

Teacher Preparation and Teaching Professional Competence among Federal Colleges of Education Graduates in South West-Nigeria

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Abstract

This paper examined the teacher preparation and teaching professional competence among federal colleges of education graduates in south west Nigeria. The study used descriptive survey design, carried out ex-post-facto. The sample for the study was selected through a multi stage sampling procedure. The first stage was the sampling of geo-political region, followed by the sampling of states, colleges, lecturers and students. Simple random sampling technique was used to select South-west, Nigeria. A sample of 2 federal colleges of education in two states of South-west Nigeria was drawn using purposive and simple sampling techniques respectively. The proportionate stratified sampling technique was used to sample 72 out of 362 lecturers; 904 students in FCE (Special) Oyo, 56 out of 283 lecturers; 776 students in FCE Abeokuta. This amounted to 128 lecturers and 1680 students. The study used two forms of “Classroom Teaching Observation Checklist (CTOC)” one for the assessment of pre-service teachers’ teaching competence during their teaching practice exercise, and the trained/employed teachers’ teaching competence in the classroom. While the second form evaluated the colleges of education lecturers’ teaching of some courses that are the interest of this study. The “Course Content Assessment Checklist (CCAC)” was equally used to evaluate the content of the courses (Teaching Methods”, and “Teaching Principles and Techniques) and ascertain that the curriculum is in accordance with the NCCE benchmark for minimum academic standard (BMAS). The instruments recorded reliability coefficients of 0.73 for the first form of “Classroom Teaching Observation Checklist (CTOC)”, 0.76 for the second form, and 0.78 for the “Course Content Assessment Checklist (CCAC)”. The descriptive statistics of frequency count and simple percentage were used for the research questions generated and inferential statistics of Pearson Product Moment Correlation was used for the analysis and the null hypotheses developed for the study were tested at 0.05 level of significance. The findings revealed that teaching methods, teaching techniques and principles offered as courses, and teaching practice exercise undertaken contributed to the trainee teachers teaching professional competence; and employed teachers’ teaching professional competence. Also, the teacher preparation curriculum in Federal Colleges of Education in Nigeria is inadequate. It is therefore recommended among others that the curriculum should incorporate learner-centred instructions and information and communication technology (ICT) into the processes of teaching and learning. Extensive pedagogical content knowledge, diverse problem solving strategies, improved knowledge of adaptation for diverse learners should be integrated into the teacher education curriculum.

Keywords: Teachers, Education, Competence, Curriculum, Profession, Preparation

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Introduction

Education is a means to cooperative dynamic and life long process through which a society deliberately generates knowledge, skills, values and other form of behavior for its survival and sustenance, and transmits these from one generation to another (Kizlik, 2007). This is the reason education in a country is usually tailored towards the needs and aspiration of the society comprising such nation. Teacher education is very vital all countries of the World because the production of every work force in any country is the responsibility of teachers. Effective teacher preparation is a very vital instrument for the development and transformation of any nation. Good teacher preparation programmes will give birth to quality teachers who in turn will produce quality school leavers, quality school leavers will give quality manpower in all spheres of life that can support, sustain and trigger development (Na'Omi, 2013).

Much has been written on the subject of competency over the last few years, and the concept is clearly one of great interest to researchers. The literature offers a large number of definitions covering a wide range of dimensions, sometimes based on different or even opposing theoretical foundations. The concept of competency is a relatively new approach that structures the vision of teaching. It offers excellent potential and the issues are important, but the possibilities for misuse are numerous. To define the concept it must be addressed in a variety of ways from a variety of standpoints. Generally, a professional competency is applied in a real-life professional setting; follows a progression from simple to complex; is based on a set of resources; is based on the ability to mobilize resources in situations requiring professional action; involves a successful, effective, efficient, recurrent ability to act; is part of intentional practice; and is a project, an ongoing pursuit (Marielle, Danielle, & Clermont, 2001). But the following are the framework for professional competencies in the teaching profession.

- To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.
- To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.
- To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.
- To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study.
- To evaluate student progress in learning the subject content and mastering the related competencies.
- To plan, organize and supervise a class in such a way as to promote students' learning and social development.
- To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.
- To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.
- To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
- To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned
- To engage in professional development individually and with others.
- To demonstrate ethical and responsible professional behaviour in the performance of his or her duties (Marielle, Danielle, & Clermont, 2001).

Teaching professional competence is no doubt the central element of teacher training, in keeping with the new emphasis on professionalization. Blömeke and Delaney (2012) proposed a model that identifies cognitive abilities and affective-motivational characteristics as the two main components of teachers' professional competence. The cognitive abilities include: professional knowledge, general pedagogical knowledge, content knowledge, and pedagogical content knowledge. The affective-motivational characteristics include: motivation, self-regulation, professional benefits about teaching and learning and the subject content. While teacher knowledge is certainly a component of teacher professionalism, professional competence involves more than just knowledge. Skills, attitudes, and motivational variables also contribute to the mastery of teaching and learning.

