) tools, material, techniques.... make up technology. Braille writing and reading are seen as magic by some persons. Today, there are video magnifier, electronic note taker, Braille translators and programmes such as expanded core curriculum and vision therapy among others for persons with visual impairment. Michael (2009) disclosed that Electronic note taking (ENT) also known as computer assisted note taking (AN) is a system that provides access to written and spoken information to the blind and the visually impaired which facilitate equal participation as the sighted. Potty (2007) in a study to elicit influence of I.C.T on the academic performance of the visually impaired found that 70% to 75% academic successes abound using the ICT.

The question now is how ready are teachers to impact same on pupils with visual impairment billed for inclusive. This has to do with professional and technology developmental readiness, and preparedness of the teachers. Maku, L (the then minister for information in Nigeria, June, 5, 2014 in a personal communication) regretted that teachers go with residual knowledge acquired years ago to teach the present children such that they remain on the same page of educational development. Nwazuoke remarked that many teachers still use 20th century skills in handling children in the 21st technology. This is a pointer to their lag in technological know-how which affects quality of teaching and then learning. Korb (2013) asserted that teachers are implicated if quality of teaching practice is evaluated. She (Korb) added that what teachers know, do and care about determine teaching profession. This cut across all places where teaching and learning take place. Information communication technology (I.C.T and Computer) is worth mentioning. Salau(2012) in a study found that over 85% of public and 72% of private primary school teachers did not possess the requisite qualification to handle the subject in schools where computer was offered. A cursory look at other like studies will uncover a greater percentage. The low percentage of teacher who possess ICT skill seem to have made successful technological development a daunting challenge.

A place such as Cross River State in Nigeria has many primary schools, teachers and pupils (that include the visually impaired) billed for inclusive education. It is imperative to look into teachers' acquired skills in the use of educational for inclusive setting that capture the pupils with visual impairment. There is need to find out teachers' background knowledge of principles and practice of inclusive education billed to co-opt the pupils' with visual impairment. The above shall determine their status in the teacher professional development in a technological age. The prospects and challenges shall be exposed for action to meet demands of teaching profession in 21st century technology age. The above development inspired the researcher to carry out this study.

Statement of problem

There is a popular bid for equal education for all. Idea of segregating the person with visual impairment has been agitated against and today the in-thing is inclusive education. The pupils with visual impairment should be in the same class setting with sighted ones. Teaching and learning are expected to be result oriented in the inclusive setting with professional teachers using materials and educational technological facilities to teach them.

There seem to be doubt in working of the above. Inclusion for pupils with visual impairment in primary school seems not to be working in the state in question. The teachers there seem not ready for the much valued inclusive education to lack professional and technological development readiness to achieve good result. The preparedness of the teachers of having sound background information in the principle and practice of inclusive education and acquired skills in using modern educational technology in teaching pupils with visual impairment ought to be investigated. No literature available to the researcher has addressed the above to assess inclusive setting for pupils with visual impairment education specifically in Cross River State, Nigeria.

The above is perceived as serious development hence inclusive education shall remain a mere dream to the pupils with visual impairment as they shall be frustrated, helpless and hopeless. They pupils might not be

able to enjoy quality and equal educational opportunity and they may not key into 21st century technology age due to unpreparedness of the teachers that they ought to learn from.

Purpose of the study

The main purpose of the study is to investigate the teachers' preparedness in the background information in inclusive education and acquired skills in use of technological facilities for teaching pupils with visual impairment in inclusive setting in Cross River State, Nigeria. Specifically the study wished to:

- (1) Find out Teachers' background knowledge of the principle and practice of inclusive education for learners with visual impairment.
- (2) Deduce Teachers' skill acquisition in use of facilities that are educational technology for learners with visual impairment.

Research Questions

Two research questions guided this study:

1. What are the Teachers' background knowledge of the principle and practice of inclusive education for persons with visual impairment?
2. What status of skill acquisition in the use of educational technology oriented facilities do teachers demonstrate for teaching learners with visual impairment in inclusive setting?

Research Hypothesis- One hypothesis was used to test the study- le.

There is no significant difference in the teachers' background knowledge of inclusion and their status in skills of using educational technology facilities in inclusive setting for learners with visual impairment.

II. Mythology

The study adopted I survey design in the study. There are primary schools in Cross River State of Nigeria. There are 18 Local Government areas in the state. One thousand five hundred (1,500) teachers served as the sample. Cluster sampling, stratified random sampling and simple random sampling were used to get at the sample. This was in cognizance of popular location in Cross River: Cross River North, Cross River Central and Cross River South.

Teachers in such location were handled as clusters such that in each 500 teachers were drawn. The researcher constructed a structured questionnaire which was named "Teachers' Professional Preparedness for Inclusivity Questionnaire" (TPATPIQ). It had two sections A and B. Section A was for personal Data and Section 'B' was 10 item-statement and response options of modified four point Likert type was used.

