Teaching Practice Experience of Science Student Teachers: Challenges and Possible Panacea in Nwafor Orizu College of Education, Nsugbe, Anambra State, Nigeria

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Abstract
The training of teachers is largely the responsibility of faculty of education in higher institutions. Teaching practice occupies a key position in teacher's education program. It is an integral part of the teacher's education program which is geared towards preparation of new entrants into the teaching profession. Teaching practice is a compulsory course which attracts compulsory course unit in science related education courses and other departments of the faculty of education. Student-teachers in the course of their teaching practice are exposed to a lot of experiences and challenges. The study was carried out to determine the teaching practice experience of science student teachers: challenges and possible panacea in Nwafor Orizu College of Education, Nsugbe, Anambra State. Three research questions guided the research with a 24- itemed questionnaire for data collection. The researcher adopted a descriptive survey research design. Five department were chosen for data collection with ten (10) final year students randomly selected from each of the department. The designed research questionnaires on four rating scale was administered to the respondents. Data collected were analyzed using mean score of 2.50. Mean score of 2.50 and above were accepted while those below 2.50 were rejected. From the result obtained, it was found that teaching practice exposes science student teachers to a lot of experiences which includes but not limited to mastery of the subject matter, improvement of classroom management skills, application of different teaching methods during lesson delivery, effective writing of lesson plans and notes, fosters student's creativity and exposition to record keeping and administrative tasks. Furthermore, science student teachers encounter numerous challenges during teaching practice which includes poorly equipped laboratories, non-co-operative attitude of permanent teachers, non-availability of office for student teachers and host of others as depicted in the findings. It was recommended among others that student teachers should be enlightened by the institution on the importance of teaching practice and likely challenges to encounter while on the assignment.

Keywords: *Education, Teaching practice, Students teachers, Teaching profession.*

Introduction

Education is the major cornerstone for any nation and for some time a big industry in Nigeria. It is one of the greatest assets that man has developed for his continued progress or destruction. It's also an instrument for social reconstruction and every education is a bedrock of quality in schools. Teachers therefore have an important role to play in the development of a nation especially in

building up leaders and intellectuals of tomorrow who will sustain and hasten the nation's development. Nigeria has succeeded in different ways to prepare teachers with various teaching qualifications with opportunities for further training and retraining. In Nigeria, teacher education programs are designed to provide student teachers with the knowledge, skills, and attitudes required to become professional, effective and resourceful teachers. The minimum teaching qualification in Nigeria institution of learning is National Certificate in Education (N.C.E) according to National Policy on Education (2019) (TRCN, 2019). Universities of Education, Colleges of Education and faculties of Education in Nigeria Universities are saddled with the training of teachers under the supervision of lecturers, staff and assessors, because of the nature of teaching given teaching practice a piece of prominence in its syllabus.

Teaching practice is a compulsory course which attracts compulsory course unit to a would-be teacher in the course of teachers training. No student in the faculty of education could be awarded a degree certificate except and until an evidence of pass performance in the level of teaching practice is obtained. Teaching practice occupies a key position in teacher education program. It is an integral part of the teacher education program which is geared towards preparation of new entrants into the teaching profession. During the period of teaching practice, the student teachers are exposed to real life teaching as they practicalized what they have been learnt during course work. Salawu and Adeoye (2018) explained that teaching practice is a practical teaching activity by which the student-teachers are given an opportunity in actual school situation to demonstrate and improve training in pedagogical skill over a period of time. It is thus, a kind of apprenticeship stage during which the students are sent out to school to gain practical and professional experience by translating all the educational theories they have acquired or learnt during training into practice. Okonkwo and Osiji (2018) defined Student Teaching Practice and its processes as: A prolonged period of laboratory experience in an actual classroom situation during which the student takes increasing responsibility for his/her preparation as a teacher under the direction of an institution supervisor representing his/her teacher–education centre and cooperating teacher who is responsible for the classroom situation. Whatever explanation given to teaching practice the most outstanding thing is that it is a professional exercise which is focused on helping the student-teacher to bridge the gap between theory and practice in education. In the process of bridging the gap between educational theories and practice, the student-teacher, through a programme of cooperative and interactive guidance, acquires valuable skills in teaching and the management of teaching from experienced teachers. A meaningful student teaching practice embodies both laboratory/clinical (microteaching) and field teaching experiences in actual school classroom situations.

