ASSESSMENT OF NIGERIA CERTIFICATE IN EDUCATION (NCE) TEACHERS ATTAINMENT GOALS IN JUNIOR SECONDARY SCHOOLS IN NORTHWEST GEOPOLITICAL ZONE OF NIGERIA

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY IN EDUCATION

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DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM,

FACULTY OF EDUCATION,

AHMADU BELLO UNIVERSITY,

ZARIA, NIGERIA

DECLARATION

I hereby declare that the work in the thesis entitled Assessment of Nigeria Certificate in Education (NCE) teachers' attainment goals in Junior Secondary Schools Northwest Geopolitical Zone of Nigeria has been carried out in the department of Educational Foundations and Curriculum. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other Institution.

_____ _____

Ahmad Umar Kalmalo **Date**

CERTIFICATION

This Thesis entitled ASSESSMENT OF NIGERIA CERTIFICATE IN EDUCATION (NCE) TEACHERS' ATTAINMENT GOALS IN JUNIOR SECONDARY SCHOOLS NORTHWEST GEOPOLITICAL ZONE OF NIGERIA by AHMAD UMAR KALMALO meets the regulations governing the award of the degree of PhD in Curriculum and Instruction of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

_____ _____

Dr. (Mrs) H.O Yusuf Date
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Dean, School of Postgraduate Studies

DEDICATION

This research is dedicated to my late parents, Muhammad Abdullahi and Rahmatu Muhammad. May Allah make their souls rest in perfect peace, Amin.

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ABSTRACT

This study assessed the Nigeria Certificate in Education (NCE) teachers' attainment goals for Junior Secondary Schools Northwest Geopolitical Zone of Nigeria. The study was conducted to find out NCE teachers' attainment goals in junior secondary schools (JSS). Five (5) research objectives were designed which aimed to assess: the NCE teachers attainment goals in production of highly motivated quality teachers; the NCE teachers attainment goals in enhancing spirit of enquiry and creativity to teachers; the NCE teachers' attainment goals of helping teachers to fit into social life of the immediate community; the NCE teachers attainment goal of enhancing intellectual and skills acquisition by teachers; and NCE teachers attainment goals of inculcating commitment to national objectives; in junior secondary schools in northwest geopolitical zone, Nigeria. The study postulated five (5) research questions and five (5) research hypotheses which are both in line with the research objectives. Appropriate literatures were reviewed and theoretical framework for the study was built on the theory of teacher training model. The research adopted descriptive survey research design. Two instruments were used; a questionnaire and structured interview. The target population was twenty-six thousand four hundred and forty (26,440) while the sample size is three hundred and eighty (380) which comprises of one hundred and seventy-six (176) JSS teachers, sixty-four (64) junior secondary school principals, sixty-eighty (68) SUBEBS officials and seventy-two (72) lecturers of NCE programme. These groups formed the respondents of questionnaire and the structured interviewed. The research questions were analyzed using percentages, frequency, means and standard deviation while non parametric statistic of Wilcoxon sign rank test was used to test the five (5) hypotheses. The structured interview was analyzed using mean and standard deviation. The outcome of the hypotheses tested at 0.05 level of significance revealed that null hypotheses one (1), two (2) and four (4) were rejected while three (3) and five (5) null hypotheses were accepted and retained. The study discovered that the pedagogical relevance of NCE goals of (JSS) in producing highly quality teachers' in teaching job was dissatisfactory, the level of spirit of inquiry and creativity is low, and in terms of intellectual and skills acquisition is also discouraging based on respondents opinions. The study concluded that the training received during NCE programme did not adequately produce high quality classroom teachers, with high spirit of enquiry and creativity and enhanced knowledge and skills to instruct the students at junior secondary schools in the geopolitical zone. It recommended that the teacher training institutions should review their curricula and the pedagogical contents of the NCE curriculum programme be improved in order to address the issue of ineffectiveness of teachers, particularly, in the aspect of intellectual and skills exhibition during lesson delivery.

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LIST OF ABBREVIATIONS

CA	Continuous Assessment
ESFES	Evaluation scale for An Educational System
FGC	Federal Government College
FMOE	Federal Ministry of Education
FVPG	Functional Values of the Pedagogical goals
GCE	General Certificate of Education
HND	Higher National Diploma
ICT	Information and Communication Technology
IPG	Importance of the Pedagogical Goals
JAMB	Joint Admission and Matriculation Board
JSCE	Junior Secondary Certificate Examination
LISP	Learning in Science Project
MLA	Measuring Learning and Achievement
NECO	National Examination Commission
NEDS	Nigeria Education Data Survey
NCE	Nigeria Certificate in Education
NCCE	National Commission for Colleges of Education
NPE	National Policy on Education
NTI	National Teachers Institute
NUC	National University Commission
PCK	Pedagogical Content Knowledge
PES	Primary Education Studies
SUBEB	State Universal Basic Education Board
TEAC	Teacher Education Accreditation Council

LIST OF APPENDICES

OPERATIONAL DEFINITION OF TERMS

The terms used in the study are operationally defined below:

Attainment goal: organizational attainments that portray an organization's effectiveness, in relation to the organizations' pre-defined objectives or goals

NCE Teacher Attainment Goals: Achieved performance of NCE teachers in Nigeria junior secondary schools in relation to NCE goals prescribed in the National Policy of Education

Assessment: Achieved performance of NCE teachers in process of analyzing events which allows for decision making

Curriculum: A programme of experience utilized by the school to attain the aims of education.

Curriculum of teacher education: A programme of all experiences utilized by teacher training institutions to train qualified teachers for teaching at certain level of schooling.

Liberal education: Education directed chiefly towards the broadening of the mind, not specifically to professional or technical need.

Nigerian Certificate in Education (NCE) programme: Nigerian teacher education programme offered by Nigerian colleges of education and other qualified institutions for the production of well-trained teachers, mainly outside the university.

Needs: The gap between the present state of an individual or society or both, on the one hand, and the desirable objectives concerning the two together on the other hand

Needs assessment: a formal process which determines the gap between current output or outcome and required outcome or output, places these gaps in the priority order, and selects the most important for solution

Needs assessment models: systematically planned procedures and tools for the assessment of needs

Professional demands of teachers: such professional education and training the teachers need so as to equip them with the ability to carry out their teaching job properly

Junior secondary education: knowledge, attitude, and skills provided by schools during the first three years between primary and tertiary levels of learning

Relevance: a situation in which educational curriculum corresponds to an existing need in the society

Teacher education: the accomplishment of the guidelines described by an educational authority for producing qualified individuals expected to educate children for all educational systems

Teaching fields: subject of specialization the teachers are trained to teach at the relevant levels of education

Teaching profession: teachers' occupation for which they are trained and employed in normal circumstances

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Effective, efficient, and well-motivated teachers' are without doubt prerequisite to the continued advancement of any nation in all fields of life. The production of such teachers is on the other hand predicated upon a sound training, which must be relevant to the teacher's own professional and specific pedagogical requirements. According to Aron (2012), teachers as professionals need training which addresses their own professional and hence pedagogical demands of teaching. The professional demands of teachers are usually in subject of specialization, general knowledge, and pedagogy, to equip them with the ability to educate children in the right way in order that the children may grow up as educated men and women and as useful citizens of the state. They maintain that preparation of good teachers rests upon a broad and liberal education and specialization in the subject to be taught, in addition to professional knowledge and skills, high level of spirit of enquiry and creativity, ability to fit into social life of the immediate community for the performance of teaching assignment and proper exhibition of commitment to national objectives as prescribed or promulgated by the federal government of Nigeria in the National Policy on Education (2004).

The National Policy states that that all categories of teachers will be trained and that the teacher education programmes will be structured so as to equip teachers for the effective performance of their duties. The policy, among other things, aims at providing teachers with the intellectual and professional

background adequate for their assignment and at making them adaptable to any changing situation, not only in the life of their country but also in their world. It also aims at encouraging further the spirit of enquiry and creativity in teachers. Colleges of education in the country are among the institutions charged by the policy, with the responsibility of giving such training.

Some educationists maintain that the NCE programme is associated with both quantitative and qualitative shortfalls in its products (Adeyanju, 2008). It is said that the products of this programme are in some cases trained by educated but untrained persons. The teacher training courses in the colleges of education are also observed to be below standard (Akintobi, 2007). One other observation (Akintobi, 2007) is that Nigerian teachers, the NCE graduates inclusive, are professionally conservative, isolated, and lacking in the ability to implement curriculum changes due to limitations imposed by the teachers' academic abilities among other things. It is also observed that the NCE programme's original concept has rapidly disappeared (Adesina, 2008). There is even the popular belief that the standard of teacher today, including the NCE holders, is by common knowledge, inferior to the old. In fact, even the National Commission for Colleges of Education (NCCE) is itself of the view that perform poorly in primary and junior secondary schools of the country (Federal Ministry of Education/National Commission for Colleges of Education, Abuja, 2013). These and other similar observations made the present research to wonder whether the NCE teachers' attainment goals are actually up to expectation and whether the NCE certificate is of much relevance as far as teaching in the nation's junior secondary schools is

concerned. There is no doubt that there is the need to clarify this point and fill the existing gap with an empirical research, hence, the present study.

The term attainment goals technically refer to those organizational attainments that portray an organization's effectiveness, in relation to the organizations' pre-defined objectives or goals (Bowen, Rawlins & Martin, 2013). According to Bowen, Rawlins & Martin (2013), an organization's effectiveness has been defined in terms of attaining goals and the more efficiently and effectively an organization can achieve its goals, the more successful it is according to this approach. Tyler's goal attainment model, sometimes called the objectives-centered model as one such a model, is designed to measure the degree to which pre-defined objectives and goals have been attained. It also focuses primarily on the product rather than the process for achieving the goals and objectives of the curriculum. The model is therefore product focused which evaluates the degree to which the pre-defined goals and objectives have been attained (Fundi, 2016). The present study hence focuses on the products of NCE programme, to determine the quality of the programme's products in the light of the pogramme's goals which include: production of high quality classroom teachers; teachers with high level of spirit of enquiry and creativity; teachers that can fit into social life of the immediate community; teachers with sound intellect and skills; And, teachers that are well committed to national objectives.

Inadequacy of qualified teachers is only one of the multiple problems the educational system of Nigeria is facing today. According to Odiva and Omofonmwan (2007), education in Nigeria is bisected with myriad's of problems

which include poor funding and thus poor educational infrastructures, inadequate classrooms, teaching aids (projectors, Computers, Laboratories and libraries), paucity of quality teachers and poor or polluted learning environment. They also observed that in addition to these problems, the educational system is plagued with numerous social vices such as examination malpractices, cultism, hooliganism, and corruption. Now that the Federal Government of Nigeria has adopted education as an instrument par excellence for effecting national development, adequate supply of effective teacher becomes necessary because there is a direct link between the quality of education and the quality of teacher. According to Abduliahi and Onasanya (2010), this view is adequately reflected in the national policy on education in section 9:59 on the purpose of teacher education. The National Implementation Committee for the National Policy on Education has observe that the purpose of teacher education seems to suggest that the real value of sound educational policies lies in its effective implementation and it is the teacher in the final analysis who transforms theory into practice. As Ukeje in Abduliahi and Onasanya (2010) explained, the system of training teachers should be the keystone of any national system of education, especially in a rapidly developing country like Nigeria and the that effectiveness of teacher training will be the main determining factor in the success or failure of education to meet that country's needs.

The history of Nigerian education has it in record that at the onset of western education in Nigeria, much attention was not paid to the training and certification of teachers. The situation was so bad that they were using the mentoring system in which the senior pupils were used to teach the junior classes.

Osokoya (2008) has observed that the 1887 education ordinance was the first to provide for the need to train, examine, and certify teachers, thereby beginning to shape a profession for teachers and that every other ordinance or policy after the 1887 ordinance has been building and improving on this. She also reported Yoloye (2007) to have observed that every educational programme that had ever been designed in the country (especially at the primary school level) had been identified to face the problem of unqualified and incompetent teachers. This situation could be attributed to a combination of factors including relatively low remuneration and recognition for teachers, and the cumulative effect of several years of neglect of the educational system prior to 1999, as indicated in reduced funding. This had adverse effects on the facilities and equipment for teaching at all levels, which also had effects on the quality of the products of the educational institutions, including the teachers (Obe, 2007).

The present research work is entitled "Assessment of Nigerian Certificate in Education (NCE) teachers' attainment goals in Junior Secondary Schools Teachers of Northwest Geopolitical Zone of Nigeria". It attempts to find out the teachers' attainment to NCE goals in junior secondary schools in North West Geopolitical zone of Nigeria. The NCE teachers' productivity (performance) or attainment goals should correspond with the goals of NCE curriculum programme (Ekpo, 2005), and any discrepancy between the two indicates a need. In the educational context, a need is a discrepancy between acceptable state of affairs and an observed state of affairs. In the context of the present research therefore, performance would mean the extent to which a discrepancy exists between the ratings, by the selected study groups, of the attainment of NCE goals by teachers

of junior secondary schools (JSS) and the NCE training on the one hand, acquired in teachers training institutions.

1.2 Statement of the Problem

The federal government of Nigeria, realizing the importance of teacher education in the advancement of knowledge, morals, skills, and manpower essential for national development has undertaken to accord major emphasis to teacher education in its development and planning (National Policy on Education, 2004). On the other hand, the quality of Nigerian teachers has been observed to leave much to be desired. Qualified teachers and instructional materials, as well as funding remain inadequate, not to talk about abysmal results in public examinations, a fact acknowledged by a one-time minister of education (Olatunji, 2010). This problem of inadequacy of qualitative teaching force cuts across all levels of learning, and affects all types of teachers in the country, including those with National Certificate in Education (NCE) as their teaching qualification. One other observed problem of the NCE curriculum is that new areas of knowledge and need that have been made to be part of the basic education programme like information and communication technology (ICT), sexuality education and HIV/AIDS education, are not part of the current NCE curriculum (Atahiru, 2008).

This study therefore seeks to identify how the NCE training is perceived to have enabled the teachers that have acquired it discharge their teaching assignment in junior secondary schools of northwest geopolitical zone of Nigeria. In other words, the study wants to identify how holders of NCE certificate are

perceived in attaining the NCE goals in junior secondary schools of northwest geopolitical zone of the country.

NCE teachers' performance should correspond to the goals of the NCE training they received, as envisaged by the national policy on education. This, in the context of the present research, would mean the absence of any gap between the goals of the NCE programme and the level of attainment of the NCE teachers in the junior secondary schools. Such goals include the production of highly motivated teachers with knowledge and pedagogical skills; teachers that can exhibit high level of spirit of enquiry and creativity in their teaching job; teachers that can effectively fit into social life of the immediate community in discharging their responsibilities as teachers; and, teacher's with high level of commitment to national objectives. The attainment of these NCE goals is doubtful with the present crops of NCE teachers teaching in junior secondary schools of northwest geopolitical zone of Nigeria. Unlike the present research, the existing literatures that discuss the NCE programme do not usually compare the goals of the programme with its outcomes. As early as 2000, Ogbonna (2007) observed that this approach was virtually unknown to the Nigeria colleges of education. He followed the above approach in order to assess the perceived educational goals and needs of the Nigerian certificate in education programme but unlike the present researcher, he selected NCE students and their teachers, most of whom had no real contact with teaching and learning environment in the Nigeria junior secondary schools, for his study. Many other related studies that followed that of Afolayan in this area do not usually discuss the teachers' productivity by comparing the goals of the NCE programme with its outcomes.

1.3 Objectives of the Study

The general objective of this research is to assess Nigeria certificate in Education (NCE) teachers' attainment goals in junior secondary schools in Northwest Geopolitical zone, Nigeria. In specific terms, the research aims at attaining the following objectives, to;

1 assess the Nigeria Certificate in Education (NCE) teachers' attainment goal of producing high quality classroom teachers for junior secondary schools in northwest geopolitical zone, Nigeria.

2 find out the NCE teachers' attainment goal of spirit of enquiry and creativity, for junior secondary schools of northwest geopolitical zone, Nigeria.

3 explore the NCE teachers' attainment goal of ability to fit into the social life for the immediate community of junior secondary schools in northwest geopolitical zone, Nigeria.

4 determine the NCE teachers' attainment goal of intellectual and skills acquisition for junior secondary schools in northwest geopolitical zone, Nigeria.

5 assess the NCE teachers' attainment goal of commitment to national objectives, for junior secondary schools in northwest geopolitical zone, Nigeria.

1.4 Research Questions

The following research questions were posed to guide the study:

1. What is the NCE teachers' attainment goal of high quality classroom teachers for junior secondary schools in northwest geopolitical zone, Nigeria?
2. What is the NCE teachers' attainment goal of spirit of enquiry and creativity, for junior secondary schools in northwest geopolitical zone, Nigeria?
3. To what extent has the NCE teachers' attainment goal of fitting into the social life of the immediate community for junior secondary schools in northwest geopolitical zone, Nigeria, been attained?
4. What is the NCE teachers' attainment goal of intellectual and skills acquisition, for junior secondary schools in northwest geopolitical zone, Nigeria?
5. What is the NCE teachers' attainment goal of commitment to national objectives, for junior secondary schools in northwest geopolitical zone, Nigeria?

1.5 Hypotheses

The following null hypotheses were postulated to guide the study:

1 there is no significant difference between the NCE teachers' attainment goal and production of high quality classroom teachers for junior secondary schools in northwest geopolitical zone, Nigeria.

2 there is no significant difference between the NCE teachers' attainment goal and the spirit of enquiry and creativity of teachers for junior secondary schools of northwest geopolitical zone, Nigeria.

3 there is no significant difference between the NCE teachers' attainment goal and the NCE teachers' fitting into the life of the immediate community, for junior secondary schools in northwest geopolitical zone, Nigeria.

4 there is no significant difference between the NCE teachers' attainment goal and intellectual and skills acquisition of teachers, for junior secondary schools in northwest geopolitical zone, Nigeria.

5 there is no significant difference between the NCE teachers' attainment goal and the teachers' commitment to national objectives, for junior secondary schools in northwest geopolitical zone, Nigeria.

1. 6 Basic Assumptions

The research is based upon the following assumptions:

1. Nigeria Certificate in Education (NCE) goals have enhanced the production of high quality classroom teachers of junior secondary schools in northwest geopolitical zone, Nigeria
2. Teachers of junior secondary schools possessed the spirit of enquiry and creativity as a result of training received during NCE programme.
3. The NCE goals have tremendously helped teachers of junior secondary schools to fit into social life of the immediate community in northwest geopolitical zone, Nigeria.
4. Nigeria Certificate in Education (NCE) goals have enhanced the equipping of teachers of junior secondary schools with knowledge and skills to meet up their responsibilities of teaching and learning.

5. Nigeria certificate in Education (NCE programme) has curriculum prescription for teachers commitment to national objectives and improve national development

1.7 Significance of the Study

This study is not only beneficial to the Nigerian governments and educational authorities but also to curriculum planners, NCE training institutions, teachers of junior secondary schools with NCE teaching qualification and educational researchers. The study is also of benefit to students of the NCE programme.

For the Nigerian governments and educational authorities, the study will help them refashion their educational policies in line with the study's findings. It will help the government see the extent to which it has realized its teacher educational goal of training the primary and junior secondary school teachers, so as to equip them intellectually and professionally for the effective performance of their duties. In other words, the study will enable the government see whether or not the training given to this category of teachers is in line with their pedagogical needs.

Perhaps the most important and direct significance of the study lies in the fact that as a needs assessment, it provides valuable information to NCE curriculum planners and developers. Needs assessment represents a formal systematic attempt to determine and choose the more important gaps of 'what is' and 'what should be'. It provides a mechanism for developing, defining and validating curriculum-less goals and the bridge by which curriculum is

subsequently selected, shaped, implemented, evaluated and improved (Kaufman; 1979). Valuable information such as the identified needs in the present study is therefore indispensable to the NCE curriculum planners and developers, and even educational administrators. It provides a foresight with which the NCE programmes can properly be implemented.

NCE training institutions and their lecturers also stand to benefit a lot from the present research. This is because the study will make them see how good they have been in discharging their duty of providing teachers with the intellectual and professional background adequate for their assignment, making the teachers adaptable to any changing situation and encouraging further the spirit of enquiry and creativity in the teachers. It will enable both the colleges authorities and lecturers see whether the pedagogical training they give their students is relevancy to the pedagogical needs of the students.

The significance of this study also lies in the fact that, it identifies the areas of discrepancy in order of their priorities as is the usual case with programmes of needs assessment. By prioritizing the needs, the study enables the NCE curriculum planners, developers and educational administrators especially the N.C.C.E., to plan, develop and implement the curriculum in order of the priorities so identified. There appears to be a considerable confusion today in Nigerian colleges of education regarding the priorities of the NCE goals. Researchers (Okpanachi, 2009) for instance, suggest that teaching practice in these schools is not given the appropriate attention it deserves and that there is a gap between theory and practice. By prioritizing the needs of the NCE

programme, and that of the contents of its pedagogy, the present study will determine the amount of attention required by the different aspects of the NCE programme.

Another significance of the present study relates to the teachers of junior secondary schools with the NCE teaching qualification. The study will enhance the quality of the NCE products by facilitating a better planning, development, and implementation of the programmes as discussed above. The quality of junior secondary education will consequently be enhanced, and this will have positive economic, political, and social impacts on the development of Nigeria. Thus, if the current popular view that the quality of education is lower than before were true, the present study will help in finding solution to that problem.

1.8 Scope of the Study

This study assessed the NCE teachers' attainment goals in junior secondary schools in the Northwest geopolitical zone of the country. The scope therefore involves the junior secondary school teachers, principals of the junior secondary schools, lecturers of NCE programmes, and SUBEB officials in the northwest geopolitical zone of Nigeria. These are to be sampled and studied in relation to the importance of the pedagogical goals of NCE programme, and the pedagogical abilities of junior secondary school teachers in relation to the NCE training they acquired in those goals. In other words, the study is about how the NCE training enables the recipients face the challenges of classroom transactions in the junior secondary schools. Members of the selected study groups are in a good position to rank the NCE pedagogical goals and to assess the various

functional values of those goals taking into consideration the appropriate practical context.

The study is however delimited to teachers of public junior secondary schools and lecturers of public colleges of education in the geopolitical zone. Parents are also not included among the study groups despite the fact that they can also assess the products of the NCE programmes to some extent since they have contact with them. This is to facilitate an in-depth study of the problem. Moreover, of the various data collecting instruments relevant to the study, two instruments, questionnaire, and structured interview were used in view of their relative ease to administer and analyze.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviewed the related literature under the following major headings: the pedagogical component of teacher education; concept of attainment goal, NCE as a teacher-training programme; the pedagogical component of NCE training; the pedagogical competence of the NCE teachers; and, assessment of teachers by the selected study groups (supervisors, the principals, the NCE educators, and the NCE teachers of the junior secondary schools). Also reviewed in the chapter are methods of assessing educational relevance; secondary education in Nigeria; and, primary education in Nigeria. The need to review the related literature on the NCE as a teacher education programme was informed by the desire to examine the concordance of the NCE with the generally known features of a programme of teacher education. Related literature on the pedagogical component of NCE programmes and its components were reviewed to help gain insight regarding the various pedagogical aspects of the NCE training. This will also help in understanding the meanings of the NCE goals that are of pedagogical nature, and in analyzing their pedagogical implications. The review made, of the related literature on the pedagogical competencies of the NCE teachers helps the researcher gain some insight on the existing empirical researches related to the assessment of the pedagogical needs of the NCE teachers in the country. The research methods used by these researches were considered in this research in addition to considering the various methods of needs assessment were also reviewed.

2.2 Theoretical Framework

The research is built on the theory of "Teacher Training Model" (TTM). The theory which was developed by Obanya (2010) says that teachers' competence is essential in promoting quality education whether in schools or in more flexible community based programmes. The teachers are advocates for, and catalysts of change, and no education reform is likely to succeed without adequate preparation and active participation of competent teachers' involvement. A teacher therefore needs to be a competent holder of teaching professional certificate, in order to be able to successfully instruct learners and even more. He should be someone who is knowledgeable, competent and result oriented in his or her expected responsibilities (Adelabu, 2007).

Hence, teacher training model is deep, fundamental and powerful in effect, to transform NCE teacher competence in relation to the teaching responsibilities. Ogbonna (2007) viewed that teacher competence are fast disappearing; pupils/students are becoming disoriented and disinterested in schooling while parents appear helpless and hopeless with teachers' ineffectiveness in schools, particularly at primary and senior secondary schools in the country.

The teacher training model involves teacher professional quality, competency in attaining the NCE goals, particularly while teaching at junior secondary schools. The model is conceived as a deliberate and conscious process of changing problems of teachers' incompetence into desirable form, in a specific manner, to enable them inspire the learners to learn. The adaptation of this model to the NCE teachers' attainment goals in junior secondary schools is based on

identification of competence as an important determinant of successful teaching and assessment of teacher's competence in their teaching job. The aim is to put in place a structured process which promotes continuous teachers' quality improvement and relevance, as well as assign a major responsibility for self development and self evaluation to teachers; and, to raise teachers' profile, change their public image and, enable them make greater impact on the learners and the school. The researcher viewed that the teacher preparation programmes have not been paying attention to the quality of training been offered at teacher training institutions in recent time, hence the need for this pedagogic study on NCE teachers' attainment goals in the nation's junior secondary schools, particularly in the northwest geopolitical.

2. 2 Historical Perspective of Teacher Education and Pedagogical Preparation of (NCE) Goals

In the ancient and medieval societies, people intending to become teachers were required only to demonstrate knowledge of those subjects they desired to teach because there were no institutions offering instruction in the principles and practices of teaching. Some teachers such as Vittorino de Feltre in Italy, Johannes Sturm in Germany, and John Colet in England gained wide recognition for their learning and ability to teach during the Renaissance period but the training of teachers was given little attention. It was only with the rise of democratic principles during the 17th and 18th centuries that measures were taken to establish institutions to provide teacher training. This resulted from assertion that the political, social, and economic development of nations could best be achieved through the education of the individual citizen. The Institute of the Brothers of the

Christian Schools established in 1685 at Reims, France, was the earliest-known educational institution to offer a systematic programme of teacher training. In the 18th century, other such institutions were begun in France and Germany, but it was not until in 1794 when a government-sponsored school was established in France that the principles of the philosopher Jean Jacques Rousseau began to be adapted in teacher training and preparation. According to Rousseau, educators should concern themselves primarily with the mental and physical development of their pupils and only secondarily with subject matter. This principle or pedagogical theories of Rousseau, which came to be applied and developed by the late 18th-century Swiss educational reformer Johann Heinrich Pestalozzi letter became a basic doctrine of all educational theory and were, adopted the world over. With the application of the views of the educator Johann Friedrich Herbart early in Prussia in the 19th century, who stressed the study of the psychological processes of learning as a means of devising educational programmes based on the aptitudes, abilities, and interests of students, an important advance in teacher-training theories and methods came to be made. in Prussia early in the 19th century with the application of the views of the educator Johann Friedrich Herbart (Microsoft Encarta, 2009).Thus, the components of teacher training evolved over time with few periods when it was not being critiqued, studied, rethought, reformed, and, often, excoriated. A look at the various problems of teacher education in the course of the history of teacher education will help shade light on the components of teacher training programmes.

During the period from roughly the late 1950s to the early 1980s teacher education was conceptualized as a formal educational process intended to ensure

that the behaviours of prospective teachers matched those of “effective” teachers (Smith, 2009). To that end, teacher educators were charged with training teacher candidates to display those behaviours that had been empirically certified through research on effective teaching.

The training approach to teacher education was criticized on the basis of the effectiveness of researches, which form its foundation. These researches were seen as thin, with consequent need for more critical research stance that made the existing social arrangements of schooling problematic and challenged the taken-for-granted assumptions about definitions of professional competence. There were also methodological objections raised against the training approach, which point to obstacles to establishing causal relationships between particular aspects of teacher preparation and teacher performance given the many intervening variables and the months-or even years-long time lag. The most damaging critique, however, was that although the training research showed that prospective teachers could indeed be trained to do almost anything, the focus was on empty techniques rather than knowledge or decision-making, and thus, the approach was seen as theoretical and even anti-intellectual.

During the period from roughly the early 1980s through the early 2000s, teacher education was defined primarily as a learning problem. On the basis of this approach, excellent teachers were seen as professionals who had knowledge about subject matter and pedagogy and who made decisions, constructed responsive curriculum, and knew how to continue learning throughout the professional lifespan. The goal of teacher preparation programmes was

consequently that of designing the social, organizational, and intellectual contexts wherein prospective teachers could develop the knowledge, skills, and dispositions needed to function as decision makers. Teacher training during this period heavily emphasized constructivist perspectives, remaining out of touch with the public interest (Smith, 2009).

Thus, critics of the system called for higher standards as well as consistency across preparation, licensure, and accreditation and better recruitment and retention strategies. Teacher education's emphasis on beliefs and attitudes was particularly hard hit by external critics, especially beliefs related to culture and diversity. Research on teacher education was also sharply criticized during this time for its weak methods and fact that its findings cannot be generalized. Teacher preparation was also attacked for being focused on teachers' knowledge, skills, and beliefs without adequate attention to pupils' learning. This is to say that since teacher education was now defined as a learning problem, neither practitioners nor researchers concentrated on establishing the links between and among what teachers knew and believed. None of them also emphasized how the teachers developed professional practice in the context of different schools and classrooms, and what their pupils learned that could be demonstrated on tests and other measures (Smith, 2009).

Since the mid-to late 1990s, teacher education has been defined as a policy problem in many of the major debates, with the aim of identifying which of the broad parameters of teacher education policy that can be controlled by institutional, state, or federal policy makers, is most likely to have a positive

effect. This approach involves the use of empirical evidence to guide policy makers in their investment of finite human and fiscal resources in various aspects of the preparation and professional development of teachers. The frequently used researches in this model include production function studies of educational resources and other multiple regression analyses that aim at establishing correlations between resources and indicators of teacher effectiveness. Some researchers also take broader approach to the study of teacher education as a policy problem, including a variety of accepted research methods and a range of indicators of effectiveness. Some of the criticisms of this model are however that results from its researches lack clear and consistent evidences, making many policy makers ignore them. Moreover, teacher education as a political problem and not just a policy problem cannot have its policies come about as the result of simple common sense or expediency alone, and cannot be disconnected from values and ideology, from existing systems of power and privilege, or from assumptions about what is main stream and what is marginal. Furthermore, teaching, despite its technical aspects is also and, more importantly, an intellectual, cultural, and contextual activity that requires skillful decisions concerning how to convey subject matter knowledge, apply pedagogical skills, develop human relationships, and both generate and utilize local knowledge. Finally, the purpose of education in a democratic society is not simply assimilating all schoolchildren into them (Smith, 2009).

The right approach to teacher education is however to base it on the existing needs of not only the teacher and the learner but also the society. Any exclusive emphasis on the pedagogical needs of the teacher is sure an inclination

to the concept of teacher education as a training problem, with all its attendant shortfalls noted by Smith (2009). To emphasize the needs of the learner in teacher education, at the expanse of those of the learner or the society or both is on the other hand to inhibit the professional growth of the teacher and to make learning irrelevant to the needs of the society. Some consideration may also be given to role of educational policies, with the aim of identifying which of them is most likely to have a positive effect, but undue emphasis on cost effectiveness of educational policies can be detrimental to educational growth by discouraging government spending on it.

There is currently a cleavage among educationists regarding what constitutes the teacher-training programme. According to Obanya(2010), some scholars tend to think of teacher educational curriculum as being limited to education (pedagogical) courses supplemental to an academic programme of general education and appropriate subject matter specialization. Others maintain that the curriculum should be thought of as including much of the programmes of general education and subject matter specialization and that these should be professionalized. The extremists among those who have limited view of teacher education curriculum uphold one other view of what should constitute the curriculum. Such scholars according to Okebukola and Onugha (2008) oppose the professional training of teachers and see no reason for any teacher training programmes.