Teachers are largely responsible for the translation and interpretation of educational policies, curriculum or course, instructional materials and assessment of learning outcomes at the level of learners. Besides the teacher's instructional leadership role, the teacher exerts a lot of influence on the character formation and the process of socialisation of the children within the learning environment. If student teachers are not well prepared, the objectives will not be realised (Oduolowu, 2009).

The pedagogical 'knowledge base' of teachers includes all the required cognitive knowledge for creating effective teaching and learning environments. Research suggests that this knowledge can be studied. Identifying the content of this knowledge base, however, is a complex issue. Most studies use the distinction between declarative ('knowing that') and procedural knowledge ('knowing how') from cognitive psychology as a theoretical basis. This approach is relevant as it focuses on understanding how knowledge is related to behaviour, or in other words, the quality of teaching performance. The first key study on teacher knowledge (Shulman, 1987) categorised teacher knowledge into 7 categories, among which were the concepts of:

- general pedagogical knowledge (principles and strategies of classroom management and organization that are cross-curricular) and
- pedagogical content knowledge (the knowledge which integrates the content knowledge of a specific subject and the pedagogical knowledge for teaching that particular subject).

This latter was considered as the most fundamental element of teachers' knowledge and has been studied widely since. In contrast, general pedagogical knowledge has not been the object of many research studies even though several studies indicate that it is essential for developing quality teachers. Some models of general pedagogical knowledge combine pedagogical and psychological aspects, whereas others do not make psychological aspects explicit. Psychological components account for the fact that learning occurs in a social context and learning success depends on the general cognitive and affective characteristics of individual students. Peterson and Bry (1980) discussed four main ingredients of competence: (a) professional responsibility, (b) interpersonal warmth, (c) intelligence, and (d) experience.

The emergence of colleges of education in Nigeria could be traced to the Ashby Commission appointed by the Federal Government of Nigeria in 1959 "to conduct an investigation on the higher education needs of the country for its first-two decades (1960-80)". The report of the commission makes a continuing contribution illustration of the nature of educational system and the use of innovation, adaptation and relevance in education. With the recommendation of the commission, indeed, it becomes the basis of educational development for manpower (Obadara, 2012), thereafter the establishment of eight Advance Teachers Colleges (ATCs) in various parts of the country from 1962 to 1968, which were later changed to Colleges of Education by the National Commissions for Colleges of Education (NCCE). The colleges of education are responsible for the production of the first echelon of teacher in Nigeria since Nigeria Certificate in Education (NCE) is the minimum qualification for entry into the teaching profession. Therefore, NCE teachers are specifically trained for the primary and junior secondary school levels. The broad objectives of teacher education as stated in Sections 71(a) – (e) of Nigeria's National Policy on Education (Federal Republic of Nigeria, 2014) are:

- To produce highly motivated, conscientious and effective classroom teachers for all levels of the education system.
- To encourage the spirit of enquiry and creativity in teachers.
- To help teachers fit into the social life of the country at large and enhance their commitment to national goals.
- Provide teachers with the intellectual and professional background adequate for their assignment and make them acceptable to changing situations;
- To enhance teacher commitment to the teaching profession.

It is imperative that every student in college of education must undertake "Teaching practice" and "Teaching methods" as a core courses out of all the courses he must undertake and pass being requisition for the award of Nigeria Certificate in Education (NCE). These are essential aspects of teacher education because they prepare teachers for their future teaching roles and assignments. During the teaching practice the trainee teachers applies the teaching methods, techniques and principles which he has been taught theoretically in the classroom.

Murray (2004) asserted that, during practice teaching, the student-teachers feel engaged, challenged and even empowered. Osuala (2004) concluded that, teaching practice exposes the trainee teacher to the realities of effective teaching and helps them to try out methods of teaching and gain practical classroom experience under expected supervision. Imart (2003) established that, the term practice teaching has three major connotations: the practicing of teaching skills and acquisition of the role of a teacher, the whole range of experiences and practical aspects of the course as distinct from theoretical studies practice teaching is the name of the preparation of student teachers for teaching by practical training. Practice teaching occupies a key position in the programme of teacher education, it is a culminating experience in teacher preparation (Nnamdi, 2000). Adagba and Idu (2005) stressed that, this exercise provides opportunity to beginning teachers to become socialized into the profession.