Teaching practice exercise enables the student teachers to get acquainted with the practical knowledge of teaching and learning process including lesson plan preparation, presentation, class management, communication skills, evaluation and the required personality of professional teachers (Aijaz *et al.,* 2021). Oluwafemi Bolafinwa (2020) carried research on the effect of teaching practice on student teachers in tertiary institution in Nigeria with reference to University of Lagos. This study identifies the effect and impact of teaching practice on student teachers. It was established that teaching practice has never been a waste of time rather it has helped to inculcate the professional traits in student teachers, preparing them for the real classroom and school situation. Eze (2019) investigated the impact of reflective practice on the teaching skills of student teachers during their teaching practice experience in Nwafor Orizu College of Education, Nsugbe, and reported that reflective practice can help student teachers develop their skills and confidence. Okoro (2020) investigated the impact of professional development opportunities on

the teaching skills of student teachers during their teaching practice. The study found out that professional development opportunities can help student teachers develop their teaching skills. Nasir and Zafar (2018) reported that collaboration with colleagues also help the student teacher to develop their teaching skills and become professional teachers. Studies have also revealed that student teacher encounter challenges and problems during teaching practice exercise. Ogonor and Badmus (2019); Nasir and Zafar (2018) observed that teachers of partnership schools do not provide specific aid to students-teachers to improve their teaching skills and strategies. Nakpodia (2011) opined that the periods of three and six months does not really provide the student-teachers ample time opportunity to effectively gain experience which the exercise is intended to encourage. Teaching practice exercise is meant to acquaint student-teachers with the practical knowledge of teaching and learning process including lesson plan preparation, presentation, class management, communication skills, evaluation, record keeping, pedagogy and the required personality of professional teachers. It has been observed that student teachers face a lot of challenges during teaching practice as they are exposed to another environment where they would practicalized what they have thought. Observation also showed that some student teachers have difficulties in preparation of lesson note and effective teaching delivery. Moreover, inadequate knowledge of techniques of implementing skills needed for effective teaching militate against its success. It is against this background that this research investigated the teaching practice experiences of science student teachers: Challenges and Possible Panacea in Nwafor Orizu College of Education, Nsugbe. In view of the above, the aim of this research is to examine the teaching practice experiences of science student teachers: Challenges and Possible Panacea in Nwafor Orizu College of Education, Nsugbe. The study therefore specifically sought to:

1. Examine science student teachers' experience during teaching practice.
2. Identify the problems faced by the science student teachers during teaching practice.
3. Proffer possible solutions in to the identified problems.

Research Questions

In order to achieve the specific objective of this study, the following research questions guided the study:

1. What are the experiences of science student teachers during their teaching practice?
2. What problems do they face when they are on teaching practice?
3. What are the possible solutions to the identified problem?

Methods

The study adopted a descriptive survey research design and was carried out in Nwafor Orizu College of Education, Nsugbe, Anambra State, Nigeria. This design was considered appropriate for the study because information is gathered from an unbiased representative group of interest (Owens, 2020). The target population consisted of all the final years students in the school of sciences that concluded their teaching practice. Of the six (6) departments in the school of sciences, five (5) department were chosen in which ten (10) students were randomly selected making a total population of fifty (50) students for the study. The instrument for data collection was structured questionnaire using a four-point scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree. The validation of the instrument was done by experts in the department of Measurement and Evaluation and that of Basic Science. Following their recommendation, the final draft of the instrument was coined. The essence is to make provision for maximum efficiency of the instrument as well as to avoiding redundant and clogging of questions from the instrument.

