

Areas of Specialisation and Years of Experience of Facilitators as Predictors of Undergraduate Distance Learners' Performance in Microteaching Practicum

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Abstract

The focus of this research was to establish the influence of facilitators' areas of specialisation and teaching experience on the undergraduate distance learners' academic performance in microteaching practicum in National Open University of Nigeria, Abuja. The study adopted a descriptive survey design of the ex-post-facto type. The study involved 40 facilitators and 1,000 teacher trainees selected using purposive sampling technique. Two hypotheses were formulated and tested. The t-test and inferential statistics of analysis of variance were employed to analyse the hypotheses at 0.05 significance level. The findings of the study revealed that areas of specialisation ($t(1,38) = 6.40$ with $p = 0.00 < 0.05$) and years of teaching experience ($F(2,39) = 688.28$; $p = 0.00 < 0.05$) of the facilitators had statistically significant differences on the teacher trainees' academic performance in microteaching practicum. It was recommended that the importance of the microteaching practicum as a key step in the process of teacher preparation and professional training should be emphasized, so the university and faculty should make sure that sensitization seminars and workshops are organized for all participating facilitators and teacher trainees, respectively, at the beginning of the semester.

Key words: Areas of Specialisation, Teaching Experience, Microteaching Practicum

1. Introduction

It is well recognized that teaching is a difficult process that involves more than just passing on knowledge from one person to another; it also involves procedures that promote efficient learning. The level of student comprehension is

used to judge a teacher's effectiveness. In the recent past, there have been numerous innovations in the nation's teacher education. The necessity for a functional educational system has made it essential to introduce new pedagogical and professional teaching techniques, theories, and

ideas. The teacher education programmes' curricula take these changes into account.

In Nigeria, colleges of education and faculties of education have the responsibility of training competent and professionally qualified teachers and the curricula have been modified to include microteaching practicum. In order for any teacher to be a competent and professionally qualified, he must be versed both in content and pedagogy. The expertise in pedagogical knowledge and skills are usually acquired during the microteaching practicum and teaching practice exercise which are compulsory courses that all teacher trainees must participate in, and perform satisfactorily before being certified as professionally qualified as teachers. Despite this innovative idea, the trend of teaching practice performance of the trainee-teachers is very poor as contained in the external examiners' reports of the 2021 accreditation exercise of the National Open University of Nigeria (NOUN). Furthermore, based on the researcher's own experience, as an Educational Technology expert, he found that conduct of microteaching practicum at the various study centres were often not adequately preparing candidates for the teaching profession.

Microteaching is a form of teaching where the teacher trainees learn and master important teaching skills (Adedapo, 2014). It enables teacher trainees to master a number of teaching skills and to gain confidence in teaching. Microteaching practicum is a cutting-edge method for the systematic and controlled development of teaching abilities and competencies. It is a process used in teacher education to develop qualified instructors. The main objective of the teaching practicum is to give students classroom teaching experience. Faculty supervisors who are in charge of the classes

where the practical are held provide the students with teaching and feedback. Microteaching practicum is a process used in teacher education to develop qualified instructors.

One student teacher, the class instructor (or school supervisor), and a small number of peers participate in microteaching sessions. Before applying their teaching methods to actual pupils, student instructors can hone them during these sessions in a controlled setting.

According to research, pre-service teachers have benefited from microteaching because it gives them the chance to practice teaching, plan and implement teaching strategies (Zonur & Kamşıl, 2019), enhance a variety of teaching skills (Ahn & Park, 2020; Bakr, 2014; Imaniah, 2019), develop teaching abilities (Salawu & Adedapo, 2019), develop competencies (Adedapo, 2017), and create effective teaching strategies (Ismail, 2011). Microteaching has been studied to learn how pre-service teachers do reflective practices (Nal, 2019; Riyanti, 2020), use reinforcement strategies (Jonaria & Ardi, 2020), use questioning strategies (Sunra & Nur, 2020), and to know their self-efficacy (Arsal, 2014). This is because microteaching is crucial for improving teacher candidates' teaching skills.

