

**PRE-SERVICE TEACHERS' PREPAREDNESS TOWARDS INCLUSIVE
EDUCATION IN NIGERIA**

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Abstract

Inclusive education is an educational practice that is built towards making everybody to be active member of society. To attain its desire vision, stakeholders like teachers must take active roles. In view of this, this study investigated pre-service teachers' preparedness towards inclusive education. Descriptive survey research design was employed. A total of 791 pre-service final year teachers were purposively selected from eight institutions in southern and eastern parts of Nigeria based on their consent. Inclusion Preparedness Inventory (IPI) was employed to collect data with reliabilities of 0.87 and 0.76 respectively measuring attitude and knowledge of pre-service teacher. Results indicated high knowledge and improved attitudes. It also revealed significant difference in knowledge and attitude between university and college of education pre-service teachers with no significant influence on gender. It was recommended that curriculum of teacher education should be re-engineered towards making teachers to be more dynamic and functional in classroom situation.

Keywords: Inclusive education, Pre-service teachers' attitude, Pre-service teachers' knowledge, Pre-service teachers' training, Programme development

Introduction

Educating students with and without disabilities within the general classroom is becoming a common practice all over the world. Hence, the need for adequate preparation to meet both human (including pre-service teachers) and materials resources (classroom environment with assistive technology) for the practice of inclusion is considered top priority in most emerging economy countries of the world. Inclusion is an educational practice based on a notion of social justice that advocates access to equal educational opportunities for all students regardless of the presence of a disability (Sharma, Forlin, Loreman & Earle, 2006). In applying the above principle, all students under inclusive educational practice are perceived and treated to be equal in all respects. Inclusiveness represents the belief that students with special educational needs should be fully integrated into general education classrooms and schools and their instructions should be based on their abilities, not their disabilities (Alzyoudi, 2006 & Forlin, 2004). The idea behind inclusiveness is the productive accomplishment that an individual could demonstrate with his/her level of ability in a given society and not his/her disadvantage (various disabilities limiting performance).

Since the Salamanca Declaration (UNESCO, 1994), both developed and emerging economies all over the world have started carrying out various forms of educational reforms to ensure education for all learners through inclusive education strategies. The declaration is also in agreement with Education for All (EFA) and Millennium Development Goal (MDG) programmes of which Nigeria is a signatory. While policies and initiatives toward inclusive education are gaining prominence across nations, this may not imply that all stakeholders especially teachers who are at the centre of the implementation of reviewed policies may be on the same frequency with policy initiators. The response here may be due to diversity of students' population as well as some intra-personal factors. Alzyoudi, Al-Sartwai and Dodin (2010) perceived that in preparing pre-service teachers for inclusive classrooms, their

attitudes, beliefs, expectation and acceptance of people with diverse needs may be a challenge.

Studies have sought to understand teachers' attitudes toward inclusive education (Arif & Gaad, 2008; Jung, 2007; Alzyoudi, 2006; Avramdis, 2001; Van Reusem, Shosho & Bonker, 2000; Chole, 2000; Kgare, 2000; & Van Staden, 2001). There is some evidence that an important predictor of successful integration of students with special needs in regular classroom is the positive attitude of teachers (Alzyoudi, Alsartwai & Doden, 2010; Sharma, Forlin, Lowerman & Earle, 2006; Al-Khatteb, 2004 & Gadium, 2002). The positive attitudes by some educators to inclusive education could be as a result of their training and little contact with general subject that introduced some of them to the plights and needs of this category of students. However, in Nigeria, the introduction of special education into the general education teacher preparatory programmes might not have significantly imparted on the teachers in training be it at the colleges of education and pre-service teachers in the universities due to limited exposure to contents and pedagogy of special needs education.

The importance of having positive attitudes toward inclusive education amongst in-service teachers has been long recognised (Sharma, Forlin, Loreman & Earle, 2006). If educators hold positive attitudes towards inclusive education, it may allow and encourage the practices that will guarantee successful inclusion of all students (Hobbs & Westling, 1998; Wilczenski, 1992, 1995). To promote positive attitude towards special needs individuals, training that will enhance positive mindset and interaction with students with disabilities need to be promoted. Curriculum of general education should to a large extent reflect training that will advocate and promote the interest of this group of students.