Pearson Product Moment Correlation Coefficient was used to establish the reliability index at 0.82, which showed a high measure of stability in the instrument used. Data collected were presented in the tables and analyzed using mean. The study accepted any mean score of 2.50 and above, while any mean score below 2.50 was rejected, hence the cut off mean score was 2.50.

Results

The results were presented in tables in accordance with the research questions:

Research Question One: What are the experiences of science student teacher during their teaching practice with respect to Nwafor Orizu College of Education Nsugbe?

Table 1: Mean Rating of the Respondents on the Experiences of Science Student Teachers during Teaching Practice with Respect to Nwafor Orizu College of Education Nsugbe.

S/N	Items	SA	A	D	SD	X(Mean)	Decision
1	Expose the student teachers to the mastery of subject matters	30 120	15 45	3 6	2 2	3.5	Accepted
2	Applying various teaching methods and techniques.	25 100	14 42	11 33	-	3.5	Accepted
3	Improve classroom management skills, discipline and student behaviour.	27 108	13 39	7 14	3 3	3.3	Accepted
4	Designing and delivery of lessons aligned with curriculum plans.	15 60	20 60	10 20	5 5	2.9	Accepted
5	It fosters students' creativity	30 120	10 30	7 14	3 3	3.3	Accepted
6	Improves classroom organization and management	20 80	20 60	8 16	2 2	3.2	Accepted
7.	Improves reflective practice and self-assessment	25 100	20 60	2 4	3 3	3.3	Accepted
8.	Exposes students' teachers to record keeping and administrative task	34 136	16 48	-	-	3.7	Accepted

Table 1 shows the detailed response of experience of science student teachers during teaching practice. From the result, it could be inferred that science teachers agreed on all the question posed to them on the experience they had during teaching practice as the mean scores were above point. It showed that teaching practice equipped them with the skills need for a professional teacher, masters the subject matter, enhance teaching methods, improve classroom organization and host of others.

Research Question Two: What are the challenges faced by science student teachers during their teaching practice?

Table 2: Mean Rating of the Respondents on the challenges faced by science student teachers during their teaching practice.

S/N	Items	SA	A	D	SD	X(MEAN)	Decision
9	Adapting to diverse learning needs	25 100	20 60	2 4	3 3	3.3	Accepted
10	Inability of the student teachers to utilize instructional materials properly	33 132	10 30	5 10	2 2	3.5	Accepted
11	Non-availability of relevant textbooks	13 52	20 60	10 20	7 7	2.8	Accepted
12	Inability of student teacher to improvise instructional materials.	25 100	15 45	5 10	5 5	3.2	Accepted
13	Unavailability of Scheme of work.	4 16	6 18	30 60	10 10	2.1	Rejected
14	Non-cooperative attitude of the regular teachers with the student teacher.	23 92	17 51	8 16	2 2	3.2	Accepted
15	Unavailability of office for the student teachers	25 100	20 60	2 4	3 3	3.3	Accepted
16	Poorly equipped laboratories and classroom arrangement	25 100	20 60	3 6	2 2	3.4	Accepted

From the table 2, responses to items 9, 10, 11, 12, 14, 15 and 16 have mean score above 2.5 while item 13 have a mean score below 2.5 respectively. The result therefore shows the challenges encountered by science student teachers during their teaching practice. It also showed that the student teachers are not provided with the necessary facilities and comfortable environment for effective teaching.

Research Question Three: What are the solutions to the problems faced by science student teachers?

Table 3: Mean Rating of the Respondents on the solutions to the problem faced by science student teachers.

S/N	Items	SA	A	SD	D	X(MEAN)	Decision
17	Intensive training on subject matters	20 80	20 60	1 2	9 9	3.0	Accepted
18	Provision of textbooks	20 80	25 75	3 6	2 2	3.3	Accepted
19	Access to instructional materials	30 120	10 30	7 14	3 3	3.3	Accepted
20	Provision of office space	15 60	20 60	15 30	3 3	3.1	Accepted
21	Upgrading of laboratory equipment	30 120	16 48	3 6	1 1	3.5	Accepted
22	Building more infrastructure in schools	28 112	14 42	5 10	3 3	3.3	Accepted
23	Collaboration with experienced teachers	30 120	15 45	5 10	3 3	3.5	Accepted
24	Guidance on curriculum planning	25 100	18 54	4 8	3 3	3.3	Accepted

From the table 3, It was found that responses to items 17, 18, 19, 20, 21, 22, 23 and 24 have mean score above 2.5 respectively. The result therefore showed that challenges student teachers had during teaching practice could be minimized if not solved by adhering to the above solution.