The National Commission for Colleges of Education (1996: 45) highlights the objectives of teaching practice as to help the student-teachers develop positive attitude towards the teaching profession; expose student-teachers to real life experience under the supervision of professional teachers; enable student-teachers discover their own strengths and weaknesses in teaching; provide a forum for student teachers to translate educational theories and principles into practice; familiarize student-teachers with school routines; expose student-teachers to the total school environment; provide student-teachers with the necessary skills, competencies, personal characteristics and experiences for real time teaching after graduation; and serve as a means of assessing the professional competences of student-teachers. While Achuonye and Ajoku (2003) asserted that, performance during practice teaching provides some basis for predicting the future success of the teacher outgoing popularity and centrality of practice teaching is an important contributing factor towards the quality of teacher education programme.

Ukeje (1998) said from experience that teachers' education programme is better undertaken in Colleges of Education. After serving for 28 years in teacher education, 19 years in the universities and 9 in the college of education, he preferred that all pre-service programmes for teacher education leading either to Nigeria Certificate in Education (NCE) or Bachelors degree should be undertaken in Colleges of Education. He was dissatisfied with the execution of teaching practice in the universities, because they were often disorganized, haphazard and ritualistic. More so that teaching practice supervision was irregular with some of the students supervised only once. Ofoegbu (2003) attributed the poor performance of students' in WAEC examinations to teaching and that poor teaching results from ill-prepared pre-service training, lead to situations which are unpleasant, awesome, scaring and a cause for anxiety later in actual job performance which must be corrected. Since pre-service teacher-preparation takes place in different institutions and in different pathways, it is apparent that products of different institutions and different pathways will never be the same in terms of acquisition of subject matter, skills, methodology and output.

Statement of the Problem

The general view that teaching is a free-for-all career have made generations not to produce the crop of teachers demanded in the society thereby causing teacher education programme to remain in a state of decay. Some Nigerian youth therefore took teaching profession as the last option to all other professions thus agree to attend colleges of education as a stepping stone to cross to other disciplines or careers. A good teacher education programme should seek to assist the student-teacher to grow and develop as a total person and equip him with necessary skills and professional abilities that will help him become an effective teacher. It is therefore believed that colleges of education is the appropriate institution that could inculcate into students the teaching knowledge, skills and competence needed to become effective and efficient teachers at lower levels of education. Whereas, teachers are equally trained in our various universities. It is also observed that adequate teaching practice exercise is not compromised in colleges of education more than any other institutions. During teaching practice, the student teachers are given the opportunity to experience and 'experiment' their knowledge and skills in an authentic teaching and learning environment. Thus, this study investigated the influence of teacher preparation on teaching professional competence among federal colleges of education graduates in south west Nigeria.

Purpose of the Study

The purpose of this study was to explore the influence of teacher preparation on teaching professional competence among federal colleges of education graduates in south west Nigeria. It therefore provided research and recommendations based on the findings of the study. Specifically, the study:

- determined the adequacy of the preparation of the pre-service teachers in Federal Colleges of Education
- ascertained if the pre-service teachers' training in Federal Colleges of Education contributed to the trainee

teachers' teaching professional competence examined the influence of teachers' preparation in Federal Colleges of Education on their graduates' teaching professional competence

Research Questions

The following research questions were generated as guides for the study.

- How adequate is the teacher preparation curriculum in Federal Colleges of Education in Nigeria?
- Does teaching methods offered as courses contribute to the trainee teachers teaching professional competence?
- Do teaching techniques and principles taught at NCE programme contribute to the trainee teachers teaching professional competence?
- Does teaching practice undertaken contribute to the trainee teachers teaching professional competence?

Research Hypotheses

The following null hypotheses were developed and tested in the study.

- Ho₁: There is no significant relationship between teaching methods offered as courses and employed teachers' teaching professional competence
- Ho₂: There is no significant relationship between teaching techniques and principles learnt at NCE programme and employed teachers' teaching professional competence
- Ho₃: There is no significant relationship between teaching practice undertaken and employed teachers' teaching professional competence

Scope of the Study

The study covered the teacher preparation and teaching professional competence among federal colleges of education graduates in south west Nigeria. It was restricted to these colleges' students and graduates within 2012/2013 – 2016/2017 academic sessions, who are employed and presently teaching in primary and secondary schools.

Research Methodology

This is the procedure that was used for the conduct of this research work. The procedure is presented with the specification of research design, population, sample and sampling techniques, research instrument, validation of the Instrument, reliability of the Instrument, procedure for data collection, and method of data analysis.

Population of the Study

The population of this study comprised all the 4 federal colleges of Education in the six states of south-west Nigeria, all the academic staff, the students and their graduates for the periods under study

Research Design

The study used descriptive survey design, carried out ex-post-facto. This design was used to explore the impact of teacher preparation on teaching professional competence among federal colleges of education graduates in south west Nigeria.