The instrument was face and content validated by three experts in Special Education, Educational Curriculum and Teaching and Measurement and Evaluation. Their input necessitated corrections that were affected. The instrument was trial tested among primary school teachers that were not involved in the state from the same state. The consistency of the instrument was deduced from reliability coefficient using Cronbach Alpa. In the end, the internal consistency estimate was 0.86. Research Assistants were used to administer the questionnaires.

In answering the research question, research statistics was used were Mean and Standard deviation. In order to test the hypothesis, t-test was used.

III. Results

Research Question I: What are the Teachers' background knowledge of the principle and practice of inclusive education for learners with visual impairment?

Table 1: Teachers background knowledge of principle and practice of inclusive education for learners with visual impairment.

S/N	Item Statement	n	x	SD	Dec.
1	I have heard of inclusive education that advocates teaching the learners with special needs as those with visual impairment along with other normal persons.	1,500	2.63	0.31	W
2	I have had the opportunity to attend workshop/training on inclusive education.	1,500	2.43	0.26	NW
3	I practice inclusive education such that learners with visual impairment can be accommodated among others in my class.	1,500	1.03	0.24	NW
4	Certificate or document to show that I had training on practicing inclusive education is with me.	1,500	1.23	0.33	W
5	Special teachers visit our school for the sake of pupils with special needs inclusion.	1,500	1.24	0.24	NW

The results in table which sought to find out the respondents' background knowledge of principle and practice of inclusion showed that teachers have heard of inclusive education hence with mean score of 2.61. Some teachers did not acknowledge that they have certificates or documents as evidence of having been trained

on inclusive education hence with mean score of 1.23. The teachers did not accept that they had had the opportunity to attend workshops/training in inclusive education as shown in the mean score of 2.43 neither do they practice inclusive education involving the visually impaired as can be seen in the mean score of 1.03. The teachers did not accede to the statement that special teachers visit their school for the sakes of pupils with special needs hence with mean score of 1.24.

Research Question II: What status in skill acquisition in the use o educational technology oriented facilities do teachers demonstrate on the learners with visual impairment?

Table 2: Teachers' status of skill acquisition in the use of educational technology oriented facilities for the learners with visual impairment inclusive education?

S/N	Item Statement	n	<u>x</u>	Sd	Dec.
6	I can read and write Braille	1,500	1.00	0.32	NW
7	I am computer literate	1,500	1.23	0.33	NW
8	I can use I.C.T such as video magnifiers among others in teaching learners with visual impairment	1,500	1.32	0.26	NW
9	There are educational technology facilities such as electronic note takers and Braille translation software, I can use to guide the learners with visual impairment on how to use them	1,500	1.21	0.21	NW
10	I have certificate or document to show as a record of training in use of modern educational technology facilities for learners with visual impairment.	1,500	1.43	0.63	NW

Table II sought to find from the teachers their acquired skills in the use of educational facilities for the learners with visual impairment inclusive education. The findings showed that the teachers had no idea of reading and writing Braille hence with mean score of 1.00. The same with literacy in computer use with score of 1.23. The findings also showed that teachers cannot use I.C.T as evidenced in mean score of 1.3).

There are educational technology facilities useable by the teachers to teach learners with visual impairment had mean score of 1.21. The above showed non acceptance. Having certificate or document to show as a record of training in use of modern technology had mean score of 1.43. This was not considered worthwhile.

Hypothesis: One hypothesis was used to test the study.

There is no significant difference in the teachers' background knowledge of inclusion and their status in skills of using educational technology facilities in inclusive setting for learners with visual impairment.

Table 3: Results of t-test for teachers' background and status of skill.

	N	Mean	SD	df	t-cal	t-crit	Decision
Tr.b/gd.	1500	1.71	0.25	1498.	75.91	1.96	significant.
Tr. S/s.	1500	1.23	0.35				

A comparison of the calculated and table values as displayed above indicate that the calculated t- value of 75.91 is greater than the critical value of 1.96. To this end the null hypothesis is rejected. Therefore, there is significant difference in the mean scores of teachers' background knowledge of principles and practice of inclusion and their status in skill acquisition in using facilities that are educational technology oriented. By examining the mean scores that of teachers background knowledge is greater than that of the teachers' skill status .

IV. Discussion

Findings from table one showed that the teachers have heard of inclusive education though the teachers are having had opportunity to attend workshops/training on it. Inclusion is now in vogue hence seen as departure from usual separation or segregation of the disabled person. Ozoji in Chukuka (2013) perceived inclusion as the programme that allows children with disabilities to learn together with other children in regular schools. This finding aligns with the fact that in different media, it has been stressed such as in the National Policy on Education among others.

Unfortunately, the findings of the study showed that inclusive education for this special population is not practiced and affirmed that the teachers had no certificate or document to show for it. This makes professional unpreparedness of the teacher for the inclusive education. NTI (2000) noted that profession is any occupation which demands all who work in it a prolonged and specialized knowledge, skills and attitude that are necessarily for providing a particular service in the community. Truly, the teachers cannot carry out effective inclusive education that can accommodate learners with visual impairment. This finding suggests that quality of

education for the pupils with visual impairment shall be affected in the much talked about inclusive education. Korb (2013) disclosed that teachers as educators are implicated if quality of teaching practice is evaluated.