Discussion

Research question one tends to probe and unveil the experience of science student teacher during teaching practice. From the data above, it could be deduced that in the first research question, from table 1, the mean scores were above the level of agreement 2.5. This shows that teaching practice exposes science student teachers to a lot of experiences which includes but not limited to mastery of the subject matter, improvement of classroom management skills, application of different teaching methods during lesson delivery, fosters student's creativity and exposition to record keeping and administrative tasks. All these make the science student teacher to become a professional, competent and effective teacher. This means that teaching practice exposes science

student teachers to lots of experiences in respect to Nwafor Orizu College of Education. This finding was supported by Korthagen *et al.* (2001) who stated that student teachers improve their teaching skills, including lesson planning, classroom management, subject matter knowledge during teaching practice particularly in areas related to teaching and classroom practice. Adebola (2022) also highlighted that student teachers' confidence in their ability to teach increases after completing teaching practice. Adeyanju (2012) noted that teaching practice encourages students to take ownership of their learning and develop meta cognitive skills. Hativa (2018) reported that teaching practice experience increases student engagement and motivation. Johnson and Johnson (2019) also opined that it fosters teamwork, communication and mutual support among students as they share their experience during teaching practice. Adeyanju (2012) and Adebola (2022) highlighted that teaching practice experience encourages active learning, critical thinking and problem solving in student teachers that aspire to become professional teachers. From the data above, it can be deduced that teaching practice exposes the science student teachers to professional, interpersonal, personal and practical skills.

The second objective of this study was to highlight the challenges faced by science student teachers during teaching practice. From table 2, Items 9, 10, 11, 12, 14, 15, and 16 had mean scores above the level of agreement 2.5. while item 13 was below the mean score. This shows that science student teachers encounter numerous challenges during teaching practice which includes, poorly equipped laboratories and classroom management, unavailability of office space for the student teachers, adapting to diverse learning needs, and non-cooperative attitude of regular teachers and student teachers. Adeyanju (2012); Abongdia *et al*., (2015); and Shaban (2020) reported that student teachers struggle to plan and engage meaningful lessons that meet the diverse needs of their students. Adebola (2022) stated that student teacher often reports inadequate resources and equipment which hinders their ability to deliver effective lessons.

The third research question centers on the solutions to the problems faced by science student teachers. From table 3, the mean scores were above the level of agreement. This shows that adhering to the enlisted solution will help to curtail the challenges faced by science student teachers during teaching practice which includes; intensive training on subject matter, provision of textbooks, access to instructional materials, provision of office space, collaboration with experienced teachers, guidance on curriculum planning, upgrading of laboratory equipment. This was in line with the findings of Nasir and Zafar (2018) emphasized that collaboration with colleagues can help student teachers develop their teaching skills, share resources and ideas and receives support and feedback during teaching practice. Okeke (2018) highlighted that mentorship and coaching from experienced teachers can help student teacher develop their teaching skills and confidence during teaching practice.

Conclusion

The study and dated obtained showed that science student teachers in Nwafor Orizu college of Education, Nsugbe gain lots of experience during teaching practice to become a resourceful and professional teacher. It was also revealed that in the course of their teaching practice, the science student teachers face numerous challenges during their teaching practice experience. However, with the right support and training, these challenges could be overcome. The study recommends that teacher's education programs provide student teachers with mentorship, reflective practice, and collaboration with colleagues to prepare them for the challenges of teaching. This will also help them to be able to develop acquiring skills and other teaching methods in the teaching profession.

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