

## Quality Assurance for Effective Agricultural Teacher Preparation and School Administration in Nigeria

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**Abstract.** This study was aimed at finding out practices that could elicit quality assurance in agricultural teacher preparation for effective school administration in Nigeria. Two research questions and two null hypotheses were formulated to guide the study. The target population for this study was 2,231 respondents comprising 2,021 lecturers from universities and 210 from colleges of education. A total of 202 university lecturers and 21 college lecturers were selected using simple random sampling technique. Practices for Quality Assurance and Application in Teacher Education (PQAATE) questionnaire was the instrument used to elicit the needed information from the respondents. The data collected were analyzed using mean and standard deviation statistics to answer the research questions and independent t-test statistical tool to test the hypothesis at 0.05 level of significance and 221 degree of freedom. From the analyses, it was found out that practices that ensure quality assurance in agricultural teacher preparation were not effectively utilized in teacher education programme in Nigerian Universities and Colleges of Education. Based on the findings, it was recommended that all quality assurance practices identified in the study should be fully integrated and applied in agricultural teacher education programmes in Nigeria.

### 1. Introduction

Agricultural education is the acquisition of skills and knowledge in Agricultural Science with the view to imparting them into prospective students and farmers for better productivity [1,2]. Teachers of agriculture require quality professional preparation in agriculture or its specific areas for effectiveness and quality assurance. According to Ojo, one basic purpose of agricultural teacher education programme is the production of highly competent teachers of agriculture who are capable of providing qualitative instruction effectively [3]. As entrenched in the Nigeria Policy in Education, the basic goal of teacher education is to produce highly motivated, conscientious and efficient classroom teachers for all levels of Nigerian educational system and to enhance teachers' commitment to the teaching profession [4].

The pedagogical preparation of agricultural teachers in Nigeria is carried out through pre-service trainings [4]. It involves exposing a trainee to basic courses in education, principles of teaching and technical agriculture [5]. Training institutions charged with the responsibility of providing professional preparation for agricultural teachers in Nigeria include: Institutes/Faculties of Education of Universities, Colleges of Education, Schools of Education in the Polytechnics, and National Teachers' Institute (NTI).

According to Artz and Robinson, quality education cannot be defined but easily identified when encountered [6,7]. There are four precepts on excellence in quality of teacher education. These are: excellence in reputation, excellence in resources, excellence in content, and excellence in outcome. Consideration of these qualities is very essential in preparing an agricultural teacher [7]. Ajayi and Adegbesan and Fadokun perceived quality education as the totality of the features of education process, product or service on its performance and the public perception of that performance [8, 9].

In early 2004, the Common Wealth of Learning worked in the area of quality assurance with the aim to achieving the outcome of enhanced quality at all levels of education. They provided adequate guideline for formulating quality assurance policies as well as for adopting systems and procedures within teacher education institutions for enhancing the quality of the processes involved in teacher training [10].

Quality assurance is the process of ensuring that the degree of excellence specified is achieved. It is a system in which the delivery service of the quality of the product is assessed and compared with that required. For Campbell and Rosznyai, quality assurance is all-embracing attributes covering all policies and actions through which the quality of higher education is maintained and developed [11]. In the view of Okonkwo and Udeze quality assurance is the practice of checking the quality of agricultural teachers graduated by teacher education institutions of a nation so that the standard of preparation will continue to be maintained [10]. In the context of this study, quality assurance in terms of agricultural teacher preparation is the identification and application of educational practices for teacher preparation that would enhance effective school administration.

The importance of quality assurance for effective agricultural teacher preparation in Nigerian teacher education programmes cannot be over emphasized. Adegbesan in a related research, pointed out the need for quality assurance in agricultural teacher preparation system in Nigeria to include: to serve as indispensable component of quality control; to ensure and maintain high standard at all levels; to assist in monitoring and supervision ; to determine the quality of teachers' input ; to determine the adequacy of the facilities available for quality control; and to guarantee trained agricultural teachers that can compete globally[12]. For effective quality assurance in agricultural teacher education in Nigeria, the crucial performance indicators are planning, monitoring, evaluation, supervision and inspection, quality control, conformation to standard and feedback [13,14,15,16].