Most importantly, exposure of pre-service teachers to inclusive education or special education programme should not be limited to taking an introductory course alone in universities and colleges. It should be a general training for all prospective teachers throughout their training period as this will enhance the knowledge of special needs individuals. Though researches have revealed that taking introductory inclusive education courses have imparted positively on pre-service teachers (Loreman & Earle, 2007; Sharma et al., 2006). For instance Lancaster and Bain (2007) reported the outcome of their

research that participation in short compulsory subjects dealing with inclusive education imparted favourably on discomfort levels, sympathy, uncertainty, fear, coping and confidence of pre-service teachers. However, Nagata (2005) claimed that a single university subject on inclusion or special education cannot adequately prepare teachers to successfully implement the various aspects of inclusion and its associated practices. The result of Nagata (2005) is corroborated by the finding of Hammings and Woodcock (2011) on pre-service teachers' views of inclusive education, they reported that significant numbers of pre-service teachers surveyed felt poorly prepared to teach students with diverse needs because of little experience of inclusive education. This of course calls for a well-planned programme of subjects and experience where pre-service teachers will have opportunities to gain enough experience that will equip them to face diversities of challenges in inclusive classrooms. Hemming and Woodcock (2011) noted that lacking necessary skills and understanding of inclusive classroom can result in concerns for pre-service and newly qualified ones.

Inclusive classroom does not only involve having general knowledge of students with special needs alone. It involves integrating all necessary skills and approaches that will make the special needs individuals better persons in and outside the classroom. The content knowledge and pedagogical skills should also include new innovation that include assistive technologies in the classrooms. Whenli et al (2012) noted that research in the area of computer as learning device for pre-service teachers education better prepares future teachers for integrating technology into their own instructional practice. Resta (2002) emphasised that it is essential for future teachers to immerse in technology-rich environment throughout their preparation in order to assure that they are comfortable and competent in integrating new tools into their instruction. Hence, pre-service teachers preparing for inclusive classroom should be well grounded in the use of integrated innovative technologies that can aid learning of their students inclusively. This involves Information Communication Technologies (ICT) that combine integrated technologies for teaching and learning, video magnifier, digital recorder, calculator with speech output, computer with screen reading software, talking dictionary to the visually impaired students, alerting device, speech viewer and teletypewriter – printer device. The knowledge of the stated technologies will in no small way

reduce the fears and effectiveness of pre-service teachers preparing for inclusive education. The pedagogical and contents knowledge as well as positive cultural shift in orientation towards special needs children in an inclusive classroom will promote successful implementation of inclusive education.

Spandagou, Evans and Little (2008) also opined that personal characteristics such as gender and cultural background are influencing factors of pre-service teachers' attitudes in some studies. However, Sharma et al. (2006) noted that the actual ways these factors interplay in shaping pre-service teachers' attitude in different contexts have not been fully explored. There have been conflicting findings as regards the impact of gender on pre-service teachers' attitude towards inclusive education. While some studies reported that female teachers showed more positive attitude towards inclusion of students with disabilities than male pre-service teachers (e.g. Avoramidis et al, 2000; Romi & Leyer, 2006). In reverse (Lyakurwa & Tungaraza, 2013; Jobe, Rust & Brissie, 1996) reported that male pre-service teachers showed positive attitudes toward inclusive education. However, the finding of Thaver, Lim and Liao (2014) on teacher variables as predictors of Singaporean pre-service teachers' attitude towards inclusive education revealed no significant influence of gender.

This paper emerge from a number of delimiting factors hampering the implementation the full inclusive education in Nigeria. While some states in the country demonstrate greater concerns to the needs of people with disabilities, others still believe that practising inclusion is synonymous to wasting of fund despite the global aspiration towards total inclusion. It is worthy to note that accomplishing the issue of total inclusion partly depends on the kind of pedagogical and contents knowledge of how inclusion should be practiced.

Research Questions

- i. What is the level of knowledge of pre-service teachers in inclusive education?
- ii. What is the pre-service teachers' attitude towards inclusive education?

Hypotheses

- i. There is no significant difference in the knowledge of pre-

service teachers in university and colleges of education in Nigeria.

- ii. There is no significant difference in the attitude of pre-service teachers in the university and college of education in Nigeria.
- iii. There is no significant difference in the knowledge of pre-service teachers based on gender.
- iv. There is no significant difference in the attitude of pre-service teachers based on their gender.