Sample and Sampling Technique

The sample for the study was selected through a multi stage sampling procedure. The first stage was the sampling of geo-political region, followed by the sampling of states, colleges, lecturers and students. Simple random sampling technique was used to select South-west, Nigeria. A sample of 2 federal colleges of education in two states of South-west Nigeria was drawn using purposive and simple sampling techniques respectively. The proportionate stratified sampling technique was used to sample 72 out of 362 lecturers; 904 students in FCE (Special) Oyo, 56 out of 283 lecturers; 776 students in FCE Abeokuta. This amounted to 128 lecturers and 1680 students.

Research Instrument

The researchers used two forms of "Classroom Teaching Observation Checklist (CTOC)" one for the assessment of pre-service teachers' teaching competence during their teaching practice exercise, and the trained/employed teachers' teaching competence in the classroom.

While the second form evaluated the colleges of education lecturers' teaching of some courses that are the interest of this study. The courses like "Teaching Methods", and "Teaching Principles and Techniques". This is to ascertain the competence of the lecturers in training the pre-service teachers.

The "Course Content Assessment Checklist (CCAC)" was equally used to evaluate the content of the above mentioned courses (Teaching Methods", and "Teaching Principles and Techniques) and ascertain that the curriculum is in accordance with the NCCE benchmark for minimum academic standard (BMAS).

Validity of the Instrument

In order to ensure that the instruments accurately measure what they were purported to measure, the checklists used for data collection were given to some experts in the researcher's area of study. The content and construct validity of the instruments were then established with the amendments made by these experts.

Reliability of the Instrument

The instruments were subjected to test-retest to ensure their internal consistency. The instruments recorded reliability coefficients of 0.73 for the first form of "Classroom Teaching Observation Checklist (CTOC)", 0.76 for the second form, and 0.78 for the "Course Content Assessment Checklist (CCAC)".

Procedure for Data Collection

Six research assistants were used by the researcher to assist in the observation and administration of the checklists for the collection of the study data. The pre-service teachers and the trained/employed teachers were observed and assessed in the classrooms while teaching for their teaching competence. While colleges of education lecturers teaching of some courses that are the interest of this study "Teaching Methods", and "Teaching Principles and Techniques" were also observed and assessed in the classrooms.

Method of Data Analysis

Data collected were coded, arranged and analyzed by the computer using statistical package for social sciences (SPSS). The descriptive statistics of frequency count and simple percentage were used for the research questions generated and inferential statistics of Pearson Product Moment Correlation was used for the analysis and the null hypotheses developed for the study were tested at 0.05 level of significance.

Presentation of Results

The results of the study are presented below according to the research questions and hypotheses developed for the study.

Research Question 1: How adequate is the teacher preparation curriculum in Federal Colleges of Education in Nigeria?

Table 1: Adequacy of Teacher Preparation Curriculum in Federal Colleges of Education in Nigeria

S/N	(N=1680)	Poor	Fair	Good	Very good	Excellent	Mean	Std. dev	Remarks
1	The curriculum content provides quality and comprehensive school based experiences.	20 (1.2%)	20 (1.2%)	52 (3.1%)	1099 (65.4%)	489 (29.1%)	2.66	.892	A
2	The teaching and learning resources available to all teacher trainers have impact upon the quality of classes.	12 (0.7%)	72 (4.3%)	997 (59.3%)	599 (35.7%)	-	2.59	.870	A
3	The lecturers have adequate knowledge and experience in using quality learning resources to enhance the teaching of basic curriculum.		180 (10.7%)	903 (53.8%)	597 (35.5%)	-	2.44	.885	A
4	The quality of course materials offered to students is adequate and the course content is relevant to basic education needs.	103 (6.1%)	140 (8.3%)	950 (56.5%)	487 (29%)	-	2.26	.886	A
5	The design of the course has adequate materials for all students to support their learning.	32(1.9%)	228 (13.6%)	1138 (67.7%)	282 (16.8%)	-	2.13	.773	A
6	The college has a curriculum that is flexibly structured to meet the needs and challenges of the basic education teacher.	133 (7.9%)	-	931 (55.4%)	616 (36.7%)	-	2.01	.616	A
7	The teaching and learning resources are well made, cost effective and relevant to the curriculum.	154 (9.2%)	-	829 (49.3%)	697 (41.5%)	-	1.97	.794	D
8	There is progression in the implementation of the curriculum.	500 (29.8%)	774 (46.1%)	355 (21.1%)	51 (3.0%)	-	1.96	.816	D
9	There is availability and effective usage of quality learning resources in the courses under study	218 (13%)	734 (43.7)	496 (29.5%)	232 (13.8%)	-	1.92	.782	D
10	The teaching and learning resources are well made, cost effective and relevant to the curriculum.	509 (30.3%)	809 (48.2%)	279 (16.6%)	83 (4.9%)	-	1.90	.734	D
11	The curriculum and its content incorporate the appropriate uses of ICT.	457 (27.2%)	919 (54.7%)	284 (16.9%)	20 (1.2%)	-	1.80	.661	D
12	The overall quality of learning resources is sufficient to deliver quality courses.	402 (23.9%)	659 (39.2%)	525 (31.3%)	94 (5.6%)	-	1.75	.633	D
13	The curriculum content has appropriate distribution between theory and practice.	254 (15.1%)	336 (20%)	821 (48.9%)	269 (16%)	-	1.71	.603	D
14	The current edition of NCCE Minimum Standards is followed to the latter in the development of the education courses under study.	179 (10.7%)	912 (54.3%)	498 (29.6%)	91 (5.4%)	-	1.70	.582	D
15	The lecturers have the necessary knowledge and understanding of the curriculum to teach effectively.	111 (6.6%)	666 (39.6%)	510 (30.4%)	393 (23.4%)	(%)	1.68	.634	D
Grand Mean							2.03		

