

A SURVEY OF PRE-SERVICE PHYSICS TEACHERS DISPOSITION TO PROFESSIONAL PRACTICE IN SOUTH-WEST NIGERIA

Edidiong E. Ukoh

Teacher Education Department

Faculty of Education

University of Ibadan, Ibadan, Nigeria

Phone no +2347063088079

E-mail: ee.ukoh@ui.edu.ng

Abstract

This study investigated pre-service physics teachers' disposition to professional practice in South-west Nigeria and the difference gender and school type could have on this attitude. A descriptive survey research design was used and a total of 247 pre-service physics teachers from three Colleges of Education which were selected using stratified random sampling technique. One research question was answered and two null hypotheses tested at 0.05 level of significance. Pre-service teachers' attitude to teaching practice was found to be positive but gender had no significant difference on this attitude. The attitude of students from federal college (\bar{x} =56.21, Standard deviation=5.873) was significantly different from state colleges (\bar{x} =54.04, std deviation=7.572). Based on this result, it is concluded that pre-service teachers have positive attitude to teaching practice. It is recommended that whatever disparity exist between the state and federal colleges be addressed so that there will be equality in attitude of these would-be teachers.

Key words: Attitude to teaching practice, teacher training, college type

Introduction

The product of any Nation's educational system is a reflection of the teacher quality that manages that system for that Nation. Jusuf (2005) opined that teachers are the single most important factor in student learning in school and those students who have access to high qualify teachers achieve at a higher rate regardless of other factors. The National policy on education (FRN, 2014) had earlier recognized this

when it stated that “since no education system may rise above the quality of its teachers, teacher education shall continue to be given major emphasis in all educational planning and development”.

Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitude, behavior and skills they require to perform their tasks effectively in the classroom, school and wider community (Wikipedia, 2011). Quality of teacher education is of utmost importance to every country of the world because the quality of the teacher determines to a large extent the level of national development.

According to Farant (1991), quality teacher and excellent teaching are functions of clearly conceived, designed, implemented and faithfully operated teacher education. The teacher preparation process focuses on three basic areas; cognitive, affective and psychomotor skills. The cognitive aspect has to do with knowledge of subject matter and the learner.

During teacher preparation, teaching skills are introduced to the student teachers and they are helped to acquire these skills which they will have to develop on as they progress in the programme and at work subsequently. These teaching skills among others include skills in creating effective, conducive and enabling learning environments that will stimulate the minds of pupils to learn, skills in engaging students in active learning, skills in classroom management and skills of planning and assessing for effective learning.

In a way to enforce and monitor these professional attributes, profession practice which is commonly called teaching practice is included as a compulsory course for all student teachers in all teacher training institutions all over the world. According to Dada (2015), teaching practice is the practical aspect of the training programme that gives the student teachers opportunity to learn and acquire essential pedagogy skills and experience real school life situation. Other professions place high premium on the practical training aspect of their professions, for example, medical doctors (internship), lawyers (court attachment), and engineers (industrial attachment) so also teachers (teaching practice).

The aim of teaching practice according to Botha and Nofemele (2013) is to provide opportunities for student teachers to integrate theory and practice and work collaboratively with and learn from the

practicing teachers. They further observed that during teaching practice, student teachers observe subject teachers at work so as to learn about teachers' skills, strategies and classroom management and do evaluate their own teaching experiences through conferencing with cooperating teachers and lecturers through self-reflection, implement a variety of approaches, strategies and skills with a view to bring about meaningful learning. Botha and Nofemele (2013) submitted that in this way student teachers gain experience in managing and evaluating class work; in maintaining discipline and good order in the classroom; find their own teaching style and personality and become acquainted with school organization and administration.