Consequent to the above cleavage among scholars regarding what should constitute teachers training programmes; educationists suggest differing sets of

goals for such programmes. Majisan (2007) for example proposed ten such goals for which the teacher deserves to be trained. These include (a) purveyor of knowledge; (b) expert in some area of knowledge or skills; (c) organizer of curriculum; (d) judge of achievement; (e) coordinator of day to day affairs; (f) in loco parentis; (g) controller of students' behaviors; (h) member of teachers' organizations (i) community leader; and, (j) agent of social changes.

Some of the goals suggested by Majisan however overlap with one another, and can be merged to make one goal. For example, the two goals of ' in loco parentis' and 'controller of students behavior' can be used to form one goal since the two have no clear demarcating line. Despite this, the goal of teaching profession outlined by Majisan implies a broad view of teacher training. It will be upheld by the present research along with the goals of the NCE programme.

Okebukola and Onugha (2008) also suggested a broad set of goals for teacher training. These include: intellectual ability and high quality of scholarship; knowledge of practical practices and techniques; a good personality; and, interest pattern. The author therefore advocates for the training programme, liberal education, subjects of specialization and professional training. Hazard's conception of professional training as that part of college curriculum that is designed specifically for those who share occupational goal of teaching in elementary and secondary schools is unfortunately contradictory. This is because liberal education and subject specializations in teacher training programme also have the same purpose.

People with a narrow conception of training programme on the other hand maintain that teachers are born rather than developed. Hence, the study of pedagogy is a waste of time. Ironically, these people fail to realize that a born teacher can perform better if additionally trained than other wise, which renders the radical argument a baseless one. The need for the training becomes the more obvious if the qualities that make a good teacher are considered.

The intent of all teacher education programmes must be the transformation of student teacher into a competent career teacher. However, Omojuwa (2007) on teacher education observes that for teacher training programmes to be good, they must have certain features. These include: that the programme explains to the inductees that the process of their selection is based on special requirements and that induction training is crucial to their future success; that the induction process is divided into progressive stages of achievement; that the programme cultivates mutual support within peer groups; and, that the training is oriented toward long-term career goals. The remaining characteristics apply directly to the needs of beginning teachers including: administratively setting up and clearly articulating and disseminating the expectations and norms of teachers' conduct; teachers' unfailing assimilation of the professional vocabulary; and supervision, coaching and assessment of the new teachers. The responsibility for supervision should also be distributed throughout the faculty in a tightly organized, consistent, and continuous programme.

In a related research, National Assessment and Accreditation Council, India (2007) identified six key areas of teacher training programmes as follows:

Curriculum Design and Planning; Curriculum Transaction and Evaluation; Research, Development and Extension; Infrastructure and Learning Resources; Student Support and Progression; and, Organization and Management. Of these six key areas, transaction and evaluation relates to pedagogy, which is the subject of the present paper. According to National Assessment and Accreditation Council, India (2007), Curriculum transaction is the most crucial dimension of an institution's functioning, so, the dynamism, flexibility, and intentions of the curriculum-planned need to be explicated in the transaction modes, which means, these features must be observable in the manner in which the curriculum design is put to practice. The council identified six quality aspects for curriculum transaction and evaluation as follows: Induction/Orientation; Transaction of Theory; Transaction of Practical Experiences; Assessment and Evaluation; Teacher and Teaching; and, Research and Development. For each of the quality aspects, certain quality indicators have been suggested.

Some of the quality indicators suggested by the National Assessment and Accreditation Council, India (2007) represent some aspects of pedagogy. For instance, under transaction of theory, they proposed the following as quality indicators:

a) Provision of various courses of theoretical study in order to develop an understanding and appreciation of teacher in a holistic educational perspective through dynamic learning experiences by having an understanding of field realities and his position of significance among them.

b) Gearing the instructional processes towards developing reflective thinking and practice, both individually and in groups, so that teaching is made a reflective practice and the teacher a reflective practitioner.
c) Reflecting, by the curricular activities, the interconnectedness among the various components of the programme to make both teacher educators as well as the student teachers aware why and how one component of the programme is connected to the other.
d) The staff and students are given access to technology and information retrieval on current and relevant issues to avoid teachers and student teacher becoming complacent with their own selves in a world where newer and better techniques and methodologies are regularly discovered.

As for transaction of practical experiences, the quality indicators according to the council include:

a) Making adequate preparation for practice of teaching through various in-house hands on experiences including simulated practice.
b) Making the school-based experiences comprehensive and varied to include exposure to not only instructional role of teachers but also their other roles and functions.
c) Visualizing and institutionalizing the process of nurturing and mentoring of student teachers to facilitate the acquisition of skills and competencies gradually through a gradual practice; and,
d) Following the learning experiences by feedback, reflection, and follow-up.

On assessment and evaluation, the identified quality indicators include:

a) Employing, apart from grading and certification, the assessment and evaluation outcomes for enhancing competence of students;
b) Using protocol for the programme, which is comprehensive in its coverage of objectives;
c) Using a mechanism for gathering, consolidating and disseminating evaluation data which reflects fairness and transparency; and,
d) Employing ICT extensively in assessment and evaluation activities of the programme.

On teacher and teaching aspect, the identified quality indicators are that: a) teachers function as a team of efficient professionals; b) teachers take initiative to learn the latest pedagogic techniques, to innovate and continuously seek improvement in their work, visualize, and carry out curriculum transactions according to the nature of the enrolled student groups. This is to say that teachers make efforts to evolve transaction modalities; and that, c) teachers provide a variety of learning experiences including individual and collaborative learning experiences; and ensure flexibility in their implementation. In other words, the teacher educators employ interactive and participatory approach in the teaching of theory and foundation courses.

Similarly, Omojuwa on Teacher Education (2007) maintains that all programmes of teacher education contain elements of faculty and facility introduction, classroom management, student discipline, professional conduct, school and school district expectations, and professional obligations. A new teacher needs to be exposed to a variety of teaching techniques and evaluation

processes. Some programmes equally instruct and assess the beginning teacher; others emphasize assistance to the teacher rather than using the programme as an indicator of the beginner's competency.

What is common with the various pieces of literature on teacher training programmes is that the aspects of the teacher training they discuss can generally be categorized into three; pedagogy, which is the theme of the present study, teaching subject, and general knowledge. Thus, Yusuf (2006) identified the three basic aspects as; techniques of teaching subject content (pedagogy), specialized knowledge in a particular subject area, and learning about how children learn. He further observed that approaches through which student teachers are provided with practical experience include teaching practice, workshop, demonstration schools, microteaching, and so on.

2. 4 Concept of Pedagogy in Teacher Education

The term pedagogy is a French and Latin adaptation of two Greek words; *paid* (child), and *agogus* (leading), which together literally means a man having oversight of a child, or an attendant leading a boy to school. It has come to acquire considerable significance in education with several resultant related researches during the past several decades. Technically, pedagogy is said to be the study of being a teacher or the process of teaching and generally refers to strategies of instruction, or a style of instruction. The term is also occasionally referred to as the correct use of instructive strategies. In educational projects, the term is wide enough to include curriculum, syllabus, textbooks, teacher training, teaching methodology, use of teaching learning material/equipment, monitoring and

supervision, evaluation, regular educational support, innovations and so on, that leads to quality improvement in teaching-learning process (Jharkhand Education Project Council, 2010). The present research will however adopt a narrower meaning of the concept pedagogy; that of the process of classroom teaching now heavily influenced by the introduction of information technology into schools. This has necessitated changes in pedagogy by making teachers to adopt new methods of teaching, facilitated by the new technology.

One of the educational terminologies closely related to the concept of pedagogy is critical pedagogy, a philosophy of education described by Henry Giroux in Wikipedia, (2011) as an educational movement guided by passion and principle to help students develop consciousness of freedom, recognize authoritarian tendencies, and connect knowledge to power and the ability to take constructive action. The concept has also been defined by Shor in Wikipedia, (2011) as "Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, and official pronouncements. It also goes beneath traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse." Based in Marxist theory, critical pedagogy is said to draw on radical democracy, anarchism, feminism, and other movements that strive for what they describe as social justice (Wikipedia, 2011).

The idea of Critical Pedagogy begins with the neo-Marxian literature on Critical Theory. The early Critical Theorists believed that Marxism had underemphasized the importance of cultural and media influences for the persistence of capitalism; that maintaining conditions of ideological hegemony were important for (in fact inseparable from) the legitimacy and smooth working of capitalist economic relations (Burbules & Berk, 1999). Theissen (2006) in his writings, the most celebrated critical pedagogue Paulo Freire, heavily endorses students' ability to think critically about their education situation, the doing of which he says, will enable them to recognize connections between their individual problems and experiences and the social contexts in which they are embedded (Wikipedia, 2011). After Freire came the postmodern , anti-racist , feminist , postcolonial , and queer theories who play a role in further explaining Freire's ideas of critical pedagogy, there by shifting the main focus of critical pedagogy on social class to include issues pertaining to religion, military identification, race, gender, sexuality, nationality, ethnicity, and age. Influence of many varied concerns, institutions, and social structures, including globalization, the mass media, and race/spiritual relations, have today come to be included by contemporary critical pedagogues (Wikipedia, 2011).

According to Burbules and Berk in Theissen (2006), Critical Pedagogy represents the reaction of progressive educators against such institutionalized functions. It aims at working within educational institutions and other media to raise questions about inequalities of power, the false myths of opportunity and merit for many students, and the way belief systems become internalized, making individuals and groups abandon the very aspiration to question or change their lot

in life. Critical pedagogy however emphasizes the need of backing change in consciousness with concrete action because, as Freire laments, the greatest single barrier against the prospect of liberation is an ingrained, fatalistic belief in the inevitability and necessity of an unjust status quo.

Another related pedagogical concept is critical thinking, which concerns itself primarily with criteria of epistemic adequacy, that is, the need for one to be more discerning in recognizing faulty arguments, hasty generalizations, and assertions lacking evidence, truth claims based on unreliable authority, ambiguous or obscure concepts, and so forth. Critical Thinking uses the skills of formal and informal logic, conceptual analysis, and epistemology as its prime tools. The primary preoccupation of Critical Thinking is to supplant sloppy or distorted thinking with thinking based upon reliable procedures of inquiry. It emphasizes the idea that specific reasoning skills undergird the curriculum as a whole. The purpose of education generally is therefore to foster critical thinking; and that the skills and dispositions of critical thinking can and should infuse teaching and learning at all levels of schooling. More recently, however, various authors in this tradition have come to recognize that teaching content and skills is of minor import if learners do not also develop the dispositions or inclination to look at the world through a critical lens (Theissen, 2006).

One other related pedagogical concept is andragogy, which the modern literature on education tries to distinguish from the term pedagogy. There are also on the other hand educationists who attempt to dispel the existence of any serious differences between the two terms by taking them as two sides of a coin. Those

who insist on this division see the pedagogue as a schoolteacher who instructs in a pedantic or dogmatic manner, assuming the responsibility for making decisions about what is learned, and how and when something will be learned. Pedagogy to them is therefore teacher-directed or teacher-centered which has its roots in Calvinism, and the belief that wisdom is evil, and that adults should direct, control, and ultimately limit children's learning to keep them innocent. It is therefore seen as focusing on transmitting, in a very teacher controlled environment, the content subject matter (Pew, 2011), or more precisely, as the art and science of teaching children. Over time, says Theissen (2000), the use of the word pedagogy has become so entwined with instructional design in general that the two have become virtually synonymous. In fact, today most people mean instructional design as a whole when they use the word pedagogy.

Andragogy, by contrast, is seen as the art and science of helping adults learn. This model of teaching is based on five assertions according to (2007) as reported by Pew (2011) include: letting learners know why something is important to learn; showing learners how to direct themselves through information; relating the topic to the learner's experiences; people will not learn until they are ready and motivated to learn and this requires helping overcome inhibitions, behaviours, and beliefs about learning. Pew (2011) further elaborates that in Andragogy, the educational focus is on facilitating the acquisition of and critical thinking about the content and its application in real-life practical settings. Andragogy also calls for learner control, measures of knowledge acquisition based upon performance standards, and the voluntary involvement of students in the learning activity.

Finally, andragogy calls for the measurement of satisfaction and for learner determined outcome measures.

According to Theissen (2006), although the word "andragogy" was in use as early as 1833, Malcolm Knowles is generally credited with popularizing the concept in the United States in the 1970s. Knowles according to him maintained the view that andragogy rests on four crucial assumptions about adult learners and how they differ from child learners. Andragogy assumes that, as people mature;

(1) Their self-concept moves from dependence to self-direction,
(2) Their growing reservoir of experience begins to serve as a resource for learning,
(3) Their readiness to learn becomes oriented increasingly toward the developmental tasks of their social roles, and
(4) They begin to want to apply what they have learned right away to life's real challenges. Accordingly, their orientation toward learning shifts from one of subject centeredness to one of problem centeredness.

Pew (2011) believe that many educators today focus on pedagogy, when they should be focusing on andragogy and that many people are not even familiar with the term andragogy. It could however be noted that the basis of andragogy as proposed by Conner and Knowles above are equally important in as far as the teaching of children is concerned. This tends to limit the importance of the purported difference between pedagogy and andragogy. In fact some educationists like Holmes and Cooper (2008) are of the view that it is not easy to distinguish an adult learner from a younger learner by just looking at the difference in years, as

most educationists assume. A mere consideration of the many possible concepts of an adult such as a dictionary definition or biological, physiological, legal, social, psychological, spiritual, and moral definitions, they say, is enough to let one realize the truth of what is meant here. These concepts include defining an adult as fully developed and mature; as someone who can reproduce him or herself; and, as someone who is responsible for his or her own actions. It also includes defining him as someone who can legally vote, and as someone who exhibits behavior, that indicates a sense of right and wrong. All of these become even more confusing when integrated with personal beliefs of what an adult learner should be (Deis, n. d).

Holmes and Cooper (2008) moreover reported Houle as maintaining that education is a single fundamental human process and that even though there are differences between children and adults, the learning activities of men and women are essentially the same as those of boys and girls. He rejected andragogy as an organizing principle in adult education and perceived it as a technique. London (2010) and Elias (2007) according to Holmes and Cooper (2008) also questioned the theoretical status and general utility of andragogy. They also questioned how andragogy was different from progressive education applied to adults. In fact, even Knowles himself could not help being at a point, in 1980, of seeing that andragogy is simply another model of assumptions about learners to be used alongside the pedagogical model of assumptions, thereby providing two alternative models for testing out the assumption as to their ‘fit’ with particular situations. He also indicated that there were occasions when andragogy might be used with children and pedagogy with adults (Holmes & Cooper, 2008).

Many concepts have come to be proposed in the attempt to bridge the "existing controversy" over the two concepts of pedagogy and andragogy. Thus Mohring in Holmes and Cooper (2008) contended that the terms andragogy (implying the education of adults) and pedagogy (meaning the education of children) are etymologically inaccurate. She maintained that andragogy is derived from *aner*, meaning adult male and not adult of either sex, so it excludes women. She therefore proposed in place of andragogy the term teliagogy, derived from the Greek word *teleios*, which means adult and therefore includes both sexes. This was in her effort to purge English of sexist words. Knudson in Holmes and Cooper (2008) proposed replacing both andragogy and pedagogy with the term humanagogy because it is pedagogy and andragogy combined. He argued that the term represents the differences as well as the similarities that exist between both adults and children as learning human beings. Rachal in Holmes and Cooper (2008) proposed self-directed and teacher-directed learning. He believed that, in addition to being more self-explanatory, these terms are not restricted to one particular clientele because they eliminate the child-adult issue.

Internet and Communication Technology (ICT) has itself come to stay as one of the most emphasized requirements in teacher pedagogical skills and therefore as one of the most important components of pedagogical aspects to be emphasized by teacher training institutions. According to Beaudin and Hadden (2008), preparing teachers to use technology effectively is a major area of concern for teacher education. Effective technology use includes such activities as linking curriculum outcomes with various technologies; establishing a learning context of discovery and process in the use of technology; collaborating with others, both

face-to-face and virtually, to achieve learning outcomes; simulating real-world environments; and, assessing outcomes. Simmons (2000) cited in Ifrane (2006) also noted that effective teaching in the 21st century requires more than a basic understanding of educational theory and classroom management. Teachers must also collaborate with other educators to learn how to implement new technology in the classroom, and how to prepare students to enter a global economy.

A work for the UK government's Department for International Development (DFID) carried out over three years by Unwin (2005) has given certain recommendations for the application of ICT in teacher education, which were further modified by Hennessy *et al* (2010) as follows:

1) integrating ICT use into subject teaching rather than as a discrete subject in school;
2) infusing technology use into an entire teacher education programme, not providing a “bolted on” course or separate ICT topics within a course (Society for Information Technology and Teacher Education, 2002);
3) developing confidence with ICT and awareness of its potential through a hands-on workshop approach (Society for Information Technology and Teacher Education, 2002);
4) modeling interactive and participatory, rather than transmission-based pedagogy, in teacher education programmes;
5) employing external stimuli for change and innovation, including video-stimulated reflection and discussion of teachers‟ own (Jones et al., 2009) and others‟ practices (Bowker et al., 2009);

6) Offering sustained, collaborative, and active learning opportunities for teachers working together within a supportive professional community of practice (Davis, Preston & Sahol 2009).

These can be culturally contextualized, through being*:*

1) based in teachers‟ own schools and classrooms, incorporating tasks linked to participants' professional practices (Davis et al., 2009);
2) tailored as far as possible to individual teachers‟ attitudes, knowledge levels, subject disciplines and pedagogical approaches;
3) locally developed with cultural, linguistic and curricular relevance (Commonwealth of Learning, 2007; Unwin, 2005);
4) Supported by champions throughout the system who can enthuse and inspire others.

They are also ongoing and aligned with national and local policy interests including:

1) school/community-led agendas and participation, hence increasing sustainability;
2) national policies and standards for ICT use (Davis et al., 2009), plus broader educational reforms (Hawkins, 2002) – through strategic leadership and early involvement of relevant stakeholders and potential partners

Thomas and Ranga in Tella *et al* (2014) classified the application of computers and other communication technologies in education into three broad categories: Pedagogy, Training, and Continuing Education. The pedagogical

applicability of the ICT, they correctly observed, is concerned essentially with the more effective learning and with the support of the various components of ICT and that almost all subjects ranging from mathematics (the most structured) to music (the least structured) can be learnt with the help of computers. Olakulehin (2007) in Tella *et al* (2014) emphasized that pedagogic application of ICTs involves effective learning with the aid of computers and other information technologies, serving the purpose of learning aids, which plays complementary roles in teaching/learning situations, rather than supplements to the teacher/instructor/facilitator. According to Tella *et al* (2014), the pedagogic uses of the computer necessitate the development, among teachers as well as students, of skills and attitude related to effective use of information and communication technologies. Aside of literacy, ICTs also facilitate learning to programme, learning in subject areas and learning at home on one's own, and these necessitate the use of new methods like modeling, simulation, use of data bases, guided discovery, closed-word exploration etc. The implications in terms of changes in the teaching strategy, instructional content, role of the teachers and context of the curricula are obvious as well as inevitable.

According to Agbatogun (2010), researches on the potency of teachers' level of computer literacy in teaching and learning reveal that ICT facilitates students' better learning, serves as a motivator to students that have been disillusioned with education, and makes learning more flexible. He also reported that researches have concluded that ICT enhances easy and convenient teaching, sparks students' interest and promotes holistic, collaborative and integrated learning, promotes the quality of curriculum content delivery and makes learning

students'-centered. On the ways the teacher can harness these advantages, Churches (2008) and Ifrane (2006) has identified the certain measures. They include adapting the curriculum and the requirements to teach in imaginative ways and locating the potential in the emerging tools and web technologies, grasping them and manipulating them to serve the students' needs. They also include maintaining leverage on collaborative tools to enhance and captivate learners, taking risks and sometimes surrendering one's self to the students' knowledge, and, continuing to absorb experiences and knowledge, endeavoring to stay current, and persistently learning and adapting as the horizons and landscapes change. Other measures are the necessity of going beyond learning just how to do it but also knowing how to facilitate, stimulate, control, moderate and manage it, and, modeling the behaviors that the teacher expects from her/his students; and, acting as a leader and working with clear goals and objectives.

Although there are currently no empirical research findings to buttress the view, it is well to entertain the fear that excessive use of computers and other elements of the ICT in teacher training cannot be without some negative consequences, which are seemingly not currently stressed by educationists. Experience and personal observation suggest for example that excessive reliance on calculator lowers the natural ability to do the day-to-day calculations needed in ordinary circumstances. Computer and other ICT gadgets cannot remain immune to these problems, which should be carefully studied for a better and more human use of the ICT in teacher training.

In view of the forgoing discussion on pedagogy and the related concepts, it can be safe to operationally define pedagogy as strategies of training children, taking into consideration all their scientifically proven peculiarities of and the use of Information and Communication Technology (ICT). This meaning is seen here to be in accord with the purpose of the present study, which has for its focus teaching in Nigeria junior secondary schools. It is submitted here that many of the learning peculiarities asserted of the adults are also true, perhaps at lesser degrees, of the children.

One of the issues stressed in pedagogy is the concept of knowledge building, which represents an attempt to refashion education in a fundamental way, to function as a coherent effort to initiate students into a knowledge creating culture. This concept involves students not only developing knowledge-building competencies but also coming to see themselves and their work as part of the civilization-wide effort to advance knowledge frontiers. According to Scardamalia and Bereiter (2009), six themes underlie a shift from treating students as learners and inquirers to treating them as members of a knowledge building community in line with the principle of knowledge building. These are Knowledge advancement as a communal rather than individual achievement; Knowledge advancement as idea improvement rather than as progress toward true or warranted belief; Knowledge of, in contrast to knowledge about (Knowledge about dominates traditional educational practice. It is the stuff of textbooks, curriculum guidelines, subject-matter tests, and typical school “projects” and “research” papers. Knowledge of, by contrast, suffers massive neglect); Discourse as collaborative

problem solving rather than as argumentation; Constructive use of authoritative information; and, Understanding as an emergent concept.

Another issue in teacher training is that of inclusive education. Inclusive education has been defined by UNESCO as a process of addressing and responding to the diverse needs of all learners by increasing participation in learning and reducing exclusion within and from education. This means that all children have the right to a quality education that caters, to the extent possible, to their individual needs. (Catholic Relief Services, n. d), Inclusion is seen to promote quality and equity education for all, without any type of barrier or exclusion. It takes care of those who may be potentially marginalized due to disability, gender, emotional/behavioral problems, family background, ethnicity, giftedness, migrants, poverty, hearing or visual impairment, and language delay, among others. According to Barton (2008), inclusive education is about why, how, when, where and the consequences of educating all learners which involves the politics of recognition and is concerned with the serious issue of who is included and who is excluded within education and society generally. A major motivation for the pursuit of inclusive education according to him is an informed conviction of the irrelevance, discriminatory and exclusionary features of current policy provision and practice in education.

Inclusive Education in the context of the goals of Education for All has however been observed (Peters, 2007) to be a complex issue for a number of reasons. First, disability is seen as an array of issues crossing health, education, social welfare, employment sectors, etc. making policy development in relation to

individuals with disabilities face challenges to avoid fragmented, uneven, and difficult-to-access services. Second, inclusive education may be implemented at different levels, reflect different classifications of special education needs, provide services in different contexts and embrace different goals and motives which may focus either on improved educational performance and quality of education, or on autonomy, self-determination, proportionality, consumer satisfaction or parental choice. Some of these goals may conflict and produce tensions.

The pedagogical relevance of the concept of inclusive education lies in the fact that teachers are the key to its success and as such, they should be able to meet the needs of students with disabilities in a regular/ordinary classroom. The success of inclusive education therefore rests on quality teacher preparation (Mukhopadhyay, Molosiwa & Moswela, 2011). Inclusive education as a process of identifying any barriers within and round the school that hinder learning, and reducing or removing these barriers is indeed a process, a product and a philosophy; a growing body of approaches, strategies and methods, a desirable outcome, and a distinctive way of thinking about educational issues. Thus according to Fanu (2008), teachers under training for inclusive education need to understand diversity in terms of knowledge; need to be able to respond appropriately to diversity in terms of skills; and, need to possess the professionalism without which they will be unable to respond appropriately to diversity in terms of attitudes. They also need to respect and uphold the rights of every child to a high quality education in terms of values. On the need of understanding diversity among learners, Fanu (2008) observed that the diversities include those of gender; language, culture and ethnicity; social-emotional

diversity; cognitive and academic diversity; and sensory and physical diversity. Teachers under training need to be aware of the complexity of these diversities many of which are inter-connected. On the question of skills, the teacher trainee should be enabled to create inclusive school and classroom environments. Outside the classroom, they will need the complex and inter-related sets of skills (backed up by knowledge of education systems) which will enable them to work constructively with others to bring about change. Inside the classroom, they will need to provide their pupils with the stimuli to develop their diverse talents fully, while working within the confines of an under-resourced educational system. For the second to be realized, teacher educators must practice an appropriate pedagogy such as Problem-Based Learning (PBL), a teaching approach in which students work in groups to solve problems but not to produce 'predetermined' solutions to them.

According to Inclusive education in action website (n. d), teacher training programmes need to take into account seven essential components in relation to inclusive education. These are: inclusion of subjects with high social and community content, since inclusive teachers need to be sensitive to the needs of students and the environment, and the need for the programmes to be oriented to diversity and promote learning strategies for all (equality), for quite a few and for only one (equity). Other essential components include the existence of collaborative work among educators since inclusion is founded on a collective effort of teachers, a team sharing knowledge, making decisions, solving problems together and generating actions in order to improve the school and to increase the learning for all. Moreover, the programmes must be based on the interpretative

and critical paradigms; the training should link directly with the educational services in so-called contextual professional practice; Cross Categorical/Multi-tiered formation; and, mentoring.

Of greater relevance to the present research from the above suggested seven components of teacher training as pertains to inclusive education is the cross Categorical/Multi-tiered formation. The principle maintains that inclusive education must characterize all training teacher programmes, and offer the teachers skills and common benchmarks for everyone regardless of education level to be entered (for example, Primary, Secondary, and High Education). This type of training alone can enable various teachers, regardless of their fields or levels of training, to collaborate and participate in the diversity of educational contexts together.

According to Heiman (2007), there are four different models of inclusion. First, there is the in-and-out model in which the special instruction needed by the children is combined together with regular lessons and interactions with their peers in regular settings. The second is the two-teacher model in which two teachers teach simultaneously in the classroom with one of them, who has had training in special education, concentrating on the students with disabilities. Other models are the full inclusion model and the rejection of inclusion on the believe that it would be better for students with disabilities to study in separate classes, according to special programmes, so they could progress at their own pace (Ali, Mustapha & Jelas, 2008).

The issue of inclusion is too good to be rejected all together out of the elements that make a good teacher. One may add here that inclusion does not always lead to creation of separate schools for the purpose. Whenever it does so, the matter should rightly be appropriated as that of special education for which there are often provisions in most of the educational settings around the world. When inclusion has to do with some slight learning disabilities such as is often observed in schools, it cannot be neglected or ignored but can best be treated by giving the teachers a sound training on how best to confront the issue within the conventional classroom settings.

Reflective teaching is also another concept related to pedagogy discussed by the existing literature. By reflective teaching is meant looking at what one does as a teacher in the classroom, thinking about why one does it, and thinking about if it works. It is a process of self-observation and self-evaluation. The idea is to enable the teacher identify and explore his own practices and underlying beliefs, by collecting information about what goes on in his classroom, and by analyzing and evaluating this information. Reflective teaching is therefore a means of professional development that begins in our classroom. It implies a more systematic process of collecting, recording and analyzing our thoughts and observations, as well as those of our students, and then going onto making changes (Tice, 2010).

According to Richards (2008), reflection, or "critical reflection," refers to an activity or process in which an experience is recalled, considered, and evaluated, usually in relation to a broader purpose. Reflective teaching is therefore

a response to experience, which according to him involves conscious recall and examination of the experience as a basis for evaluation and decision-making and as a source for planning and action. The article reported Bartlett (2009) to have pointed out that becoming a reflective teacher involves moving beyond a primary concern with instructional techniques and "how to" questions and asking "what" and "why" questions that regard instructions and managerial techniques not as ends in themselves, but as part of broader educational purposes.

The concept of reflective teaching is said to have stemmed from Dewey who contrasted 'routine action' with 'reflective action'. According to Pollard Pollard, Anderson, Maddock Swaffield, Warin, and Warwick (2008), Dewey was of the opinion that routine action is guided by factors such as tradition, habit, and authority, and by institutional definitions and expectations. This by implication is relatively static and thus unresponsive to changing priorities and circumstances but reflective action on the other hand involves a willingness to engage in constant self-appraisal and development. Among other things, reflective action implies flexibility, rigorous analysis, and social awareness. Dewey's notion of reflective action, when developed and applied to teaching, is both challenging and exciting.

Pollard *et al* (2008) identified seven key characteristics of reflective practice, as follows:

1. Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency.
2. Reflective teaching is applied in a cyclical or spiraling process, in which teachers monitor, evaluate, and revise their own practice continuously.

3. Reflective teaching requires competence in methods of evidence-based classroom enquiry, to support the progressive development of higher standards of teaching.
4. Reflective teaching requires attitudes of open-mindedness, responsibility, and wholeheartedness.
5. Reflective teaching is based on teacher judgment, informed by evidence-based enquiry and insights from other research.
6. Reflective teaching, professional learning, and personal fulfillment are enhanced through collaboration and dialogue with colleagues.
7. Reflective teaching enables teachers to mediate externally developed frameworks for teaching and learning, creatively.

Reflective teachers according to McKay (2007) often make the decisions they do on the basis of classroom experience; general knowledge they have learned in their teacher training; and, personal, educational, political, social, and moral values. They according to him have the following characteristics: they attempt to solve classroom problems; are aware of the beliefs and values they bring to teaching; take part in curriculum development and are involved in school change effort; and, take responsibility for their own professional development.

Some technology-integrated ways for reflection include Teaching journal, Self-observation, and Action research. According to Kulavuz-Onal (2009), self-observation is a technique where one observes and evaluates himself under the guidance of an observation checklist or some questions he decides on or before the observation. In this process, one may need to videotape his lesson. Teaching

Journal is a place where the teacher writes about his experiences or records some specific teaching events and his feelings about them on a periodical basis. Action research is the systematic, reflective study of a teacher's actions and the effects of these actions in a school or classroom context, which includes data collection and data analysis. It is a reflective process of progressive problem solving.

Richards (2008) is however of the opinion that many different approaches can be employed if one wishes to become a critically reflective teacher, including observation of oneself and others, team teaching, and exploring one's view of teaching through writing, but central to any of the approaches, there are three stages involved. The first stage is the event itself, the starting point of which is an actual teaching episode, such as a lesson or other instructional event. The second stage is that of recollection of the event in which an account is first given in writing, video or audio recording, a checklist or cording system, of what happened, without explanation or evaluation. The third stage is that of review and response to the event in which the event is processed at a deeper level, and questions are asked about the experience.

Educationists also point to the necessity of preparing the Reflective Teaching Statement, also known as teaching philosophy statement, which according to Brookfield in Teaching Resource Center, is a personal vision of teaching; a critical rationale of teaching; sense of purposes of teaching. It is usually a short reflective essay. It describes the teaching philosophy, strategies, methods, and objectives of a person. Teaching Resource Center (n. d) reported Fuhrman and Grasha explaining that reflective teaching statement expresses

teachers' personal values in teaching that represent the importance and stable ideas and beliefs and assumptions that affect our behaviors. Brookfield (in Teaching Resource Center, n. d) maintains that the development of a teaching philosophy can be used for four purposes. These are the personal purpose, by providing the teacher with a distinctive organizing vision-a clear picture of why he is doing what he does and the political purpose, a feeling that one's position is grounded in a well developed and carefully conceived philosophy of practice. Others are the professional purpose, a commitment to a shared rationale for college teaching, and, the pedagogical purpose linked to which are the most fundamental evaluative questions of all-what effect am I having on students and on their learning?-which the teacher must continuously ask himself.

Although there is no standard format for Reflective Teaching Statements since their structure, content, and wording varies by individual and disciplinary preference, there are some common rules of thumb for formatting such a document. They are usually brief, one or two pages long. Most statements avoid technical terms and favor language and concepts that can be broadly appreciated and are as a rule written with the audience in mind. Narrative, first-person approaches are generally the appropriate styles. It should also be made reflective and personal (Teaching Resource Center).