NOTE: A mean of 2.0 and above was considered agreed and positive while a mean rating of less than 1.99 was regarded as negative and disagreed upon.

Table 1 shows the adequacy of teacher preparation curriculum in Federal Colleges of Education in Nigeria. Items 1-6 show that teacher preparation curriculum in Federal Colleges of Education in Nigeria is adequate while items 7-15 show that teacher preparation curriculum is low. The result indicates that the curriculum content provides quality and comprehensive school based experiences ($\bar{x} = 2.66; SD = 0.89$); the teaching and learning resources available to all teacher trainers have impact upon the quality of classes ($\bar{x} = 2.59; SD = 0.87$); lecturers have adequate knowledge and experience in using quality learning resources to enhance the teaching of basic curriculum. ($\bar{x} = 2.44; SD = 0.88$); the quality of course materials offered to students is adequate and the course content is relevant to basic education needs ($\bar{x} = 2.26; SD = 0.88$); the design of the course has adequate materials for all students to support their learning ($\bar{x} = 2.13; SD = 0.77$); the college has a curriculum that is flexibly structured to meet the needs and challenges of the basic education teacher ($\bar{x} = 2.01; SD = 0.61$). The grand mean was 2.03 and item 7-15 were not within the range of the grand mean, therefore, the overall result indicates that teacher preparation curriculum is relatively low.

Research Question 2: Does teaching methods offered as courses contribute to the trainee teachers teaching professional competence?

Table 2: Contribution of Teaching Methods offered as courses to the Trainee Teachers Teaching Professional Competence

S/N	(N=120)	Poor	Fair	Good	Very good	Excellent	Mean	Std. dev	Decision
1	Stimulating enough to arouse the interest and curiosity of students	5 (4.2%)	39(32.5%)	1 (0.8%)	1(0.8%)	74(61.7%)	2.39	.863	A
2	Making reference to previous knowledge/skills and everyday experience	-	1(0.8%)	6(5%)	71(59.2%)	42(35%)	2.37	.601	A
3	Content is related to learners' previous experience	-	-	43(35.8%)	64(53.3%)	13(10.8%)	2.26	.782	A
4	Use of appropriate and familiar examples to illustrate main concept	-	6(5%)	11(9.2%)	66(55%)	37(30.8%)	2.25	.808	A
5	Use of appropriate teaching methods	-	2(%)	21(17.5%)	83(69.2%)	14(11.7%)	2.24	.769	A
6	Lecturer has mastery of content	-	-	45(37.5%)	67(55.8%)	8(6.7%)	2.21	.728	A
7	Explanation and elaboration of main concept	-	54(45%)	57(47.5%)	9(7.5%)	54(45%)	2.19	.638	A
8	Lecturer prepared appropriate and relevant materials for students' use	-	36(30%)	56(46.7%)	25(20.8%)	3(2.5%)	1.72	.597	A
9	Helping the learners to focus on content of the lesson	16(13.3%)	55(45.8%)	35(29.2%)	14(11.7%)	-	1.69	.591	D
10	Content is geared to level of learners	37(30.8%)	57(47.5%)	21(17.5%)	5(4.2%)	-	1.63	.623	D

NOTE: A mean of 2.0 and above was considered agreed and positive while a mean rating of less than 1.99 was regarded as negative and disagreed upon.

Table 2 shows the contribution of teaching methods offered as courses to the trainee teachers teaching professional competence. Items 1-8 show that teaching methods offered as courses contribute to the trainee teachers teaching professional competence while items 9-10 negate this position. The overall result shows that teaching methods offered as courses contribute to the trainee teachers teaching professional competence.

Research Question 3: Do teaching techniques and principles taught at NCE programme contribute to the trainee teachers teaching professional competence?