Methodology

The study adopted a descriptive survey research design. The target population for the study comprised all prospective teachers in the tertiary institutions of Southwestern and Southeastern Nigeria. The tertiary institutions are limited to colleges of education and universities in the Southern Nigeria. The colleges of education and the faculties of education house educational programmes which was the reason for taking samples from these levels of educational cadres. The target population were all the final year students in the colleges of education and the faculties of education of the various universities in the southern Nigeria. The sample for the study consisted of 791 pre-service teachers' volunteers drawn from eight higher institutions consisting of four colleges of education and four universities. The eight institutions were selected from four states in the southern Nigeria. In each state, a college of education and a university were selected. The number of male participants were 258 while female students were 533.

Instrument

A questionnaire named Inclusion Preparedness Inventory (IPI) developed by the researchers was used to collect data. The instrument was self-constructed questionnaire validated by experts in the Department of Psychology and Test and Measurement. The IPI has three sections. Section A was made up of the demographics of the respondents. Section B consists of a sub-scale of the questionnaire which was designed to elicit information on the knowledge of the respondents in inclusive education. The sub-scale contains 15 items that were scaled on four-point of strongly agree, agree, disagree and strongly disagree. The sub-scale internal consistency was established to be 0.87 using the Cronbach alpha method. Examples of questionnaire

items on knowledge of inclusive education are: I have adequate knowledge of persons with special needs. We have been taught and fed with relevant information about people with disabilities and how to meet their need using assistive technology.

The section C contains a ten-item sub-scale measuring the attitude of the respondents towards inclusive teaching or education. The section was scaled on a four-point scale and also rated on the strongly agree, agree, disagree and strongly disagree scale. The internal consistency of the attitude sub-scale was measured to 0.76. The weighting of the scales were done in such a way that they are rated as: strongly agree = 4, agree = 3, disagree = 2 and strongly disagree = 1. The negative worded items were reversed in weighting for analysis purpose. Examples of questionnaire items on attitude to inclusive education are: Coping with special needs students might be difficult but I believe it is a task that must be done. If I have my way, inclusive educational practice would be given more priority than any other educational practices.

Data Collection and Analysis

Data was collected by the researchers and with the assistants of fellow lecturers who were trained on how to effectively collect the questionnaire from the respondents in their schools. The data collected was analysed using Statistical Package for Social Sciences (SPSS). Mean score was used to answer research questions and the hypotheses were tested with t-test and at 0.05 level of significance. The decision rule for research question one is that any item that has a mean above 2.50 will be described as "High" while the mean below 2.50 will be referred to as "Low" and the decision rule for research question two is that any item that has a mean above 2.50 will be described as high and "Positive" respectively while the mean below 2.50 will be referred to as low and "Negative".

Results

Research Question One

What is the level of knowledge of pre- service teachers' towards inclusive education?

Table 1: Table showing the level of the pre-service teachers' knowledge in inclusive education

Items	Mean	Std. Dev.	Decision
I have adequate knowledge of persons with special needs	2.57	0.97	High
We have been taught and fed with relevant information about people with disabilities and how to meet their need using assistive technology.	2.49	1.13	Low
What I know about people with special needs has changed my orientation towards them.	2.47	1.15	Low
It is necessary to make modification in the school curriculum to meets the needs of different students with special needs.	2.56	1.18	High
The present school environments do not favour integration of students with special needs into the regular school settings.	2.61	1.06	High
I understand that there is individual difference in people which r assistive technology intervention.	2.49	1.31	Low
We offered causes that taught us about special needs children from my year 1 to year 3 or 4.	2.51	1.08	High
With the situation of things in our schools in Nigeria after my teaching practice, I know there is no adequate provision for persons with special needs.	2.55	1.05	High
I don't want to be involved in the teaching of special needs students after my training because their conditions can affect me.	2.46	1.07	Low
Students with special needs are better trained in special schools because of	2.58	1.23	High

their conditions.			
Looking around my environment I could see that there is exclusion of people with special needs in the arrangement of things.	2.54	0.98	High
I know we can never achieve total inclusion due to our belief and background.	2.52	0.98	High
I will join any advocacy group after my course of study to make sure that the needs of special needs children are met.	2.55	1.01	High
I know that one day; our society will develop to appreciate people with special needs.	2.47	1.14	Low
Inclusion is the best policy of normalization.	2.50	1.01	High
Grand mean	2.52	0.76	High

The result in Table 1 shows that the level of knowledge of pre- service teachers' towards inclusive education is above 2.50 mean which shows that it is high. The result revealed that the teacher trainees had high knowledge of inclusive education.

