Innovations

Lecturers' Perspective of Microteaching as a Quality Assurance Tool in University Teacher Education for Sustainable Development in Nigeria

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Abstract : *The study investigated lecturers' perspective of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria. The aim of the study was to determine the extent microteaching ensures quality assurance in university teacher education for sustainable development. Three research questions were answered and two hypotheses posed for the study which adopted descriptive survey design with a population of 103 lecturers in Science education and Arts education departments, Faculty of Education, Prince Abubakar Audu University, Anyigba,Kogi State. A sample size of 40 lecturers was drawn using the proportionate stratified random sampling technique. The instrument for data collection was a 15- item questionnaire validated by three experts and it gave a reliability coefficient of 0.78 which was obtained using Cronbach Alpha method. The data collected were analyzed with mean and standard deviation and the hypotheses tested using t-test. The findings showed poor communication of curriculum content delivered by lecturers, adequate monitoring and supervision process as well as need for lecturers to improve on identification and utilization of local resources.It was then concluded that microteaching has the potential for quality assurance maintenance in university teacher education, could strengthen lecturers to be better and empower students for the future,*

Introduction

Microteaching is a miniature classroom situation that a teacher trainee experiences in order to polish and sharpen adequately his/her teaching skills for such to become more effective in the act of teaching. Teachmint (2020) sees microteaching as an innovative technique adopted for a student-teacher to manage a small group referred/called class of students/pupils. The idea presented by the two definitions above show that microteaching is not the normal type of teaching but a simulated, specific and that aimed at growing definite characteristics in the teacher. Remesh and Memorial (2013) say that microteaching is an approach used in the teaching profession to enable teachers to raise their teaching skills standard to a more acceptable and productive level. The emphasis here is that microteaching practice and activity enhances the teaching capacity and competencies of the teacher trainee and perhaps the teacher. HARAPPA EDU (2022) says that microteaching is a specialized training received by intending teachers to develop and practice particular teaching skills. Here again, the information is that it leads to the embellishment of specifically identified and chosen skill for the student-teacher to get better on. This is an indication that the ideation of microteaching is for quality improvement, so that the latter output of a teacher trainee becomes better than the previous. So, student-teachers are engaged in microteaching in order to make them more qualitative and to help them possess better sought after skills; a pathway towards quality assurance.

Quality assurance could be perceived as a medium of guarantee in confidence and true to talk that an educational practice is standard enough; a mechanism in place for maintaining desired quality. European Education Area (EEA, n.d.) sees quality assurance in the educational practice as a deliberately organized approach towards the provision and maintainance of improved quality, equality and efficiency. Quality assurance is also seen as a compact of procedures, identifiers and specific actions that encourage on-going improvement in the practice of education.

The foregoing definitions present quality assurance as a means adopted to sanitize education practice of any attempt to introduce inadequacies and quackery (IGI, 2014). Moreso, quality assurance introduces effectivenesss and efficiency in educational process and practice. Quality assurance permeates every part of education process and practice which may include monitoring, evaluation, maintenance and enhancement of the school or programme.

It could go further to review teaching processes, learning processes, assessment process, qualification standards, design and presentation of learning achievement (QQI, 2021).Therefore, the essence of quality assurance is to ensure that the processes and practices of education meet originally intended level of excellence and performance expectation or standard. In a university system several quality assurance mechanisms have been put in place to pursue or achieve desired level of excellence and microteaching; a technique used in teacher education for teacher-trainees is no least of such practices applied.

The professional practice of preparing and developing teachers could mean teacher education. According to Akor, Okonny and Pepple (2023) teacher education is seen as a process of preparing, training teachers professionally in personality and skills in order for them to be able to do the teaching job as desired by the society. This conveys that the act of developing the personality and skills of the teacher trainee in order to become such acceptable to the society is what is referred to as teacher education. Ololube (2005) says that teacher education is the manner of producing highly motivated, conscientious classroom teachers who would effectively teach learners and attain educational goals and objectives. Thus, the descriptions are pointing to an act and art of deliberately moulding individuals into desirable professional characters that would show self-motivation in the discharge of their responsibilities to the learners, school and the society through tutorship and mentoring practices for the purpose of achieving stated educational objectives.