The teacher can show a clear conceptual and systematic comprehension of the course content when they are proficient in their area of specialisation and can effectively respond to complex higher order inquiries in their field of study. According to Nwachukwu (1990), the areas of specialisation of inexperienced integrated science teachers have an impact on students' performance. He noticed that the likelihood of integrated science students performing better increased with the degree of biological bias in a subject area. Koledoye (2011) in his study on the effect of teachers'

academic qualification on students' performance at the secondary level, found that English language teachers with master's degrees in the subject matter they teach—literature, language, or both—perform better than their colleagues who don't have such degrees but nonetheless instruct in the subject in secondary schools. He believed that a teacher's subject-matter expertise affected both their approach to teaching and, ultimately, the performance of the students.

One of the most important elements that influence employees, according to Jenifer (2010), is teachers' experience. She added that teaching effectiveness is enhanced by experience. According to her research, teachers achieve the most productivity during their first few years of teaching before their performance starts to decline. A number of studies using data from Florida and Carolina shown that average teachers with 1-2 years of experience are more successful than those without any experience (Clotfelr, Ladd and Vigdo, 2007a, 2007b; Harris and Sass, 2007). In their study, Gede and Lawanson (2011) demonstrated a substantial correlation between experience and workers' job performance of staff of Bayelsa state ministry of education . Their findings suggest that this association is most likely caused by the fact that an employee's performance increases as they get more experience from their years of service since they are required to put all of that experience into practice. This is consistent with Rugai and Agih's (2008) findings, which showed a strong correlation between teachers' experience and job performance. They indicated that a teacher has a larger chance of being more productive the longer he stays at a school.

Studies on how areas of specialisation or expertise and experience of teacher educators affect the practical teaching performance of undergraduate

distance learners are rare, according to the aforementioned literature. Therefore, this study examined the influence of lecturers' areas of expertise and experience on undergraduate distance learners' academic performance in the microteaching practicum.

2. Statement of the Problem

Teaching practice exercise is a prominent feature and an important aspect of teacher education programme in Nigeria. Consequently, teaching practice constitutes a major course to be taken by students in colleges of education and those pursuing their career in the faculties of education in the country. This course has a prerequisite course, which is microteaching practicum that students must pass before registering for the teaching practice. The main objective of the teaching practicum is to give students classroom-teaching experience and the faculty supervisors who are in charge of the classes where the practical are held provide the students with teaching and feedback. The consistent poor performance of undergraduate distance learners in the practical teaching might be attributed to the varying levels of facilitators' academic qualifications, areas of specialisation, and teaching experiences. The researcher suggests that teacher trainees' performance in teaching practice could be improved if competent and the study centres in the facilitation of the microteaching course engage experienced facilitators. There is a need to examine the influence of facilitators' areas of specialisation and teaching experience on the academic performance of undergraduate distance learners in microteaching practicum at the National Open University of Nigeria, Abuja.

3. Objectives of the Study

The aim of this study was to examine the influence of facilitators' areas of specialisation and teaching experience on the academic performance of undergraduate distance learners in microteaching practicum. Specifically, the objectives of the study are to examine the influence of:

- areas of specialisation of facilitators on the academic performance of undergraduate teacher trainees in microteaching practicum.
- facilitators' academic years of experience (high, moderate and low) on the academic performance of undergraduate teacher trainees taught microteaching practicum.

4. Hypotheses

The following hypotheses were tested at 0.05 level of significance.

H₀₁: Areas of specialisation of facilitators do not significantly influence the academic performance of undergraduate teacher trainees in microteaching practicum.

H₀₂: Facilitators' academic years of experience (high, moderate and low) do not significantly influence the academic performance of undergraduate teacher trainees taught microteaching practicum.

5. Scope of the Study

This study was delimited to facilitators participating on the National Open University of Nigeria undergraduate programme and teacher trainees of the university. Only 200 level distance learners of the National Open University of Nigeria that registered for the course during 2021_2 and pursuing their Bachelor of Education degree programmes were involved in the study.