Korb reported that high quality teaching contributes significantly to learners' academic performance hence teaching equation is demonstrated on what teachers know and do and care about. The foregoing speaks volumes of what persons with visual impairment experience in the so called inclusive setting under the care of unprepared regular teachers. Worse still, the result indicated that no special teacher visits school for the sake of learners with special needs. This negates the arrangement of inclusive education for it is proposed that experts in special education should be posted to school or have itinerant teachers to ensure success of inclusive education (Obi, 2010). That is why Ozoji in Chukuka (2013) emphasized appropriate support of the regular teacher by special teachers.

The finding of the study on the teachers' acquired skills on the use of educational technology facilities showed that the teachers do not have idea of how to read and write Braille neither are they neither computer literate nor able to use ICT to teach the learners with visual impairment. Technology is now in vogue in teaching and learning more so for learners with visual impairment. Mexican (2013) indicated that technology includes the use of materials, tools, techniques and source of power to make life richer or more pleasant or be more productive. Braille is magic to some people. There are many educational equipment and facilities to help in the education of persons with visual impairment. They are video magnifier, electronic notetaker, Braille translator etc. There are also programmes as expanded curriculum and vision therapy. The foregoing include technological breakthrough that make education of the learners with visual impairment real.

The findings indicated that teachers are not aware of the above let alone utilizing them for this special population. They admitted of not having certificate or document as evidence of received training in the use of the modern educational technology. The finding agrees with the study conducted by Salau (2012) where he found that over 85% of public and 72% of private primary school teachers did not possess the requisite qualification to handle the subject in schools where computer was offered.

It is most unfortunate that as it is found in this that facilities, equipment and programmes are not even available in schools let alone acquiring the skill on the use. F.R.N (2013) pointed out among others that primary education lay a sound basis for scientific, critical and reflective thinking and provide opportunity for the child to develop life manipulative skills that will enable the child function effectively in the society within the limits of the child's capacity. Learners with visual impairment in primary schools billed for inclusive education ought to benefit from technological development in order to be carried along. The matter is worse of when teachers do not know. F.R.N uncovered that no standard of education can rise above that of its teachers. Eke (2006) in experimental study of pupils with visual impairment in Oji River found that the pupils are faced with academic stress related to worry, pressure, impediments and disappointment. It is shocking in 21st century with its fast rate of technological development. This is the case of this special population in the face of today's technology.

Abang in (Eke) disclosed that 80% learning activities come from sense of sight. Abang in Eke disclosed the contemplation of one blind person who lamented that his ambition to become educated has been jeopardized as a result of blindness. The lee way to success of the above is technology; but a situation where the teachers are not technologically equipped as showcased above makes the matter worse. Teachers in primary seem not to key into technological development of the 21st century. In a study conducted by Potty (2007) to elicit influence of I.C.T on the academic performance of the visually impaired found that 70% to 75% academic successes abound using the ICT. It was uncovered in the hypothesis that there is significant difference in the teachers' background information on the principles and practice of inclusive education and the teachers' status in acquired skills in the use of educational technology facilities in the teaching the pupils in question. Though it was noted that there is a lag in either case but it is worse in case of the later that is skills in the use of educational facilities by the teachers to teach pupils with visual impairment. No wonder why Maku L. (the Minister of Information, June 5, 2014 in a personal communication) regretted that teachers go with residual knowledge acquired years ago such that they remain in same page of educational development. Nwazuoke reported that teachers use skills acquired in 20th century to teach learners in 21st century.

V. Conclusion

Based on the findings of the study, it is concluded that teachers do not have background knowledge of principle and practice of inclusive education billed to co opt the learners with visual impairment. The teachers lack skills of using educational technology facilities for teaching the learners with visual impairment. It is therefore concluded that teachers' preparedness for pupils with visual impairment inclusivity is lacking.

VI. Recommendations

Based on the conclusion drawn, the following recommendations are made:

1. There should be training and retraining of teachers by the Ministry of Education on the principle and practice of inclusive education that is billed to accommodate pupils with visual impairment.

2. Committee of experts in inclusive education with bias in visual impairment drawn from universities should organize workshops or seminar for the teachers in primary schools on inclusive education.
3. The Federal, State and Local Governments should appeal to donor agencies in the western countries to help donate facilities, equipment for the education of pupils with visual impairment
4. Public spirited individuals, nongovernmental organizations, religious organizations should be appealed to by schools where pupils with visual impairment are co opted (for inclusion) for fund in order to buy some of these facilities and equipment.
5. The teachers should be trained also by experts from within and outside the country on how to make use of educational technology facilities when acquired so as to update and improve their technological (skill) know-how.
6. Trainings, workshops attended on the principles and practice of inclusive education and educational technology facilities skill acquisition by teachers should be backed with certificates.
7. The teachers should be taught elementary reading and writing of Braille in organized workshop by state or/and local education authorities so as to be able to impact same in inclusive setting where learners with visual impairment are co opted.
8. Any teacher certified by the state as having been prepared and equipped for the learners with visual impairment inclusive education should have significant incentive from the state.

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