The existing literature on the subject of reflective teaching does not appear to take cognizance of the importance of teachers' pedagogical, general, and professional knowledge needed for a good reflective teaching to take place. In view of its relevance to professional development of teachers and the teaching

profession in general, reflective teaching cannot be taught in isolation from other aspects of teacher education. For instance, it needs a great deal of observation and data analyzing skills in addition to the knowledge of philosophy, child psychology, and use of instructional materials, both traditional and modern. It is therefore best taught simultaneously or even intertwined with these segments of knowledge and this should be reflected by all good teacher-training programmes.

Teachers must also allow an interactive environment to reign in their practice of imparting knowledge. This is the import of Interactive teaching, another pedagogically related and useful concept. Interactive teaching is defined as a two-way process in which pupils are expected to play an active part by answering questions, contributing points to discussions, and explaining and demonstrating their methods to the class (Pratt, 2009). The Excellence Gateway (2011) sees interactive teaching as a two way process wherein the teacher modifies his or her approach in response to the needs of the learner(s). According to Quality Learning (2010), the term interactive teaching is applied to a strategy/style of teaching developed through research undertaken as part of the Learning in Science Project (LISP) at Waikato University in the 80s. The document cautioned that interactive teaching does not mean just allowing students to make whatever sense they can from any experience (learning by doing), but it must be kept aright by the interaction of sensitive teachers to interact and challenge student thinking, exposing them to new ideas. It further contrasted the concept of interactive teaching with 'focused teaching' and 'the teacher as a cognitive coach' often used to define the more positive role for the teacher, re-iterating that interactive teaching values student's prior ideas and aims at

empowering students to be independent learners. It also offers the teachers the opportunity to learn along with the students and to use their interactive skills to listen carefully and challenge misconceptions where possible. In a study which compared two classes of a beginning physics course at the University of British Columbia in Canada; one class taught in the traditional lecture style and the other in the interactive teaching methods, students in the interactive class scored nearly twice as high as are those in the traditional class. Attendance also increased that week (VOA Special English Education Report, 2011).

It is not possible according to Excellence Gateway (2011) for an effective teaching to take place without interaction, which although a two way process permits the learner to interact with the teacher, with peers, with resources or with all the three. It further maintains that for good interactive teaching and learning to take place, it needs all the key ingredients of a good practice of teaching known since long ago. These include a task or lesson, which offers challenge and gives students something to think about and a positive learning ethos, which fosters confidence and respect, enabling learners to give and accept constructive criticism and see errors as stepping-stones to success. It also includes teaching, which addresses a variety of learning styles, has high expectations, and allows thinking time; appropriate resources in the right place; and, leadership vision that anticipates the needs of teachers and students.

Discussion on pedagogy and its related concepts like critical thinking, critical pedagogy, reflective teaching, and knowledge building cannot be complete unless a reference is made of how teacher's knowledge of pedagogy is combined

with that of content for a more productive teaching. This is the subject of pedagogical content knowledge (PCK). The extant literature reveals that an effective teacher needs to master two types of knowledge: content knowledge and pedagogical knowledge. According to Sidhu *et al* (2011), content knowledge, often seen as deep knowledge, refers to the knowledge a teacher should possess in the subject itself while pedagogical knowledge refers to the teaching and learning of the subject and the curricular development. For example, an economic teachers' knowledge of economics is related to content knowledge, while his knowledge of students and knowledge of teaching are related to pedagogical content knowledge. According to (Turnuklu & Yesildere, 2007), knowledge of students' cognitions is seen as one of the important components of teacher knowledge, because learning is based on what happens in the classroom as opined by Yinger and Hendrcks (2000), observed that pedagogical knowledge also includes teachers' knowledge of teaching and decision-making. This is because, teachers' beliefs, knowledge, judgments, and thoughts have an effect on the decisions they make which influence their plans and actions in the classroom.

Pedagogical content knowledge can therefore be viewed as an intersection of content and pedagogical knowledge. McCaughtry has according to Sidhu *et al* (2011) noted that since the past decade, pedagogical content knowledge has emerged as a prominent and insightful feature in teacher education programmes.

2.5 Concept of Attainment Goals

Goal literally refers to the aim or object towards which an endeavour is directed or the terminal point of a journey or race, and so on. The word attainment

on the other hand refers to achievement, accomplishment, success, realization and so on. The term attainment goals technically refer to those organizational attainments that portray an organization's effectiveness, in relation to the organizations' pre-defined objectives or goals. According to Bowen, Rawlins & Martin (2013), an organization's effectiveness has been defined in terms of attaining goals and the earliest theories of organizational behavior viewed organizations as rational institutions whose primary purpose is to accomplish objectives. Thus, the more efficiently and effectively an organization can achieve its goals, the more successful it is according to this approach.

In the field curriculum which is the concern of the present research, there are approaches to curriculum evaluation that that make the curricular goal their basis of prograame evaluation (Yusuf, 2012). Such approaches include Tyler's goal attainment model, sometimes called the objectives-centered model, which is the basis for most common models in curriculum design, development and evaluation. The Tyler model consists of four major parts, namely: defining objectives of the learning experience, identifying learning activities for meeting the defined objectives, organizing the learning activities for attaining the defined objectives, and evaluating and assessing the learning experiences. Tyler's model is designed to measure the degree to which pre-defined objectives and goals have been attained. It also focuses primarily on the product rather than the process for achieving the goals and objectives of the curriculum. The model is therefore product focused which evaluates the degree to which the pre-defined goals and objectives have been attained (Fundi, 2016).

The goal attainment model approach to evaluation of educational programs is however said to have failed to take into consideration, the very human nature of organizations and the outside influences that affect the efforts to reach the organizational goals (Bowen, Rawlins & Martin, 2013). When considered in the light of educational evaluation, the model is said to be difficult and time consuming to apply because it mainly relies on behavioral objectives which are difficult and time consuming to construct. It is also said to be too restrictive and covers a small range of student skills and knowledge; too dependent on behavioral objectives which do not necessarily cover none specific skills such as those of critical thinking and problem solving and the objectives related to value acquiring processes (Fundi, 2016).

The concept of attainment goals is different from that of achievement goals which according to Sportlyzer Coaching Software (2016) is competence-based aims that individuals target in evaluative settings. Elliot, Shell, Henry & Maier (2009) see achievement goals as as the competence-relevant purposes or aims that individuals strive for in achievement settings, and these different purposes or aims are posited to lead to differential performance outcomes. Achievement goals, as can be noted from these definitions therefore are concerned with individual's goals rather than that of the organization or programme the individual works for. The primary aim of the concept is to motivate the individuals in realizing the goals he has sat u for himself. The concept of achievement goals is at present the most prominent account of the link between achievement motivation and performance.

In education, the concept of achievement goals emphasizes teachers' performance goals which according to Teacher Evaluation and Support System (2015) offer the best chance for personal involvement on the teacher's part because these kinds of goals focus specifically on the teacher's behavior, rather than on the students or programs. The concept of achievement goals also emphasizes learner goals thereby providing an opportunity to measure more accurately how well the teacher met a pre-established goal.

As for the present study whose focus is the assessment of the performance of NCE teachers in junior secondary schools of northwest geopolitical zone of Nigeria in the light of the goals of the NCE training, the concept of teacher attainment goal, rather than that of achievement goal is of more relevance. This approach will help the researcher identify the gap between the NCE teachers' performance and the goals of the NCE training they have received.

2.6 Pedagogical Components in NCE Teachers' Preparation and Teacher Attainment Goals

It is clear in the light of the foregoing discussion on pedagogy and its related concepts that teacher trainees need to be well trained in different aspects of pedagogy. This will ensure competency in the recipients and enhance their attainment goals. Thus, while suggesting the quality indicators of the various key areas of teacher education programmes, National Assessment and Accreditation Council, India (2007) also included among others, those things that are of pedagogical nature. These include the provision of various courses of theoretical study in order to develop an understanding and appreciation of teacher in a holistic educational perspective and gearing the instructional processes towards

developing reflective thinking and practice. It also includes making reflections on the interconnectedness among the various components of the programme to make the teacher educators as well as the student teachers know why and how one component of the programme is connected to the other. Also included are: giving to both the staff and students access to technology and information retrieval on current and relevant issues, making adequate preparation for practice of teaching, visualizing, and institutionalizing the process of nurturing and mentoring of student teachers to facilitate the acquisition of skills and competencies gradually through practice.

According to Harbison (2010), "Raising Teaching Quality" has defined teacher quality in five dimensions, namely: knowledge of substantive areas and content and pedagogic skill, including the acquisition and ability to use a repertoire of teaching strategies. Others are reflection and ability to be self-critical, the hallmark of teacher professionalism; empathy and commitment to the acknowledgement of the dignity of other; and, managerial competence, as teachers assume a range of managerial responsibilities within and outside the classroom. The education international (2009) argues that the said dimensions of teacher quality should not be seen in terms of narrow behavioral competencies. It should be viewed more in terms of dispositions since teacher quality should be regarded as a holistic concept, that is as a gestalt of qualities rather than as a discrete set of measurable behaviors, to be developed independently from each other. In another interesting approach to describing the good teacher, Perrenoud (1999) in Education International (2009) has stipulated ten teacher competences including: organizing student learning opportunities, managing student learning progression,

dealing with student heterogeneity, developing student commitment to working and learning, working in teams and participating in school curriculum and organization development. Others include: promoting parent and community commitment to school, using new technologies in their daily practice, tackling professional duties and ethical dilemmas and managing their own professional development.

In a more precise manner, Rosmah (2010) observed that the 21st century teaching competencies require teachers to move beyond simple content area or knowledge and skills to meet the complex contemporary and future demands, which include among others, critical thinking and problem solving, creativity and innovation. It also includes agility and adaptability, resourcefulness and entrepreneurialism, curiosity and imagination, to sustain the capacity for lifelong learning. Teachers according to her must also have the knowledge and expertise to shape productive learning experiences as well as be able to identify the thinking and learning styles of students to understand and accommodate different styles of student learning using a variety of teaching and learning strategies, including the use of information and communication technology tools. In essence, the woman is identifying those pedagogical aspects of teacher education that need attention as dictated by the findings of many years of research in teacher education and child psychology, and by the ever-increasing scientific and technological developments.

Onike (2010) in the like manner identified two categories of key attributes of an effective teacher; the inherent characteristics and the acquired characteristics that by implication are the targets of a sound teacher education. The teacher's

acquired characteristics are according to him the attributes which teacher needs to possess for effective performances in the school and these characteristics are not inherent but acquired qualities. They include: (a) Mastery of subject matter; the knowledge of which to teach, when to teach and how to teach. This will give the teacher enough material and confidence to teach effectively; (b) Professional Certificate; c) Teacher's ability to deliver the goods by manipulating the learning experiences that go on in the school through his instructional procedure; and, (d) Effective Communication, that is, the linguistic competence and communication skills to teach effectively. These according to Adewuyi and Ogunwuyi (2004) call for adequate knowledge of the language being used as medium of instructions in schools. The teacher's inherent characteristics on the other hand refer to those characteristics of the teacher, which are part of his personality and intellectual make up. They include the teacher's sex, age, attitudes, interests, empathy, and understanding of human relations.

According to McKenzie (2009), an effective teacher must spend much time on strategic questions such as how to manage and manage well, how to reach child individually and give her or him the lesson needed. These questions may be grouped into several major categories that help to show the importance and scope of pedagogy. They include Needs Assessment (What learning is needed?), Professional Growth (How can I improve my teaching?), Classroom Culture (How do I cultivate the class culture for learning?), Strategy (How do I teach to maximize results?), and Resource Management (How do I make do with what we have?). Others are Problem Solving (What could go wrong and how do I cope?), and Orchestration, (How do I orchestrate all the different aspects of pedagogy?).

There is also the factor of Relating Pedagogy to Smart Use of Technologies and to Professional Development (how to use those new tools effectively to maximize student learning while orchestrating all of the other aspects of daily classroom practice).

Tuli and File (2010) observed that in the cause of an effective teacher interacting with the learners in the teaching-learning process, the teacher is influenced by his personality, teaching methods and his knowledge of the theory of learning. Ability to teach however demands that one exhibits qualities that point to Knowledge of teaching subject matter; Skills in imparting such knowledge to others, Temperament of listening to others' ideas and helping to reconstruct them and Flair for supervision. Regarding the complex interaction pattern that exists among teachers, learners and materials, the two researchers maintain that an effective teacher must demonstrate attributes which help to influence the good image of the teacher. These include: Knowledge of the subject matter; Use of effective methods and techniques as occasions demand; Giving of relevant and appropriate assignments to learners; Helpfulness; Impartiality; Sense of humor; Equanimity; Devotion to duty; and, Leadership qualities.

The perception of Nigerian secondary school teacher regarding what makes a good teaching also agree with the submissions of Rosmah (2010), Onike (2010), Adewuyi and Ogunwuyi (2004), McKenzie (2009) and Tuli and File (2010). A study by Ololube (n. d) which widely studied the role of teachers to guarantee secondary school effectiveness and quality improvement in Nigeria examined quality teaching approaches that ensure quality schooling vis-à-vis

students' academic achievement. Using both the qualitative and quantitative research methods, the study revealed that knowledge bases of subject matter, teaching skill (presentation, explanation etc.), general knowledge base and enthusiasm and devotion to teaching are regarded as the most important factors in determining qualities of good teaching. Moreover, the respondents interviewed defined quality teaching in terms of teaching skills and knowledge base of subject matter, instructional processes that are carried out by highly qualified teachers, the creation of effective learning environment, effective evaluation of students and teaching that brings about low dropout rate among students.

2.7 Evolution of the NCE Programme and its Goals and Objectives

The NCE was initially inspired by the Ashby commission, which recommends the training of grade one teachers in grade one colleges to be associated with university institutions of education. Since then, the programmes continued to evolve to its present stage. The original concept of the NCE programmes according to (2008) was aimed at producing advanced teachers who did not possess university degrees but who would be used to strengthen the teaching force of both primary and secondary levels, the ratio greatly favoring the primary schools. The great majority of the programmes' recruits were to come from school certificate holders. With time, this original concept of the NCE programmes gradually disappeared. Today, a very negligible percentage of NCE graduates, observed Adesina, opt for service in primary education and that the NCE programme itself is heavily oriented towards service in secondary schools. It may also be added that the majority of the programmes' recruits until very recently, came from grade two holders, another reversal of the original concept.

Until the coming of the National Policy of Education and its gradual implementation, the goals of the NCE programmes in the country were not well defined and consistent. Even as at 2000, Ogbonna (2007) observed, no widely known, well-defined, and consistent goals for NCE programmes existed. Afolayan did not however state why the situation remained so at this time despite the publishing of the National Policy on Education (NPE) a year before. It can here be opined that the NCE training institutions did not yet uniformly adapt the NPE prescribed goals for the NCE programmes. Moreover, there was no established educational body at that time, such as the NCCE, to regulate the activities of the colleges of education and ensure the uniform adoption of the NPE goals for the NCE programmes in all colleges.

The National Policy on Education (2004), first published in 1977 stipulated the following objectives for Teacher's Education adherence of the NCE programmes:

a. To produce highly motivated, conscientious and efficient classroom teachers for all levels of our educational system;
b. To encourage further the spirit of enquiry and creativity of teachers;
c. To help teachers to fit into social life of the community and the society at large and enhance their commitment to national goals;
d. To provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situation;
e. To enhance teacher's commitment to the teaching profession.

With the establishment of the National Commission for the Colleges of Education (NCCE) in line with the roles of the National University Commission (NUC), these disparities are eliminated. This means a more uniform interpretation and adoption of the NPE goals for teacher's education by the NCE offering colleges. It can be observed that an inference can be made of those of the NCE goals with pedagogical implications. These are to form the basis of assessment in the present study. They are:

1. Production of highly motivated, conscientious and efficient classroom teachers for all levels of our educational system:
2. Encouraging further the spirit of enquiry and creativity of teachers; and,
3. Provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situation

In its Minimum Standard for the NCE programmes, the NCCE has stated the objectives of the NCE, which appear to spell out succinctly the broad goals of teacher education as follows;

a. Discuss intelligently the main ideas that have affected and still affect the development and practice of education generally, and in Nigeria in particular;
b. Examine the main psychological, health and socio-economic factors that may help or hinder a child's educational performance;
c. Study learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement;

d. Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating, and imparting knowledge, attitudes and skills;
e. Develop, select, and effectively use appropriate curriculum processes, teaching strategies, instructional materials and methods for maximum learner achievement;
f. Broaden their intellectual perspective through the General Studies Education programme;
g. Demonstrate desirable attributes in moral and character development;
h. Discuss intelligently major issues affecting teacher education and the teaching profession in Nigeria;
i. Identify major problems of education in Nigeria, and their corresponding solutions;
j. Demonstrate proficiency in measuring and evaluating learning outcomes, as well as in carrying out appropriate research on educational problems in Nigeria.

As with the general objectives of teacher education, some of the objectives of the NCE according to the Minimum Standard are also of pedagogical import. These objectives include developing teachers' proficiency in:

a. Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement;

b. Professionally combining use of conventional and ICT or other innovational instructional/learning strategies in generating, and imparting knowledge, attitudes and skills;
c. Developing, select, and effectively use appropriate curriculum processes, teaching strategies, instructional materials and methods for maximum learner achievement;
d. Demonstrating proficiency in measuring and evaluating learning outcomes, as well as in carrying out appropriate research on educational problems in Nigeria.

As earlier stated, the pedagogical goals of the NCE training as given by the national policy on education are to form the basis of the present study. For the sake of convenience and clarity however, some of the goals can best be conceived in the light of the objectives of the programmes as specified by the minimum Standard of the NCE. Thus, the goal "To provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situation" is seen as implying the following objectives:

1. Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement;

Professionally combining use of conventional and ICT or other innovational instructional/learning strategies in generating, and imparting knowledge, attitudes and skills;

Developing, select, and effectively use appropriate curriculum processes, teaching strategies, instructional materials and methods for maximum learner achievement;

2. Demonstrating proficiency in measuring and evaluating learning outcomes, as well as in carrying out appropriate research on educational problems in Nigeria.

2.7.1 Current State of the NCE Programmes

The related literature also discussed the current state of the NCE programme and analyzed its problems and their causes, and the programme's prospects. Occasionally, the literature also proposed solutions to the programme's problems. Adeyanju (2008), on a more general ground observed the popular belief that the standard of teacher today is by common knowledge inferior to the old. He however cautioned that until adequate research has substantiated the view, generalization would be difficult to make. Despite the caution, he maintained that evidences such as rush and anxiety to expand, automatic promotion in primary schools, high failure rate and the lack of facilities in training institutions etc suggest that standards in general have been lowered. It can however be argued here that the presence of more professors and Ph D, masters' degrees, and first-degree holders today must have negated the possibility of the observed fallen standard. These sorts of arguments may therefore stay on unless there are contextual evidences to give an amicable verdict.

As relates to the NCE programmes, writers like Adeyanju (2008) also speak of qualitative and quantitative shortfalls. He attributed the problem of quantitative shortfall to a number of factors. One factor according to him was that educated but untrained persons are employed to train teachers for secondary schools. Other factors include lack of standardization of teacher training courses and the failure of the public to evaluate teachers in terms of the schooling needed for the job. This last factor is related to the present study although limited by the fact that parents are not among the study groups selected.

Jegede (2012) identified absence of curriculum change in the country as a factor in bad policy. The author attributed the problem to professional conservatism of teachers, their isolation, and their lack of ability to implement changes due to limitations set by the teachers' academic ability, lack of relevant equipment and overwork. In essence, Jegede is here alluding to the importance of ability to implement curriculum changes as one of goals of teachers training. This ability in teachers undoubtedly results from a good programme of teacher training. Jegede's observation therefore implies the inadequacy of teacher preparation in the country. Discussing the problems of the NCE programmes from the historical perspective, the author recommended certain measures for improving the general standard of teacher education. These include strengthening the quality of teachers at the primary level; organizing summer training programmes for the practicing teachers; enhancing the teaching of specialization subject, teaching skills and practicals in the teacher training programme; and, professionalization of teaching.

Various other researches however evaluated the quality of Nigerian teacher education and, particularly the Nigeria Certificate in Education (NCE) in a number of varying aspects such as the curriculum, students' output, and the general teacher performances. Adegoke (2013) refers to the concept of quality "as worthwhileness, efficiency, excellence, conformance, relevance, literacy, numeracy, and morality, retraces systematically the qualities of public education including (basic education) from pre-independence to date. Using qualitative research approach, documentary analysis and experiential practices of public education in Nigeria, he observed that the post-1976 universal primary education scheme lacked adequate planning and management. This actually affected its quality. Even the National Policy on Education serving as a signpost, is still threatened by such things as planlessness, under funding or mismanagement of funds, poor maintenance culture and politisation of educational policies and programmes. He recommended a list of quality control of the measures for prioritization by the Federal Government, which also included the teacher preparation programmes. He recommended under this that: teachers should be developed in innovative teaching-learning strategies and human relations to help promote cultural-empathy, problem solving and understanding of others. The relevance of this study to the present research has to do with its realization that teacher education in Nigeria, including that of the NCE, can only be realistic if the trainees are given the know-how on innovative teaching-learning strategies and human relations.

Iyiola, (2007:50) made an Evaluation of the Nigerian educational Curriculum, focusing on the 6 – 3 – 3 – 4 system of Education against the background of the

Extended Information Recall Process model which identifies the source, (the nation through the curriculum planners), the medium (the education institutions and means of passing the curriculum to the target), the learners, and performance (the product of the whole system which the source, the nation or the planners adjudge either ‘good’ or ‘bad’) of an educational programme. Simple percentage statistical analysis was used and a questionnaire tagged Evaluation scale for An Educational System (ESFES) was administered to 950 respondents consisting of primary, secondary, and tertiary schoolteachers who were at the time of the research resident in Oyo State of Nigeria. The results showed that 44.27% of respondents identified with the good intention of the curriculum planners. 97.9% was satisfied with the way the curriculum has been handled and passed to the learners or students; 42.3% believed that students receive the maximum of what is given out, while 16.77% felt the students who relieved the little would probably perform. The case of poor implementation was thus established by the researcher. Although the government was identified as the source of planning, it was at the same time seen as the cog in the wheel of the programme’s success. The author recommended that the government at all levels should stop politicizing education and establish a commission free of political influences which should its efforts towards proper implementation for the proper realization of the 6 – 3 – 3 – 4 system of education. Iyiola's findings are however just a portrayal of opinions or perceptions that need to be substantiated further in the light of the reality by means of the direct evaluation of the curriculum.

The problem of curriculum relevance or quality is not a problem peculiar to Nigeria alone. According to Wolfenden (2008), Mensah has noted that across the

West African region, a number of reports suggest the need to review and modernize the training curriculum. He maintained that the view of teacher education curriculum should be broadened. The curriculum should also have increasing emphasis on skills in analysis and reflection and greater articulation between theory and practice. He highlighted three issues in particular: (i) the need to give greater value and relevance to the school practicum and the need for support during this activity (ii) a more competency based approach to training and assessment of quality (iii) experimentation with more diversified types of training for different locations and career stages. The authors noted that a national review of the Nigerian Certificate in Education, the predominant pre-service teaching qualification, identified the need for the new curriculum to focus on active teaching skills and their development in the classroom.

In his Policy Evaluation of the Nigeria Certificate in Education (NCE) in Nigeria, Dada (n. d.) observed that the present NCE curriculum is geared towards making the recipient a subject specialist, trained in either one or two subject areas. The manner of training in these courses, he says, does not adequately reflect the challenges of teaching in primary schools because it is geared towards secondary school pedagogy and not towards primary school pedagogy like the former Grade II curriculum. At the primary school level, a teacher teaches across the subjects and not that he/she specializes in the teaching of one or two subjects. The only course geared towards primary school pedagogy is Primary Education Studies (PES) but the numbers of candidates offering the course is far too bellow the needed number put at 772,338 in the year 2000. Dada further observed that "with the introduction of the nine (9) year Basic Education Programme that has made

the Junior Secondary School an extension of the primary School, there is need to re-organize the NCE curriculum to meet the needs of teachers in implementing the programme. This will prevent it from ending up as did the previous attempts that have almost all failed because they never achieved their set out objectives. Another important deficiency of the NCE curriculum observed by the author is that new areas of knowledge and need that have been made to be part of the Basic Education programme like Information and Communication Technology (ICT), Sexuality Education, HIV/AIDS education is not part of the curriculum. He submitted that these areas are essential if our Country must develop like most advanced countries of the world and be in line with the United Nation's millennium development goal. The author concluded that the NCE Curriculum should be revised towards basic education pedagogy.

The Education Sector Analysis Unit of Nigeria Federal Ministry of Education (2005) on the other hand observes that the contents of teacher training institutions are being adapted to the changing needs of the society. It maintains that with the current emphasis on universal primary education, teachers are being prepared specially in Primary Education Studies and more credits are being demanded for certification in that study. The curriculum, observes the Unit, has also been enlarged to make room for computer education courses as a core subject, education on environmental and HIV/AIDS issues, drug abuse, breakdown of family values, cultism, sexual harassment and endemic corruption. It further maintains that government's attention has already been drawn to the need to broaden the information base of teachers and that efforts are also being made to address deficiencies observed in the skills needed to effectively involve the

learners in the series of experiences that will make 'subjects' like Mathematics, English, and Science meaningful and related to life.

The analysis unit observed that when the various categories of teacher training institutions were asked to identify those objectives of the National Policy on teacher education that they regularly achieved, the response showed that 76.3% of the institutions claim to achieve the objective of producing highly motivated classroom teachers. Different categories of teachers do not seem to contribute equally to the attainment of this objective however. For instance while 92.9% of the output of Colleges of Education could be said to be highly motivated classroom teachers**,** only 57 representing 1% of the output from universities and 75.0% from polytechnics and monotechnics could be classified as meeting that objective of teacher education as stated in the national policy.

One issue discussed by related literature is that of ICT literacy among products of the NCE, which, without a doubt is influenced among other things, by the level of such knowledge among the teacher educators themselves. A related study by Jegede (2012) examined the nature and impact of ICT trainings received by the teacher educators in Southwestern Nigeria teacher training institutions. Four hundred and sixty nine teacher educators participated in the study by responding to three research instruments. The research findings showed that more than half of the educators had been exposed to one form of ICT training or the other, but trainings had hardly included the use of ICT in instruction. Most of those trained received their training directly from the institution. Educators preferred mostly the inclusion of software skills on teachers' ICT training

curriculum. It was also found that training delivery has no varying effect on basic ICT skills.

Findings of this nature indicate that unless the teacher educators are themselves given the relevant ICT training to use in training the teachers, the ICT literacy at the nations' secondary education level will remain a tall dream. This is because using any aspect of ICT by a secondary school teacher in teaching is very likely to increase the level of computer awareness of the students. A clarification needs to be made however that the training received on ICT literacy by the teachers is not always relevant to their teaching and professional needs. In such cases, the ICT training will be of little or no significance to the teacher trainees and will not positively reflect on the secondary school products.

According to Ejieh (2009), a large proportion of the students in colleges of education do not have the requisite entry qualifications. He observed that some colleges even admit some of those students who could not pass the relevant papers at the General Certificate of Education (GCE) ordinary level on the condition that the affected students produce their passed results in those subjects before they can be awarded their certificates on the completion of their studies in the colleges. He reported that the Education Sector Status Report has testified that there are seemingly many opportunities for anyone who is interested and minimally qualified to enter the teaching profession, concluding that one does not need to be interested in teaching before entering the teacher education programme in either a university or a college of education.

According to Mohammed (2006), a recent research by Tee Kay Educational Consultancy Services revealed that there exist major gaps in the present NCE and

degree curricula. The gaps are found in computer education, small-scale research techniques, handling of large classes, special courses on learning disabilities, heath, and environmental studies and mother-tongue education courses. Other areas are improvisation skills in respect of instructional materials, resource management (instructional materials, funds, etc), skill for teaching multi-grade classes, especially in rural areas; critical analysis of the major primary textbooks, the national curriculum modules and sexuality education. The research further observed that the said gaps have urgent implication for pre-service training. They also have implications for those teachers already trained, using the present curricular and therefore need to be followed up with in-service continuing professional development programmes to correct these deficiencies.

In accord with Ejieh's observations on teacher preparation is Mohammed's (2006) submission that initial teacher training in the country is inadequate in preparing students for teaching. This according to him mainly derives from the poor form of preparation, added to which is also the inadequate attention being given to continuing professional development. He cautioned that it might be unrealistic to expect initial training to produce a fully-fledged teacher. Rather, learning to teach as a process that requires continuing support and resources should be supported with continuing professional development of teachers through various means. Such means include orienting teachers to curriculum or examination changes, upgrading qualification levels, donor-funded projects, professional teachers' associations in developing subject teaching such as teachers' unions, school based improvement initiatives, or individual teachers working to improve their qualifications, career prospects, or teaching skills. Ejieh

(2009) further noted that the issue of quality hardly receives the desired emphasis in the training of student teachers in either colleges of education or in the universities and that consequent to lack or decay of necessary infrastructure in the nation's tertiary institutions and poor funding, the student teachers are not exposed to enriched teacher education programmes.

As for the quality of the individual subjects of the curriculum and that of instruction at the teacher training institutions in the country, a study by Adeosun *et al* (2009) focused on determining the relevance and adequacy of Primary Education Studies (PES) curriculum to achieving the goals of basic education through quality teacher training. The findings showed that though the content and coverage of the curriculum is adequate, the teaching strategies need a lot of improvement. The study also revealed that the teacher trainees had no well-articulated understanding of the concept of basic education or even Primary Education Studies, on which their training is based. PES lecturers were also found by the study to have a lot to do in the area of self improvement/professional development and their instructional capacities to ensure that their teacher trainees, who will eventually implement basic education policies and curriculum, actually have the proper knowledge of what is expected of them. The study recommended that the required training given to PES students should imbue them with teacher competencies and skills needed to develop basic education, and which will make them contribute diligently to the development of the nation. It also recommended for focused training of PES lecturers and for the UBE teacher education curriculum to reflect both the innovation intended in UBE as well as the content of

the UBE curriculum, in addition to adequate instructional supervision within and outside the college system to ensure quality delivery of service.

Regarding the training of business educators, Chris (2011) observe that the nine colleges of education (technical) established to train teachers outside the four Universities and other colleges of education could not cope with the number of teachers required for the programme. He reported them to have submitted that the teachers were poorly trained, as many could not teach the subjects they were not trained in. He further observed that some skills are likely to become obsolete because of lack of updating knowledge by business teachers, hence the need for a workable staff development policy that would influence the retraining of business educators whose skills will turn out to be unmarketable. Such staff development will center on the area of new technology application relating to such things as internet browsing. The teachers also need to be attending seminars and conferences, reading relevant books and journals and playing active roles in relevant professional associations.

According to Umar (2009), despite the vital role played by the PES in exposing a teacher to different methodologies and innovations on how to teach all primary school subjects effectively, most colleges of Education in Nigeria have made the study of PES in them an optional issue. He observed that no matter the efficiency of teachers that do not study PES, there would necessarily be areas of inadequacies in teaching especially as it affects primary school education. He concluded by recommending that in order to attract the best brains to the teaching profession, PES should be made compulsory to all students at NCE level. This, he

said, is necessary since the teacher is a vital factor to reckon with in the education delivery process.

2.7.2 Position of NCCE on NCE Teachers' Attainment Goals

The National Commission for Colleges of Education, NCCE as a major stake holder in the production of teachers required for the successful implementation of primary and junior secondary education in Nigeria is not itself oblivious of the fact that the performance of NCE teachers at these levels of education has been very low. As a onetime secretary of the commission, Prof M. I. Junaidu (Junaidu, 2013) observed, the existing NCE programme in the country is associated with discrepancy between teacher certified qualifications and the quality of their on-the-job performance and that a major part of the problem has been an observed dislocation of the existing NCE programme from its service sector. Similarly, a onetime minister of Education, Prof. (Mrs.) Ruqayyatu A. Rufa'i (Rufa'i, 2013) noted that the existing NCE programme has been accused of being a tunnel vision and not capable enough to respond to the ongoing transformation agenda of the present administration. Even in a joint paper presentation by the Federal Ministry of Education and National Commission for Colleges of Education, Abuja (2013), the two educational bodies and very important stakeholders in Nigeria education noted the current dwindling performance of the pupils taught by graduates of the Colleges of Education (COEs) and the consequent mounting criticism of the achievements of school leavers.