6. Methodology

The present study employed a descriptive survey design of the ex-post-facto type, also known as "after-the-fact" research. It is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher. This design is considered most appropriate because, the study does not involve manipulation of variables. It only involved information collection gathering and analysis. The population of this study comprised all the undergraduate distance learners who registered for EDU216 – Microteaching Practicum during 2021_2 semester examination. The purposive sampling technique was employed to select 40 facilitators drawn from among the NOUN facilitators captured through the platform known as "Project Administration System" managed by the Learning Content Management System Unit of the National Open University of Nigeria. Also, the purposive sampling technique was used to select 1,000 teacher trainees that registered for EDU216 - Microteaching Practicum course from 72 study centres of the NOUN. The instrument used for data collection in the study was teacher trainees' raw scores in microteaching practicum. The instrument titled: Microteaching Practical Assessment Format that was used to observe teacher trainees microteaching practicum was developed and validated by the Faculty of Education Teaching Practice Committee of the National Open University of Nigeria, Abuja. The reliability coefficient value of 0.84 was obtained. This confirms that the instrument is not only suitable but also reliable for use as an instrument for data collection. Specifically, the scores were used to determine the influence of facilitators' areas of expertise and teaching experience on the academic performance of undergraduate teacher trainees in microteaching practicum. The facilitator information

data was used to elicit information on areas of expertise and years of experience of the facilitators.

The data collected for this study are standardized composite scores of 200 Level students in EDU216 – Microteaching Practicum for the 2021_2 semester. The scores of the sampled students in Microteaching Practicum that were considered at the Faculty of Education Board meeting were analysed using a t-test and inferential statistics of analysis of variance (ANOVA) to test the hypotheses set at 0.05 level of significance.

7. Results

Table 1: Facilitators' Distribution by Area of Specialisation

Area of Specialisation	Frequency	Percentage (%)
Educational Tech. Experts	14	35
Non Educational Tech. Experts	26	65
Total	40	100

Table 1 shows that 14 of the respondents who are facilitators (35%) specialized in Educational Technology and the remaining 24 facilitators (65%) did not specialized in Educational Technology but in other disciplines in the faculty of education. It revealed that the non- Educational Technology experts have higher percentage than the Educational Technology experts.

Table 2: Facilitators' Distribution by Years of Experience

Years of Experience	Frequency	Percentage (%)
1 - 5	13	32.5
6 - 10	18	45
11 and above	09	22.5
Total	40	100

Table 2 shows that 13 (32.5%) of the facilitators had between 1 and 5 years of teaching experience and 18 (45%) had between 6 and 10 years teaching experience. Also, only 9 (22.5%) of the facilitators had eleven years and above teaching experience. It revealed that facilitation of microteaching practicum was carried out by all the cadres of academics.

7.1 Testing of Hypotheses

Table 3: t-test Analysis on the Difference in the Academic Performance of Teacher Trainees Taught Microteaching by Educational Technology Facilitators and non-Educational Technology Facilitators.

Variables	N	X	SD	Df	T	Sig.	Decision
Educational Tech. Experts	14	69.50	10.21	38	6.40	0.00	Reject H_{02}
Non Educational Tech. Experts	26	47.27	10.62				
Total	40	116.77	20.83				

$$\alpha = 0.00 < 0.05$$

Table 3 shows the mean (69.50) and standard deviation (10.21) of educational technology facilitators, while those of non-educational technology facilitators were mean (47.27) and standard deviation (10.06). $t(1,38) = 6.40$ with $p = 0.00 < 0.05$. This indicated a significant difference in facilitators' areas of specialisation and academic performance. Therefore, the null hypothesis was rejected. It revealed that there was a significant difference in the academic performance of teacher trainees taught microteaching by educational technology facilitators.

Hypothesis II: Facilitators' academic years of experience (high, moderate and low) do not significantly influence the academic performance of undergraduate teacher trainees taught microteaching practicum.