However, Dada (2015) noted that as important as teaching practice is to teacher education, its organization and conduct seems to be bedeviled with a lot of factors which include: duration, timing, posting, poor supervision, students and lecturers attitude towards the exercise among others. Attitude is a psychological construct which Barros and Elia (1998) define within the framework of social psychology as a subjective or mental preparation for action and outward and visible postures of human belief. In this way, attitude means the individual's prevailing tendency to respond favorably or unfavorably to an object (person or group of people, institutions or events) and that attitude can be positive (values) or negative (prejudice). Attitudes determine what each individual will see, hear, think and do.

If this explanation holds true for attitude then one could say that attitude determines actions and reactions of individuals and their behaviors. Consequently, the pre-service teacher attitude to teaching practice could determine how he prepares for the exercise and what he does during the exercise. If the student teacher has a positive attitude to teaching practice, he is likely going to put in his best and strive to succeed even in the face of difficulties.

Vieluf, Kaplan, Klieme, and Bayer (2012) believe that teachers' beliefs, practices and attitudes are important for understanding and improving educational processes and those are closely linked to teachers' strategies for coping with challenges in their daily professional life and to their general well-being, and they shape students' learning environment and influence student motivation and achievement.

Several factors have been reported to influence student teachers attitude to teaching. Bhargava and Pathy (2014) reported that gender, school type, school status, family background, type of training among others influence teachers attitude to teaching. Research has shown difference in attitude among male and female teachers to teaching. Scholars like Osunde and Izevbigve (2006) and Capa and Cil (2007) reported that female teachers' attitude to teaching is different from that of their male counterpart. Also Babu and Raju (2013) reported that male and female student teachers were differed significantly in attitude towards the teaching profession. With these conflicting reports, this study investigated pre-service teachers' disposition to professional practice in the South-west Nigeria.

In Nigeria, Colleges of Education are either own and funded by Federal, state or private individuals. This situation suggests disparity in quality because the learning environment in terms of facilities and teacher quality are different. The possible influence this parity could have on pre-service teachers' attitude to teaching was investigated. Adeyinka and Kaino (2014) study on school category as they call it showed a t-test analysis that private school students did not differ to a significant extent in their attitude from the public school students but there was a significant difference in their performance in mathematics. Also, Khan and Rodrigues (2012) did not observe any difference in attitude of students from public and private schools in Pakistan. Although these authors reported on general attitude, there may be some link with pre-service teachers' attitude because they are students.

Based on the foregoing discussion, this study investigated the disposition held by the pre-service physics student teachers in the South-west Nigeria about teaching practice and also the influence of gender and college type on their attitude to teaching practice.

Statement of the problem

Most teachers' performance has been reported to be below expectation and this is showing in students' academic achievement at all level of education. This problem could be traced to teacher preparation process and an important aspect of this process is the professional practice. This study therefore investigated the disposition of pre-service physics teachers to teaching practice in the south-west

Nigeria. The influences of gender and college type on pre-service teachers' attitude to teaching practice were also investigated.

Research Question

One research question was answered in this study

1. What is the attitude level of pre-service physics teachers to teaching practice?

Hypotheses

Two hypotheses were tested at 0.05 level of significance.

- Ho₁.** There is no significant difference between the attitude of male and female pre-service physics teachers to teaching practice.
- Ho₂.** There is no significant difference in the attitude of pre-service physics teachers from state and federal colleges of Education.

Scope

This study made use of 300 level NCE pre-service physics teachers from three colleges of Education in the South-west Nigeria who have taken part in teaching practice exercise in the last one year.

Methodology

The study employed survey research design of expo facto type.

Population and Sample

The population of this study included all 300 level physics students in all colleges of Education in the South-west Nigeria .A total of 247 NCE pre-service physics teachers from three Colleges of Education in the South-west Nigeria were selected using stratified random sampling technique and two state and one federal colleges of Education were purposefully selected to constitute the sample for this study. Intact classes were used in which a total of 79 male and 168 female took part in the study.

Instruments

A 20-item self-developed NCE pre-service physics teachers' attitude to teaching practice questionnaire was used to collect data for the study. This instrument was divided into two sections: A seeks for information on the demographic variables of the pre-service teachers, and section B

on attitude to teaching practice. Some examples of items in the questionnaire: Teaching practice prepares the students for their teaching profession, it is waste of time to ask students to go for teaching practice.