Perhaps, the reason, Amadioha (2017) says that the school as an organization desires the services of knowledgeable, talented and motivated persons who would be willing to exert all effort at producing the required results as this is the only way the system could remain sustained for a long time to come. It may also be the reason Akor, Okonny and Pepple (2023) asserted that teacher education should be carried on both in parallel or consecutive practice, thereby, accommodating pre-service and in-service training for teachers, thus, ensuring the sustainable development of the entire process.

Sustainable development is a pursuit which encourages the use of available resources with regards to its preservation for its availability for the future use. Akor and Ochijenu (2023) see sustainable development as a means of providing support for the present needs and bearing future needs and what it may require to satisfy them in mind. Amadioha and Akor (2020) perceived sustainable development to mean a way of establishing balance between the usage of available resources (natural or artificial) now and in the future without them getting exhausted. The presentation on sustainable development mean that it is future oriented while

solving immediate problems and ensuring that available resources must be perpetuated through generations to come.

The above is pointing to the fact that sustainability as a concept possesses the capacity for quality assurance through its mechanism of having a reserve of resources for future perpetuation. This quality assurance practice is what is ensured by teacher education process and practice using microteaching to make sure that each generation of teacher trainee do not just pass through the university teacher education process but that it would also ensure sustainability such that every generation of students are meant to go through an improved version of microteaching curriculum that meets the immediate needs of the society at that particular point in time.

For Akib (2023) different types of quality assurance exist in education and they may include: Institutional accreditation, programmatic accreditation, assessment evaluation, continuous improvement, peer review, student feedback and surveys, external quality audits technology driven quality assurance, international benchmarking, regulatory compliance, transparency and accountability, curriculum development and review, faculty development programs among others. However, the present discourse would focus more on curriculum development and review. This is a mechanism that ensures that quality assurance is conducted on the purview of assessing curriculum alignment with latest industry needs, trends and societal desires and aspirations. The above is coming on the background of inadequate output challenges that is being witnessed with a good percentage of teacher education graduates in recent years. The said challenge of inadequacy would be reviewed in consideration of lecturers ability to communicate effectively, extent of set monitoring and supervision done and the application of local resources in the teaching and learning process. It essential that a lecturercommunicates or pass to the students what he intend to say par time and when mixed with their learning experiences, the learner should understand what they are being taught (Amadioha, 2017; Akor, 2021).

Also, the university system ought to establish a formidable system through which it can monitor and supervise the teaching and learning process that goes on under its care, perhaps, a committee comprising of few persons in management position should be able to achieve this goal with a qualitatively assessed rubric applied. Moreso, learners are able to relate more with what they have in their environment, hence, the use of local resources which are contextualized to meet learners needs would be highly welcomed (Meziobi, 2009). To cite a very practical scenario of a business studies education graduate who was being interviewed to take up a teaching job in a particular school and was asked to differentiate between foreign

trade and home trade but to the embarrassment of the panelist, he quickly pointed out that foreign trade was a type of trade done outside the home and that home trade was such business transaction conducted within a home.

This left the interview panel amused and confused as to the kinds of graduate who were being churnout of universities today. Thus, the question: What is the cause of this challenge? The curriculum? the curriculum practice? or the curriculum process? Hence, the study lecturers' perspective of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria. Specifically, the study sought to achieve the following objectives:

1. Determine the extent to which lecturers communicate the curriculum content of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria.
2. Determine the extent set monitoring and supervision mechanism are adequate for quality assurance in university teacher education for sustainable development in Nigeria.
3. Determine the extent lecturers utilize local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria.

To guide the study, the following research questions were posed:

1. What is the extent to which lecturers in different departments communicate the curriculum content of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria?
2. What is the extent set monitoring and supervision mechanism are adequate for quality assurance in university teacher education department for sustainable development in Nigeria?
3. What is the extent to which lecturers in different departments utilize local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria?

These hypotheses guided the study (P=0.05)

1. There is no significant difference between the extent lecturers in Science education department and Arts education department communicate the content of microteaching curriculum as a quality assurance tool in university teacher education for sustainable development in Nigeria.
2. There is significant difference between the extent lecturers in Science education department and Arts education department utilize local resources

to ensure quality assurance in university teacher education for sustainable development in Nigeria.