Table 3: Contribution of Teaching Techniques and Principles taught at NCE Programme to the Trainee Teachers Teaching Professional Competence

S/N	(N=120)	Poor	Fair	Good	Very good	Excellent	Mean	Std. dev	Decision
1	Evaluation of the lesson by the Lecturer	-	30(25%)	41(34.2%)	43(35.8%)	6(5%)	2.92	.912	A
2	The Lecturer indeed inculcates skills and knowledge in students	-	21(17.5%)	71(59.2%)	20(16.7%)	8(6.7%)	2.66	.899	A
3	Pupils encouraged to ask and answer questions	14(11.7%)	35(29.2%)	49(40.8%)	22(18.3%)	-	2.62	.863	A
4	Encouraged individual participation in both group and class discussion	17(14.2%)	28(23.3%)	58(48.3%)	17(14.2%)	-	2.55	.878	A
5	Guide learners to summarize main points of lesson through carefully structured questions	-	25(20.8%)	56(46.7%)	36(30%)	3(2.5%)	2.52	.773	A
6	Appropriateness of Lecturer's attitude and expression	-	26(21.7%)	8(6.7%)	77(64.2%)	9(7.5%)	2.49	.782	A
7	Use of pupils opinions/ideas	-	50(41.7%)	53(44.2%)	8(6.7%)	9(7.5%)	2.39	.808	A
8	Lecturer discusses and corrects pupils misconceptions	-	20(16.7%)	70(58.3%)	26(21.7%)	4(3.3%)	2.21	.728	A
9	Provision of activities and opportunities that help to develop process skill (observation, manipulation, weighing and measuring, etc)	-	52(43.3%)	56(46.7%)	12(10%)	-	1.76	.591	D
10	Sufficient time for learners to ask questions and seek clarification	16(13.3%)	66(55%)	38(31.7%)	-	-	1.42	.254	D

NOTE: A mean of 2.0 and above was considered agreed and positive while a mean rating of less than 1.99 was regarded as negative and disagreed upon.

Table 3 shows the contribution of teaching techniques and principles taught at NCE programme to the trainee teachers teaching professional competence. Item 1-8 shows that teaching techniques and principles taught contribute to the trainee teachers teaching professional competence while items 9-10 negate this position. The overall result shows that teaching techniques and principles taught contribute to the trainee teachers teaching professional competence.

Research Question 4: Does teaching practice undertaken contribute to the trainee teachers teaching professional competence?

Table 4: Contribution of Teaching Practice undertaken to the Trainee Teachers Teaching Professional Competence

S/N	LESSON PLAN (N=120)	Poor	Fair	Good	Very good	Excellent	Mean	Std. dev	Decision
1	Clarity/feasibility of lesson objectives and preparation		28 (23.3%)	52 (43.3%)	36 (30%)	4 (3.3%)	2.03	0.84	A
2	Stated in simple and clear language.	-	38 (31.7%)	66 (55%)	16 (13.3%)	-	1.97	0.60	D
3	Stated in measurable and achievable terms	-	56 (46.7%)	12 (10%)	52 (43.3%)	-	1.63	0.62	D
4	Teacher prepared appropriate and relevant materials for pupils' use	-	20 (16.7%)	70 (58.3%)	26 (21.7%)	4 (3.3%)	2.00	0.76	A
5	Achievable within the stipulated time.	72 (60%)	28 (23.3%)	12 (10%)	8 (6.7%)	-	1.67	0.65	D
6	Time is appropriately distributed in the lesson plan.	-	16 (13.3%)	56 (46.7%)	48 (40%)	-	1.63	0.56	D
	PRESENTATION								
7	Teacher Mastery of Subject Matter.	5 (4.2%)	-	50 (41.7%)	65 (54.2%)	-	2.21	0.87	A
8	Development of Lesson.	-	37 (30.8%)	71 (59.2%)	8 (6.7%)	4 (3.3%)	2.66	0.91	A
9	Introduction (relevance)	30 (25%)	41 (34.2%)	43 (35.8%)	6 (5%)	-	1.80	0.75	D
10	The Use of Chalkboard.	21 (17.5%)	71 (59.2%)	20 (16.7%)	8 (6.7%)	-			D
11	Time Management.	17 (14.2%)	28 (23.3%)	58 (48.3%)	17 (14.2%)	-	1.76	0.63	D
12	Teacher Use of Questioning Technique.	49 (40.8%)	14 (11.7%)	35 (29.2%)	22 (18.3%)	-	1.75	0.60	D
13	Effective Use of Instructional Materials (Relevancy & Adequacy)	39 (32.5%)	58 (48.3%)	22 (18.3%)	1 (0.8%)	-	1.61	0.52	D
14	Motivating Classroom participation and distribution of tasks during activities	42 (35%)	12 (10%)	50 (41.7%)	16 (13.3%)	-	1.45	0.34	D
	CLASS MANAGEMENT								
15	Class control	-	24 (20%)	48 (40%)	48 (40%)	-	2.03	0.69	A
16	Class arrangement	-	26 (21.7%)	77 (64.2%)	9 (7.5%)	8 (6.7%)	2.58	0.84	A
17	Reaction and Reinforcement of Students' Response	13 (10.8%)	40 (33.3%)	63 (52.5%)	4 (3.3%)	-	1.24	0.17	D
	COMMUNICATION SKILLS								
18	Use of instructional materials and improvisation	12 (10%)	42 (35%)	50 (41.7%)	16 (13.3%)	-	1.80	0.75	D
19	Clarity of Voice	-	9 (7.5%)	8 (6.7%)	53 (44.2%)	50 (41.7%)	2.85	0.84	A
20	Appropriate Use of Language	-	4 (3.3%)	36 (30%)	52 (43.3%)	38 (31.7%)	2.12	0.71	A
	EVALUATION								
21	Suitability of Assessment	38 (31.7%)	16 (13.3%)	66 (55%)	-	-	1.47	0.21	D
22	Attainment of stated objectives	-	52 (43.3%)	12 (10%)	56 (46.7%)	-	2.23	0.56	A
	TEACHER'S PERSONALITY								
23	Neatness/Dressing	-	12 (10%)	8 (6.7%)	72 (60%)	28 (23.3%)	2.39	0.86	A
24	Comportment	-	8 (6.7%)	71 (59.2%)	37 (30.8%)	4 (%)	2.03	0.84	A