The instrument had four-point Likert-scale of strongly agree, agree, disagree and strongly disagree. The reliability of the instrument using Cronbach alpha was 0.70. The data collected were analyzed using simple percentages and t-test.

Results

The results of the study are presented in the order that the research question and hypotheses were stated:

Research Question

What is the disposition level of NCE pre-service physics teachers to teaching practice?

Table 1: Descriptive statistics table showing frequency, percentage, mean and standard deviation attitude level of pre service Physics teachers to teaching practice

S/N	Statement	SA	A	D	SD	Mean	Std. D
1	It is good for teaching practice to be part of training programme	201 81.4%	38 15.4%	5 2.0%	3 1.2%	3.77	.540
2	Teaching practice prepares the students for their profession	186 75.3%	52 21.1%	5 2.0%	4 1.6%	3.70	.591
3	It is waste of time to ask students to go for teaching practice	16 6.5%	10 4.0%	54 21.9%	167 67.6%	3.51	.850
4	The course content only is enough to prepare the teachers for their profession	44 17.8%	78 31.6%	98 39.7%	27 10.9%	2.44	.908
5	If I have my way i would recommend	17 6.9%	19 7.7%	48 19.4%	163 66.0%	3.45	.904

	that teaching practice should be removed from teachers training curriculum						
6	I do not need teaching practice to be a good teacher	9 3.6%	17 6.9%	102 41.3%	119 48.2%	3.34	.764
7	I did not learn anything new during the teaching practice exercise	11 4.5%	10 4.0%	82 33.2%	144 58.3%	3.45	.774
8	During teaching practice no student teachers gain real life experience of their profession	14 5.7%	18 7.3%	77 31.2%	138 55.9%	3.37	.850
9	Am always looking forward to teaching practice exercise	96 38.9%	114 46.2%	25 10.1%	12 4.9%	3.19	.807
10	The thought of standing before those students always put me off	20 8.1%	53 21.5%	95 38.5%	79 32.0%	2.94	.927
11	I do not like teaching practice	9 3.6%	14 5.7%	72 29.1%	152 61.5%	3.49	.764
12	I will like teaching practice programme better if the government will take it as a form of industrial training so that the students could have financial support	147 59.5%	73 29.6%	16 6.5%	11 4.5%	3.44	.804
13	I enjoyed my teaching practice because I gained teaching skills	179 72.2%	46 18.6%	10 4.0%	12 4.9%	3.59	.786
14	Writing of lesson note is a tedious	24 9.7%	19 7.7%	115 46.6%	89 36.0%	3.09	.906

	task and should not be compulsory						
15	Micro teaching should take the place of teaching practice	38 15.4%	46 18.6%	104 42.1%	59 23.9%	2.74	.990
16	Teaching practice should not be removed from teachers training programme but it should not be a compulsory course	59 23.9%	40 16.2%	73 29.3%	75 30.4%	2.66	1.146
17	I do not like giving students assignment because it is tedious to mark	13 5.3%	21 8.5%	91 36.8%	122 49.4%	3.30	.837
18	Providing instructional materials for all lessons should not be compulsory	31 12.6%	40 16.2%	85 34.4%	91 36.8%	2.96	1.017
19	I find it difficult to interact with students in my class	11 4.5%	11 4.5%	95 38.5%	110 52.6%	3.39	.773
20	I find it difficult to manage my class because the students do not usually cooperate with me	14 5.7%	20 8.1%	84 34.0%	129 52.2%	3.33	.852
Weighted mean = 3.26							

Table 1 show respondents rating of items on the attitude scale. The first three rating is as shown below; It is good for teaching practice to be part of training programme (Mean = 3.77) was ranked highest in the mean score rating and was followed by Teaching practice prepares the students for their profession (Mean = 3.70), I enjoyed my teaching practice because I gained teaching skills (Mean = 3.59),

Table 1 also revealed the weighted mean (3.26) out of the maximum 4.00 obtainable which is higher than the standard mean

(2.50). This implies that pre service Physics teachers have positive attitude to teaching practice.