Thus, over the years; the NCCE has been involved in a number of activities including conferences, workshops, critiquing sessions to address the problem of the quality of NCE programme in accordance with the mandate of NCE teacher training programme of producing quality teachers for the Basic Education sub-sector (Junaidu, 2012). The NCCE has been forced to focus on the contents and methods of the teacher preparation programmes. The outcome is a revised curriculum that pays greater attention to what the trainee teacher is expected to teach and the methodology appropriate for teaching them **(**Federal Ministry of Education/National Commission for Colleges of Education, Abuja, 2013). The NCCE reform also made a review of the methods of instruction, looked at how to provide an enabling child/learner friendly environment for our teachers and reviewed the minimum professional standards for teacher educators and came up with Quality Assurance Toolkit, that would address institutional evaluation as well as the needs of educators in the performance of their tasks (Junaidu, 2012).

2. 7.3 Prospects of the NCE Curriculum

According to Online Nigeria (2010), teacher education has also witnessed tremendous growth in Nigeria right from the time the first teacher training institution was established at Abeokuta in 1853. By 1926, there were 13 Teacher Training Colleges with student population of 320 and the number rose to 53 and 3,026 in 1948 respectively. The introduction of the National Certificate in Education and degree programmes in education in universities actually helped to influence the development of teacher education in Nigeria. For instance, the number of teacher education institutions dropped from 287 in 1962 to 160 in

1970, while enrolment rose from 31,170 in 1962 to 32,314 in 1970. The number of teachers teaching in Nigerian primary schools were only 1,857, 1970, but by 1977, the number had risen to about 197,750.

Furthermore, there was an increase in the number of colleges of education in Nigeria to 54, the enrolment of which increased from 60,324 in 1991 to 70,613 in 1995, indicating a growth of 17.06 per cent. With the phasing out of teachers training colleges and establishment of National Teachers Institute (NTI), the number of teacher education institutions will continue to decline. However, more teachers are being prepared through long distance learning programmes sponsored by NTI programmes. The government is determined to maintain the minimum standards for colleges of education and to realize her dream of making the National Certificate of Education the minimum qualification to teach in primary schools in Nigeria. To this end, in service training opportunities have been created for those who want to upgrade their knowledge and keep abreast of new developments in their fields (Online Nigeria, 2010). Contrary to this observation however, the in-service training opportunities created by the government are not yet satisfactory because those sponsored are usually part-time students and even those on full-time admission, are on work study leave.

2. 7.4 The Pedagogical Content of NCE Programmes and Teacher attainment Goals

Kanu (2010) observes that although Education Studies did not begin in Nigeria until the 1960s, giving training to people who teach others in specific fields of knowledge as an enterprise predated the beginnings of western type of education that is based on reading and writing in the country. That was when the

Rev. and Mrs. Freeman's nursery of the infant church was, like the schools of other Christian missionary societies that came after it, in-fact, a teacher education outfit and they were all fashioned on the traditional Nigerian peoples' way of learning-by-doing. Andrew Bell's Monitorial System of teacher training that then prevailed in the United Kingdom resonated well with the indigenous Nigerian peoples' apprenticeship pattern of professional education, which persisted even after the establishment of teacher training institutions in the country in the 1890s. Teacher training, during this period according to Kanu (2010), consisted largely in the inculcation of competence in pedagogic skills. He further observed that the establishment of the Yaba Higher College programme for secondary teacher education in 1932 introduced the concept of professionalism into teacher education in Nigeria. There was however hardly any attempt to study education at the College or anywhere else in Nigeria until the implementation of that recommendation of the Ashby Commission (1960) which called for the establishment of universities and the production of graduate teachers for the country's school system.

The NCE was initially inspired by the Ashby commission, which recommends the training of grade one teachers in grade one colleges to be associated with university institutions of education. Since then, the programme continued to evolve to its present stage. With the coming of the National Policy on Education and its gradual implementation, the goals of the NCE programme in the country came to be well defined and consistent. Among the goals of the NCE training, the production of highly motivated, conscientious and efficient classroom teachers for all levels of our educational system; encouraging further the spirit of enquiry and

creativity of teachers; and, providing teachers with the intellectual and professional background adequate for their assignment and making them adaptable to changing situation, are of pedagogical relevance. The NCE programme in the 50 colleges of education were however not standardized in terms of the college academic courses, admission requirements and the duration of the courses until 1987 when, with the establishment of the National Commission for Colleges of Education (NCCE), these disparities are eliminated.

Stakeholders in Nigerian education agree that teacher-training needs to be more teaching based and that training should be taken into the classroom. They also agree that placements take at least a year. Placements should be carefully monitored so that schools benefit more and teaching should be made compulsory at least during the first year after completion of a teacher-training programme (Voluntary Service Overseas). The NCCE minimum standards for preparing NCE teachers guarantee a competency-based and performance-based programme of training in which the following components are covered: General education consisting of broad background in the mainstream of human knowledge; Specialized knowledge of two types knowledge of teaching subjects, and knowledge of pedagogy or professional studies; The practicum of a minimum of 12 months. The competencies to be attained by graduates of this programme are Subject matter mastery to enable the sustenance of students' cognitive development; Pedagogy, by which meaningful learning can be stimulated; and, Skill processes, by which student development and acquisition of appropriate skills can be facilitated. Others include Resourcefulness, which enables one to improvise teaching aids; Behavior motivation, which enables one to provide

appropriate services to students; and, Evaluation techniques, by which appropriate tests are constructed, administered and analyzed (Ivowi, 2007).

Accordingly, Adeosun (n.d) observes that the3-year NCE programme covers: General studies (Use of English, Introduction to Computers, and so on) -14 credits/units; Study of the main elements of education (philosophy, sociology, psychology, theory, and history of education, comparative education, school administration, classroom management, subject pedagogy, and so on)- 36 credits/units; Studies in areas of specialization (school subjects) - 70 credits/units; and, Conducting a research project in an area of education/instructional practices borrowing from issues observed especially during teaching practice- 4 credits. The Nigerian Certificate in Education overall has three major components; area of specialization or teaching subject area, educational foundation and pedagogy (Afemikhe, 2004). Olakulehin (2007) also maintains that the NCE curriculum consists of the Foundations of Education (Historical, Psychological, Sociological, Philosophical and Religious Foundations); Pedagogy courses (Classroom Management, Curriculum Design & Development, General and Special Teaching Methodology, Measurement & Evaluation, Counseling, Design & Construction of Instructional Aids, and so on); and Teaching Subjects under the broad categorizations science, arts, social sciences. There is also the usual teaching practice exercise the duration of which varies across institutions.

A look at the nation's Teacher Education Accreditation Council's (TEAC) view of quality principles of teacher education shades some light on the pedagogical component of the NCE training programme. According to the

council, quality principles for teacher education programmes include evidence of Student Learning, identifiable in the student teacher's subject matter knowledge, pedagogical knowledge and caring teaching skill, which include the oral and written rhetorical skills, critical thinking, and the qualitative and quantitative reasoning skills that are embedded in subject matter, pedagogy, and teaching performance. They also include knowledge of other perspectives and cultures and some of the modern technological tools of scholarship. Teachers can be said to have acquired teaching skill at the level TEAC envisions (a) if they employ the teaching technologies that are available because they understand them; and, (b) if they reach all the pupils in their class through their knowledge of individual and cultural differences. Another condition is (c) the teachers' ability to continue to develop professionally because they understand how to learn on their own and how to apply what they have learned to novel situations in their classrooms. Other quality principles prescribed by the council are the existence of a valid assessment of student learning and evidences that decisions about the programmes are based on evidence, and that the programmes have quality control systems that yield reliable evidence about its practices and results and influences policies and decision making.

From what has been said above, it can be inferred that the NCE programme has the potential of enhancing teachers' attainment goals in Nigeria. In other words, the NCE training if well received by the trainees and properly implemented by them while teaching at the basic education level of the country will allow no room for the existence of any gap between the teachers' performance (attainment goals) and the goals of the NCE programme.

Despite the much emphasis by the related literature on the pedagogical and professional training of teachers, teacher-training practices in Nigeria including the NCE are being faced by a number of challenges. According to Cruickshank and Metcalf (1990) in the Journal of the Korea Society of Mathematical Education (2000) teacher preparation makes little effort directly or indirectly to provide pre-service and in-service teachers with precise professional, intellectual, affective, or psychomotor skills, the discovering was as a result of research on teaching. It has also been observed that Teacher education programme is still carrying the stigma of requiring students to absorb dull and irrelevant theory that offers little assistance to the budding practitioner. Thus, teacher candidates and experienced teachers alike tend to see course as theoretical, that is, by which they generally mean 'vague and impractical' (Journal of the Korea Society of Mathematical Education, 2000).

The global economy and competitive market place, the changing nature of job and advanced technology, changes in demographic nature of students and the growing bodies of knowledge about how people learn and what makes for effective teaching have caused teacher education to re-examine the basic principles and methodologies of teacher preparation. Moreover, research also suggests that the act of teaching is becoming increasingly complex and that highly competent teachers apply a range of practices for varying purposes, incorporate and integrate different kinds of knowledge, build up a sophisticated pedagogical repertoire, and adapt to learner diversity and shifting contextual forces. It is, therefore, imperative that teaching professionals responsible for teacher

preparation continually find ways to respond to these challenges (Tuli & File, 2010).

There is also the problem of controversy among educationists as to whether a teacher trainee should acquire just the practical skills he needs for teaching or more than that. Many teacher educators reject the view that a professional teacher should acquire more than just practical tools for managing classroom situations and that it is their job to present student teachers with a broader view on education and to offer them a proper grounding in psychology, sociology, and etcetera. This is because; many studies have shown that the transfer of theory to practice is meager or even non-existent. Zeichner and Tabachnick in Korthagen (2009) for example, showed in their research that many notions and educational conceptions, developed during pre-service teacher education, were washed out during field experiences. Moreover, researches carried out into the phenomenon of the transition shock showed that, during their induction in the profession, teachers encounter a huge gap between theory and practice. Consequently, they pass through a quite distinct attitude shift during their first year of teaching, in general, creating an adjustment to current practices in the schools and not to recent scientific insights into learning and teaching (Korthagen**,** 2009).

No doubt, the NCE cannot have remained immune to such problems and challenges as outlined above. As Moja (2009) observed, most Colleges of Education offer courses, which are not appropriate or relevant to the level and needs of most primary teachers. The courses according to him are largely of an academic nature as opposed to the development of processes, skills, and career

development geared towards the primary school. In a study by Ololube (2006) the results obtained from the data analysis show that Nigerian teachers require professional knowledge and professional teaching skills, as well as a broad base of general knowledge (for example, morality, service, cultural capital, institutional survey). Voluntary Service Overseas (n. d) also observed that the teachers do not retrain and that their teaching method and course content are often completely obsolete. It further noted that there is the frustrating tendency to be overly concerned with certificates at the expense of relevance to schools and the extent to which trained teachers are actually competent and effective. Moreover, there are no policies in place requiring and enabling teachers to improve themselves.

In general, across the countries of the African region a number of reports suggest the need to review and modernize the training curriculum with a broadening of the view of the teacher education curriculum: increasing emphasis on skills in analysis and reflection and greater articulation between theory and practice. Three issues in particular are commonly highlighted: (i) the need to give greater value and relevance to the school practicum and the need for support during this activity; (ii) a more competency-based approach to training and assessment of quality; and, (iii) experimentation with more diversified types of training for different locations and career stages (Watt, 2008). According to Iyamu and Otote (2010), the professionally trained teachers do not seem to demonstrate acceptable level of pedagogical competencies probably due to the low quality of training that they received. In what follows therefore, a review will be made on the various aspects of pedagogical competency of the NCE teachers in the Nigeria Junior secondary schools under such headings as teachers' methodological

evaluative and communicative competencies, skills in using internet and communication technology, critical thinking abilities and instructional adaptability to changing situations.

2.8 Quality Teachers and Pedagogical Relevance

While elucidating the concepts relevance and quality, Obanya in Educational Research Network for West and Central Africa (2003) noted that there is a high degree of commonality between the two concepts in education. He portrayed relevance and quality issues in education as two sides of the same coin, hence the expression: "Relevance-Quality Interface." He lamented that one cannot pursue relevance in education without at the same time (or in the same vein) pursuing quality; this is simply because quality can be assessed only to the extent to which it meets the criterion of relevance in its different possible manifestations. In the like manner, relevance has to be with reference to something, which qualitatively uplifts the direct beneficiaries of education. The author opines that Relevance-Quality interface in the Nigerian context will only make sense if re-thinking and re-engineering of education is geared to include broadening the base of participation in educational development and focusing on basic education that will lay a solid foundation for lifelong learning. It should also be made to include strengthening the scientific and technological base of society, restoring the glory of the teaching profession, curriculum enrichment all through the system, improved funding, improved management of the entire system and total societal cleansing through total national re-orientation.

The Issue of educational quality however, although a crucial educational concept, especially in relation to the present study which seeks to identify the pedagogical relevance of the NCE training to the needs of teaching in secondary schools in the northwest geopolitical zone of Nigeria, needs clarification. According to *et al* (2008), the concept of educational quality has as many different meanings as it has writers. They noted that the concept generally includes such things as what learners should know, that is, the goals of the education system as reflected and elaborated in the curriculum and performance standards; and, where learning occurs or, the context in which learning occurs. It also includes how learning takes place, that is, the characteristics of learner-teacher interactions (for example, the roles learners play in their learning, teacher and learner attitudes towards learning, other teacher practices, and so on); and, what is actually learned – the outcomes of education (for example, the knowledge, skills, competencies, attitudes, and values that learners acquire).

Education International (2009) has identified a number of views on the nature and meaning of the educational concept of quality. According to the Education International, an almost classical view of quality is held by Coombs (1985) who opines that qualitative dimensions mean much more than the quality of education as customarily defined and judged by student learning achievements, in terms of traditional curriculum and standards. This is because quality also pertains to the relevance of what is taught and learned - to how well it fits the present and future needs of the particular learners in question, given their particular circumstances and prospects. Coombs further noted that the concept also signifies significant changes in the educational system itself, in the nature of its inputs (students,

teachers, facilities, equipment, and supplies); its objectives, curriculum and educational technologies; and its socioeconomic, cultural, and political environment. The World Bank according to Education International (2009) also noted that quality in education is not easy to define and measure and that an adequate definition of the concept must include student outcomes. Moreover, most educators would also include in the definition, the nature of the educational experience that helps to produce these outcomes, that is, the learning environment. There is also the issue whether quality is only a matter of learning things well or not. From this perspective, quality is to learn the right things and to learn them well. It is however not good enough to learn the right things only half well and it may be even worse to learn the wrong things well.

Morgatroyd and Morgan according to Education International (2009) discussed three basic definitions of quality. These include Quality assurance that refers to the determination of standards, appropriate methods, and quality requirements by an expert body, accompanied by a process of inspection or evaluation that examines the extent to which practice meets these standards. Another definition is contract conformance, where some quality standards have been specified during the negotiation of forming a contract. There is also the customer-driven quality which refers to a notion of quality in which those who are to receive a product or service make explicit their expectations for this product or service and quality is defined in terms meeting or exceeding the expectations of customers. Different conceptions of educational quality also emanate from students, teachers, and parents. For many students, quality fairly exists where their skills are awarded and where their achievements are acknowledged. For parents,

quality is a school where the students are safe and where they can learn in a stimulating environment and for many teachers quality is a school where the students want to learn and where the working conditions are good (MacBeath et al. in Education International, 2002).

Identified three dimensions of teacher quality including teacher effectiveness, teacher competence and teacher performance. Effectiveness according to them is a system-oriented concept, having to do with the achievement of cooperative and organizational goals from the above. It is the degree to which a teacher achieves desired effects upon students. Odili (2011) puts it, it is how much, and how well students achieve the positive trials that determine commitment and resilience in the face of adversity might play an important role in determining teacher effectiveness.

According to Odili (2011), an attempt to identify personal qualities relevant to teacher effectiveness encounters two problems. First, defining teaching effectiveness in terms of ratings by students, observers, or supervisors does not always correspond with the actual academic progress of the student and secondly, there is the problem of selection bias. In order to avoid these problems Odili (2011) proposed three human traits as indices of teacher effectiveness, namely; grit, life satisfaction and optimistic explanatory style. Grit, is perseverance and passion for long-term goals, which has been shown to predict the accomplishment in challenging circumstances. Life satisfaction is the cognitive component of subjective well-being that reflects contentment with one’s current life situation. The optimistic explanatory style is evinced by the findings that experience with

aversive uncontrollable events can lead to the expectation that outcomes are unrelated to one's actions. Moreover, pessimists who habitually attribute bad events to stable and global causes and good events to temporary and specific causes are at greater risk for experiencing learned helplessness than those with the opposite, optimistic explanatory style. Therefore, the beneficial effects of optimism on performance in stressful circumstances are expectedly mediated upon by higher levels of grit and life satisfaction (Odili, 2011).

It can be opined here that grit, life satisfaction, and optimistic explanatory style cannot be the only human traits that impact on teacher effectiveness. Other traits that can possibly impact on effectiveness include faith, piety, courage, honesty, hope, truthfulness, and etcetera. Attempts at identifying teacher effectiveness must therefore take into account all these traits, for it to be comprehensive.

Closely related to the term effectiveness is efficiency, which according to Braun *et al*, (2008) refers to the optimal use of educational resources and facilities in improving access to schooling and the quality of education provided. They noted that efficiency generally comprises the functioning of the current structures and systems at different levels, including staffing and management; the availability, allocation, and use of human and financial resources; and, throughput and repetition rates, that is, the number of learners that enter and leave a system as well as the number of learners that repeat any grades. According to them, there evidently exists a complex interdependence among these three attributes.

Competences are the skills effectively and efficiently acquired when teaching. It includes according to Odili (2011) what is more generally referred to as teaching skills which is the ability to organize and teach in interesting and flexible ways, using good teaching methods. Competences necessarily relate to quality because the aim is not just to teach but to teach well. It is reasonable to assume that teacher competence is related to students' attitudes to schoolwork and learning as well as students' self-confidence and self-conceptions. Indices of competency in teaching mathematics according Odili include: ability to innovate, enquire and create during the mathematics teaching and learning process; capacity to encourage a favorable atmosphere for the process of mathematics learning; and, capacity to face socio-cultural diversity during the process of mathematics teaching. Other indices are teamwork capacity in the professional work of the teacher; capacity to self-criticize their role as a trainer and as teacher of mathematics; skill to apply mathematics knowledge capacity to adapt, update, and project as a teacher of mathematics; and, capacity to foster and encourage ethical development in the student.

Specialized competences in teaching mathematics were identified by Odili (2011) as: skill to plan didactic activities in mathematics; capacity to face curriculum, methodological and technological demands; skill in using varied teaching strategies; and, capacity to understand, identify and apply mathematics learning theories skill to encourage learning through problem solving in mathematics by means of research and active methods. Other specialized competencies identified by him are skill to follow, develop, and describe mathematics reasoning; skill to describe mathematical ideas; skill to relate

mathematical development areas to other disciplines; skill to use updated assessment procedures; and, capacity to design development projects or projects that contribute to improving the teaching of mathematics at local, regional or national level.

The current review of the quality of NCE teachers will therefore, in the light of the forgoing discussion take into consideration the terms efficiency, effectiveness, performance, and competency as aspects of teacher quality. Teacher performance relates to the teachers' subject knowledge and ability to plan and structure the content (Odili, 2011). Without this, teaching will lead to poor results immaterial of the amount of learning and experience the teacher may have acquired in the technicalities of teaching.

Several researches have however come to observe quality deficiency among the NCE products teaching in the primary and secondary education levels of the country. Okebukola (2010) for example noted that at the secondary and higher education levels of Nigerian education, teacher quality could not be rated above the average mark. Among the causes of this unhealthy state of affairs, he rightly noted, are the toll exerted by the brain drain phenomenon and the low rating of the teaching profession. These had exerted profound influences on teacher quality, leading to lack of interest in the teaching profession with the consequent pervasive notion that only the academic dregs make up the bulk of teachers - both in-service and practicing. This notion is highly contestable giving the high caliber, commitment, and industry of a good number of teachers.

Oguntimehin (2009) discovered, in his assessment of the effectiveness of teaching personnel of NCE distant learning programme of the National Teachers Institute (NTI) Kaduna,in Ogun state of Nigeria, that the teaching personnel of that programme were qualitatively inadequate but quantitatively adequate. This probably explained why people look down on the certificate. With this caliber of teaching personnel, the programme may be devoid of acceptable standard. No wonder then that many universities do not accept the certificate for admission purpose. Although, the NCCE stipulates that bachelor degree holders are qualified to teach NCE students, considering the quality and attitude of the present Nigeria University graduates, Masters Degree holders and/or years of experience/graduation should be taken into consideration for those to teach the NCE.

While emphasizing the part time teacher training programmes, Okebukola (2010) observed that the existing model and practice of teacher education spew out teachers that are deficient in content and methodology. He observed that the current centers for part time teacher training have weak pedagogical bases and frameworks and that the input into many of them is of doubtful quality. The process, he said, seriously lacks rigor, quality and quantity of teacher trainers, and the quality of contact. The products of the system are therefore weak in knowledge and pedagogy. This observation is of some bearing to the present study because the proportion of the products of the part time programmes teaching in primary and secondary schools is by no means negligible.

The thrust of Abdullahi and Onasanya's (2010) study was to assess the effects of teacher effectiveness as regards to certain variables like his educational qualifications, teaching experience and curricular activities, on students' achievement in Mathematics. Results of ANOVA revealed that apart from teachers' qualification, there were significant differences among the three study groups used by the study, in all the variables of teacher effectiveness considered in the research. Furthermore, the results of multiple regression analysis showed clearly that the subjective independent variable predicted considerably the objective measures of students' achievement in Mathematics. It was therefore, suggested that the present secondary school students' poor achievement in Mathematics could be improved if only qualified and experienced teachers handle Mathematics at the senior secondary school level but such teachers need be adequate provided with relevant instructional facilities. The problem with this study is however that it used the students in assessing teachers, carrying with it all possibilities of subjectivity arising from students' relationship with the teachers assessed. The students' assessment of teachers could also be handicapped by their lack of experience.

Teacher performance is also limited by teachers' availability. The Education Sector Analysis Unit observed that, of the teachers sampled by the analysis, 56.5% teach all the subjects on the timetable to a single class, an indication that the preparation of the teachers and the use to which their training is put are diametrically opposed. This, says the unit, necessitates the need for a new type of teacher or a review of the use of teachers. Moreover, only 12.5% of the pupils responded that their teachers used varied techniques in delivering their

lessons; 4.1% acknowledged that their teachers were regular to classes and 2% adjudged their teachers as always punctual to classes. When the pupils were segregated according to subject areas that are core to all studies, a more consistent assessment emerged. According to the analysis, there is a total lack of coordination in determining the types and number teachers required for teaching in Nigerian school

2. 8.1 NCE Teachers' Methodological Competencies

Methodology refers to the processes of teaching and learning, which brings the learner into relationship with the skills and knowledge that are specified and contained within the curriculum (Harris & Muijs, in Ololube, 2007). According to Ololube, (2007) teaching methods as the means or procedures used by teachers to aid students in having an experience, mastering a skill or process, or in acquiring an area of knowledge. This is why, according to Ololube (2007) psychology of education, teaching method courses and curriculum development and evaluation play an essential role in teacher education programmes. Unfortunately, teacher-training institutions in Nigeria have been critiqued for inability to produce teachers who are properly grounded in pedagogy and content as well as ability to collaborate professionally in the work environment. For example, educationists observed that the transition from academic theories in universities to classroom practice has often been very sharp suggesting that student teachers are not often properly groomed to put into practice current pedagogy and interactive skills that has been theoretically learnt (Ogonor & Badmus, 2006**).** In his findings, Olalube (2007) also noticed that although trained teachers in Nigeria take into account the individual differences that exist among students when teaching, there are

differences in the way and approaches trained and untrained teachers go about their role in the instructional process. The author concluded by suggesting that a great deal of importance should be attached to developing the untrained teachers in the process of teacher training because quality teaching is scored high in the evaluation of an effective teacher**.**

Edukugho (2006) reported Obanya as saying that in respect of secondary education in Nigeria, it was found after a study, that classroom teaching styles are dominated by: Frontal Teaching, the teacher standing in front of the class and talking down on the learners. Its other features are talking and chalking, the teacher saying things and immediately writing these on the chalk board with no interesting discussion; The textbook as a god, and not as a guide; The tendency to follow textbook exactly the way it is ordered; and, the habit of not supplementing what is contained in the textbook. He reported Obanya to have concluded that teachers determine what ultimately happens to educational policies, to curriculum guidelines, the use to which teaching-learning materials are put, etc, and in fact, the fate of a nation's huge investment in education. In the same vein, Marinho, (2009) observed that although the new curriculum recommends learner-centered approaches to instruction, traditional methods of learning remain dominant and that modes of teaching are outdated and focus on a teacher-centered approach, which assumes the teacher to be the sole source of knowledge and the student, the receptor of the knowledge. He noted that there are few instances where curriculum expectations include measurable comprehension, application, analysis, evaluation, and problem-solving competencies.

In fact some researchers have even come to discover that secondary school teachers including those with NCE as teaching qualification, immaterial of their teaching experiences perceived it difficult to apply (some) methods of teaching in the classroom. In one such a study, Okigbo and Okeke (2010) found that although there was a significant difference between beginner and experienced teachers in their perceptions of the difficulty of integrating PI, II, and MD educational objectives into Mathematics classes, there was no significant difference between them in their perceptions of the difficulty of integrating ET into their classroom teaching. The research also found that the perceived level of difficulty experienced by Mathematics teachers in using those skills is independent of gender, suggesting, eventually that student Mathematics teachers should be prepared by their various institutions as to the importance and methods of teaching the subject. Another study by Kiadese (2011) that investigated the teaching effectiveness of prevocational subject teachers using descriptive survey research design discovered that there was a relatively low teaching effectiveness among prevocational subject teachers.

Researchers like Samba and Odoh (2011) found that its sampled secondary school teachers were not at home with improvisation. Though many teachers know the relevance of improvisation, factors inherent in the teachers themselves seem to stand out distinctly among factors militating against effective improvisation, followed by student factor. Twenty-five percent (75%) of the respondents agreed that improvisation has great relevance in the teaching/learning of science subjects, a positive indication that improvisation is a must task for every science teacher. The result however, still leaves much to be desired since

the twenty-five percent of practicing science teachers are unable to appreciate the value of improvising instructional materials, which can be quite detrimental in the training of young scientists. The findings also reveal inadequacy or lack of professional training of teachers for effective use or handling of local materials in the process of improvisation, with 92% of the respondents agreeing that this variable is one of the possible challenges of improvisation. Moreover, the study discovered that 73% of the respondents were of the view that it is easier to teach some concepts in theory than to improvise.

Closely related to the subject of methodological competence is the issue of inclusive teaching competence. In recent years, the debate about inclusive education has been observed to move from high-income countries like the United States and Canada to low-income countries like Nigeria. In Nigeria, an official policy of educating children and youth with disabilities, together with those without disabilities, in ordinary schools, has been adopted with a consequent growing recognition that including students with disabilities in general education can provide them with the opportunity to learn in natural, stimulating settings, which may also lead to increased acceptance and appreciation of differences. The debate has been perceived to result in pressure greater than ever before for most students with disabilities to access the general curriculum and attain the same standards as typical students (Ajuwon, 2008). Moreover, Section 7 of the revised National Policy on Education (2004) explicitly recognizes that children and youth with special needs shall be provided with inclusive education services. Ajuwon noted that these are undoubtedly lofty goals intended to improve the quality of

special education services, but much more is needed to translate the goals into concrete action.

The critical thinking ability of Nigerian secondary school teachers including those with the NCE teaching qualification has also been observed to be inadequate. Many schoolteachers according to Obike (n. d) still lay emphasis on memorization of facts thereby encouraging their students to be content with the notes given to them by their teachers, which they can reproduce almost verbatim, when the demand arises. Many schoolteachers seem to be satisfied with their old notes and old method of teaching (Obike, n. d). According to Ijaiya, Alabi, &Fasasi (2010), it is sad that Nigerian students including those at tertiary level have been reduced or have reduced themselves to mere passive recipients of information. Students no longer put up strong arguments in class or question their teachers' judgments or solutions to problems but simply wait to copy ill-digested notes. Lectures at the tertiary levels have become increasingly one-sided and teacher-centered with limited communication between the lecturer and students and among students in large classes. In a related research, it was found that there was a lot of emphasis on recall and understanding at both the under-graduate and post-graduate levels with minimal attention to the higher order questions. The findings also indicated poor level of awareness of the need by lecturers to facilitate critical thinking in their lectures and examinations.

According to Marinho (2009), traditional, teacher-centered methods of teaching do little to advance conceptual understanding and critical thinking, but in Nigeria, evidence shows that this is the dominant pedagogical mode. He reported

Oduolowu as saying that among other outdated instructional techniques, rote learning which focuses on the memorization and regurgitation of facts is still in use. Ajibola (2008) holds the view that this form of instruction and learning hampers creativity and does little to foster innate abilities for problem-solving and decision-making, calling for the need to incorporate child-centered approaches in curriculum development.

Ijaiya et al (2010) observed that the Nigerian curriculum is lacking in critical thinking skill needed by teachers to prepare good scheme of work and lesson notes, select appropriate content, methodology, and instructional materials, organize the class, set thought-provoking questions, respond to questions, and teach critical thinking skills, and so on. Other factors that negate the critical teaching ability of teachers according to the authors include over-emphasis on knowledge and recall at the expense of reasoning; excessive use of objective questions at the lower levels; and shifting emphasis to computer based testing at the tertiary level, which encourages factual questions. There are also the problems of over-crowded lecture rooms negating useful interaction and questioning; lecturers' work-overload and role conflict due to shortage of personnel; and, lack of emphasis on critical thinking in the various course contents. Other factors are those of poor knowledge of ICT by lecturers; poor training of students from the lower levels of education in critical skills; over-emphasis on certificate rather than skills acquired; and, over reliance on lecture method without the old tutorial classes. In addition to these, tertiary institutions, universities, polytechnics and colleges of education particularly in Nigeria pay little attention to co-curricular activities that promote critical thinking among the students population such as

quiz, and essay competitions, debates, public lectures and seminars by students, etc.

Another study that examined instruction between two independent variables of teacher quality and instructional strategy on student's performance in secondary school science discovered that the variables of teacher quality and instructional Strategy had positive significant relationship with achievement in science. Moreover, it was found that teacher quality and instructional strategy were two non-separate interactive independent variables in science education. Thus, efforts should be made by all concerned with teachers' recruitment, training, certification, and science education in general to ensure that these two variables are properly integrated into the teaching and learning of Science subjects in secondary schools (Anonymous, 2008).

2. 8. 2 Evaluative Competences of NCE Teachers

According to Omo-Egbekusen*et al* (2011), The American National Council on Measurement in Education and National Education Association has identified seven standards for teacher competence in the educational assessment of students as follows. These include choosing assessment methods appropriate for instructional decisions; developing assessment methods appropriate for instructional decisions; administering, scoring, and interpreting the results of both externally produced and teacher produced assessment methods; and, using assessment results when making decisions about individual students, planning teaching, developing curriculum and making recommendations for school improvement. Other standards are developing valid grading procedures, which use

pupils' assessment, and communicating assessment results to students, parents, other lay audiences and other educators; recognizing unethical, illegal and otherwise inappropriate assessment methods and uses of assessment information.