Research Question Two: What is the attitude of the pre-service teachers towards inclusive education?

Table 2: Table showing the attitude of the pre-service teachers' attitude towards inclusive education

Items	Mean	Std. Dev.	Decision
Inclusive educational practice in the school system makes me like teaching.	2.51	0.98	Positive
Coping with special needs students might be difficult but I believe it is a task that must be done.	2.56	1.06	Positive
If I have my way, inclusive	2.63	0.98	Positive

educational practice would be given more priority than any other educational practices.			
I respect students with disabilities as individuals with differences as I respect other students.	2.53	1.14	Positive
I am comfortable communicating with special education teachers to gain more knowledge of people with special needs.	2.54	1.07	Positive
I think you need to be a special kind of teacher to teach students that are special needs.	2.65	1.11	Positive
I would prefer to teach in special school if I have the choice because it has more facilities than regular schools.	2.59	0.91	Positive
I just love people with special needs because they are human beings who have potentials and unique abilities.	2.50	1.04	Positive
There is nothing wrong being a friend of person with special needs or even marry him/her.	2.59	1.07	Positive
As a teacher, my duty is to look after the interest of the students and not their disabilities.	2.46	1.23	Negative
Grand mean	2.56	0.79	Positive

The results from the Table 2 showed that the pre-service teachers have positive attitude towards inclusive education

Hypothesis 1

There is no significant difference in the knowledge of pre-service teachers in University and colleges of education in Nigeria.

Table 3: Comparison of teacher trainees' knowledge in inclusive education by respondents' higher institution

Variable	Respondents' Institution	N	Mean	Std. Dev.	t	df	p-value
Knowledge in inclusive education	University	289	2.71	0.68	5.32	789	0.000
	College of Education	502	2.42	0.78			

Table 3 shows that there is significant difference between the university and college of education pre-service teachers (i.e. t -calculated > 1.96 which is the t -critical) in relation to their knowledge of the inclusive education. The table revealed that there is significant difference between the two groups ($df = 789$, $t = 5.32$, $\alpha = 0.000$). The null hypothesis is rejected. Therefore, we conclude that there is significant difference in the knowledge of the inclusive education between the university and college of education pre-service teachers.

Hypothesis 2

There is no significant difference in the attitude of pre-service teachers in University and college of education in Nigeria.

Table 4: Comparison of teacher trainees' attitude towards inclusive education based on their higher institution

Variable	Respondents' Institution	N	Mean	Std. Dev.	t	df	p-value
Attitude to inclusive education	University	289	2.73	0.74	4.63	789	0.000
	College of Education	502	2.46	0.81			

Table 4 shows that there is significant difference between the university and college of education pre-service teachers (i.e. t -calculated > 1.96 which is the t -critical) in relation to their attitude towards inclusive education. The table revealed that there is significant difference

between the two categories of participants ($df = 789$, $t = 5.32$, $\alpha = 0.000$). The null hypothesis is rejected. Therefore, we conclude that there is significant difference in the attitude towards the inclusive education between the university and college of education pre-service teachers.

Hypothesis 3

There is no significant difference in the knowledge of pre-service teachers based on gender.

Table 5: Comparison of teacher trainees' knowledge in inclusive education by gender

Variable	Respondents' Gender	N	Mean	Std. Dev.	t	df	p-value
Knowledge in inclusive education	Male	258	2.55	0.74	0.59	789	0.555
	Female	533	2.51	0.77			

Table 5 indicated that there is no significant difference between the male and female pre-service teachers (i.e. t -calculated < 1.96 which is the t -critical) in relation to their knowledge of the inclusive education. The table revealed that there is no significant difference between the two groups ($df = 789$, $t = 0.59$, $\alpha = 0.56$), The null hypothesis is thus upheld. Therefore, we conclude that there is no significant difference in the knowledge of the inclusive education between the male and female pre-service teachers.

Hypothesis Four

There is no significant difference in the attitude of pre-service teachers based on their gender.