Table 4: Descriptive Statistics of Facilitators' Years of Experience and Academic Performance

	N	Mean	Std. Deviation	Std. Error
Low	13	26.69	3.20	0.89
Moderate	18	57.06	3.15	0.74
High	9	75.56	3.13	1.04
Total	40	51.35	19.04	3.01

Table 5: ANOVA of Facilitators' Years of Experience and Academic Performance

	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	13763.16	2	6881.58	688.28	0.00	Reject H_0
Within Groups	369.94	37	10.00			
Total	14133.10	39				

Results in Tables 4 and 5 show that there was statistically significant difference in facilitators' years of experience and academic performance ($F(2,39) = 688.28$; $p = 0.00 < 0.05$). The mean and standard deviation values also showed statistically significant differences in facilitators' years of experience and academic performance. To determine the actual sources of significant differences observed in table 5, Scheffe post hoc test was employed and the result is presented in Table 6.

Table 6: Scheffe's Post Hoc Pairwise Comparison of Facilitators' Years of Experience and Academic Performance

(I) Facilitators' Academic Year of Experience	(J) Facilitators' Academic Year of Experience	Mean Difference (I-J)	Std. Error	Sig.
Low	Moderate	-30.36*	1.15	0.00
	High	-48.86*	1.37	0.00
Moderate	Low	30.36*	1.15	0.00
	High	-18.50*	1.29	0.00
High	Low	48.86*	1.37	0.00
	Moderate	18.50*	1.29	0.00

8. Discussion of Results

The finding of the study revealed that there was a significant difference in the academic performance of undergraduate teacher trainees taught microteaching by educational technology facilitators. This can be explained by the fact that the quality of microteaching facilitators in terms of areas of specialisation (Educational Technology and other disciplines) would determine the teacher's mastery of the content and ability to initiate to make effective teaching. This finding is in support of Goldhaber and Brewer (1997) and Brewer (2017) who found that areas of specialisation enables the teacher to adequately address detailed higher-order questions in the field of study thereby enabling the teacher to demonstrate a clear conceptual and systematic understanding of the course content. This finding is not in line with the study of Filgona (2017) who opened that the perception of teachers for effective teaching of any subject depends to a large extent on the teachers' understanding of the nature of the subject matter and that perception of proper teaching is a consequence of a teacher being able to pass-on the content of the subject matter. This finding is in line with Wiki (2013) who expressed how important it is to increase the number of qualified teachers in the school system.

Another amazing finding of this study is that there was a statistically significant difference in facilitators' years of experience and academic performance of teacher trainees in microteaching practicum. However, this finding is not unexpected because experience promotes the effectiveness of the teachers and the more experience one gathers as a result of length of service, the higher the effectiveness which invariably leads to a better academic performance of the students. This finding lends support to the findings of Gede and Lawanson (2011), Koledoye (2011) who found a high relationship between teachers experience and their job performance. He also found that teaching is an act that can be refined by training and practice and that the availability of competent teacher is very important in the reconstruction development of educational system. The finding is not in agreement with that of Agbatogun (2006) who reported that younger workers had higher average intention to use the internet than the older workers. But, in case of the facilitators with a high length of service, the longer the years of teaching experience the greater the probability of the performance to be higher.

9. Conclusion

The study revealed that the facilitation of microteaching practicum was handled by qualified educational technology and non-educational technology experts who possessed a high, moderate and low teaching experience. It further revealed that the facilitators' areas of specialisation and years of teaching experience had significant difference on the teacher trainees' academic performance in microteaching practicum. The implication of these findings suggest that in practice and/or policy, areas of specialisation and years of teaching experience should be viewed as major criteria for consideration when allocating the facilitators' spots in the microteaching practicum course.

10. Recommendations

Based on the findings that emerged from this study, emphasis should be laid on the importance of the microteaching practicum as a major step in the process of teacher preparation and professional training. The university as well as the faculty should make sure that sensitization workshops and seminars are organized for all of the participating facilitators and the teacher trainees, respectively, at the beginning of the semester.

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