Education International (2009) lamented the general importance for teachers´ ability to improve the quality of education through their ability to reflect on their own teaching, critically examine the methods used in teaching while searching for other alternative ways. To do this successfully, there need to be increased quality awareness among teachers whom must also be helped to improve their teaching methodology and skills. A major way of achieving this is to make the teachers able to evaluate their own teaching and its results systematically. Evaluation is a general term used to describe any activity where the quality of provision is the subject of systematic study. The Education International (2009) however cautioned about the several risks in relation to present developments in the area of evaluation, one of which is the practice of focusing the evaluation too much on easily measurable school achievement, without taking into consideration the complexity of the reality in schools. Another risk is that teachers are sidestepped in the evaluation process and made only objects of the process. There is therefore the need to find and highlight alternative methods for evaluation which allow for the consideration of the complexity of the school environment and which give teachers a possibility to be part of the process.

In their research, "Standards for teacher competence in educational assessment of students: Nigerian teachers' ratings of their need", Omo-Egbekuse *et al* (2011) discovered that the Nigerian teachers sampled for the study were competent on

some of the standards of evaluation proposed by the study. These are: providing appropriate feedback to students/pupils; planning collection of information that facilitates decision making; interpreting informal assessment results; using accumulated assessment information to organize instructional plan; and, explaining why grades assigned are rational and justified; communicating to students/pupils, parents/guardian how to assess students'/pupils' educational progress. The teachers were on the other hand found incompetent in those standards dealing with recognition of unethical practices, namely, describing laws that affect assessment practices, explaining how assessment procedures can be misused, and knowing harmful consequences of overused/misused assessment procedures. The researchers however cautioned that the results for first standards look good because they were looked at from a macro level. A look at the individual items at the micro level makes it obvious that some items fall short of expectations as their mean is less than 2. The results of the study also indicate that significant differences exist between primary and secondary school teachers regarding their assessment competencies on the following standards: choosing/selecting assessment methods; administering, scoring and interpreting results of assessment; using assessment results when making decisions about students; using assessment for grading; and, communicating assessment results. Differences were however not observed in the cases dealing with development of assessment methods and recognition of unethical practices.

A study by Obioma (2009) however discovered on the contrary that Nigerian primary and secondary school teachers in general demonstrated poor knowledge of the elementary concept of Continuous Assessment (CA). Many of them

misapplied the CA instruments leading to more of continuous testing of learners instead of continuous assessment and a vast majority of them demonstrated poor knowledge of the basic concept of CA. Nevertheless, they were unanimous that continuous assessment requires taking decision on individual learners based on all records obtained during the course of a programme.

Christopher (2008) focused on language teachers' competence of language evaluation, maintaining that the Nigerian classrooms should ideally emphasize alternative or formative assessments as a means of adequately diagnosing as well as involving learners in their language development process. Badger & Wilkinson have however according to Christopher (2008) observed that an obstacle to this objective is the teachers' evaluative knowledge which is not adequate. Consequently, students are not led to find out who they are as literacy users or to reflect on their learning and achievement.

2. 8. 3 NCE Teachers' Information and Communication Technology (ICT) Competence

Despite the fact that both the federal and state governments of Nigeria have called for increased teacher training in computer technology in order to provide students the needed tools required in meeting the challenges of academic activities (Agbatogun, 2010), the school system in Nigeria, at all levels, seems to have been left behind in this interactivity. The entire school curriculum according to Olakulehin (2007) require urgent overhauling and/or enrichment, to equip participants in the education system with the knowledge, skills and attitude for understanding and appreciating the content and structure of ICTs. In Africa and

most developing countries of the world, Nigeria inclusive, there is a deluge of challenges confronting the application of ICTs in teacher training and in the educative process in general. These challenges according to Olakulehin (2007) include limited ICT infrastructures (in terms of facilities and competent staff); lack of information and information illiteracy in teachers and teacher trainers-technophobia; poor or nonexistent internet connectivity; and, inadequate learning resources including related educational tools, course curriculum, and other learning materials. Other challenges are the attitudes of teacher-trainees and teacher trainers which indicates a gross lacking in independent learning skills and reluctance to take responsibility for their own learning; software license and highly prohibitive costs associated with them; and, maintenance and technical support as well as poor power supply in most parts of the developing regions of the world. In a related research, Adelabu (2009) observed that the Nigerian teachers must be able to participate effectively in the contemporary ICT imposed revolution in knowledge creation, distribution, and management.

In a study that assessed Nigerian Teacher Educators' ICT Training, Jegede (2009) discovered that out of the 469 respondents, 265 had undergone formal ICT training. He observed that majority of those trained have done so at personal expense and that even where the trainings were organized by schools' authorities and computer centers, payments in many of the cases have been from personal purses. Those who were trained by institutions were the largest but this type of training by institutions does not mean a focused, targeted training meant for teacher educators; rather it was mere digital literacy that was meant for training in beginners' skills which had no pedagogical content as the trainees often include

non-academic staff as well. This, he observed, makes it difficult to develop a focused curriculum for ICT training for the trainees. It therefore indicates the extent of teacher educators' deficiency in ICT knowledge and understanding. Unfortunately the design of teacher education curriculum lies primarily with this category of people who themselves were minimally informed on ICT concepts. The Distance Learning NCE programme has also been found to have its high hopes and enthusiasm for ICT interfered with inadequacies in essential services and infrastructures: electricity, postal and telecommunication services and so on the nation is currently facing (Ololube et al, 2007).

It is natural to expect that the deficiency of computer knowledge among the nation's teacher educators reflect among secondary school teachers. Thus, in a study by (Olakulehin,2007) aimed at ascertaining the literacy level and attitude of science teachers towards information and communication technology (ICT) application in science, technology, and mathematics (STM) education, it was found that the science teachers' awareness of and knowledge ability of the educational applications of ICT are respectively far below expectation. Whereas their attitude towards the applications of ICT in STM education is not significant, their awareness of the benefits of STM education of access to ICT is significantly higher than expectation. 51.0% of the science teachers are however, computer literate though only 90.9% of these literate teachers can operate a computer without assistance; only 14.3% of those that have operated a computer have actually accessed the unique science apparatus software; 72.7% of the schools have a computer but none is linked to the internet or VSAT.

A study by Agbatogun (2010) which on the other hand made a survey of the influence of gender, academic qualification, and subject area on ICT literacy level of public secondary school teachers in Ogun-State, Nigeria concludes that teachers, irrespective of their gender and academic qualification have embraced the use of ICT devices for personal, academic, or instructional purposes. Their response to acquiring knowledge, skills, and competence in the manipulation of Information and Communication Technology is on the high rise without academic qualification prejudice. The study however discovered disparity in the ICT literacy level of teachers of varying subject areas. In another related study, (B score) though there is room for the government and its agencies to improve upon the situation. The teachers' attitudes towards ICT however vary and most have mixed feelings. While the majority of teachers (62% primary and 76% secondary) are interested in developing their ICT skills and knowledge, many non-computing teachers worry about the pace of developments, feel they cannot cope with the jargon associated with computers, and generally worry about their own lack of skills and knowledge compared to that of their own pupils. This study contradicts that of Olakulehin(2007) which among other things found that the science teachers' awareness of and knowledge ability of the educational applications of ICT are respectively far below expectation and that: their attitude towards the applications of ICT in STM education is not significant.

Attitude of Nigeria junior secondary school teachers to ICT may be reflected by the way they acquire computers and utilize the internet. Adeosun (2010) for example discovered in his study: 'Quality Basic Education Development in Nigeria: Imperative for Use of ICT', that only 33.7% of the teachers sampled by

the study claimed to have personal computer, while 27.5% admitted to being introduced to some ICT during their training as teachers. Also, 35.3% admitted to having an e-mail account and out of this, 50.6% claimed they check their mail just occasionally. Moreover, as much as 41.4% claimed they never visited the internet at all and that only 5.8% who do so went there for the purpose of research. It could however be noted that the nations' state of facilities such as electricity supply and law living standard of the Nigerian teachers have substantially contributed to this unhealthy development. In short, as Olakulehin (2007) states, Nigerian model of teacher training is rather restrictive in the sense that it fails to take into cognizance the burgeoning possibilities of information and communication technologies in the teacher production process.

2. 9 Teacher' Pedagogical Relevance and Adaptability to fit into Social Life of Immediate Community

Nigeria has made provision for the development of teachers, when it stated in its national policy on education that teacher education will continue to take cognizance of the changes in methodology and the curriculum and that teachers will be regularly exposed to innovation. Their professional in-service training will also be developed as an integral part of continuing teacher education.

Unfortunately, this ideal has turned out to remain a forlorn hope. Obike (n. d) for example has observed that even though the teachers may be professionally qualified, many teachers are occupationally incompetent, because they do not update their knowledge and skills. He expressed the opinion that, not much is done in this country in the area of helping serving teachers to update their

professional and academic training, especially teachers in primary and post primary institutions. For many teachers observed Wolfenden et al (n. d), the greatest influence on their teaching is their own experience of classroom learning as pupils but new teachers cannot be assured of finding examples of good pedagogic practice either in their own experiences of schooling or in the performance of their colleagues when they begin teaching. He also reported Mulkeen (2009) to have observed limited opportunities for continuing professional development opportunities.

Similarly, Mohammed (2006) observed that despite the fact that teachers need continuing professional development and substantial research seem to have confirmed this, not much importance seem to be attached to continuing professional development of teachers in Nigeria. Hence, training ends as soon as the teachers graduated and no opportunities exist for updating their knowledge and skills by attending seminars, conferences, and workshops that will enhance their knowledge and skills and ultimately their classroom practice. He submitted that budgets for continuing professional development are often small because funds to that effect are rarely allocated and even where allocated are inadequate and often misused. Moreover, in-service training workshops and seminars are very few and irregularly organized.

Most Technical Teachers are said to have never since their practice gone for re-training programme in order to keep abreast with the ever-dynamic technological innovation associated with the ever-changing needs of the society (Uwaifo & Uwaifo, 2009). It has also been observed that headmasters do not

always allow teachers to go to workshops. Instead of using this tool to improve their teachers, they use it as a political instrument by favoring the teachers who support their power base, or they send members of their family to the workshops instead of the teachers (Voluntary Service Overseas, 2010).

The importance of lifelong learning which makes teachers able to adapt to changing situations cannot be overemphasized. As Adeosun (n. d) noted teachers are key personnel in realizing the national goal of a knowledgeable society and as such they need to be lifelong learners themselves in order to shoulder the heavy responsibilities entrusted to them and be capable of positively influencing the students in their thoughts, behaviors and lifestyle.

There is also the problem of transforming theories into practice taken for granted in the Nigerian teacher education practices. Researchers have confirmed that theories are not always transformed into practices and the courses in educational theories given to teacher trainees are rarely transformed to practices. A research by Laursen (2007) for example, investigated student teachers' conceptions of theory and practice in teacher education and found that student teachers often complain that theory in teacher education is not relevant to practice. The student teachers view theory as a product of other persons' work and theorizing is not viewed as anything they do or can do themselves. They primarily want to learn to teach, not to reflect on teaching and therefore they want theories to be useful and to be 'tool-like'. They do not want recipes or manuals; they want freedom to develop their own way of teaching.

2. 9. 1 Teachers' Communication Skills

In Nigeria, there are strong indications to suggest that teachers lack sufficient content knowledge and up-to-date pedagogical and language skills to teach effectively **(**Voluntary Service Overseas n. d). This problem also reflects in the products of these teachers. Thus the nation-wide assessment of the quality of school graduates in Nigeria by the Nigerian Educational Research and Development Council (2004) as reported in Iyamu and Iseguan (2010) established that majority secondary school leavers failed to demonstrate appreciable and acceptable abilities in the areas of expression (spoken English), creativity, and problem-solving. The problem of expressive inability was attributed to the decline in the quality of education at all levels in the country, which in turn is linked to declining teacher quality. Iyamu and Isegun (2010) for instance observed that majority of the social studies teachers in secondary schools in South Central Nigeria are weak in the use of English language as a medium of instruction implying that these teachers are not likely to be able to communicate their ideas and thoughts effectively to the students in the class.

Startling research findings as above, which point to series of methodological in competencies among the Nigerian teachers of secondary schools, particularly those with NCE as their teaching qualification no doubt calls to question the quality of teacher training the teachers may have received some researches were therefore undertaken on this ground. For example, Iyamo and Otote (2010) discovered that NCE teacher Educators are incompetente in using enquiry method. This finding according to him corroborates the views of Mkpa (2010) and Popoola (2000) that the major problem of social studies education in Nigeria is the gross

lack of appropriate pedagogical skills and competencies by the teachers. Oguntimehin (2009) also assessed the National Teachers' Institute (NTI) Kaduna, Nigeria Certificate in Education (NCE) distance learning programme, in Ogun State of Nigeria by examining the teaching personnel effectiveness in the training of NTI (NCE) students. The findings showed among others that teaching personnel were qualitatively inadequate but quantitatively adequate.

Another study by Babalola and Yara (2010) in this connection evaluated the extent to which the Primary Education Studies (PES) programme has achieved the objectives for which it was introduced into the colleges of education in South West Nigeria. The study found that the human and material resources for the teaching of PES were inadequate; PES lecturers used lecture and assignment methods of teaching very often and that not all the objectives of PES have been achieved in the colleges of education in Southwest Nigeria. Nwaboku (2003) observed that with the poor state of facilities in the colleges of education visited for his study, it would be difficult for the lecturers to use a variety of strategies. Not all the institutions had enough teaching space and although microteaching is recommended as a compulsory technique to be adopted for training in pedagogy, the institutions lacked adequate facilities. He further observed that the sandwich programmes run by the institutions to enable serving teachers to update their knowledge and skills and acquire higher qualifications for teaching are unfortunately taught by the same methodologies without regard to the nature of the students in terms of age, maturity, and experience. Moreover, most of the books and journals in the libraries of the institutions visited are outdated, and the stocks inadequate for the number of users. The colleges also have no electronic

Library facilities. It is there doubtful that such institutions can deliver sound training to their students.

2.9.2 Assessment of teachers by the study groups

Related literature on the assessment of teachers by the study groups is of both theoretical and practical types. In each case, the related literature abounds but the standards for the assessments are hardly the original goals of teacher training. Moreover, the issue of assessing the teachers is not an issue given a mind to in Nigeria despite the importance this practice has in the educational literature. As Joshua (2008) simply puts it, this practice is not very popular in the Nigerian school environment. It could be added here that literature on this aspect of Nigerian education is accordingly very hard to come by, and this has made the present study rely on the foreign literature on the subject. According to Joshua (2008), research in teacher evaluation in this country has been scanty, a problem not peculiar to countries abroad such as the United States and the United Kingdom. In these two places, teachers at various levels of the school system including those in the institutions of higher learning are systematically evaluated periodically, by super-visors, principals, heads of departments, and the like. Even in these places however, the teacher evaluation methods used are often conventional. According to Weiss and Weiss (2008), such methods are based upon teacher directed models of learning such as lecture, demonstration, recitation, and modeling designed primarily to transmit knowledge and cognitive skills to students. Fortunately, new evaluation procedures that include evaluation as authentic part of teachers' everyday practice, with supports for regular reflection, are naturally taking root, as hierarchical controlling structures give way

to environments that sustain interactions in the colleges. In what follows, a review will be made of the said literature for more insight regarding the study groups and their styles and views of teacher assessment.

The term ‘assessment’ is often interchanged with the term ‘evaluation’. According to Wheeler (1977) however, the term evaluation is broader because it includes not only the process of determining what the actual educational goals are and comparing them with the expected outcomes but also involves judgment about the nature and desirability of any demonstrated changes. Assessment on the other hand refers to the process of investigating the status of an individual or group usually with reference to expected outcomes, and as such it includes within itself the term measurement which implies some sort of scale on which individuals can be ranked with respect to what they can do or what they know. Despite this distinction observed by Wheeler, it appears that when evaluation is used in relation to individuals it has the same meaning with assessment, when used in the same manner. In the educational literature therefore, the concepts of teacher evaluation and teacher assessment are often interchanged.

One other concept, which has more or less the same meaning with those of teacher evaluation and teacher assessment, is that of teacher appraisal. According to Credlin (2008), the terms evaluation and appraisal are used almost interchangeably in much of the literature dealing with the assessment of teachers even though the term evaluation seems to imply some kind of hierarchical intervention, whereas appraisal appears to denote to a greater degree, professional dialogue between colleagues – perhaps between peers. It is obvious therefore, that

the terms evaluation, assessment, and appraisal when thought of teachers have virtually the same meaning and this fact would be considered in the present review.

Issues often discussed by the available literature on teachers' assessment by supervisors include those of standard or basis of assessment; the procedure and method of assessment; the importance of assessing; teachers concern in the assessment issue and the reporting of its results.

According to Boyd (1999), a teacher assessor must set specific procedures and standards, which must result to important teaching skills, among the other things for a successful teacher assessment. Nevertheless, the issue of standard in assessing teachers is itself a vexing issue among educators. It has been observed (The ten Myth of Teacher Evaluation, 2006) to be an evaluation myth to suppose that specific prior goals are needed to evaluate a teacher because good teaching can be documented only after the teaching has been done by highlighting the actual specific outcomes and performance or preparations that played a role in that specific teacher performance. Moreover, teachers are good for different constellations of reasons and this contradicts the belief that a uniform system of evaluation is essential.

Carey (2008) dispels course credentials and the knowledge needed to pass teacher-selecting test as the only criteria for assessing teachers. Qualities such as work ethics, organizational ability, knowledge, and experience from outside education, the ability to work in teams, critical thinking skills, and high expectations for oneself etc contribute to success in the classroom. At the face of

Carey's argument however, Ritchey (2008) observed that teacher preparation programmes have developed some very worthwhile techniques for dealing with classroom diversity, discipline problems, learning difficulties and so on, and that the employment of teachers' certification and recruitment tests is at least theoretically useful in generating minimum prerequisite for teachers regardless of where they teach. Ritchey further observed that certification encourages teachers to make innovations in the different aspects of their profession. He also discarded the argument by Carey that certification is a gateway method for controlling entry into the teaching profession (using the guild model) but rather a mechanism developed over time in order to ensure some level of equity in education.

In a way, Ritchey's argument that teacher preparation programmes normally capped by the teacher certification are useful for the teachers in their dealings with the different classroom situations, and that the certification at least theoretically guarantees minimum requisites for teachers, lend some support to the present research. This is because the standard of certification is still the most highly valued and employed criteria of recruiting and even assessing the quality of teachers in the Nigerian public schools. Members of the public on the other hand, observed Oruche (2012), rarely evaluate teachers in terms of the schooling needed for output and social abilities in doing so. There appears a general belief in the ability of the teachers with high education to produce more quality products from the schools in which they teach. The importance of the standard in assessing teachers cannot be overemphasized. Despite the existing controversies on this subject in the educational sector, it can still be mentioned here that no proper

teacher assessment can take place in the absence of an adequate standard for so doing.

On the sources of information and procedures of assessing teachers by the supervisors, the educational literature has also not been unanimous. One form of teacher assessment emphasizes the evaluation of teacher's instruction Hastings in Osuuji (2009) identified three forms of information to look for by supervisors etc. when evaluating a course or a departmental range of courses from the perspective of teachers' classroom performance. These are: (a) entry behavior or antecedents-entry skills of students and instructors (b) activities, assignment, and transactions during the teaching and (c) the outcomes (the learning) of students and instructors. The evaluator needs to asses each of these aspects as regards to the expectations, the actual scene, and the judgment of experts. Hastings further identified the sources of information for evaluating teachers' instruction which include: (a) the instructor himself; for his intentions or expenditures about antecedents, transaction and outcomes (b) record of class activities (c) students; for the perceptions presented, adequacy of reference material and tests, and (d) evaluation by peers.

Assessing the teacher on the basis of his instruction as outlined by Hastings in Osuuji (2009) above is undoubtedly not a small job. The methods currently being used in assessing teachers seem to be a fragmentation of that obviously broad method of teacher assessment. Osokoya (2008), have come to identify such methods as assessment of teacher performance, assessing teacher's knowledge, and appraisal interview. Other methods used in assessing the teacher include student evaluation of teachers and peer evaluation of teachers. Teacher assessment

on the basis of student performance is according to the most common method of teacher assessment. Student performance is usually assessed in terms of all forms of test. Test according to Osokoya (2008), is one of the excellent Information that can be obtained from students when instruction is being evaluated.

Assessment of teachers on the basis of the performance of their students is one of the methods used by supervisors, principals and other educational authorities. This method is more in use in United States and other countries abroad. Joshua and Bassery (2009), however maintain that the use of such criterion in assessing teachers has several problems. In the first place, the method does not indicate those specific aspects of pupils /students' performance that can be attributed to a particular teacher. The method is also faced with the question of reliability and validation and the problem of retrogression in the performance of the pupils even when there is no change in the teacher. There is also the tendency that the behavior of teachers affects pupils' performance. However, subjectivity in the method of using student performance in assessing teachers is said to be of two kinds; good subjectivity and bad subjectivity. Good subjectivity is based on the best objective evidence available. It is controlled from individual bias and involves the interested audience, and employs some public logic (The Ten Myth of teacher evaluation, 2006).

The method of assessing teachers on the basis of the performance of their students is also said to endow the inspectors and supervisors with a high degree of power that makes the teacher often regard them as ruthless, capricious, and arrogant. Consequently, the teacher employs variety of ruses and strategies in

order to beat the system since their livelihoods depends, at least partly, on the pay (Credlin, 2008).

In Nigeria, students' performance in a school makes that school and its authority very important in the eyes of the higher authorities and the public even though the results are not used in giving remunerations to teachers or making allocations to the schools. Consequently, schools now embark on all sorts of unhealthy practices in order to improve the performance of their students. According to Akpan (2009), out of fright principals pretend to achieve success by going to the extent of writing examination answers on the board for the students to copy. Other practices include allowing the students to copy from their colleagues and allowing teachers in to examination halls to “help” the candidates. It can be concluded on the basis of this fact, therefore, that student performance particularly in the external examinations such as National Examination Commission (NECO) and Genera Certificate in Education (GCE) cannot be a good basis for assessing teachers’ performance in Nigeria.

Across the total range of the decision area in a teacher’s education programme, assessing the teacher’s pupil’s performance says Joshua and Bassery (2009), is only one of the three kinds of assessment related activities. The other two include assessing the teacher when he was still under the training and monitoring the programme operation and analyzing discrepancies found. Assessing the teacher’s performance on the basis of his students’ performance is according to Mensah and Wolfenden (2009), an assessment at the consequences level. The present research is within this observation. Mensah *et al* (2009) has

however cautioned, as Credlin (2008) did that when the consequence criterion of pupil attainment is used in assessing teaching competency, cluster of competencies appears to yield certain pupils outcomes in synthesis performance.

Observation of teacher's performance is yet another method used in assessing teachers by supervisors. Those who favor this method accuse the system of assessing teachers based purely on performance testing for taking a 'black box' view of teaching and ignoring the process and emphasizing the product. These educationists argue that it is the process rather than the product measures that form the most stable index of teacher effectiveness. Barton (2008) observed that the method of observing teacher's performance is by far the most common form of data collection for evaluation. The goal of this method according to him is to obtain a representative sample of a teacher's performance in the classroom whether formally and in planned fashion or informally and unannounced. Valuable information can be obtained using any of the two methods.

The method of assessing teacher by observing his performance has however been observed to have a number of weaknesses. One such a weakness is that observers can be extremely unreliable in how they interpret teacher actions. It is also said that head teachers in the case they are involved, have shown reluctance to observe their teachers for evaluation purposes Mensahand Wolfenden (2009). It is here submitted however that since the method focuses on the process and not the outcome, it provides the supervisors who employ it with the opportunities to explain the type of teachers they work with. The present research therefore believes that such supervisors are of enormous relevance to it.

At times, teachers are assessed on the basis of their knowledge. This method however is not favored by the Nigerian educational practices. It is criticized for inaccuracy and for not addressing the issue of student performance in relation to the teachers' knowledge precisely. According to Credlin (2008), many of the teachers who have failed to achieve desired scores have successfully completed teacher-training programme and in many cases are considered good teachers by their principals. Carey (2008) observed that researches that try to establish the relationship between the teacher's knowledge and student performance have not so far been conclusive. Bake and Cooper (2008) are on the other hand of the view that some such researches which relate certain indices of teachers' academic abilities such as prior test scores especially those related to verbal ability, and selection or competitiveness of the undergraduate school teachers attended, are positively associated with their student's outcome. Appraisal interview is yet another method used in assessing teachers. It is said that this particular method can help in training, identifying problems, priorities and training needs, but according to Akinjolu (2010) the method does not reflect the real classroom situation.

Supervisors, principals, and evaluators also use students to assess teachers. According to (2008), students can be a very good source of data regarding the perception of structure, relevance of material presented, adequacy of reference material presented and tests. He however observed that the information given by the students on teachers must be checked against observations of the instructor's descriptions.

A more specific and related study of students assessment of teachers is however that of Joshua and Joshua (2008). According to their study, student's rating of teachers is one of the inexpensive and popular methods of assessing teachers. Moreover, some studies have discovered some modest degree of relationship between the students rating of teachers and students achievement scores. There are however many questions about the validity, reliability, generalizability, utility, interpretability and acceptability of student ratings as means or measures of assessing teachers on their jobs. This is more so when the results of such an assessment or evaluation are to be used in such decisions as teachers promotions, determination of tenure, dismissal and forms of award/reprimand.

Joshua and Joshua (2008) discovered that Nigerian teachers sampled by their study showed a significantly negative attitude to student evaluation of the teacher irrespective of the use to which the result might be put. In this regard, professional status of the teachers, their gender, geographical location, academic qualification, and teaching experience makes no significant difference. The research also discovered that the Nigerian teachers showed more negative attitude to the student evaluation of teachers when such evaluations are to serve summative purposes than when they are to serve formative purposes. This is because the summative evaluation has to do with such things as promotion, salary increase, termination of contract/appointment and other forms of award or reprimand.

One difficulty with the study of Joshuas is that of applying the findings to the generality of Nigerian secondary school teachers in view of the fact that the sample used in the study is a stratified one selected from the Akwa Ibom

secondary school teachers only. Omolade (2008) has also criticized the authors' recommendation that policy makers and school administrators should exercise a great deal of caution in using results of student evaluation of teachers especially in matters that bear on personal decision affecting teachers directly. The recommendation is according to Omolade a limited one because the issue here is not just that of caution since the summative evaluation when limited to the result of student evaluation of teachers is dangerous. It is that of the summative evaluation of teachers being a comprehensive one and not limited to just one aspect from one section of the learning community in order to avoid the observed danger.

It may be said here that results of students' assessment of the teachers can still be used as the teachers own observed performance of the teachers in the process of instruction. When such ratings are limited to the process of instruction, the problem of subjectivity is seemingly minimized. It is unfortunate that in Nigeria, the method of student assessment of teachers is more used in tertiary institutions and hardly ever used in secondary and primary schools. Joshua and Joshua (2008) have observed that the method can be applied at the secondary and even the elementary school levels.

One study by Joshua and Bassey (2009) assessed the teachers' perception of student evaluation of teaching effectiveness by surveying the views of secondary school teachers on the matter. A sample of 120 teachers out of 580 in Calabar metropolis of Nigeria was used for the study. The study revealed that most of the teachers favored that students assess their teaching effectiveness more for formative purpose and a lot less for summative reasons. These teachers'

perception were determined not by teachers gender but by their professional status and teaching experience. They can be interpreted in the light of the teachers' belief that when students rate or assess the teachers' teaching effectiveness, they would restrict the judgment to the issue of instruction alone and as such would be more objective. When on the other hand the students evaluate teachers on broader terms, they don't restrict their judgment of the teachers to the process of instructions and as such the possibility of student becoming subjective in their judgment is very high. The students may also not be experienced enough to rate the other traits of the teacher in addition to the quality of his instruction.

Akpotu and Oghuvbu (2009) in a study examined the contributions of students as an innovation in the performance appraisal of teachers in Nigerian secondary schools. According to the findings, the student subjects of the study perceived their teachers as competent and dedicated. The students however saw the male and urban teachers as having a more cordial relationship with students than their female and rural counterparts. The urban teacher was also seen as more competent in content and pedagogy. This study, although not specifically on the relevance of the NCE teaching qualification to the professional demands of those teachers of secondary schools who possess them is in fact implying that students' assessment of such teachers is positive. One basic assumption of the research under review is that student assessment of teacher has no defects of any kind. A study by Arubayi (2009) which reviewed the evidences on whether or not students' rating are reliable and valid enough to be used for the purpose of improving instruction and teachers effectiveness confirmed that there is seemingly measures of consistency, stability and validity of student ratings in the existing literature. Some variables

identified to have a low to high levels of positive relationships with the students' ratings of teachers include sex of the rater and rated, class size, mood of students, rank of instructors, grades students were expecting, time of the day courses are taught etc. Arubayi also observed that the use of student ratings are seen to improve or likely lead to the improvement of instruction, provided the evaluation data are fed back to instructor and that an expert or consultant provides assistance to the instructor

Teachers' peer evaluation is often discussed by the relevant literature (Barton, 2008, Credlin, 2008 and so on.) as a form of teacher self-assessment. The results of peer evaluation of teachers are also used by supervisors, principals, and other evaluators. It is even argued that the system of peer evaluation is not for the teachers but also for the administrators who can also be made to evaluate their own peers (Gil, 2001). The American Federation of Teachers (2008) also argue that peer assistance and or review programmes allow teachers in trouble to be evaluated by people who are well trained in the field, to get help and to be observed over time. The association maintains that peer assistance programmes provide a fairer and more comprehensive system of review than most traditional teacher evaluation systems currently used.

In a study conducted by Joshua et al (2006), the general attitude of Nigeria secondary school teachers toward peer evaluation of teachers was investigated. The study also sought to determine whether teacher characteristics such as gender, school geographical location, and academic qualification affected Nigeria teachers' attitude toward peer evaluation. The study revealed that the general attitude of Nigeria secondary school teachers toward peer evaluation of teachers is

negative, whether the result of the evaluation serves formative or summative purpose. It also revealed that for both the formative and summative purpose, the general attitude of Nigerian teachers is not affected by the teachers' professional status, gender, school location, academic qualification or teaching experience. It could be opined here that the negative attitude of the Nigeria secondary school teachers is partly the making of the type of academic environment in which most of the teachers have now come to find themselves. It is a dictatorial rather than a democratic environment, which creates a lot of mistrust even among the teachers themselves. Peer evaluation cannot thrive among the teachers of such an unhealthy environment.

The existing related literature often looks at the issue of teacher evaluation whether by the supervisors or by the principals from the perspective of accountability. Gil (2001) distinguished two forms of accountability in this regard; the outcome accountability, which relates educational input to output, and the transactional accountability, which holds teachers responsible for the transactions that, occurs within the class room. The outcome accountability is difficult to measure because of the difference of various outcomes, absence of adequately developed trustworthy measures of these outcomes and the problem of determining the amount of student learning for which the teacher is responsible. This has led the educators and the public to emphasize the transactional accountability the sources of which include tests, classroom researches, implicit assumption about the importance of specified transaction of student learning and morality. The author however observed that taste, which has its bases in aesthetic preferences, could not serve as a reliable source of accountability. Classroom

research and the implicit assumption about the importance of specified transaction for student learning also contain assumptions about the relationship between transaction and student outcome yet to be verified. Regarding morality as a source of transaction accountability, the problem is that behaviors considered immoral in classrooms vary over time and that some teacher behaviours considered bad might have positive impact on learning. Accountability according to Akpotu and Oghuvbu (2009) is however still a largely untested concept of education in Nigeria. This, one may opine, could be the reason why evaluation of teachers is not very much enshrined in the Nigerian educational practices.

One other perspective from which teachers are assessed by the supervisors and so on is to measure teachers' qualities, which are often associated with students' performance. Bake and Cooper (2008) have however observed that it is difficult to measure such teacher qualities as strong work ethic, people and communication ethics and enthusiasm for teaching and so on. Large scale educational policy studies on the other hand focus on relationship between the easily classified teacher background attributes such as certification status, content area, educational preparation, teachers degree level, teachers' own test scores and undergraduate and graduate institution quality. To date however, empirical analysis of the relationship between state level teachers certificate status and student outcomes are inconclusive at best (Bake & Cooper, 2008; Carey, 2008). Brake and Cooper (2005) further discovered that principal's undergraduate background matters when it comes to recruitment, selection, and perhaps retention of teachers with strong undergraduate academic background, especially in high poverty schools.