Research Method

The study was carried out in Prince Abubakar Audu University, Anyigba, Nigeria. The study adopted descriptive survey design. The population for the study was 103 lecturers in the faculty of education while the sample size for the study was made up of 40 lecturers from the departments of Science education and Arts education which were drawn using the proportionate stratified random sampling technique.The instrument used by the researchers for data collection was a questionnaire titled: Questionnaire on Lecturers' Perspective of Microteaching as a Quality Assurance Tool in University Teacher Education in Nigeria (QLPMQATUTEIN)) which was constructed by the researchers. It consists of 18-items which were arranged in two sections A and B. Section A contains the biodata, while section B consists of three subgroups: extent of communication of curriculum content of microteaching, adequacy of set monitoring and supervision mechanism and utilization of local resources for quality assurance. The questionnaire was built on a four-point Likert Scale, namely: Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE) and the levels of responses are weighted as 4, 3, 2, 1 respectively.

The instrument was face validated by three experts, one from Measurement and Evaluation Unit, one from Curriculum and Instruction unit and another one from Educational Technology unit, all from of the Department of Educational Foundations, Faculty of Education, Prince Abubakar Audu University, Anyigba, Kogi State and Rivers State University. The suggestions given were used in producing the final copy of the instrument. Cronbach alpha was used in calculating the reliability to determine the internal consistency which gave an alpha value of 0.78 which was considered high. The instrument was administered and collected by the researchers. The data obtained were analyzed using mean and standard deviation for answering the research questions. Hence, 4+3+2+1= 10/4=2.5.Therefore, items whose mean were less than 2.5 were seen as low extent (LE) responses while those whose mean were 2.5 and above were seen as high level (HE) responses. The decision rule on the null hypotheses was to reject the hypothesis with calculated Z-value greater than the critical Z-value but otherwise accept.

Results
Research Question 1: What is the extent to which lecturers in different departments communicate the curriculum content of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria?

Table 1: Mean and Standard deviation on the extent lecturers of different departments communicate the curriculum content of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria

S/N	Items	Mean Sci Edu	SD Sci Edu	Remark	Mean Art Edu	SD Art Edu	Remark	N
1	Lecturers' appearance communicates microteaching curriculum content for quality assurance	3.6	0.51	HE	2.8	0.41	HE	40
2	Lecturers approach to curriculum content delivery in class ensures microteaching quality assurance	3.3	0.81	HE	2.6	0.51	HE	40
3	Avenues of learner to lecturer interaction communicate microteaching curriculum content for quality assurance	2.0	0.82	LE	2.5	0.51	HE	40
4	Learner to learner communication ensures microteaching quality assurance	3.6	0.51	HE	2.4	0.51	LE	40
5	Outside the classroom experiences if the learner	3.4	0.67	HE	2.8	0.41	HE	40

communicate microteaching curriculum content for quality assurance							
Grand Mean and SD	3.18	0.67		2.62	0.47		

Source: Field data 2023

Table 1 results showed that there is high extent for all the other items except item 2 and 4 for science education and arts education which indicated low extent; an indication that lecturers to learner communication and learner to learner communication needs improvement. However, the grand mean of 3.18 and 2.62 for science education and arts educations shows that the content of microteaching content in both departments communicates quality assurance for sustainable development.

Research Question 2: What is the extent set monitoring and supervision mechanism are adequate for quality assurance in university teacher education department for sustainable development in Nigeria?

Table 2: Mean and Standard deviation on the extent set monitoring and supervision mechanism are adequate for quality assurance in university teacher education department for sustainable development in Nigeria

S/N	Items	Mean Sci Edu	SD Sci Edu	Remark	Mean Art Edu	SD Art Edu	Remark	N
1	Qualified individuals undertake set monitoring and supervision of microteaching for quality assurance	3.8	0.48	HE	2.6	0.51	HE	40
2	There is flexibility in the monitoring and supervision	3.6	0.51	HE	2.5	0.51	HE	40

	process to encourage innovation for microteaching quality assurance							
3	Monitoring and supervision recommendations in microteaching are usually adopted for future use for quality assurance	3.7	0.47	HE	2.6	0.51	HE	40
4	Monitoring and supervision encourage cooperative teaching and learning in microteaching classroom for quality assurance	3.7	0.47	HE	2.6	0.51	HE	40
5	Set monitoring and supervision of microteaching activities gives attention to classroom management practices for quality assurance	3.5	0.51	HE	2.5	0.51	HE	40
	Grand Mean and SD	3.66	0.48		2.56	0.51		