NOTE: A mean of 2.0 and above was considered agreed and positive while a mean rating of less than 1.99 was regarded as negative and disagreed upon.

Table 4 shows the contribution of teaching practice undertaken to the trainee teachers teaching professional competence. The result shows the teachers displayed clarity/feasibility of lesson objectives and preparation ($\bar{x} = 2.03; SD = 0.84$); teacher prepared appropriate and relevant materials for pupils' use ($\bar{x} = 2.00; SD = 0.76$); teacher mastery of subject matter ($\bar{x} = 2.21; SD = 0.87$); development of lesson ($\bar{x} = 2.66; SD = 0.91$); class arrangement ($\bar{x} = 2.58; SD = 0.84$); class control ($\bar{x} = 2.03; SD = 0.69$); clarity of voice ($\bar{x} = 2.85; SD = 0.84$); attainment of stated objectives ($\bar{x} = 2.23; SD = 0.56$); neatness/dressing ($\bar{x} = 2.39; SD = 0.86$); comporment ($\bar{x} = 2.03; SD = 0.84$). By implication, teaching practice undertaken contribute positively to the trainee teachers teaching professional competence.

Testing of Hypotheses

Ho₁: There is no significant relationship between teaching methods offered as courses and employed teachers' teaching professional competence.

Table 5: Relationship between Teaching Methods Offered as Courses and Employed Teachers' Teaching Professional Competence

	\bar{X}	Std. Dev	Teaching Methods Offered	Professional Competency
Pearson correlation Teaching Methods Offered Sig (2 - tailed)	16.98	3.63	1	.097**
N			1680	1680
Pearson correlation Professional Competency Sig (2-tailed)	9.86	2.38	.097**	1
N			1680	1680

* Correlation is significant at 0.01 level (2-tailed).

Decision: Significant

In this table 5, teaching methods offered as a course was correlated with employed teachers' teaching professional competence. The result showed a Pearson Correlation Coefficient $r = 0.097$; $p < 0.01$ which means that the hypothesis which state that, there is no significant relationship between teaching methods offered as courses and employed teachers' teaching professional competence, is therefore rejected. Hence, teaching methods offered as a course has significant relationship with employed teachers' teaching professional competence.

Ho₂: There is no significant relationship between teaching techniques and principles learnt at NCE programme and employed teachers' teaching professional competence.

Table 6: Relationship between Teaching Techniques and Principles learnt at NCE Programme and Employed Teachers' Teaching Professional Competence

	\bar{X}	Std. Dev	Teaching Techniques and Principles	Professional Competency
Pearson correlation Teaching techniques and principles Sig (2 - tailed)	19.81	3.24	1	.280**
N			1680	1680
Pearson correlation Professional competency Sig (2-tailed)	9.86	2.38	.208**	1
N			1680	1680

* Correlation is significant at 0.01 level (2-tailed).

Decision: Significant

To test this hypothesis, Teaching techniques and principles learnt at NCE programme was correlated with employed teachers' teaching professional competence as shown in the table 6 above. The result showed a Pearson Correlation Coefficient $r = 0.208$; $p < 0.01$ which revealed a significant relationship between teaching techniques and principles learnt at NCE programme and employed teachers' teaching professional competence. So the hypothesis which states that, there is no significant relationship between teaching techniques and principles learnt at NCE programme and employed teachers' teaching professional competence is therefore rejected. Hence, teaching techniques and principles learnt at NCE programme has significant relationship with employed teachers' teaching professional competence.