According to Ochuba the basic determinants of quality teacher education include goals of education, quality of the input and a well organized school system that ensures the articulation and effective co-ordination of all aspects of school life [17]. He also pointed out that if the education industry would want to carry out its function of development of quality human capital, there would be need for checks and balances through regular and effective supervision and inspection. This, in essence, is to ensure and maintain quality of output. The quality of agricultural teachers is enhanced by the quality of preparation. Ugwu observed that every year, agricultural teachers are churned out from training institutions in Nigeria. Most of these products are deficient in content and methodology dispositions. Such deficient agricultural teachers constitute a nuisance to the education system as they lack knowledge of the subject matter, spirit of enquiry, creativity and capability to impart knowledge effectively [18]. Besides, they cannot be appropriately managed by the school administration [4]. It is against this background that this study was undertaken to ascertain quality assurance for effective agricultural teacher preparation and school administration in Nigeria.

## **2. Purpose of the study**

The main purpose of this study was to investigate into quality assurance for effective agricultural teacher preparation and school administration in Nigeria. Specifically, the study sought to:

1. Determine the educational practices that could enhance quality assurance for effective agricultural teacher preparation and school administration in Nigeria
2. Ascertain the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in teacher training institutions in Nigeria.

## **3. Research questions**

The following questions were posed to guide the study:

1. What educational practices could enhance quality assurance for effective agricultural teacher preparation and school administration in Nigeria?
2. To what extent are educational practices for quality assurance in agricultural teacher preparation employed in agricultural teacher education programmes in Nigeria?

## **4. Hypotheses**

The following hypotheses were formulated to direct the study:

1. There is no significant difference in the mean ratings of respondents on the educational practices that could enhance quality assurance for effective agricultural teacher preparation and school administration in Nigeria
2. There is no significant difference in the mean ratings of respondents on the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes in Nigeria.

## 5. Methodology

The study employed a survey research design. It was carried out in Enugu, Cross River and Akwa Ibom States of Nigeria. The target population comprised 2,021 education lecturers who are involved in agricultural teacher preparation programmes from universities and 210 lecturers of similar status from Colleges of Education. University of Calabar, University of Uyo, University of Nigeria, Nsukka, College of Education, Afaha Nsit, and Federal College of Education, Obudu were involved in the study. A total of 202 university lecturers and 21 colleges of education lecturers were sampled for the study. Practices for Quality Assurance and Application in Teacher Education (PQAATE) questionnaire was the instrument used to elicit the needed information from the respondents. The data obtained were analyzed using mean and standard deviation as a statistical tool.

## 6. Results

### 6.1 Research question one

What educational practices could enhance quality assurance for effective agricultural teacher preparation and school Administration?

Table 1: Mean rating of respondents on educational practices which could enhance quality assurance for effective agricultural teacher preparation and school administration in Nigeria

S/N	Quality assurance practices	X	SD	Decision
1	Increasing duration of teacher training programme to five years for degree and four years for Nigerian Certificate in Education (NCE)	3.50	0.53	Agree
2	Establishing monitoring and supervisory teams to ensure service delivery to the agricultural student teachers	3.46	0.52	Agree
3	Effective supervision of teaching practice exercise through adequate monitoring of agricultural student teachers at all stages of lesson preparation and delivery	3.28	0.46	Agree
4	Recruitment of qualified lecturers into agricultural teacher education preparatory programmes	3.43	0.59	Agree
5	Meticulous supervision of students of agricultural education during examinations	3.43	0.59	Agree
6	Introduction of post teaching practice courses into agricultural teacher preparation programmes	3.47	0.61	Agree
7	Admission of students with requisite entry qualifications into agricultural education programmes	3.37	0.56	Agree
8	Increase of pass mark grades from 40% to 60%	3.36	0.61	Agree
9	Provision of instructional material allowance to teachers of agriculture in training	3.43	0.58	Agree
10	Motivation of agricultural student teachers through awards of bursary to promote their interest in teaching	3.35	0.70	Agree

Results in Table 1 show that all the items recorded mean score values which were above the cut-off point of 2.50. This implied that most respondents agreed that all the educational practices have potentials of enhancing quality assurance for effective agricultural teacher preparation and school administration in Nigeria. The result also revealed that all the items recorded values ranged from 0.46 – to 0.70 indicating that there was less variability in the opinions of the respondents.