Table 6: Comparison of teacher trainees' attitude towards inclusive education based on their gender

Variable	Respondents' Gender	N	Mean	Std. Dev.	t	df	p-value
Attitude to inclusive education	Male	258	2.54	0.77	-0.31	789	0.761
	Female	533	2.56	0.80			

Table 6 indicated that there is no significant difference between the male and female pre-service teachers (i.e. t -calculated < 1.96 which is the t -critical) in relation to their attitude towards inclusive education. The table revealed that there is no significant difference between the two groups ($df = 789$, $t = 0.59$, $\alpha = 0.56$). The null hypothesis is thus upheld. Therefore, we conclude that there is no significant difference in the male and female pre-service teachers' attitude towards inclusive education.

Discussion

The results of research question 1 and 2 revealed high knowledge and positive attitudes of pre-service teachers towards inclusive education. This is because the grand mean of 2.52 and 2.56 respectively were all above the mean average 2.50 as decision rule. The findings revealed above can be attributed to the length of campaign against segregation, advocacy and possibly, contact with students with disabilities. Furthermore, documentary evidence from researches have revealed that introductory inclusive education subjects can have positive influence on the attitude and knowledge of pre-service teachers (Stella, Forlin & Lan, 2007; Loreman & Earle, 2007; Sharma, et al; 2006; Campbell, Gilmore & Cuskey, ,2003). The results was further corroborated by the findings of Lancaster and Bam (2007); Spandagou, Evan and Lille (2008) and Thana, Lim and Liao (2014) that participation in short compulsory subjects dealing with inclusive education imparted on preparation of pre-service teachers toward inclusive education practice. However, Nagata (2005) claimed that a single university subject on special education cannot guarantee change in knowledge and attitude. One can here infer that the knowledge and attitudinal change reported may be accepted to be valid when the opinions of pre-service teachers are translated into action when they eventually start teaching. In addition, there was gross low knowledge of some assistive technologies devices in the education of people with special needs that can aid the learning and adjustment of students with special needs to current world of technological innovation. This can seriously impart negatively on the performance of pre-service teachers when they eventually get to the field of practice. Here, the advice of Resta (2002) who emphasised that it is essential for future teachers to immerse in technology-rich environment throughout their preparation in order to

assure that they are comfortable and competent in using the device in the education of special needs individuals for holistic teaching approach.

The results of hypotheses one and two revealed significant difference between knowledge and attitude of university and college of education pre-service teachers. The outcome of this study can be attributed to frequencies of engagement in course relate to people with special needs. This is because majority of pre-service teachers in the universities could have attended colleges of education where they have been initially exposed to such related courses. And of course, having opportunity in the universities to undertake such courses would be additional advantage thereby increasing their knowledge and interest. However, this result is contrary Nagata (2005), Trait and Purdie (2000) that believed that such training may not make significant impact.

The results of hypotheses three and four revealed no significant difference in knowledge and attitude of pre-service teachers based on gender. The results support the finding of Thava, Lim and Liao (2014) that revealed that variable of gender exerted no significant influence on the attitudes of pre-service teachers towards inclusive education. However, many literatures have reported conflicting findings on the issue of gender with some studies reporting that female teachers showed positive attitude than their male counterparts (Romi&Leyer, 2006; Avramidis et al; 2000) while Jobe, Rust and Brissie (1996) found that make pre-service teachers were more open to inclusion.

Conclusion

In conclusion, the study has revealed that attitudes and knowledge of pre-service teachers towards inclusive education have greatly improved by few courses undertaken in special education which is a welcome development in this era global inclusiveness. However, significant difference exists between knowledge and attitude of pre-service teachers in colleges of education and university with no statistical influence on gender. Pre-service teachers have high knowledge of and positive attitude towards inclusive education. There is significant difference in knowledge and attitude of pre-service teachers in universities and colleges of education and there is no

significant difference between universities and colleges of education pre-service teachers' knowledge of and attitude to inclusive education based on gender.

Recommendation

Based on the findings above, the following recommendation:

- I. Curriculum of college of education should be refashioned to train teachers holistically for them to be more dynamic and functional and be able to cope with current challenges in inclusive classroom situation.
- II. More advocacy campaign should be organised to create more awareness as this can go a long way to change societal perception of people with special needs.
- III. Pre-service teachers should be introduced to remedial teaching on Assistive Technology so as to be able to provide required care and support to children with special needs.

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