Literatures on supervisors' assessment of teachers also discuss the functions of such assessment. The philosophical basis of the functions of teacher assessment in general according to (2009), is the fact that one of the most important obligations of the teaching profession is the development and implementation of instruction programme that meets realistic societal needs of boys and girls. Personnel who can carry out these responsibilities must therefore be employed and some type of evaluation thus becomes a necessary part of the instructional programme to make certain that the performance of the instructional personnel is meeting the expected goals of the institutional programme. Certain inherent assumptions underline this outlined philosophy. Firstly, evaluation begins with the acceptance of a teaching contract, which terminates only when the teacher leaves the job. Secondary, since education is a process of linking together the educational goal of the school system and the performance of the teachers, it is assumed that there must be active participation in the evaluation by both the evaluator and the person being evaluated. Thirdly, the desired outcomes of teacher evaluation should always be increased effectiveness of personnel in improving the instructional programme.

The last assumption which sees the desired outcome of evaluation to always be the increased effectiveness of personnel of the instructional programme has however been explained away as a myth. It is observed (The Ten Myth of Teacher Evaluation, 2006) that there is scarce research to suggest that evaluation causes teachers growth; rather teachers will only improve their effectiveness when given adequate time to work on good ideas. There are on the other hand, other good reasons to evaluate teachers: to document current good practice, reassure teachers

of a needed and effective job, reassure audiences, identify good teaching practices for evaluation, and prevent bad evaluation practices.

Other researches (Creden, 2006; Shikfield, 2006; Forster & Poulshok, 2007; and, Natriello, 1984 and so on) however continued to believe in the role of teacher evaluation by the supervisors and so forth as a means of improving teachers' effectiveness among other things. According to Credlin, the goals and purposes of teacher appraisal can be categorized into evaluative and developmental goals and purposes. The evaluative purposes include such things as decision on pay, promotion, retrenchment, and termination. The development purposes include research, feedback, management and career development, human resources planning, performance improvement and communication. Shinkfield (2006) also maintains that teacher evaluations will most likely lead to improvement in the practice of the teachers if the teacher is being evaluated only with the expectation of positive outcomes in mind. Other researchers with similar observation include (Rizzo, 2010; West Ed, 2006; Boyd, 1999; & Teacher Evaluation, 2006); among others. Rizzo's (2010) study on teachers' and supervisors' perception on the correct and ideal teacher supervisory practices further discovered a congruence among the two groups that affective supervision consists of a collaborative approach involving a variety of models as well as more frequent visitations and more trusting and open relationship between the supervisor and the teacher. Similarly, Natriello (1984) in a research observed that there is a positive relationship between the frequencies of teacher evaluation and his leverage and that more frequent evaluation activity experienced a greater degree of effectiveness in relation to effort on their teaching tasks.

Ololube (2008) observed that one of problems education in Nigeria is facing is that of acute shortage of the employability of professionally qualified teachers and the recruitment of unqualified and untrained people into teaching. He discovered, in his research that trained teachers take into account the individual differences that exist among students. His research also found that there are relationships between teaching practice and methodological competence. Ololube's findings though not specifically on secondary school teachers with NCE as their teaching qualification are by implication suggestive of the fact that such teacher are also in need of some competency improvement.

2. 10 Assessment of Nigeria Junior Secondary School Teachers on Pedagogical Relevance

In Nigeria, experience suggests that secondary school teachers' assessment by supervisors is not very much based on trust and open relationship between the two parties. As Ezewu in excellence gateway (2001) observed, such inspections are not adequate:

> What we have now in our ministries of Education are office inspectors collating and sometimes doctoring Educational statistics which they obtained through radio messages or through area offices. Even those in the area offices hardly visit schools under them because transport claims are never paid by the government. P. 12

This inspection work is also of less quality because most of the inspectors are highly deficient, some in subject matter and others in professional competence. They are also not in touch with new development in the field of Education and inspection and many of them have no teaching qualifications.

Obviously, such an inspection and its results can be of little use to the professional development of Nigerian teachers in particular and to the Educational development of the country in general. The problem is further compounded by the fact that the said inspections are not always conducted with the seriousness they deserve in the post independent Nigeria Hakim (2015). Ajayi (1995) has observed that during the first decade of the existing of the Federal Ministry of Education's inspectorate division, only 180 full general inspections were conducted, that is, on the average of eighteen (18) schools a year. Majority of the existing schools were thus not visited. It should be noted that Nigerian secondary schools, which were at that time numbering 8,000, have now risen to 11,000. One may opine here that in view of the said inspection problems observed above, our secondary school supervisors cannot be very effective in evaluating the relevance of the Nigerian Certificate in Education (NCE) to the pedagogical demands of Nigerian secondary school teachers. It is doubtful if they can be as effective as the teachers themselves can in this regard.

2. 10.1 Principals' Assessment of secondary school teachers

Since the organization, administration, instruction, spirit and purpose of a school reflect largely the personality of the principal (Akpan, 2009), the principal's school supervision in general and assessment of the teacher in particular is undoubtedly very essential. It is not surprising that educational researches have examined the principal's role in teacher evaluation (Blasé & Kirby in Zimmerman & Melanie, 2008). The existing literature on this subject discus such things as; what teacher aspects to asses by the principals, methods of

assessing the teachers, the importance of the principals' assessment of teachers and the teachers' perceptions of the principals' assessment of teachers etc. It must be borne in mind however that here again much of the related literature is of foreign origin.

Different principals consider different things when they assess the teacher particularly at work. Hopkins (2009) has identified, through analysis, the different aspects of the teachers the principals assess. These include observing the learning instead of the teacher himself, the evidence of a solid lesson, student teacher relationship, and evidence of effective learning including positive classroom environment etc. It must be noted that the principals like the supervisors do not asses the teachers' performance in relation to the professional training he possesses as shown by Hopkins observation. The same may be said regarding the Nigerian principals who may therefore not be very effective in assessing the pedagogical relevance of the NCE for the Nigeria junior secondary school teachers.

There is also the issue of how accurate the secondary school principals assess teachers. According to Jacob and Lofgren (2006), while the principals can judge teachers' performance, there is little good evidence on the accuracy of the judgment. According to them, principals are good at identifying the teachers who produce students with the highest and the lowest scores in standardized tests in their schools (the top and bottom 10-20%) but they are less able to distinguish among teachers in the middle of this distribution. They also observed that ratings by the principals, both overall ratings and rating of a teacher's ability to improve achievement, effectively predict a student future achievement gains. No attempt

was however made by the researchers to compare the predictive ability of principals' assessment of teachers in relation to student achievement with either that of the supervisors' assessment of teachers or that of the teachers' own self-assessment.

The principals' assessment of teachers have however been observed to have many advantages in the educational literature. According to Gordon et al (2006), the principals' assessment of teachers form part of the job most principals truly enjoy because it involves helping teachers in developing new skills in order to improve their teaching and student learning. Zimmerman and Melanie (2008) also observed that many stakeholders would agree that principals are key players in the success and increased student achievement. The view however that the principal is the only and the best evaluator has been dismissed by some literature as a myth (The Ten Myth of teacher Evaluation, 2006). According to this observation other forms of evaluators like the supervisor' the teacher himself and the students etc. can provide information or opinion and should be involved.

Despite its importance, the principals' assessment of teachers has unfortunately not received the due consideration it deserves in the country. According to Hakim (2015), Nigerian principals are more preoccupied with administrators' job by way of attending meetings, conferences and spending hours in the office without necessarily knowing what goes on in the classroom. Such principals do not even delegate powers to their heads of departments and other subordinates. This makes the teachers loose, lazy, and indolent to the extent that they even refuse to attend classes. Akpan (2009) observed that the principal has to control educational quality using both external criteria, which are made up of how

the system can cater for the needs of the society in which the school situates, and the internal criteria, which are derived from how the students perform at standard examinations. Akpan further observed that in Nigeria, an ill-equipped student who did not have success in other steps can, out of fright pretend to achieve success here by doing a lot to cover up his failures often resulting to all forms of examination malpractice.

One cannot however discard all together the principals' assessment of Nigerian secondary school teachers as insignificant. It is the submission of the present study that the principals' assessment of secondary school teachers in Nigeria is higher, quality wise, than that of the supervisors. This is because the former is more frequent and involves a better cordial relationship between the assessor and the assessed.

2. 10. 2 Teachers' Self-Assessment

Literatures on teachers' self-evaluation discuss such things as the basis, importance, products and models of the system. Teachers' self-assessment like the previous forms of teacher assessment is not a practice honored by Nigerian secondary school teachers. Much of the literature on it is of foreign origin and even such a literature does not emphasize the self-evaluation of teachers in relation to the goals of their professional training. However, it needs to be noted here that the Nigerian junior secondary school teachers are the best evaluators of the pedagogical relevance of their own professional training in relation to the needs of their job of teaching in the secondary schools. Without a doubt, they can do this more than their supervisors and principals.

Teachers self-evaluation according to Tahir (2010) is more a feature of child centered curriculum than the traditional one. In the former, there is a greater widespread emphasis on teacher in which case the, teachers are encouraged to not only determine their objectives and methodology but also to undertake the assessment of what takes place in their classrooms without necessary reference to external assessment and as a personal professional responsibility. This explains partly, the reason why in Nigeria where the traditional method of teaching is still predominant, teacher self-evolution is not sufficiently practiced.

On the importance of teacher self-evolution, The Highland Learning and Teaching Tool Kit (2008) observe that it is universally acknowledged that improvement in educational system is dependent on effective teacher self-evaluation. Forster and Joseph (2007) argue that teachers need self-evaluation because not all of them have the benefit of being evaluated by administrators. Teachers also need to assess themselves even if only for self-professional development. Umunadii (2009), observed that teacher's self- evaluation is the most powerful means ever developed for the teacher to be the master of his own professional growth. This system, Bodine maintains, is bold but easy to understand. It gives the teacher a portrait of himself and information about the method he uses in the class.

Bagoro (2008) discusses the improvement of teachers' self-assessment in relation to the school and the performance of its students in examinations. He sees the quality of teachers as a thing that is very often accorded the highest assessment index in rating them. Through this rating criterion, it has been established that there is a high correlation between the quality of teachers and the standard of a

school. Furthermore, where merit is recognized and awarded appropriately, it leads to enhanced performance.

Mkpa (2010) however observes that there is some disagreement over the values of self-assessment by the teachers. On the one hand, if self Improvement is the goal, then self-assessment may have considerable merit. If on the hand administrative action is to be based on the self assessment, it is doubtful whether the self-assessment can be accepted because in that case the evaluator is both the judge and jury; plaintiff and defendant at his own trial. Only some limited researches such as Forster and Joseph (2007) have indicated that a person can evaluate his own work objectively. Such findings can however be explained away in terms of differences in the climate within which education takes place, the knowledge by the teacher that his identity will be protected and that the teacher's self evaluation will not harm his status.

Methods and procedures of self-assessment are among other things discussed in the related literature reviewed. There seems to be several procedures and methods proposed for teacher self-assessment. Schorn (2011) suggests that in assessing himself, the teacher can take to the use of recording and notes in a diary, which he will make for his own use. These will enable him in particular, reveal, and pinpoint problem situations by making observations of himself, which he will from time to time set up from a particular point of view. Hopkin (2005), is of the opinion that self-assessment can be done by the teacher using a checklist or by filling a Performa or by writing freely about the lesson. Most teachers, he observed, use a combination of these methods. Some other methods suggested by Petty include discussion with other teachers, keeping a diary, a learning journal

and assessment by a mentor or a critical friend who has some experience of teaching. In a study conducted by Ellet and Smith (2009), it was discovered that the use of videotape replay and self-rating instrument in teachers' self-assessment could be effective tools in helping teachers to modify their performance in the classroom teaching/learning process.

Bagoro (2008), suggests that the teacher must learn to use the same instruments of measurement of the classroom as the researcher, apply the measures to his own teaching performance, set a goal or more for himself in terms of measuring instruments, try out the new teaching performance and then repeat the first four steps. The sources of the goals can be models as seen in the films, at demonstration in classrooms of his colleagues or in his readings and examination of his own beliefs about the purpose of education. The measuring instrument used said the author must be applied to what the teacher does in the classroom and should include an analysis of the question used in examinations. It should also include a classification of questions used in discussion, a classification of concepts developed in textbook materials used by the teacher, description by students, observation by colleagues and audiotapes of class sessions and so on. Bodine further observes that through the discrepancies between the teachers' ideal and real, which now becomes visible to the teacher using these methods, the teacher is motivated to asses himself. Thus, in opposition to the view of Mkpa (2010) and other authors, Bodine believes in the objectivity of the teachers in this regard.

Some suggested methods for teachers self-assessments are based on the concept of reflection. According to Wolf (2006), the concept of reflection is what allows us learn from our experience and where we want to go next and that

through the concept the teacher begins the ongoing process of blending the art of science of good teaching practice. Wolf's suggested method of teacher self assessment termed the reflection cycle involves five steps. First, the artifact or evidence included in the lesson, that is, the one to reflect upon. The next stage is the description of circumstance, situation, or issue related to the selected evidence or artifact. This is followed by analysis, which involves digging deep into the why of the evidence or artifact and the how of its relationship to ones teaching practices, and then the appraisal, which involves the interpretation of the activity or evidence and evaluation of its appropriators. The final stage is the transformation in which the practitioner uses the insight gained from reflection in improving and transforming his practice. The author also proposed the convenient periods for undertaking this reflection but the periods proposed do not include the time the lesson is being presented. The reflection cycle proposed by Wolf is therefore limited in this regard.

Wolf's (2006) reflection process discussed above seems to be just a segment of the teacher's process of self-assessment. According to Classroom Curriculum Connection (2001), there are two levels of teacher self-evaluation; reflection on day-to-day classroom instruction and professional assessment. Wolf's reflection cycle is restricted to the first level, the classroom instruction. The Classroom Connection suggests the questions that will assist the teacher in evaluating his students' progress as follows: was there sufficient probing of students' knowledge, understanding, skill, and process? Were the assessments strategies appropriate to the student information required and for the instructional strategies used? Where the assessment triteness appropriate for the student information

required and for the instructional strategies used? Were the assessment conditions conducive to the best possible student performance? Were the assessment strategies far or appropriate for the levels of student abilities? Was the range of information collected from students sufficient to make interpretations and evaluate progress? Were the result of the evaluation meaningfully reported to students' parents and other educationists as appropriate? It should be noted here that these questions are restricted to students' progress and do not emphasize the learning environment and self-learning.

On the issue of teacher professional self-assessment, The Classroom Curriculum Connection opines that teachers should take stock of their professional capabilities, set improvement targets and participate in professional development activities. Some ways teachers can address their professional development according to this view include reflecting on the teacher's own teaching practices, reading professional documents and conferences and developing network with other professionals in the field. Although this view when considered makes a point that assessing the relevance of the NCE curriculum needs to take the issue of teachers' professional development into consideration, the concern of professionalism does not seen to be given the adequate consideration it deserves in the county. The Nigerian educational system is in a sorry state and this must have affected the issue of teachers' professional development adversely.

It could be concluded here that teachers' self-assessment like other forms of teacher assessment is not very popular in Nigeria. Moreover, the purpose of teachers' self-assessment including that of improving the teachers' self-development and morale, and those of the college (Highland Learning and

Teacher Kit, 2008), do not include enabling the teacher assess the relevance of his professional training. Consequently, the present research, which seems to employ the teacher in evaluating the pedagogical relevance of his own professional training, is breaking a new ground. It is here believed that teachers are in the best position to assess the relevance of their own professional needs. They can do this better than the principals and the supervisor when these last two asses the teachers.

2. 10. 3 Supervisors, Principals and Teachers' Self Assessment on Pedagogical Relevance

Some literature on teacher assessment seek to compare the various forms of teacher assessment with teachers' self assessment or inside school (internal) assessment which according to Jegede (2009) is more satisfactory as a procedure for assessing improvement in educational practice. Assessment by outsiders on the other hand is seen to carry some sanctions against teachers making them to evolve defensive and sometimes hostile responses, which inhibit continued efforts in the direction of curriculum improvement. Teachers' self-assessment is a form of internal evaluation, which more likely commits them into improving quality of the school. This according to Jegede (2009) is the argument for the professional mode of accountability and the rational for suggesting that evaluation has an important role in promoting professional development and curriculum improvement.

Rao (2008) observed that authors within the tradition of professional accountability agree that accountability procedure of the self reporting kind which renders educational practices open to view and responsive to critique can usefully

serve both improvement purposes in school and those of public accountability. On the basis of this tradition, Osurji (2008), have developed the idea of action research as one way of an explicit approach to self-evaluation. This concept according to Taiwo (2004) stands for a research carried out by practitioners with a view to improving their professional practice and understanding.

The external form of assessment, also known as traditional approach to assessment, has also been attacked by the related literature on several grounds. The traditional approach according to Mkpa (2010) uses ratings by supervisors or by specially trained observers. The ratings, despite all attempts to improve them, are according to him still biased, subjective and in many cases un-interpretable by anyone except the rater himself. Such forms of evaluation also have strong tendencies to disagree with each other. On the other hand, evaluation conducted by teachers in response to their perceived needs and interests has a greater capacity to promote professional development because the role of teacher is extended but their autonomy preserved.

A study by Imhanlahimi (2009) however discovered that teachers are biased in their self-assessment of teaching effectiveness, and that students and researchers are more objective in their assessment of teachers' effectiveness than the teachers are when they assess themselves. This is one of the few studies, which contradict the studies of McCormick and James (1983), Mclyntyre (1989), and Mkpa (2010), which favor teachers' self-assessment over the assessment by outsiders.

Principals and teachers also differ only slightly from one another on the ground of the purpose to be served when the teacher is evaluated. In a research by Shuli (2008), an attempt was made to discover through the perceptions of

elementary school teachers and principals whether existing practices for evaluating intended to help elementary school teachers improve student learning. According to the research, the principals and teachers listed accountability, teachers' professional growth, and improvement of curriculum and instruction as the three most important purposes. According to the finding, only a few principals believed that the purpose of teacher evaluation is to improve.

On the issue of relevance and feasibility of criteria generally used to evaluate teachers, a research by Simms (2007) discovered that both the principals and teachers found a given criteria to be both relevant and feasible for use in evaluating teachers. There however, was found some significant difference in their perceptions. Principals found the criteria to be more relevant than did the teachers. Principals also found the criteria to be more feasible than did teachers. Simms also discovered that separately measured, both teachers and principals found the criteria to be more relevant than feasible for use in teacher evaluation. This study, one may conclude, indicates the existence of difference between the manner the principals evaluate the teachers on the one hand and the way the teachers evaluate themselves on the other hand.

Conclusively, each of the current forms of evaluation reviewed above of teachers has both its merits that are worthy of consideration and demerits which limits its usefulness. A good method of teacher assessment must therefore combine the various approaches for more useful results. This is the approach of the present research It is unfortunate that these forms of evaluation are not based on the coals of teacher training as is the case with needs assessment which is to be reviewed in the section below

2. 11 Techniques of Assessing Educational Pedagogical Relevance in Teacher Education

This section reviewed the related literature under the under such headings as; the concept of relevance in teacher training programmes; assessment of educational relevance; needs assessment; techniques and models of needs assessment; and the groups of needs assessment models. Unfortunately, method of needs assessment which unlike accreditation studies enables the assessors to use such groups as teachers, school principals and supervisors etc and which also compares outcomes with goals of a training programme is not a practice given some valuable consideration in Nigeria. In a related argument, Gordon (2003) observed that assessment of performance for determining needs is virtually unknown to the Nigeria colleges of education. T-he present review of the related literature was therefore more theoretical than contextual.

2. 11. 1 The Concept of Relevance in Teacher Education

For long time in the past, man had not yet been able to reach a universally accepted the conclusion as precisely what knowledge, skills and beliefs are most conducive to a successful adulthood Obanya (2006). This problem of disagreement regarding what shall be taught in schools has come to be reflected in both the meaning of the term relevance itself and in what the teacher education programmes should aim at. The term relevance has been interpreted as functionalism by educationalists such as Ishaku (2008). Some educationists like Moja (2009), view relevance as concordance of the curriculum to an existing need in the society. In each of the cases, relevance is assessed through the process of

needs assessment. The term need, and hence the need assessment have unfortunately come to be controversial concepts in the educational literature.

Need as a concept according to Taba (2007) in Kit (2008) has been defined psychologically, socially and educationally. Psychologically, it means a. sociological aspect of psychological requirements of an individual; b. requirement of the biological nature of man; and, c. the ego and integrative requirements. Socially needs stands for those things that represent the requirement of the society such as those of socialization and social learning. In the purely educational context, need stands as the gap between the present state of an individual and the desirable objectives. It should be noted that this view of needs from the educational perspective is narrow since it does not consider the needs of the society. Taba himself did not observe the problem but noted that the issue of 'needs has become a hotly debated issue among the educationists as they use it to direct attention to the role of the learner and of the learning task as one criterion for curriculum making. The conception of need made it a difficult criterion for two reasons. First, it was difficult to reconcile the psychological concept of need with the educational use of the same term, which includes the idea of social and cultural demands and of the gap between these demands and attainment. Secondly, there were as many definitions of psychological needs as there are psychologists. A broader conception of need therefore becomes necessary; the type that considers both the child and the society together. Such a broad conception of need alone can be reconciled with the educational use of the same term. Operationally, need can be defined as the gap between the present state of

the individual or society or both of them on the one hand and the desirable objectives concerning the two of them together on the other hand.

Arising from the controversy over the meaning of need is the considerable rift among educationists regarding the issue of needs assessment. As Taiwo (2004), observes, few topics in education are hotter than needs assessment and that considerable confusion exists about such basic questions as what is a need assessment? And what should a need assessment be made up of. It may be added here that the question of scope and function of needs assessment has also added to the confusion and cleavage. Defining need assessment from the perspective of a whole school district for instance, Ellet and Smith (2009), viewed it as a comprehensive inquiry into the educational status of a school district and starts with the announced goals for education. With this sense, needs assessment includes not only the final measured performance of the students of a school against the intended goals of the school curriculum but also its educational facilities as well as the social and even physical environment. There are narrower versions of the functions and scope of needs assessment also. As Hopkin (2005), observed, "needs assessment may be applied to individuals, groups or institutions". This observation relates to the context of the present research, which seeks to assess a group of individuals.

The above view of Marco concerning needs assessment upholds Obanya (2007) definition of needs assessment and fits into the context of the present study. Needs assessment according to this definition is a 'formal process which determines the gap between current output or outcome and required or desired

outcome or outputs; places these gaps in the priority order; and selects the most important for solution". By outlining the procedures in the needs assessment, Kaufman's definition is elaborate. The definition suggested by Hopkin (2005), which sees need assessment, as the process by which one identifies needs and decides upon priorities, among them" on the other hand although equally inclusive is not as elaborate.

2. 11. 2 Needs Assessment Models

Literature on needs assessment interchanges the two words "models" and "techniques" with one another. The present research also uses the two terms interchangeably although the name need assessment technique will more often be used for those models which outline in more specific terms the procedure and tools of needs assessment.

Needs assessment models and techniques are seemingly as many as are purposes for which needs assessments are done, and as are the varying contexts, in which the assessments are conducted. Many of these models according to Roa (2014) seem to be concerned with goals verification. The models have varying degrees of partnership involvement and varying degrees in the extent to which the models include system performance criteria derived external to the educational system. They also vary from the ones that strongly emphasize the ability of the recipient to survive and contribute upon exit from a system to those that call for sorting potential solutions to problems in order of priority. Some of the models conceive need as a gap between current and desired outcome while others use it differentially at times as an outcome gap. Gordon (2003) has given a concise

outline of twenty-four needs assessment techniques most of which are said to fall under the rubric of what adult education literature refers to as gaming and stimulation device. Some techniques like content analysis, supervisory ratings, advisory council impact, panel survey, and anecdotal records etc can be used in both needs assessment and evaluation. Others like team or group problem solving, brainstorming and nominal groups according to the author can only be used in needs assessment. One other positive thing about the work is that for each technique outlined, uses and sometimes limitations are also stated. No assessment tools for the various techniques have however been stated.

Jegede (2009) have made a more elaborate discussion on the nominal groups technique, one of the techniques referred to by Gordon above. The technique according to them can be used to identify issues of which needs may be one. It could also be used for data collection, using teachers as the data source and, in curriculum deliberation and review. The technique also ensures that the priorities are genuinely those of the whole group not merely the most vociferous or powerful. The nominal groups technique involve first the groups listing aims individually, then preparation and display of master list showing this, for clarification, followed by the ranking of the aims by the individual and finally the display of a master list showing total voting's. It is possible to go into a second round of voting. Obviously, the nominal groups appear to be too expensive for the present research because the technique requires that the subjects be brought together for assessment.

A more relevant technique to the study is the Phi Kappa delta technique, which Gordon (2003) observed to be more economical finance and time wise, and can be used to collect data on people's perception. The author applied the technique in order to assess the perceived educational goals and needs of the Nigerian certificate in education programme. Although the present research will use this same technique, the groups selected by the study are different. Afolayan used NCE students and their teachers, most of whom had no real contact with learning environment in the Nigerian secondary schools. The study measured the discrepancy between goals and the extent they were attained through instruction at the NCE offering institutions. No doubt, some of the students involved in the study could not have completed their courses and must have made incomplete assessments. Such students could also have had no knowledge of what teaching in Nigerian secondary schools was. The present study on the other hand uses as its study groups secondary school teachers with NCE certificates, the principals of those schools and the secondary schools supervisors. These are, unlike the study groups used by Afoloyan, in direct contact with the context in which the NCE training acquired is put to use. The present study therefore measures, identifies, and prioritizes the existing discrepancies between the goals of the NCE programmes and the outcome of those programmes within the intended context.

Another point of divergence between Afoloyan's use of Phi Kappa Delta technique or model and that of the present study is that the former, in the absence of widely well known, well-defined and consistent goals for the NCE programmes and inadequate knowledge of needs assessment. Gordon (2003), modified and used Phi Kappa Delta's educational goals. The eighteen educational goals of Phi

Kappa Delta may not all be relevant to the professional demands of Nigerian secondary school teachers even as the Afolayan's study itself suggest. Today, the National Policy on Education has established more defined and consistent goals for the NCE programmes, which the present research will use after some due modifications.

2. 11. 3 Groupings of Needs Assessment Models

Some writers (Marco, 2010, & Peter, 2009) often group different assessment models or techniques on different grounds and analyze the features of the various groups. These attempts may be seen as steps towards theorizing the concept of the needs assessment.

One of the groupings of needs assessment was proposed by Marco (2010). The three groups he proposed which he inconsistently referred to as models are: the inductive (type i), deductive (type d) and classical (type c) models. In the inductive 'model' according to Kaufman, goals expectancies and outcome for education are first obtained from the members of the sub-communities from the school district. The programme is based on this data. The deductive 'model' starts from the existing goals and outcomes statement and proceeds to deduce an educational programme from this initial material. The classical 'model' usually starts with some general statements of goals or intent and proceeds to the development of educational programmes, which are implemented and evaluated. It may be observed that the three 'models' are more or less a classification of needs assessment techniques or models on the basis of logic. Models like those of Mesa Unified School District in California are inductive in nature for example,

having started from general to the specific. The needs assessment style adapted by the Temple City Unified District on the other hand was deductive because it started from the specific to general. The classical ‘model’ can in this sense be seen as deductive since it starts with some general statement of goals in developing the educational curriculum. Although, the present study is itself deductive logic wise, the aim in it is not to develop the curriculum but to provide some genuine ground for the reconstruction of the existing NCE curriculum. On this ground, the study differs from the classical ‘model’, which according to Kaufman proceeds from the statement of goals and intent to the development of educational programmes. This model he concluded, although most often used, usually by default is not recommended.

Marco (2010) categorized needs assessment on the basis of whether the discrepancy has been measured objectively or subjectively. In the objective types of needs assessment, the level of measured performance is compared with the level judged acceptable. In the subjective type on the other hand, selected judges are asked to indicate the extent to which needs exist in a given area Marco, (2010) says needs assessment whether undertaken by a group of judges or by the researchers themselves directly cannot be divorced from value judgment, the line of demarcation between the two types of needs assessment proposed by Marco is not clear. Marco himself noted this fact saying the line between the two approaches is somewhat blurred, for a value judgment is necessary in either case. If however, the presence of judge makes a needs assessment objective as first proposed by Marco, the present study can be said to be an objective one also. It

has for its judges the secondary school teachers and the principals and supervisors of the secondary schools in Nigeria.

2.12 Overview of Junior Secondary Education in the Northwest Geopolitical Zone of Nigeria

The National Policy on Education (2013*)* spells out the broad goals of secondary education as being 'to prepare the individual for (a) useful living within the society, and (b) higher education.' In order to achieve this goal, the document further states that secondary education shall provide all primary school leavers with the opportunity for education of a higher level, irrespective of sex, social status, religious or ethnic background and offer diversified curriculum to cater for the differences in talents, opportunities, and future roles. It further promised to provide trained labor in the applied science, technology and commerce at sub-professional grades; Develop and promote Nigerian languages, art and culture in the context of world's cultural heritage; and inspire its students with a desire for self-improvement and achievement of excellence. Other undertakings are the fostering of national unity with an emphasis on the common ties that unite us in our diversity; raising of a generation of people who can think for themselves, respect the views and feelings of others, and respect the dignity of labor, and providing technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development.

2. 12.1 Curriculum of the Junior Secondary Schools

Students of junior secondary schools study 9 to 12 subjects, including a core group that consists of mathematics, English language, a major Nigeria language

(Hausa, Igbo, or Yoruba), social studies, creative arts, integrated science, practical agriculture, religious studies(Christianity or Islam), and physical education. Students may select electives from courses such as introduction to technology, home economics, business studies, local crafts, and foreign languages (often Arabic or French), depending on the school they belong to. At this level, students are streamed into one of three areas of concentration: academic (science or humanities), technical/commercial, or teacher education.

The curriculum, according the Nigeria Education Sector Analysis Unit of the Federal Ministry of Education (2005), is both pre-vocational and academic, consisting of basic subjects meant to prepare learners for senior secondary education and empower them with some prevocational skill. Students at this level offer between 10 and 13 subjects selected from three groups of 'A' core, 'B' pre vocational and 'C' Non-prevocational electives. All the 8 specified core subjects are on the other hand compulsory, and students are to offer at least pre-vocational and non prevocational elective Core subjects-Group A. In other words, a student is expected to offer a minimum of 10 and a maximum of 13 subjects. All the subjects in Group A are compulsory while at least one subject is offered from each of Groups B and C.

A debate is currently on in the country as regards to the quality of secondary schools curriculum. A survey (Tee-kay, 2004) indicates that the majority of sampled secondary school teachers (76.6%) consider the existing curriculum as reflecting the ability and needs of learners while fewer, although still in the majority (60.9 percent) thought that the curriculum reflects cultural relevance and societal needs. Only a small proportion of teachers (31.7%), according to the

analysis were of the contrary opinion with regard to adequacy of the curriculum in reflecting cultural relevance and societal needs, which none the less is significant to warrant review of the curricular content in terms of cultural/societal relevance.

This finding is however subject to doubtful interpretations because it is a mere collection of perceptions of secondary school teachers, which has a high probability of subjectivity. The teacher may have only expressed their subjective views being involved in the system; issues that must have been made the more effective were the teachers involved were not professionally trained.

The majorities of Teachers used by the analysis also generally agreed over the quality and effectiveness of existing curriculum on various issues evaluated and considered the time allocation for the dissemination of specific subjects as adequate. "However in view of the magnitude of the proportion of teachers who hold contrary opinion, a curriculum review should take into cognizance various perceived aspects that need to be improved to effectiveness. In our regard, there is need to carry out analysis of observation of classroom interactions (Tee-kay, 2004).