H₀₃: There is no significant relationship between teaching practice undertaken and employed teachers' teaching professional competence.

Table 7: Relationship between Teaching Practice undertaken and Employed Teachers' Teaching Professional Competence

	\bar{X}	Std. Dev	Teaching Practice Undertaken	Professional Competency
Pearson correlation Teaching practice undertaken Sig (2 - tailed) N	18.36	3.55	1 1680	.091** .000 1680
Pearson correlation Professional competency Sig (2-tailed) N	9.86	2.38	.091** .000 1680	1 1680

* Correlation is significant at 0.01 level (2-tailed).

Decision: Significant

To test this hypothesis, teaching practice undertaken was correlated with employed teachers' teaching professional competence. The result in the table 7 showed a Pearson Correlation Coefficient $r = 0.091$; $p < 0.01$ which revealed a significant relationship between teaching practice undertaken and employed teachers' teaching professional competence. So the hypothesis which states that, there is no significant relationship between teaching practice undertaken and employed teachers' teaching professional competence is therefore rejected. Hence, teaching practice undertaken has significant relationship with employed teachers' teaching professional competence.

Discussion of Findings

The result of this study showed that the adequacy of teacher preparation curriculum in Federal Colleges of Education in Nigeria is low, this indicate that the curriculum is inadequate. The study established that teaching methods offered as courses contributed to the trainee teachers teaching professional competence. It also found that teaching techniques and principles taught contributed to the trainee teachers teaching professional competence. And teaching practice undertaken contributed positively to the trainee teachers teaching professional competence. This study equally found that teaching methods offered as a course had significant relationship with employed teachers' teaching professional competence; teaching techniques and principles learnt at NCE programme had significant relationship with employed teachers' teaching professional competence. Finally, teaching practice undertaken had significant relationship with employed teachers' teaching professional competence.

These results might not be unconnected with the fact that the teaching techniques and principles, and teaching methods courses are the content taught at NCE programme as preparation for teaching competence, which include, micro-teaching, and classroom observation activities are expected to be exhibited by the would-be teachers at their places of teaching practice exercises. Even the teaching practice exercise prepared them for real teaching skills and competence needed in their career as professional teachers. It is the only opportunity for student-teachers to apply and develop their practical professional skills. The results of the present study agrees with Adagba (2005), who claimed that teaching practice exercise provides opportunity to beginning teachers to become socialized into the profession. They equally buttress the finding of Mkpandioke (2006) who observed that; effective teacher must be equipped with different teaching techniques to tackle the issues of the differences among individual learners.

As regards the adequacy of teacher preparation curriculum in Federal Colleges of Education in Nigeria, the result of this present study is in agreement with Ezewu (2000) who emphasized that the current Teacher Education programmes are no longer adequate to realize the current goals of teacher education. It stands to reason therefore that current teacher education programmes which are now available cannot serve the needs of the Nigerian system in the present day. This might not be unconnected to inability of the curriculum to fully integrate learner-centred instructions and information and communication technology (ICT) into the processes of teacher's preparation in Federal Colleges of Education in Nigeria.

Conclusion

The Nigerian Certificate in Education (NCE) is awarded by the colleges of education. It is the lowest qualification for entry to teaching profession in Nigeria.

Thus study became required to assess the quality of graduate teachers of the colleges of education in Nigeria. There is no doubt that the teacher preparation curriculum in Federal Colleges of Education in Nigeria is inadequate to meet the current demands of our educational system. It is not sufficient to provide for the 21 century challenges of education system. There is need for urgent upgrading of this curriculum. Succinctly, teaching methods, teaching techniques and principles offered as courses, and teaching practice exercise contributed to the trainee teachers teaching professional competence, which in turn influenced or contributed to their teaching professional competence when they were employed as teachers at their various schools.

Recommendations

Based on the above stated findings of this study, the following recommendations were made. For teacher preparation curriculum provisions to be adequate it must include knowledge of various types of learners because teacher's knowledge goes beyond mere knowledge of content, classroom management, learning, and mastery of subject matter. The curriculum should incorporate learner-centred instructions and information and communication technology (ICT) into the processes of teaching and learning. Extensive pedagogical content knowledge, diverse problem solving strategies, improved knowledge of adaptation for diverse learners should be integrated into the teacher education curriculum. Effective teachers must use techniques that best serve the learning needs of their students therefore; teachers' preparation must be equipped with diverse techniques and methodologies for the teachers to meet the needs of various type of learners.

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