Source: Field data 2023

Table 2 indicates that set monitoring and supervision mechanism are adequate to guarantee quality assurance as all the responses showed high extent for each item. Meanwhile the result of the grand mean showed that science education department

seem to do better set monitoring and supervision processes than arts education department as the result of the grand (3.66 and 2.56) indicated.

Research Question 3: What is the extent to which lecturers in different departments utilize local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria?

Table 3: Mean and Standard deviation on the extent lecturers in different departments   utilize local resources to ensure quality assurance in university teacher education   for sustainable development in Nigeria

S/N	Items	Mean Sci Edu	SD Sci Edu	Remark	Mean Art Edu	SD Art Edu	Remark	N
1	There is training opportunity on how to identify local resources for use in a microteaching for quality assurance	2.8	0.41	HE	2.2	0.41	LE	40
2	There are training to lecturers on how to utilize local resources in a microteaching class for quality assurance	2.7	0.47	HE	2.4	0.41	LE	40
3	There is abundance of local resources the environment from which to choose for microteaching experience for quality assurance	2.9	0.31	HE	2.4	0.51	LE	40
4	There is management	2.9	0.31	HE	2.7	0.43	HE	40

	support for harnessing local resources for utilization in microteaching for quality assurance							
5	Lecturers have adequate experiences to mix the utilization of local resources for desirable results in microteaching for quality assurance	2.3	0.47	LE	2.8	0.41	HE	40
	Grand Mean and SD	**2.72**	**0.39**		**2.50**	**0.43**		

Source: Field data 2023

Table 3 result is indicative of the fact that arts education department confirmed a low extent for more of the items to support microteaching for quality assurance and also there is a challenge of lecturers lacking experience required to mix local resources for microteaching to ensure quality assurances. These findings came out based on the mean of (2.2, 2.4, 2.4 and 2.3) for arts education department and science education department respectively. Furthermore, it means that the department of arts education would need to pursue vigorously local resources identification and how to use them to enhance their microteaching experiences.

Hypotheses

1. There is no significant difference between the extent lecturers in Arts education department and science education communicate the content of microteaching curriculum as a quality assurance tool in university teacher education for sustainable development in Nigeria.

Table 4: t-test score on the extent lecturers in arts and science education communicate curriculum content of microteaching as a quality assurance tool in university teacher education for sustainable development in Nigeria.

Group	Mean	SD	N	Df	$Z_{calculated}$	$Z_{critical}$	Decision
Sci. Edu	3.18	0.67	20	38	2.33	2.02	Rejected
Arts Edu.	2.62	0.47	20				

Source: Field data 2023

The result on table 4 shows that Z-calculated of 2.33 is greater than the Z-critical 2.02 at 0.05 level of significance at 38 degree of freedom indicating that there is significant difference in theextent between science education department and arts education department communicate curriculum content of microteaching for quality assurance in university teacher education for sustainable development. Therefore, the null hypothesis of no significant difference is rejected.

2. There is significant difference between the extent lecturers in arts education and science education utilize local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria.

Table 5: t-test score on the extent lecturers in arts and science education utilize local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria.

Group	Mean	SD	N	Df	$Z_{calculated}$	$Z_{critical}$	Decision
Sci. Edu.	2.72	0.39	20	38	1.53	2.02	Accepted
Arts Edu.	2.46	0.43	20				

Source: Field data 2023

The result on table 5 shows that Z-calculated of 1.53 is lesser than the Z-critical 2.02 at 0.05 level of significance at 38 degree of freedom indicating that there is no significant difference in extent between science education department and arts education department in the utilization of local resources to ensure quality assurance in university teacher education for sustainable development in Nigeria. Therefore, the null hypothesis of no significant difference is accepted.