Null hypothesis 1

Ho₁. There is no significant difference between the attitude of male and female NCE pre-service physics teachers to teaching practice.

Table 2: t-test statistics showing difference in attitude of male and female NCE pre-service physics teachers to teaching practice and t - value

Respondent Sex	N	Mean	Std deviation	Std Error Mean	t-value	df	Sig
male	79	54.37	7.140	.8033	0.162	245	.871
female	168	54.54	7.389	.5701			

From table 2, the mean (\bar{x} =54.37, std deviation=7.140) of attitude of male NCE pre-service physics teachers is slightly different from the mean of attitude of female NCE pre-service physics teachers (\bar{x} =54.54, std deviation=7.389) but the difference is not significant. So it could be said that there is no difference in attitude of male and female NCE pre-service physics teachers to teaching practice.

Null hypothesis 2

Ho₂. There is no significant difference in the attitude of NCE pre-service physics teachers from state and federal colleges of Education.

Table 3: t-test statistics showing difference in attitude of NCE pre-service physics teachers from state and federal colleges of Education and t -value

respondent college type	N	Mean	Std deviation	Std Error Mean	t-value	Df	Sig
State	196	54.04	7.572	.5408	1.906	245	.050
Federal	51	56.21	5.873	.8223			

From table 3, the mean (\bar{x} =54.04, std deviation=7.572) for NCE pre-service physics teachers from state colleges is lower than that of federal colleges which is (\bar{x} =56.21, std deviation=5.873) therefore it could be said that the attitude of NCE pre-service physics teachers from state colleges of Education are different from those from federal colleges of Education and the difference is significant. NCE pre-service physics teachers from federal colleges of Education have better attitude than those from state colleges of Education to teaching practice.

Discussion

The result of the study shows that the attitude of pre-service physics teachers to teaching practice is positive that is pre service teachers are favorably disposed to teaching practice. This result negates findings of Dada (2015) and Abimbade (1999) who found that pre-service teachers have negative attitude to teaching practice. This also negates the findings of Hussain, Ali, Khan, Ramzan, and Qadeer (2011) who reported that teachers do not have positive attitude toward teaching. This result could be because the students are aware of the status of the course as compulsory course and the credit load the course carries and are determined to like the course compulsorily no matter what. This could also be because the student teachers may be satisfied with their chosen career and have taken it as a noble profession which it is.

In this study also, it was found that there is no difference in attitude of male and female NCE pre-service physics teachers to teaching practice. This finding contradicts the submission of Osunde and Izevbigve (2006), Cupa and Cil (2007) and Babu and Raju (2013) who reported gender difference in attitude of teachers. This could be that these pre-service teachers are satisfied with their chosen profession and that both the male and the female are given equal treatment in their schools.

The result of this study also shows that NCE pre-service physics teachers from federal colleges of Education have more positive attitude than those from state colleges of Education to teaching practice. This also contradicts the findings of Khan and Rodrigues (2012) and Adeyinka and Kaino (2014) who reported no difference in attitude of students from private and government own schools. However this result could be explain based on the difference that exist in the quality of teachers that teach in federal colleges, the learning facilities available and the general condition of the federal colleges is more conducive for learning than what those from state owned colleges are exposed to.

Conclusion

Based on the findings of this study, it is concluded that pre-service teachers' attitude to teaching practice is positive, there is no difference in attitude of male and female NCE pre-service physics teachers to teaching practice and that NCE pre-service physics teachers from federal colleges of Education have more positive attitude to teaching practice than those from state colleges of Education.

Recommendation

Based on the findings of this study it is recommended that all the colleges of education in the country be equipped equally in terms of manpower and facilities if the quality of education is to be improved.

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