### 6.2 Research question two

To what extent are educational practices for quality assurance in agricultural teacher preparation employed in agricultural teacher education programmes in Nigeria?

Table 2  
 Mean rating of respondents on the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes in Nigeria

S/N	Quality assurance practices	$\bar{X}$	SD	Decision.
1	Increasing duration of teacher training programme to five years for degree and four years for NCE	1.00	0.00	VLE
2	Establishing monitoring and supervisory teams to assure service delivery to the agricultural student teachers	1.00	0.00	VLE
3	Effective supervision of teaching practice exercise through adequate monitoring of agricultural student teachers at all stages of lesson preparation and delivery	2.00	0.30	LE
4	Recruitment of qualified lecturers into agricultural teacher education preparatory programmes	1.80	0.65	LE
5	Meticulous supervision of students of agricultural education during examinations	1.00	0.00	VLE
6	Introduction of post teaching practice courses into agricultural teacher preparation programmes	2.00	0.50	LE
7	Admission of students with requisite entry qualifications into agricultural education programmes	1.00	0.00	VLE
8	Increase of pass mark grades from 40% to 60%	1.00	0.00	VLE
9	Provision of instructional material allowance to teachers of agriculture in training	1.80	0.65	LE
10	Motivation of agricultural student teachers through awards of bursary to promote their interest in teaching	1.00	0.00	VLE

LE = Low Extent; VLE = Very Low Extent; SD = Standard Deviation

Data in Table 2 show the opinion of respondents on the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes. Result indicated that all items recorded mean scores ranging from 1.00 to 0.65. These values were below the cut-off point of 2.50 on the four-point scale. This implied that respondents maintained that the extent to which the educational practices are being employed in agricultural teacher education programmes in Nigeria is very low. The standard deviation values obtained revealed that all the items recorded values range of 0.00 - 0.65 indicating that there was less variability in the opinions of the respondents.

**6.3 Research hypothesis one**

There is no significant difference in the mean ratings of respondents on the educational practices that could enhance quality assurance for effective agricultural teacher preparation and school administration in Nigeria.

Table 3

t-test analysis of respondents' opinions on quality assurance practices for effective agricultural teacher preparation and school administration in Nigeria

Respondents	n	$\bar{X}$	SD	Cal. t-value
University education lecturers	221	3.25	0.66	
				-0.59
College of education lecturers	21	3.53	0.65	

$P < .05$ ,  $df = 240$ , Critical  $t = 1.960$

Data in Table 3 indicated a recorded calculated t-value of -0.59 which was less than critical t-value of 1.960 at 0.05 level of significance and 240 degree of freedom. This implied that there was no significant difference in the opinions of respondents on the educational practices that could enhance quality assurance for effective agricultural teacher preparation. Hence the null hypothesis was upheld.

#### 6.4 Hypothesis two

There is no significant difference in the mean ratings of respondents on the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes in Nigeria.

Table 4  
 t-test analysis of respondents' opinions on the extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes in Nigeria

Respondents	n	$\bar{X}$	SD	Cal. t-value
University education lecturers	221	3.41	0.59	
				1.80
College of education lecturers	21	3.23	0.53	

$P < .05$ ,  $df = 240$ , Critical  $t = 1.960$

The result in Table 4 revealed that the calculated t-value of 1.80 was less than the critical t-value of 1.960 at 0.05 level of significance and 240 degree of freedom. Based on this, the null hypothesis was accepted.