According to Etim (2007), "the issue of relevance will always be pertinent in the discussion of Nigerian education given the colonial past. In his study, he discovered that although 75.26 percent of secondary schools students who responded to the questionnaire used by the study strongly agree/ agree that what happens in school are relevant to their lives now. Only 56.92 percent of respondents Strongly Agree/Agree that what happens in school now is relevant to their lives in the future. This calls for an added push to make the curriculum more

relevant to students. He suggested some strategies for developing a relevant curriculum, which include linking school with the world of work, continued indigenization of the curriculum at the junior secondary level and making better school community relations so that individuals in the community can come in as guest speakers. Other suggested strategies are providing another worldview to students, linking education to problem-solving, building on student's prior knowledge, and, encouraging and practicing curriculum integration.

2. 12.2 Standard of Junior Secondary Education in the Geopolitical Zone

The education landscape in many, if not most, developing countries is, according to Braun et al, (2008) characterized by a number of patterns. These include the existence of substantial disparities in the distribution of opportunity to learn and in achievement, associated with factors such as geographic location, race/ethnicity, language, social class, and gender, among others. Other features are low general achievement levels, both with respect to a country's own standards and in comparison to the norms established by developed nations and, several impediments to progress, including limited facilities and resources, insufficient capacity, inefficient allocation of available resources, and wastage due to high rates of grade repetition and attrition. They observed that secondary schools by their nature face greater challenges than primary schools, because the learners at secondary schools need to move beyond standard academic content to the acquisition of relevant competencies and skills that would better prepare them to function in society. Education at this level is therefore faced with the real challenge of incorporating relevant knowledge, skills, and experience into the

learning and teaching process in a manner that will address the country's specific growth and development needs.

According to Education books and Journals Online (n. d.), secondary schools are mostly state or federally owned. In addition, the federal government has two colleges (secondary schools) witch it finances and manages in each state. Students attend junior secondary school for grades seven through nine when the majorities of them are at least 15 years-old. In the ninth grade, students take the Junior Secondary Certificate Examination (JSCE) to qualify for admission into senior secondary schools. The Nigeria Education Sector Analysis (2005) noted that Standards vary considerably across the schools. The federal government secondary schools, including the newly established ones in the states, usually tagged unity schools, are still the models. They tend to be well funded, provided with facilities for learning, and well staffed. Therefore, when studies are conducted to focus on standards and performances in the various categories of schools, researchers usually do not classify such federal government colleges [FGCs] with public schools. They are treated as in a class of their own. There are on the other hand, the various types of private schools, many of them founded by individuals or firms, e.g. the oil mining companies. Within the whole gamut of these private schools, standards vary, considerably.

However, the standard of education in Nigerian schools is observed to have fallen. According to a one time Minister of education, lack of an institutionalized quality assurance system and a regulatory body for quality assurance especially at the post- basic level was a major challenge regarding the standard of education in

the country. He identified such factors as poor infrastructure, obsolete facilities, and inadequate number of qualified teachers as having seriously lowered the standard and quality of education at all levels. He noted that the technical and vocational colleges are grossly inadequate and are faced with a dearth of teachers with the requisite professional training to teach technical and vocational subjects (Ola, 2010).

The decline in the standard of secondary education in the country started since many years back. For example, a nationwide test score conducted under Measuring Learning and Achievement (MLA) project coordinated by Federal Ministry of Education (FM.E) in 2005 revealed lower than 40 pass marks in all subjects taken by primary 4 pupils in public schools. National averages were 32.2 in numeracy, 25.17 in literacy, and 32.62 in life skills. Kano and Bauchi states' Numeracy scores were 43.59 and 16.6 respectively, with Lagos achieving 37.07 in literacy. Results from JSS show credit pass rates in English, Mathematics, and Integrated Science to be within the range of 16 and 30 percent between 1985 and 1998. The system should not emphasize memorization and rote learning above a number of competencies and basic skills, which include good communication, literacy in reading and writing, mathematics and science and having a positive and good attitude to 2000 in 2005. The system according to him should also emphasize ability to think critically, to define problems, and to propose solutions and having at least knowledge of one or two other languages than the mother tongue and in general being ready and being able to learn how to learn.

In a pilot study, Joshua (2008) found that the sampled secondary school teachers believed that the extent of realization of the aim of preparation for useful living in society was 2.77 of the maximum score of 5.00, thus giving a percentage of realization of 55. They also believed that the aim of preparation for the higher education has been realized at the extent of 3.04, giving the percentage of realization of 61. These results according to him reveal that, as a nation, Nigeria is only about halfway through to realizing the aims for which secondary schools were setup. On the extent of graduating senior secondary school students' acquisition of some of the social and affective skills needed for useful living, the teachers believed that their "ready products" are just about halfway through in realizing some of the objectives specified for that level of education. The pilot study went further to verify from the teachers in the sample the extent to which the content and teaching resources in the secondary schools are designed to prepare the students for useful living. It also the extent to which teachers are satisfied with some of the activities/practices going on in the secondary schools as they are executing their mandate. The results show levels of satisfaction of the teachers on the related activities to be just on the average (halfway). On the second broad aim of secondary education, the preparation for higher education, the results show that the teachers appear to have very little faith in what they are doing in the lives of the youths under their care. Only 30% of them assert that more than 70% of their SS3 students can pass their WASC/NECO pubic graduating examinations without cheating or undue assistance; and only 5% of them assert that more than 70% of their SS3 students can pass the JAMB

administered entrance examinations into the Nation's tertiary educational institutions.

In fact, teacher effectiveness in the Nigerian secondary schools has been observed to be below expectation. In a study by Akiri and Ugborugbo (2009) on the influence of teachers' classroom effectiveness on students' academic performance in public secondary schools in Delta State, it was discovered that effective teachers produced better performing students, but the observed differences in students' performance were statistically not significant. Although the researchers opined that this could be due to the influence of student and school environment related factors, which were not included in the study, they concluded that teachers' effect is not the only determinant on students' academic achievement.

There is also the problem of examination malpractice, which has continued to contribute in worsening the situation of secondary and other levels of education in the country. According to Fasasi (2007), examination malpractice occurs every year and has seemingly defied solutions. It has come to have negative consequences on the examinees and the education system. His study observed that among the causes of this problem is that students of poor ability have been admitted or promoted into higher classes in our educational institutions, a practice that does occur frequently during free education programmes. Another cause of the problem is that many teachers are lacking in good quality, which can enhance meaningful teaching, seeing for example that, as at 2004/2005 session, 25.65% of teachers in Nigerian secondary schools were not professionally qualified.

Girl-child education is another issue in the Nigerian education that has come to be accorded a somewhat considerable attention from both within and outside the country. According to Offorma (2006), United Nation Statistics repeatedly shows that girls as a group, had lower literacy rates and receive less health care than boys. They are also more impoverished than boys are. She noted that the quality of education given to the girl-child that will help her to adapt to the knowledge based economy of the 21st century has been observed to have been negated by the problems of unmotivated teachers, examination malpractice, gender biased curriculum, lack of school facilities and instructional materials and incessant strike actions. Offorma (2006) also reported the UNICEF education chief in South Africa, Wamahiu to have identified the issues of administration of discipline, corporal punishment, sexual harassment, child abuse, and child labor as some of the things that lead to exclusion of groups of students from accessing quality education.

Added to these problems is however that of violence against school children. A study conducted by Federal Ministry of Education in collaboration with UNICEF (2007) revealed that the existing types of violence in schools are physical, psychological, sexual, gender and health based violence. However, physical violence (85%) and psychological violence (50%) accounted for the bulk of violence against children in schools. Other forms of violence meted upon learners in basic education level in the country include gender –based violence (5%), sexual violence (4%) and health related violence (1%). Violence has been discovered to contribute to school absenteeism in Nigeria. One example of this is that about 6% of learners were absent from school because of physical violence

and that more girls (7%) than boys (5%) were absent from schools due to physical violence, and school absenteeism is more in the south (9%) than in north (3%). Moreover, absenteeism from schools due to physical violence is more likely among learners in JSS (9%) than in primary schools (3%). It can be maintained here that teachers' violence against schoolchildren has to do with the type of training received by the teachers, among other things. It is also a reflection of teachers' lack of teaching competencies.

Consequently, the level of acquired skills among the graduates of secondary education, despite its importance for sustainable development of the country, is very low. According to Odu (2010) for example, the Nigeria's secondary school leavers do not have vocational skills because of the poor implementation of technical and vocational programmes in the schools. Consequently, they cannot be self-reliant or self-employed. In a related development**,** a study that examined reading skills, mathematics knowledge and general life skills among students in grade 4 discovered that on the average, the students could only respond correctly to 32% of the tasks related to mathematics knowledge. The students could respond properly only to 25% of the tasks related to reading skills and to 33% of the tasks related to general life skills. One of the tasks was that the students should copy a five-line text but only 8% of them managed to do this correctly, while 40% of them could not copy a single word correctly. In a similar study on reading skills, students in grade 1 in upper-secondary schools in Nigeria were found not very impressive in reading skills and were particularly poor in rural schools, which constitute a major part of all schools in the country (Education International**,** 2011).

One other area of deficiency in the country's secondary schools graduates is that of entrepreneurial skills. According to Yusuf (2013), the Federal Government of Nigeria has recently acknowledged that about 80% of Nigerian youth are unemployed and 10% underemployed and has consequently developed a broad based school curriculum for secondary level students with subjects like trade and entrepreneurship skills inputted into it in order to promote entrepreneurship education among secondary level graduates that would equip them to effectively tackle growing inflationary trend in the society. In accord with this move, Yusuf (2013) noted that entrepreneurship education is beneficial in actualising the goal of self reliance as stipulated in the National Policy on Education and that Basic Education level should be the starting point. She suggested among other things that entrepreneurship skills can be infused into the reading curriculum for basic education by providing reading tasks and activities that will encourage, stimulate and get students interested in business.

A research into factors related to underachievement in science, technology and mathematics education in schools in Rivers State, Nigeria, by Obomanu and Adaramola (2011) discovered that most teachers teaching science, technology and mathematics education (STM) related subjects are not qualified. They are either higher national diploma (HND) holders or engineers. The research also revealed that students' have a negative attitude towards STM related subjects, parents are too busy to look into students' schoolwork at home, and above all, there is inadequate funding and a significant difference in the influence of the stakeholders on students' performance in STM related subjects. Recommendations were made based on these findings.

Ololube (2008) also identified the problems besetting secondary education in Nigeria to include: inadequacy of basic infrastructure, overcrowded classes inadequacy of teaching and learning facilities/materials, over reliance of teachers on the lecture method, teachers' incompetence in subject matter and modern teaching skills, lack of knowledge on and inability to apply modern structure. Other problems of secondary education in Nigeria according to researcher are that there are very little opportunities for in-service programmes, and the training programmes themselves do not produce the right quality of teachers because not much of content is covered and the time spent on internship or teaching practice is inadequate. Certainly, teacher education for secondary schools must address these deficiencies. The Colleges of Education preparing teachers for the Junior Secondary schools must also ensure mastery of the content of the various teaching subjects.

A summary of the state of secondary education in the northwest geopolitical zone has been given by National Bureau of Statistics (2006) according to which about 44.0 percent of the children of secondary school age (12-17 years) had access to secondary school although access in the urban areas nearly doubled that of the rural areas. With 18.8 percent, Zamfara State recorded the lowest, while Kano State with 59.8 percent had the highest. According to the bureau,the net secondary school enrolment rate for the zone stood at 25.4 per cent. The net enrolment was 27.5 percent and 22.5 per cent for males and females respectively. Among the States within the zone, Kaduna had the highest rate (41.6 per cent), and Jigawa the lowest, at 14.0 per cent. According to the report, seven per cent of the number of secondary school pupils completed that level of education in the

year before the survey. More secondary school children completed school in the urban areas (17.0 per cent) than in the rural areas (4.8 per cent). Kaduna State (14.7 per cent) recorded the highest rate within the zone, while Kebbi State (3.1 per cent) had the lowest.

The trend of the fallen standard of junior secondary education in the country is however more pronounced in the north than south. Education Encyclopedia (2008) attributed the problem of fallen standard of education to the economic decline and the political rivalries, especially dividing the northern Muslim states from the southern non-Muslim states adding that the most dramatic figures are reported from the northern states. It maintained that of the 19 states labeled "educationally disadvantaged," 17 are in the North. On enrollment, it lamented that there were 4,448,869 secondary students enrolled in Nigeria in 1995, but the northern area, with about half the country's population, accounted for only 1,417,645 of these students. Other examples cited by the Encyclopedia are that in 1999, the bottom six states in candidates applying for admission into universities were all in the north, with 5,619. Out of a nationwide 160,724 candidates, some 72,830 were from 6 southern states, while the bottom 6 states, all in the north, had only 375 candidates. Moreover, in the late 1990s, only 16 percent of the primary school teachers in the north held the NCE, considered the minimum qualification for teaching while in the south, more than 94 percent held the NCE.

In a recently released survey conducted by the Nigeria Education Data Survey (NEDS) 2010 on the situation of education in the country, it was discovered that there is a state-level differentials in terms of education, largely

replicated at the secondary school level, broadly visible in the secondary school net attendance ratios recorded for the six geo-political zones or sub-regions. According to the survey, the net attendances for the six geopolitical zones were North central - 37 per cent, Northeast - 22 per cent, Northwest - 24 per cent, South-south - 28 per cent, Southeast – 60 percent and Southwest-65 percent (Ahonsi, 2010). In the Northwest zone, Zamfara State leads the pack with 68 per cent, followed by Sokoto State - with 66 per cent, while Kebbi came third with 60 percent (Champion, 2011). This same state-level differential is also seen regarding the ability of the Nigerian child to read or perform simple addition. Twenty-one per cent of children of ages 5-16 cannot read at all in the Southwest compared to 31 per cent in the South-south, 32 per cent in the Southeast, 58 per cent in the North-central, 72 per cent in the North-west, and 83 per cent in the North-east. Thus, a typical child in the Northeast sub-region is about four times more likely to be illiterate than his or her mate in the South-west. On numeracy skills, the survey reported that while only 11 per cent of children of ages 5-16 cannot perform simple addition in the Southwest, the other sub-regions are largely at the disadvantage, with the following figures: South-south - 19 per cent, Southeast - 21 per cent, North-central - 42 per cent, Northwest - 61 per cent, and North-east - 73 per cent. Again, the implication is that the chances of the average child in the Northeast being innumerate are nearly seven times those of the average child residing in the Southwest (Ahonsi, 2010).

Some educationists have come to attribute this unhealthy development to poor governance in especially the disadvantaged states. According to Ahonsi (2010) for example, the failure of several states in Nigeria to provide basic

education for thousands of children of school-going age reflects a political leadership that does not hold and live out as its core values - social justice and human dignity, thereby not giving to the education sector the utmost priority it deserves. He observed that even though the local governments also have a big role to play in the delivery of basic education, the blame for the failure to have significant access to basic education in any state must be placed squarely on the governor, given that within Nigeria's warped federalism; state governors fully control local government area affairs.

The problem of educational parity between the northern and southern regions of Nigeria however has its root in the colonial era when the western education started and became more widely spread in the south than in the west. It is not an entirely new development, brought about, as Ahonsi opines, by poor governance in the North. It is as a matter of fact, very difficult for anyone to convince Nigerians that the southern governors are more prudent and better administrators than their northern counterparts are. Besides, the study, having failed to recognize the place of Islamic education preferred by many parents above the western education in the north, is lope-sided. Moreover, some people such as the Niger State governor, Babangida Aliyu according to Oham (2011) have queried the modalities and competence of the researchers who undertook the said assessment.

Adekola in Oham (2011) also cautioned about the NEDS report that Children not being in school is not the only issue for consideration by government and the civil society. Those who are in school are often confronted with a disconnection with their teachers in terms of what is being taught and how to be socially

accepted in the society. He further argued that in addition to the inadequacy of good classrooms, books, uniforms and other materials necessary for school, hunger and poverty also mitigate against good learning because the child needs to be adequately prepared for the classes and made to have his morning meals so that he will be attentive for learning. He further lamented that a child who is brought up at home where Hausa is being spoken all day will find it difficult to interact in English Language fluently despite efforts by teachers at school. Other problems identified by him include that of the teachers not being equipped properly for the task of teaching and conservation of teachers who are too rigid to learn from their colleagues.

Kaduna state is one of the states that fall within the northwest geopolitical zone. Despite the substantial expenditures and investment in the educational sector of the state, education remains one of the key problem areas of the State Government. Here, the State Government according to Abubakar and Bennell (2007) has to contend with not only low education outputs and outcomes, but also equally low enrolment levels at both primary and secondary school, both of which impact negatively on enrolment and performance levels at the tertiary level. These and many other problems combine to minimize the impact of the investments in the sector on education outputs and outcomes in the State.

According to Education Sector analysis conducted (Chang & Rwehera, 2008) under the leadership of Kaduna state Ministry of Education, the net basic education enrolment ratio for the primary and secondary schools in the state in 2006 was 54%, i.e. 55% for males and 53% for females, which are some nine-

percentage points below the national average. Due to the fact that many pupils do not transit to junior secondary and the fact that a good deal of them drop out of school even before primary school completion, the enrolment rate was higher in primary than in junior secondary school: 66% compared to 24%. There were 1,140,609 pupils enrolled in 4,715 primary schools in 2005/06 and 187, 47 JSS pupils in 501 schools, of which 373 are public and 128 private. Disparity exists in student enrollment into junior secondary schools, with three LGAs having an enrolment ratio of less than 20% (Birnin Gwari, Giwa and Soba) and four others have enrolment ratios larger than 50%. This is mainly the result of the unequal distribution of schools.

Chang and Rwehera (2008), in the Education Sector Analysis also related a report on measure of learning achievement of Junior Secondary school students conducted in2003 focused on JS2 andJS3 students. The study discovered that the students, who were tested in Mathematics, English, Social Studies and Integrates Science as a whole, came up with very poor scores in all subjects, with for example a mean average score in JSS2 mathematics of 25% and 32% in English. Compared to the national averages, Kaduna students performed better in Mathematics (27.4% versus 25.2%) and in science (36.9% versus 34.7%). The performance by Kaduna students in WAEC in 2006 and 2007 confirms their weakness though this weakness seems neither systematic nor constant.

On learning and teaching condition of the state, the report stated that about two out of ten Kaduna teachers do not have the textbook for a given subject, and only about a quarter of them have a teacher's guide for each subject. It was further

discovered that only 10-14 percent of the students had the textbook, depending on subject. The average pupil/classroom ratios (PCR) were 72:1 in primary, 50:1 in junior secondary, and 37:1 in senior secondary, and situations of extreme overcrowding of classrooms are frequently observed. About half the classrooms in the state have no student benches and about 75 percent of the schools in the state have no toilets of any kind for students or teachers, in addition to having no access to water, protected or unprotected. The report also states that 51.3% of the primary school teachers had less than 3 years of post-secondary training and that 15% have no post-secondary education because of the absence of an active policy of upgrading grade 2 teachers to NCE level.

As pertains the implementation of the secondary school curriculum in the state, some educationists view it negatively. A research by Yusuf (2014) which assessed the implementation of the reading component of the Junior Secondary School English Language Curriculum for Basic Education in Kaduna state, Nigeria for example, discovered that the implementation of the reading component of the English language curriculum was not very effective from the classroom observation of the teachers and that teaching was teacher-centred in which students remained passive and did not participate in class discussion.

Investigating the availability, utilization and management of ICT facilities in teaching English language in secondary schools in Kaduna State, Yusuf, Maina & Dare (2013) adopting a descriptive survey research design and used a random sample of twenty secondary schools from Kaduna metropolis and a total of 100 teachers. After analyzing the data using frequencies and percentages, they found

that there is a dearth of ICT facilities in secondary schools in Kaduna as there are only very few of such facilities available in most of the schools visited. The researchers also discovered that most teachers were not competent in the use of these facilities, the management of which requires training and re-training.

Statistics, according to Jigawa State Economic Empowerment and Development and Strategy (2010), have shown that Jigawa State is lagging behind in terms of educational development in the country, leading to its classification as 'educationally disadvantaged. The 2002 CWIQ Survey indicates that in secondary education, access and enrolment was only 25% and 8% respectively. According to the survey, adult literacy rate was found to be only 37% much below the national average. Gender disparity in education was also found by the survey to be glaringly to the disadvantage of girl-child in both primary and secondary schools. Government has made substantial investment in education over the years but the output has still fallen short of expectations. By the year 2009, there were 1,861 Primary Schools and 327 Junior Secondary Schools in the State. The total number of teachers in 2009/10 in junior secondary schools was 3,152 and the average pupil-teacher ratio was 24 in junior secondary schools. The average student-qualified teacher ratio in junior secondary schools was 33. There are significant gender inequalities in Jigawa State, standing at 0.73 at the primary level, 0.54 at the junior secondary level and 0.31 at the senior secondary level (Basic Statistics for Jigawa State Universal Basic Education Board (n. d).

On teacher education in Jigawa state, Allsop and Howard (2009) in the Education Sector Support Programme Nigeria: Assessment of Education in

Jigawa State: Task Specialists Visit Report noted that there is a serious policy gap at the sate level which leaves the College of Education as the only institution offering the National Certificate in Education (NCE). This, according to the report has led to confusion of purpose for the college, resulting into failure to comply with the main mission of generating large numbers of qualified teachers to enhance the quality of teaching in the state's basic education schools. The report also observed that the absence of vision\mission statement and strategic plan. The college management was, according to the report, also found to be a minimalist with poor communication channels and inadequate record keeping, particularly in tracking and documenting student progress. Consequently, students enter the college with little motivation towards teaching in basic education schools as a career.

The NCCE's curriculum, according to the report, focus on secondary, the emphasis on education theory over practical acquisition of teaching skills, and the didactic college teaching methods do little to address this issue, resulting in studen ts being poorly prepared for teaching of the key skills of numeracy, reading and w riting for learning in all subjects throughout basic education. The dilapidated infra structure of the teaching rooms was described as depressing. Moreover, the college has no significant links with the schools which should be its co nstituency.

The status of secondary education in Katsina State is encouraging as compared to other states in the region. The state, for example, won the first national overall position for Universal Basic Education (UBE) delivery and got a

trophy and a princely sum of N700 million for that performance. The second overall position went to Oyo State while the third national best was Adamawa State. Besides the national awards, there are also awards for the best three in each of the six geo - political zones in the country. Kano, Kebbi and Zamfara states won the first, second and third positions respectively for the North West zone. Katsina's case was described as a completely radical transformation (MDGs Watch, 2009).

Some researchers are of the opinion that the repeated failure of laudable educational programmes introduced in Nigeria could be attributed to poor administrative skills of school administrators. A study on the administrative competency needs of principals for effective UBE administration at J.S.S level carried out in the northwest geopolitical zone by Adegbemile *et a*l (2011) for example discovered that the instructional leadership skills needed by principals for effective UBE administration are many. They include principal's co-operation with teachers in defining objectives for the school, selecting learning experiences, methods and procedures to achieve the objectives; assigning subjects and classes according to qualification and competence, allocating time to subjects; making facilities accessible to all teachers according to need. Other skills also needed are: principal ensuring that all staff work co-operatively for the common goal of the schools, supervising lesson plan, teaching and learning activities, evaluating the plan and implementation of curriculum programmes and assisting teachers to try new findings. Other personnel management skills needed by principals for effective UBE administration, as revealed in the results of the study are principal modeling behaviors expected from others, principal defusing tense situation and

negotiating solutions, not taking side in conflict resolution. According to the study, the financial management skills needed by principals for effective UBE are prioritizing financial allocation according to needs, ensuring that budgets reflects agreed goals and objectives, delegating the mechanism of financial matters to capable staff, and keeping close check on financial matters delegated to staff. Other financial skills include working within the constraints of the school budget, planning and sourcing for funds for school development, keeping accurate financial information about the school and giving true and fair view of financial position of the school.

Adegbemile *et a*l (2011) discovered that the sampled principals perceived all the listed items as instructional leadership skills needed for effective UBE administration because all the items had mean scores above the 2.50 cut of point on a four-point likert scale. The study also revealed that all the financial management skills in the table are needed by the principal for effective UBE administration because each of the items had a mean score above the 2.50 cut-off points on a four point likert scale. In all these administrative needs of the principals, the research discovered no significant difference between the mean opinion scores of male and female principals for effective UBE administration and the need for instruction leadership skills of principals' effective UBE administration. The research also found no significant difference between the mean rating of urban and rural school principals on the financial management skills needed by principals for effective UBE administration.

2.13 Supply of Quality Teachers for Junior Secondary School in Nigeria

The aim of the National Commission For College of Education, (NCCE) Nigerian government as spelt out in the National Policy on Education (NPE, 2004) is the production of highly motivated, conscientious and qualified and effective NCE teachers for all levels of primary and junior secondary schools education. Akintobe (2007) observed that the federal government had taken some step to improve quality teacher education programme in the country through several conferences, activities and policies that emphasized the Educational Summit and the Roadmap to the transformation of the education sector. In addition to government huge on education through its agencies such as the NCCE is geared towards improving the qualities of teaching in the country. But the problem of incompetence teachers still persists. Jegede (2012) lamented that Nigeria requires NCE teachers with strengthened desirable skills and knowledge and the right kind of attitudes that will make them effective in their work which will improve their result. For, Junaid (2012), junior secondary schools require NCE teachers with new mindset and skills that will encourage and promote innovation and knew kinds of learning. He retreated that the 21st century learner requires, the cohort of teachers that will contribute to the academic and character development of all children. Collaborate with parents and community groups to build a sound knowledge and dependable profession skills in pupils that will ensure that will assure responsibilities, for developing standards for practices as the basis for evaluating the work of its members.

Osurji (2009) viewed quality teachers as those with pedagogical relevance of solid grasp of the subject matter to be taught and mastery of instructional

strategies for passing the desired knowledge to the learner. Oruch (2012) opined that teachers with pedagogical relevance should be well educated, creative and enterprising and be able to communicate well, show initiative, work effectively together and demonstrate high level of confidence in discharging their responsibility. Above all, the 21st century learner requires the crop of teacher that have full integration of theory and practice in the art of teaching and teachers who will always go belonging the call of duty to ensure the students that look up to them are not only taught well but are inspired beyond what they believe their capabilities are, or what is possible".

Adepoju (2000) and Adesina (2008) remarked that the heart of Nigeria's educational system is the teacher. The teacher would continue to be both the major indicator as well as the major determinant of quality education. The absence of this heart from the system spells a lot of problem for the entire body. A study conducted by Ishaku (2008) revealed that there exists a shortfall in the supply of NCE teachers at the expense of the unprecedented increase in the pupil's enrolment in primary and junior secondary schools in the country. Federal Ministry of Education (2010) indicates that there is shortfall of 45,974 teachers junior secondary schools of the federation, it is germane to say that inadequate supply of teachers only goes to show that inefficiency abound in the system. Considering the important role played by the teaching personnel, their absence in the classroom leads to a complete deviation from all that meaningful school is expected to offer.

Admitted that meaningful schooling according to Ekpo (2000), promotes changes in the meaning of human experiences, the absence or shortage in the number of NCE teachers that are expected to bring this experiences into being, negates the whole efforts targeted at educating the youths. It is this lamentable situation that spurred Adamu (2008), to observe that, we are short of qualified NCE teachers. He further observed that in many countries in African children still do not go to school. If all children are to be in and get better education by 2015, far more qualified teachers will be needed. Not enough have been produced by conventional teachers training institutions in the country. The issue of teacher shortage in Nigeria Junior secondary schools is better appreciated when one considers the breakdown given by Baikie (2010), observed that the transition for primary to JSS stands about 3.6 million pupils. At the pupil/teacher ratio of 1:40, about 90,000 teachers will be required for the JSS one classes. One imagination can be further stretched if we understand that classes often have more than 40 pupils/students each, with many urban and semi-urban basic schools having up to four arms of teach class and operation two shifts. This aptly bring to fore the fact that 60,000 basic schools in Nigeria are grossly under staff (FMO, 2011).

2.14 Empirical Studies

Many of the thirty-two (32) empirical studies reviewed investigate how teachers' qualifications and subject mastery could predict Students' achievement. Fakeye (2012) investigated the extent to which teachers' qualification and subject mastery could predict students' achievement in English language among senior secondary students in Ibarapa Division of Oyo state. The aim of the study was to find out how teachers' qualification can influence students achievement in English

Language. Adopting a descriptive research design of survey type, the study covered twenty (20) senior secondary schools randomly sampled, with a total number of fifty (50) senior secondary II students selected from each of the schools for the study, a total of one thousand (1000) students in all. All the S.S. II English language teachers in the selected schools also participated in the study. Data collected were analyzed using frequency counts and simple percentage. Multiple regression analysis was also used in analyzing the data. All research questions were answered at 0.05 level of significance. The study found out that teachers' teaching qualification has a significant relative contribution to students' academic achievement in English language. The study's similarity with the present research was that the both determine that teacher's qualification is a factor of teacher productivity, while the difference between the two researches was on subject matters. The latter is precisely concerned with English language. The purpose of the study was to explored effect of teachers' qualification in teaching physics at (SS) school level.

Owolabi (2012) examined the effect of teacher's qualification on the performance of Senior Secondary School students in Physics. The instrument used was questionnaire. Descriptive research design was adopted. The sample for the study consisted of 100 Senior Secondary School Physics students randomly sampled in Ekiti State and the teachers that prepared and presented the students in each school for 2009/2010 West African School Certificate Examination. The year's result summary for each school was collated with the bio-data of their respective Physics teachers. The research questions were answered using sample percentage, mean and standard deviation while the (3) hypotheses were tested

using the inferential analysis of statistic ANOVA at 0.05 level of significance. The study revealed that students taught by teachers with higher qualifications performed better than those taught by teachers with lower qualifications and that students performed better in physics when taught by professional teachers. The result also showed that a teacher's ability to impact knowledge on his students is not affected by the teacher's gender, much as he/she is a skilled teacher in that field of study but the experience of the teacher is significant at impacting the students' academic performance in Physics. The study recommended that physics teacher should be trained, re-trained and made to acquire practical skills to teach the subject. The study is similar to the present research in the aspect of teachers' professional competency. The difference lies on subject specialization and level of students; the reviewed study dealt with senior secondary schools, while the present study dealt with junior secondary school level.

Hakim (2015), in a related study analyzed and determined the contribution of teacher competencies (pedagogical, personal, professional and social competence) on the performance of learners. The study focused on the role of professional qualities of teachers in enhancing teaching and learning at (JSS) level of schooling. The study adopted descriptive research design and used stratified proportional sampling technique. Forty (40) teachers were sampled out of population of 400 teachers in the study area. A questionnaire instrument of (20) items was used to obtain data. The results of data analysis using multiple regressions at 0.05 level of significance showed that, partially pedagogical, personal competence, professional competence and social competence have a significant influence on teachers' ability to improve learning performance of

students. The contributions of all the teaching competencies simultaneously or jointly, were declared to have significant influence in improving the quality of performance in the learning process. Therefore, the study recommended that teachers should endevour to improve on professional qualities such as subject mastery, to enhance their performance. The study is similar to the present study in the aspect of understanding the role and relevance of teacher competency in teaching profession, but it differs in scope and area with the present study.

In another similar study, Bassey, Okon, Asu & Ottong (2011) attempted to determine the effect of training and retraining on teachers' productivity in public secondary schools in Calabar South Local Government Area in Cross Rivers State. The study aimed at finding out the influence of professional development programme through retraining, on productivity of teachers. The study adopted descriptive survey approach and used the questionnaire instrument. Ninety-nine (99) subjects teachers were randomly sampled from six public secondary schools in proportion to the numbers of teachers per school. The four hypotheses guiding the study were tested using Pearson Product Moment Correlation statistical analysis at 0.05 level of significance. The findings revealed significant relationship between training and retraining and productivity of teachers in terms of punctuality to school, organizing extra-lessons for students, timely submission of examination grades and participation in extra-curricular activities. In other words, the study discovered that teacher training and retraining have profound influence on the teacher' competence. The study recommended that teachers should be retrained regularly through workshops, seminars and conferences; to enhance their professional competency. The similarity with the present study is

that both have to do with assessing teacher's productivity while the difference between the two is in place of study and area of coverage.