Discussion of the Findings

The result on table 1 revealed that the curriculum content of microteaching determine quality assurance to a large extent in the teacher training process except that there is need for improvement in the areas of lecturer to learner communication and learner to learner communication. There is an indication that when those weak ends are pinched together that the potential of the curriculum holds great potential for capacity and competency delivery to the students. This was confirmed by the findings of Remesh and Memorial (2013) who found that microteaching improves the skills of both new teachers and experienced ones particularly in the areas of presentation and reinforcement after a study on microteaching as an effective technique for teaching and learning. Again, Msimanga (2021) affirmed through the findings of a study on impact of microteaching lesson on teacher professional skills development and discovered that microteaching helps to develop students teachers' skills and that there are various forms of progression in microteaching presentations. Moreso, Sagban, AlMumar & Hashim (2021) who studied the effect of microteaching techniques of Iraqi students found that microteaching ensures quality assurance more than the normal teaching methods when adopted in the training of student teachers. The result on table 4 also revealed that there was significant difference between the way lecturers in science education department and lecturers in arts education department communicate curriculum content to their students where science education department lecturers seem to maximize the microteaching technique more. This is affirming that microteaching curriculum content in teacher education practice would ensure quality assurance for sustainable development in Nigeria.

Next, the result on table 2 showed that the set monitoring and supervision mechanism put in place for quality assurance in teacher education for sustainable development has a high extent of guarantee to ensure what it is meant to do. This is line with the study conducted by Mukoro and Ogheneovo (2013) on instructional supervision which found that quality assurance is attainable in microteaching when educational practice applied in instructional supervision is efficiently created and adequately mapped out to help what would bring about quality improvement in the teaching and learning process. Also, Ojo (2007) had found that regular reengineering of teacher education through microteaching would result in effectiveness after studying supervision for quality assurance and that those responsible for microteaching should be empowered and strengthen to do their job better. These confirmations affirm the fact that effective and efficient set monitoring and supervision of microteaching for quality assurance in teacher education has a high extent of guaranteeing sustainable development in Nigeria.

The result on table 3 indicated that science education department lecturers maximized the utilization of local resources in the microteaching classroom than their arts education department counterpart except in the area of having enough experience to mix the resources available for use. It is clear from the result on display from the table that while there is abundance of local resources and even the opportunity for training on how to use them, the lecturers in arts education department have not taken full advantage of what they have to succeed in the utilization of local resources in teacher education for quality assurance for sustainable development in Nigeria. However, the hypothesis result on table 5, showed that there is significant difference between the extent of utilization by lecturers of science education department and those of arts education. This results is confirmed by the finding of Mukagihana, Nsanganwumana and Aurah (2020) who studied instructional resources availability and utilization and found that there is a low level use of available resources in the teaching of pre-service teachers which may lead to production of less competent teachers in the future.Mohindra (n.d.) found too that institutions should empower teachers to create, disseminate and transfer knowledge in an acceptable manner after studying resources use for teaching.Even the findings of Omebe (2015) on teachers and quality assurance in education found that students support and management with effective monitoring guarantees quality assurance. Hence, there is need for improvement in the skills level possessed by the lecturers in both departments on their capacity and competence.

Conclusion

It could be concluded by saying that the application of microteaching in teacher education practice has the potency to strengthen lecturers to be better at what they do and empower student teachers to become competent in the delivery of curriculum content in the future in such a way that would guarantee quality assurance if lecturers would imbibe desired attribute to help them train the teacher trainees to maximize their potential and available resources in the environment through contextualization. Furthermore, lecturers need regular training to upgrade the level of skills they currently possess.

Recommendations

The following are the recommendations supporting this study based on the findings:

1. Lecturers should devise new ways of making communication between them and the learners more effective by ensuring the learners understand the content they are communicating each time for quality assurance teacher education practice.

2. Lecturers should strengthen learner to learner communication as studies have confirmed peer to peer interaction as one of the best ways of curriculum content delivery in microteaching practice towards sustainable development.

3. There is need to step-up set monitoring and supervision responsibilities of school management to have definite and definable level of quality assurance level particularly with microteaching.

4. Lecturers should further seize training opportunities especially those of arts education department for the identification and use of local resources that can enhance their curriculum content delivery for quality assurance.

5. Lecturers who are not experienced enough at utilizing local resources for content delivery should attached themselves to more experienced colleagues to build their capacity and competent in such areas.

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