### 7. Discussion of findings

The findings of this study were discussed under the following sub-headings:

#### 7.1 Quality assurance practices for effective agricultural teacher preparation and school administration in Nigeria

The result of this aspect of the study revealed the following practices for quality assurance in agricultural teacher preparation for effective school administration in Nigeria: admission of students with requisite entry qualifications into agricultural teacher training programmes, establishment of monitoring and supervisory team to ensure service delivery to the agricultural student teachers, recruitment of highly trained individuals into agricultural teacher education preparatory programmes, provision of instructional material allowance to both student teachers, and motivation of student teachers through bursary awards among others, This finding was in line with that of Ijaiya who in a related study concluded that for quality to be achieved in agricultural teachers' training programme, agricultural teachers trainees must be motivated through scholarship awards, payment of bursary and allowances [19]. Okonkwo and Udeze confirmed in his study that it is important to re-establish institutions responsible for the training of nonprofessional tertiary teachers and Nigerian education should de-emphasize paper qualification but place emphases on simultaneous realization of the three major success factors in total quality management which include quality product (teachers), cost and time [10]. Similarly, Oshionebo and Ashang found out from their empirical study that it was imperative to establish quality assurance in the infrastructural facilities of teacher education programmes especially in the availability of infrastructural development programmes [20]. Ukeje's findings in his research study revealed that lecturers supervising student teachers in teaching practice in secondary or primary schools must have mastery of Agricultural Science at that level of education. He also suggested that organization of seminars and workshop at frequent intervals to develop communication skills of prospective teachers are better educational practices with potentials of establishing quality assurance for effective teacher preparation and management [1].

#### 7.2 Extent to which educational practices for quality assurance in agricultural teacher preparation are employed in agricultural teacher education programmes in Nigeria

The findings in this aspect of the study indicated that the employment of educational practices for quality assurance in agricultural teacher preparation in agricultural teacher education programmes was generally low. By implication, most of the educational practices are not employed in agricultural teacher preparation programmes in Nigeria. The

admission of entrants with required qualifications into agricultural education programmes is not applied in Nigerian universities and colleges of education. This agreed with Okebukola who pointed out that the quality of input into a training programme will determine the output. According to him, admission of good quality candidates into agricultural teacher training institutions will result to good quality teachers to manage schools [21]. Hanushek ; Ugwu and Oboegbulem (n.d.); and Ochuba are in support of this when they pointed out that the current minimum three credit level passes at the school certificate level required of entrants into NCE programmes in College of Education does not guarantee good quality entrants [22,16,17]. Findings of this study also showed that recruitment of high quality trainable candidates was rated low by the respondents. This is evidence that the lecturers are not finding it easy coping with the quality of student teachers under their care. Akale in a related research concluded that most students admitted into teacher training programmes are products of examination malpractice from senior secondary school level who parade with *paper* credits in all the subjects without acquiring the actual knowledge [23]. These students when admitted into Colleges of Education and Universities to study Education remain as academic weaklings who can neither be transformed nor perform creditably even under the most effective tutelage.

## 8. Conclusion

Based on the findings made, it was concluded that the identified educational practices have potentials of establishing quality assurance for effective agricultural teacher preparation and school administration in Nigerian colleges of education and universities. However, most of these practices were not considered in the preparation of agricultural teachers in Nigerian colleges of education and universities. This explains the proliferation in Nigeria schools today, of half-baked agricultural teachers of low quality who not only lack knowledge of the subject matter, spirit of enquiry and creativity but also the capability to imparting quality instruction to students.

## 9. Recommendations

Based on the findings, the following recommendations were made:

1. The Government should provide financial incentives to agricultural student teachers while on training.
2. The Government should re-establish institutions responsible for the training of nonprofessional tertiary teachers.
3. Universities and colleges of education should step up minimum criteria for admission of candidates into agricultural teacher training programmes to five O'level credit pass including Chemistry, English Language, and Mathematics in Senior Secondary School Certificate Examination
4. Universities and colleges of education should increase duration of degree and NCE programmes to five years and four years respectively.

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