Abdullahi (2015) assessed the effects of Teacher Effectiveness on secondary students' achievement in Mathematics in Kwara state. The study aimed at examining teachers' performance in teaching mathematics at (JSS) level. The study used descriptive survey design. Twelve (12) teachers were randomly sampled from a total population of 1,280 teachers of mathematics in the study area. The research questions and hypotheses were analyzed using means, percentage, standard deviation, while the hypotheses were tested using ANOVA at 0.05 level of significance. The study's results of data analysis using ANOVA statistic revealed that apart from teachers' qualification, there were significant differences in all variables of teacher effectiveness considered in the research. Furthermore, the results of multiple repression analysis showed clearly that the subjective independent variables predicted considerably the objective measures of students' achievement in Mathematics. The researcher therefore suggested that the present secondary school students' Poor achievement in Mathematics could be improved, if only Qualified and experienced teachers handle Mathematics at the Senior secondary school level; but such teachers need be adequately provided with relevant instructional facilities. The similarity with the present study is that teacher's productivity is the focus of the two researches, and the difference with the present study is that while the previous study is concerned with mathematics as a subject, the present research is studying the basic schooling level, precisely, junior secondary school level.

Obot (2010) studies the contributions of students' perception of teachers' competence in subject matter on students' interest in learning with particular attention to social studies education in Akwa Ibom state. The study focuses on teachers motivational factors on students' interest in teaching social studies. Descriptive research design was used, and the research population consisted of all social studies education students in Akwa Ibom state. Both stratified and the simple random sampling techniques were adopted for the choice of the samples. The instrument used was a structured questionnaire. The collected data was coded and analyzed using the one way analysis of variance (ANOVA) at 0.05 level of significance.

The study revealed that students with moderate and high perception of teachers' characteristics experienced more interest in social studies education than students with low level perception. Based on the findings, the study recommended that teachers of social studies should be motivated and retrained to enhance their competence in subject matters. The study's similarity with the present research is in the area of teachers' competency while the difference is that the later concentrated on social studies as a subject but the present study dealt with JSS curriculum and teachers attainment goals.

Fakeye (2012) in a related study also investigated the extent to which teachers 'classroom behaviour and teaching experience would predict students' achievement in English language among public senior secondary students in Ibadan Metropolis. The purpose of the study was to identify the role of teachers' performance in classroom management on enhancing teaching of English

language. He adopted a descriptive research design of survey type, using a total of 1000 S.S.II students randomly selected from 20 schools and their English language teachers, as participants in the study. Teachers' Classroom Behaviour Questionnaire (r=.76) and English Language Achievement Test(r=.72) were used in data collection. Data collected were analyzed using frequency counts. Simple percentage and multiple regression analysis were also used to analyze the data collected. All research questions were answered at 0.05 level of significance The findings of the study are that teachers' teaching experience has a significant relative contribution to students' achievement in English language and that teachers' classroom behaviour also has significant relative contribution to achievement of students in English language. The study recommended that experienced teachers should be employed to teach English in senior secondary schools. The study's similarity with the present one was in the area of teacher related factors of qualification and experience while the difference is in scope and subject matter.

Opara and Ifeoma (2015) studied the relationship between teachers' self-regulatory skills and students' achievement in Integrated Science. The study aimed at identifying teachers teaching skills in enhancing students' performance in integrated science. Four hypotheses on domains of self-regulation guided the study. Two instruments: Teachers Self-Regulatory Skills Questionnaires (TSRSQ) and Achievement Test in Integrated Science (ATIS) were used for the study. Participants in the research include 376 Integrated Science students from ten schools in Anambra State and 10 (ten) Integrated Science teachers in the schools. The data was analysed using, percentage, means and standard deviation. The

hypotheses were tested using t-test at 0.05 level of significance. Results from the study showed that there were positive correlation between teachers' metacognitive skills, self-efficacy and motivational skills and students' achievement in Integrated Science. A negative relationship existed between teachers' volition strategy and students' achievement. The study recommended that quality teachers should be employed to teach science at basic foundations of students learning. The study is similar to the present study in the aspects of quality of teachers and their competency in job performance. The two studies differ in scope and area of coverage.

Akinsolu (2010) examined the number of qualified teachers and its relationship to students' academic performance in public secondary schools in a sampled Local Government Areas (LGA) of Osun State. The aim of the study is to find out whether teacher-student ratio is significantly related to students' academic performance. Descriptive research method was used. This descriptive study utilized stratified random sampling techniques to select twenty-one (21) public secondary schools, one in each LGA, from a population of thirty-one (31) LGA in the State. It also used Senior School Certificate Examination results from 2000/01 to 2004/05 to analyze students' academic performance and reflect some concerns in the school system. The study utilized structured questionnaite to obtain data at 0.05 level of significance. The data were analyzed using ANOVA and Spearman rank correlation coefficient, to test the three operational hypotheses. The research findings are that teachers qualifications, experience and teacher–student ratio were significantly related to students' academic performance. Therefore, the study recommended the use of quality and experience teachers to enhance students'

performance. The similarity with the present study was in the aspects of teachers' quality and students' performance, while the differences were in scope and study overage areas.

Abdullahi and Onasanya (2010) made an assessment of the effects of teacher effectiveness as regards to certain variables like his educational qualifications, teaching experience and curricular activities, on secondary schools students' achievement in Mathematics in Kwara state. The study aimed at identifying the variables that may enhance teachers' competency in teaching mathematics. Descriptive survey research design was used. The total population of the study was 28,400 which comprised of all secondary students and their mathematics teachers. Fourty (40) Public schools were randomly sampled and used as respondents to the structured questionnaire. The data were analyzed using ANOVA and multiple regression analysis at 0.05 level of significance. Results of ANOVA revealed that apart from teachers' qualification, there were significant differences among the three study groups used by the study, in all the variables of teacher effectiveness considered in the research. Furthermore, the results of multiple regression analysis showed clearly that the subjective independent variable predicted considerably the objective measures of students' achievement in Mathematics. The study therefore, recommended that the present secondary school students' poor achievement in Mathematics could be improved if only qualified and experienced teachers handle Mathematics at the senior secondary school level but such teachers need be adequate provided with relevant instructional facilities. The problem with this study is however that it used the students in assessing teachers, carrying with it all possibilities of subjectivity

arising from students' relationship with the teachers assessed. The students' assessment of teachers could also be handicapped by their lack of experience. However, the study has similarities with present study in determining teacher qualities as a factor influencing students academic performance while the difference between the two was in number of variables examined by each of the two studies and the level of participants in the assessment.

Ololube (2013) investigated the relative fundamental roles played by academically qualified teachers and their professionally qualified counterparts in motivating students and co-teachers to attain educational objectives in Ondo state. The study aimed at understanding the significant difference between academically qualified teachers and teachers with professional teaching qualification teaching as (SSS) level. The study population comprised of all teachers teaching senior secondary schools (220) teachers were randomly sample. The instrument used was a structured questionnaire. The researcher used multiple statistical procedures including Mean Point Value, T-test of Significance, Cross Tabulation and ANOVA to analyze the available data at 0.05 level of significance. The research revealed that professionally qualified teachers tend to motivate students and co-teachers more effectively than teachers who are academically qualified do. Therefore, the study recommended the employment of professionally qualified teachers in public schools. The study has some similarities with the present study in the areas of teacher professional competence and attainment of programme goals. The study differs from the present one on the basis of its methodology but relates to it on the basis of the subject matter.

Popoola and Odili (2011) investigated mathematics teachers' understanding of pedagogical knowledge and how it works out in teaching and learning in Kwara state. The study focuses on teacher's methodology in teaching mathematic subject. The study utilized descriptive survey design. The entire mathematics teachers in senior secondary schools were considered the target population. The researchers randomly selected a sample of 162 senior secondary school year two (II) students (87 boys and 75 girls) and purposefully selected six secondary school teachers from 5 Local Government Areas in the study State. Two instruments were used for the study: an interview schedule and a researcher designed questionnaire. Data were analyzed using frequency counts, regression and multiple regressions at 0.05 level of significance. Findings of the research are that teachers' pedagogical knowledge correlated significantly with practice and that there is a significant correlation between teachers' preparation and teacher characteristics with practice in mathematics. The study recommended the use of B.Ed teachers with experience to teach mathematics at (SSS) level of education. The reviewed study is similar to the present study one in the aspect of teachers' pedagogical relevance and performance in achieving programme objectives. These two studies differ in the aspect of scope and area of coverage.

Ololube (2006) examined professional and non-professional teachers' methodological competencies among secondary school teachers in Nigeria. The aim of this study was to find out the impact of the teachers' methodological competencies as a predictor of their teaching effectiveness. The population of the study was 32,796 teachers teaching in Nigeria junior secondary schools. A sample of 250 randomly selected teachers was used to obtain data. Descriptive survey

research approach was used. The study made use of questionnaire for data gathering and employed ANOVA statistical procedure in analyzing the data, at 0.05 level of significance. The result showed that there are significant differences in the effectiveness of professional and non-professional teachers' in their methodological competencies. The findings depict that trained teachers take into account the individual differences that exist among students and this is so because of their knowledge of educational psychology which makes them involve themselves in many activities that might possibly help if one is found in a difficult situation. The findings likewise revealed practical evidences that professional teachers tend to apply correct teaching methods (e.g., problem solving methods, dramatization and demonstration methods) in the teaching and learning processes. The study recommended the use of professional teachers to instruct the learners in the classroom. The study has similarities with the present one in aspects of teacher quality and qualification. It differs from the present study in the aspect of scope and use of statistical tools in the analysis of data.

Iyunade (2011) examined the correlates of teachers' continuing professional development on universal basic education in Bayelsa State, Nigeria. The study aimed at identifying the influence of re-training teachers in enhancing their competency in teaching. The study used descriptive survey research design. The research population comprised 500 teachers of basic schools. A sample of 250 teachers was randomly selected from twenty 20 Basic Junior Secondary Schools and Primary Schools used for the study. The instrument used was a questionnaire. The data collected were analyzed using frequency distribution and percentages. Findings revealed that the level of teacher preparation for the

universal basic education was relatively low and that teachers were not adequately prepared for the universal basic education scheme. The study therefore concluded that Bayelsa State has not been fully prepared for the sustenance of universal basic education. The study recommended training and retraining of UBE teachers at basic school level to improve their professional competency. The similarity with present study is in the area of quality of teachers while the differences lie in scope and coverage of the study area.

Saidu (2006) assessed the perceived educational goals and needs of the Nigerian certificate in education (NCE) programme in Nigeria. The purpose is to examine the level of NCE teachers' performance. The study used descriptive survey design. The population of the study was (2000), comprising NCE teachers (1,110) and teacher educators (90). A sample of 120 NCE teachers and (20) lecturers were randomly selected. Structured questionnaire was used to obtain data. Simple percentages, mean, standard deviation and ANOVA was used to analyze the data at 0.05 level of significance. The study revealed that NCE teachers were short of goal attainment in classroom instruction. Therefore, the study recommended one year students practical teaching to enhance classroom instruction. The similarity with the present study is that the two studies aimed at measuring the discrepancy between NCE goals and the extent the goals were attained through instruction at the junior secondary school level of education. However, it differs with the present study in scope and coverage of the study area.

Kumazhege and Zir (2010) assessed the technical competency needs of Introductory Technology teachers in Adamawa State of Nigeria. The study aimed

at identifying level of technical competency of teachers teaching at junior secondary schools. Descriptive survey research design was applied. The population of the study was 201 Introductory Technology teachers in 174 Government junior Secondary Schools within Adamawa State. A sample of 60 teachers was randomly selected for the study. Structured questionnaire was used to obtain data. The study utilized (ANOVA) statistical tool to analyze the data at 0.05 level of significance. The study revealed that: Introductory Technology teachers in Adamawa state have deficiencies in various aspects of Introductory Technology; they need further training in various aspects of Introductory Technology. It was also discovered that Introductory Technology teachers in Adamawa State have acquired technical skills in one or two aspects of Introductory Technology. The study recommended that teachers in Adamawa State need refresher courses and in-service retraining to be properly grounded in other areas so as to have a broad-based training in all aspects of Introductory Technology. The similarity with the present study is that both the two researches focus on teachers' competency in goal attainment. The two studies differ in scope and place of study.

Uwameiye (2012) investigated the professional and technical competencies needed by teachers of business studies in junior secondary schools in Ondo State, Nigeria. The study aimed at identifying teachers' proficiency in teaching business studies subject. The study used descriptive survey research design. The population of the study was 1,600. Random sampling technique was used to sample 12 professionally qualified teachers of business studies in the state. The study utilized PTCCTBSQ which is a 45 item questionnaire. The data

obtained was analysed using percentage, means, standard deviation and ANOVA test at 0.05 level of significance. The study found that that teachers of Business Studies in Ondo State public Junior secondary schools need improvement in instructional planning, implementation and evaluation skills, as well as in core Business skills in relation to the teaching of office practice. It was also discovered that teachers were deficiencies in shorthand and keyboarding as well as in commerce, bookkeeping and ICT. This study recommended that the identified tasks items where the teachers of Business Studies needed improvement be packaged for retraining of the in-service teachers of Business Studies in Ondo State junior secondary schools. The similarity between the two studies is in teacher performance in classroom instruction. They differ in subject concern as well as area of study.

Patrick (2009) studied the competency of Nigeria secondary school teachers by examining the activities which go on in science classrooms in secondary schools in Delta State. The aim of the study was to compare these activities with both national and international standards. To guide this study, ten research questions were raised and answered. The design of the study was descriptive survey design. The population of the study was 40,000 teachers and students. Using random sampling technique, 90 senior secondary schools, 90 Principals, 270 science teachers and 2,500 students were drawn from the three senatorial districts in Delta State. The instrument used was a structured questionnaire. The data were analyzed using Analysis of variance (ANOVA) at 0.05 level of significance. The study discovered that the following science education activities have suffered serious setback: insufficient time allocation in

school time table, persistent use of lecture method in science teaching, persistence of teacher dominated teacher-student interaction in science classroom, non-coverage of science schemes of work, non-regular giving and marking of assignments, non-proper supervision of instructions, non-conduction of practical lessons and non-assessment of students in all the domains. It concluded that the poor state of infrastructure and poorly trained teachers are the causes of poor teaching of science in schools. Therefore, the study recommended that there is need for improvement of infrastructure and instructional materials and that the teachers require in-service training to advance their knowledge and skills. The similarity between the two studies is that both the studies are on teacher performance in classroom instruction while the difference is in scope and study coverage area.

Lawal, Onipede, Oketoobo & Famiwole (2014) studied competency capacity building needs of teachers of agricultural science in the utilization of school farm for skill acquisition among secondary school students in Ondo State, Nigeria. The focus of the study was on teachers' skills abilities in farm utilization. The study adopted the descriptive survey research design. The entire population of 422 teachers of agricultural science in senior secondary schools in Ondo State and 46 lecturers of agricultural education in tertiary institutions in Ondo and Ekiti States was used for the study; hence there was no sampling since all the lecturers were utilized for the study. A 33 competency items questionnaire developed and validated by three experts from the Department of Vocational Teachers Education (Agricultural Education Unit) was used for data collection. 406 copies of the questionnaire administered on the respondents were retrieved and analyzed using

weighted mean and improvement need index (INI) to answer the research questions and hypotheses at 0.05 level of significance. The researchers found out teachers of agricultural science in the study area were grossly deficient in school farm skills of practical exhibition. Therefore the study recommended that teachers of agricultural science in Ondo State needed capacity building in all the 33 competency items identified in the following areas: planning and organizing school farm, implementing school farm practical, coordinating and evaluating school farm practical. The research's similarity with the present study is in teachers competency in attainment goals, while the difference is in subject specialization and study area.

Olaitan, Alaribe & Amusa (2010) studied competency-capacity building needs of secondary school teachers of agriculture in pig production for poverty reduction in southeastern Nigeria. The purpose of the study was to identify teachers' professional skills in agricultural science and pig production. The study utilized descriptive survey research design. The study population was 674 secondary school teachers of agriculture out of which a random sample of 300 teachers was used. The data collected using questionnaire was analyzed using weighted mean and improvement required index (IRI) at 0.05 level of significance. The research found out that teachers required capacity building in pig production competencies in planning, housing management, feeding of pigs, health management and marketing of pig products. It therefore recommended that the competencies identified be packaged and utilized for retraining teachers of agriculture. The study is similar with the present study in the area of teacher competency but differs with it in scope and coverage area.

Onyeneke (2013) studied secondary school principals' perception of business studies teachers' teaching effectiveness in Anambra state. The study aimed at identifying teacher quality in teaching business studies at (JSS) level of education. Descriptive survey research design was used. The study population was 2,700 principals of the state out of which a sample of 261 public secondary school principals was randomly selected and used as sample for the study, guided by four research questions and three null hypotheses. The instrument of the study was structured questionnaire with (20) items. Means and standard deviations were used to answer research questions while z-test was used to test the hypotheses at 0.05 level of significance. The research findings are that business studies teachers were ineffective in adhering to some aspects of time management; classroom management and lesson note preparation and delivery for optimal achievement of instructional goals and improved students' academic achievements and consequently employability. Therefore, the study recommended that teachers of business studies need to be trained and retrained to enhance their performance. The similarity between the two studies is that both are on teacher competency of teaching and learning, while the differences are in subject matters, scopes and areas of study.

Rabiu (2014) investigated perception of junior secondary school students on teachers' attitude and competence in Basic Science teaching in Sokoto State. The study aimed at examining role of teachers' personal and professional qualities in enhancing teaching of science subject. A descriptive survey method was employed in the study. The study population consisted of 4,823 JS III students and its sample consisted of 342 JS III students drawn from nine (9) selected secondary

schools within the state. Four research questions and two null hypotheses guided the study. The instrument for data collection was a 40 items questionnaire designed by the researcher and validated by experts in the field. Analysis of data was done using simple percentage and Chi- square statistical tools at 0.05 level of significance. The major findings of the study are that Majority of Junior secondary school students in Sokoto State perceived their Basic science teachers as having positive attitude in discharging their duties of teaching. Moreover, there is no significant difference in the perception of male and female JS III students on the Attitude of Teachers Teaching Basic Science as a subject in junior secondary schools located in Sokoto State. The similarity between this and the present study is that both are on teacher professional qualities, while the differences are in scope and area of coverage of the two studies.

Udoukpong (2012) studied teacher efficacy ratings by secondary school students and academic performance in social studies in Akwa Ibom state, Nigeria. The aim of the study was to explore teacher proficiency in teaching social studies and achieving the subject at junior secondary school. A descriptive survey research design was used. The population consisted of 5280 JS III students. Using simple random sampling techniques, a sample of 600 Junior Secondary school students was selected from public secondary schools in Akwa Ibom State and used for the study. Questionnaire was utilized for data collection and the data collected was analyzed using chi-square statistical tools at 0.05 level of significance. The study revealed that the students' academic performance in social studies summative evaluation was found to differ significantly on the basis of their ratings of teachers' instructional practices and interpersonal relationships respectively.

The result of the data analysis also indicated that students' rating of teachers' instructional practices plays a role in their academic performance in summative evaluation. Participants who rated the teachers' instructional practices as "student-teacher collaborative" performed better than those who perceived same as "teacher-centred". Another finding of the study is that the participants who rated teachers' interpersonal relationships as "supportive to learning" obtained a higher mean score in the social studies summative evaluation than those who rated same as "non-supportive to learning" on the criterion. The study recommended that teachers of JSS need capacity building training in the aspect of social studies curriculum contents and summative evaluation procedure. The similarity between the study and the present research is that both are concerned with teacher performance and competency in attaining goals of a programme, while the difference is in the area of specialization and study area since the present study is concerned with northwest geopolitical zone Nigeria.

Adodo (2014) assessed the competency of the secondary school teachers in evaluating students' cognitive and psychomotor achievement in Basic Science and Technology in Ondo state, Nigeria. The study aimed at identifying the relationship of students' learning concepts and skills in relation to teacher competency. The study was a descriptive survey design. The population of the study consists of 15,200 secondary school teachers in Ondo state out of which 20 public secondary schools and 5 private secondary schools were randomly selected as the research sample. The total number of the teachers sampled from these schools and used in the study was 90. Out of these, 57 male and 33 female were selected through stratified random sampling technique. The instrument used was a self-developed

25-item questionnaire instrument. One research question and three hypotheses were raised and tested using t-test statistical analysis at 0.05 level of significance. The results of the study indicated that teachers' qualification and their years of experience does not have any effect on how to determine the objective of the test, construct table of specification and evaluate students' learning outcome. The study however discovered that a significant difference exists between teachers' gender and their competency in evaluating sciences learning outcome. The study recommended that teachers of science and basic technology require training in practical skills acquisition to influence students' cognitive and psychomotor achievement in the subject(s). The similarity of the study with the present research is that the two studies are concerned with teachers' competency and performance in teaching and learning of students, while the difference between the two is in matters of scope and study area.

Olukayode (2012) studied and analyzed social studies evaluation in selected secondary schools in Ogun state, Nigeria. The study aimed to find out if social studies teachers in Nigeria secondary schools generally evaluate the affective domain to an acceptable level and to identify the proportion of teachers who meet the acceptable level of evaluation as specified by the study. A descriptive survey method was used. The population of the study was made up of one hundred and forty-three (143) social studies teachers out of which eighty-four (84) teachers were randomly selected for the study. Two hypotheses were generated for the study and analyzed using t-test statistical tool at 0.05 level of significance. The research findings are that Social Studies teachers in the junior secondary schools are generally competent in affective evaluation and that about

50% of the teachers evaluate the affective domain to an acceptable level. The study recommended that social studies teachers should be encouraged to evaluate student performance in cognitive and psychomotor domains, respectively. The similarities between this study and the present research are in the aspect of using junior secondary schools as well as in the method applied, while the differences are in the variables of study.

Samba and Odoh (2011) studied secondary science teachers and the art of improvising in Bayelsa state, Nigeria. The study aimed at identifying teachers' competency in the improvisation of instructional materials to enhance teaching and learning at (JSS) level of education. A descriptive survey design was used. The population consisted of 1,200 JS III teachers in Bayelsa state. A sample of 12 JS III teachers was randomly selected for the study. Questionnaire instrument was utilized to gather data. The data was analysed using simple percentage, mean and ANOVA statistical tools at 0.05 level of significance. The study found out that secondary school teachers were not at home with improvisation. Though many teachers know the relevance of improvisation, factors inherent in the teachers themselves seem to stand out distinctly among factors militating against effective improvisation. The findings also revealed inadequacy or lack of professional training of teachers for effective use or handling of local materials in the process of improvisation. The study recommended that teachers should be trained to utilize local materials for improvisation to improve teaching and learning. The study is similar to the present study in the aspect of teacher competency and differs from it in variables. The former study dealt with improvisation as an aspect

of teacher competency while the present research is concerned with teachers' attainment of goals as indices of their performance at JSS level of education.

Iwuamadi and Ajeka (2015) assessed the level of ICT competence among secondary school teachers in Imo state. The study aimed at identifying teachers' competency in the use of ICT facilities to enhance students' performance. Descriptive survey research design was used. The population of the study was 2,840, consisting of all social studies teachers in Imo state. The sample of the study drawn from Social Studies teachers in Imo state of Nigeria is 220 Social Studies teachers (120 males and 100 females), randomly selected from 51 secondary schools in Owerri educational zone. A 25–items questionnaire was used to collect data for answering three research questions and test the hypothesis. The data was analysed using (ANOVA) at 0.05 level of significance. The findings of the research are that many Social Studies teachers do not possess adequate competency in ICT application. The study recommended that social studies teachers should be trained to acquire practical skills in ICT to enhance their performance. The similarity of this study with the present research is that both have to do with teachers' competency while the differences between the two are in scope and area of study.

Ololube (2006) made an examination of professional and non professional teachers in Ondo state, Nigeria. The study aimed to identify and evaluate the relevant strategies employed by professional and non-professional teachers in ICT instructional material utilization and the role these competencies play in stimulating students' academic achievement during and after instruction.

Descriptive survey research design was used. The population of the study was 3,260, comprising of JS III and II teachers. The sample of 130 was randomly selected from the junior secondary schools in the state. The 2 research questions and the 2 hypotheses were tested using t-test statistical tool at 0.05 level of significance. The results of the findings point out that variety of techniques are needed by the teachers to effectively utilize ICT instructional materials in the teaching and learning processes. The findings also revealed that there are significant differences in the effectiveness between professionally trained teachers and untrained teachers in their ICT instructional material utilization competencies. The study recommended that teachers should be trained and retained to use ICT as instructional materials, to enhance teaching and learning in schools. The similarity of the study with the present research is that both of them are concerned with teachers' competency and performance, while the differences between the two is in the issues of variables, scope as well as study area.

Igomu and Solomon (2014) assessed ICT Competence among teachers of Federal Unity Colleges in North Central Geo-political of Nigeria. The study aimed at finding out the competency of teachers in utilizing ICT in teaching and learning process. Descriptive survey research method was utilized. The population of the study comprised all FUC teachers in the North-Central Geo-political zone of Nigeria. Through random sampling technique eight (8) FUCs out of the twenty-two (22) FUCs were utilized for the study. The target participants were all teachers in the 8 sampled FUCs. The research instrument employed was a questionnaire with 20 items. The data was analyzed using chi-square statistical tool at 0.05 level of significance. The study found that the competency level of

FUC teachers in using ICT materials is low and that majority of them cannot utilize ICT in teaching their subjects. Most teachers have personal computers/laptops but have little or no competence in the usage of ICT. Moreover, access to internet by the teachers was mainly private, indicating inadequacy of the facility in the colleges. Majority of the teachers rated their ICT competence as low. The study recommended facilities development in the schools and that the teachers should be trained in the application of ICT in teaching. The similarity between the study and the research at hand is that both are concerned with teachers' competency. They differ in variables, scope and study coverage area.

Jegede (2009) made an assessment of Nigeria Teacher Educators' ICT training issues in information science and information technology in Southwest geopolitical zone, Nigeria. The study aimed at finding out teacher educators' competency in utilizing ICT in teaching and learning. A descriptive survey research design was used. The population of the study was 1,480. A sample of 96 randomly selected teacher educators participated in the study by responding to the questionnaire instrument. The data was analyzed using ANOVA at 0.05 level of significance. The research findings showed that more than half of the educators had been exposed to one form of ICT training or the other, but the trainings hardly included the use of ICT in instruction. Most of those trained received their training directly from their institutions. The educators mostly preferred the inclusion of software skills on teachers' ICT training curriculum. It was also found that training delivery has no varying effect on basic ICT skills. Therefore, the study recommended that the educators should be given training on the use of ICT in instruction. The similarity of the study with the one at hand is in the aspect of

teachers' competency in enhancing classroom instruction while the differences are in variable, scope of the study, level of participants and study area.

Omoniyi and Quadri (2013) studied perceived competence of Nigerian secondary school teachers in the use of information and communication technology (ICT). The study aimed at examining teachers' perceived competence in the use of ICTs with respect to computer basics, use of the internet, and their ability to use simple software, in Ogun State. A descriptive survey research design was applied. The population of the study was all the 5,680 secondary school teachers in the state. A research question and three hypotheses were raised. Using simple random sampling technique the researchers selected 300 secondary school teachers in the three senatorial zones of Ogun State. The instrument used for the study was the ICT competence questionnaire (ICT CQ). Frequency counts and percentages were used for analyzing the research question while chi square was used in analyzing the hypotheses at 0.05 alpha level of significance. Findings indicated that most teachers in Ogun State secondary schools do not have the required competence in ICT and that teachers in the humanities have more competence in ICT than teachers in the sciences. The study also found that academic qualification and teaching experience of a teacher do not have any effect on the teacher's competence in ICT. The study recommended provision of ICT facilities in schools and teachers re-training in the use of (ICT) through workshops and seminars. The study is similar to the present research in methods applied and the subject of teacher competence they both discuss while the difference between the two studies is in scope and location of the study areas.

Obakhume (2015) examined the availability and usability of Information and communication technology among secondary school teachers in Oyo Metropolis as a case study. The purpose of the study was to identify teachers' competency and skills of using ICT in teaching and learning. The Research Design employed is the descriptive survey design. Three research questions were formulated for the study. The population for the study consisted of 120 secondary school teachers. Simple random technique was used to sample 120 teachers from public secondary schools. Questionnaire was used as the instrument for gathering data for the study. Data collected were analyzed using frequency tables, simple percentage and chi-square statistical tools to test the hypotheses at 0.05 level of significance. Results of the study showed that ICT facilities are not available in most of the schools covered. It was also observed that most teachers used as the sample for the study, are not competent in the use of ICT. The study recommended that government should provide adequate ICT facilities and teachers should be permitted to attend courses on the use of ICT. The Study has similarity with the present research in the subject of teachers' competency but differs from it in variables, scope and coverage area. The present study was carried out in northwest geopolitical zone, Nigeria.

2.15 Summary

This chapter reviewed the existing literature related to the research topic: Assessment of Nigerian Certificate in Education (NCE) Teachers' Attainment Goals in Junior Secondary Schools in Northwest Geopolitical Zone of Nigeria. The present research which is a needs assessment is a relatively new area of study

in Nigeria when compared to countries abroad and Writings on it as regards the Nigerian Certificate in Education are accordingly scanty.

Related literature on the assessment, evaluation, and appraisal of teachers by the study groups (the teachers themselves, SUBEB officials, the principals, and NCE lecturers) is not quite adequate either. Moreover, the assessments do not make the goals of teachers' professional and pedagogical training their basis, thus providing a sufficient justification for the present study.

The existing related literature on the quality and competencies of the NCE teachers in Nigeria Secondary schools does not usually follow any needs assessment format so as to point to the existing gaps between the NCE goals and the functional values of those goals and this provides another justification for the present research. The reviewed literature nonetheless indicate that: the methods of teaching among the NCE and other categories of teachers in the country are outdated and mostly focus on teacher-centered or traditional approach to teaching; that the teachers are competent on some of evaluation standards like providing appropriate feedback to students/pupils but incompetent in those standards dealing with recognition of unethical practices; that the teachers have been left behind in matters of ICT competence; and, that the teachers' adaptability to changing situations is negative, and so on.

It could be concluded from the reviewed related literature that the present research is justified. This is because; neither the assessment of NCE and other Nigerian teachers by the study groups nor the various researches on the different aspects of teacher competence, adopted the NCE goals as its basis of appraisal. This is to say that although the reviewed related literature contains a

number of valuable findings as summarized above, it has not adopted the needs assessment format intended by the present study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In the present chapter, the research design, population, Sample and Sampling procedure, research instruments, procedure for data collection, and procedure for data analysis are discussed. Although a needs assessment, the present research is principally a survey in that it studies a large research population and as such has occasion for such research instruments as questionnaire which is the major research tool used in the study.

3.2 Research Design

In order to identify how NCE teachers' attainment goals in junior secondary schools in the northwest geopolitical zone of Nigeria, the descriptive survey design, with research questionnaire and structured interview as its soul instruments was used. This is because the study population which consists of lecturers of NCE students in colleges of education within the geopolitical zone, NCE teachers of junior secondary schools, principals of the schools, and SUBEB officers is large enough to warrant the choice of the design. Each of the population segments stated above is a group of stake holders in the geopolitical zone, now considered as a study group by the present research. These were sampled to respond to the research questionnaire consisting of items developed from the goals of NCE programme as specified by the National Policy on Education. As research respondents, the study groups ranked the relative importance of the NCE goals and rated the attainment goals (competencies) of the junior secondary school teachers in the geopolitical zone, in relation to the goals of NCE. The respondents'

ranking of the importance of the NCE goals was compared with their rating of competence of the secondary school teachers, using the right statistic, in order to identify the existing differences between the two, if any. The identified difference or gap between the importance of the pedagogical goals and the teacher competence will be considered as the teachers' pedagogical needs, with the implication that the NCE is not relevant to the teachers' professional needs. The influence of gender and geographical location on the respondents' ranking of the importance of the pedagogical goals and their rating of the competence of the junior secondary school teachers will also be studied.

3.3 Population

The population of this study is twenty six thousand four hundred and forty (26,440), which includes all junior secondary school (J.S.S.) teachers with NCE, in the Northwest geopolitical zone of Nigeria. These are 17,048, according to the Universal Basic Education Commission-U.B.E.C (2011). The population also includes all the principals of these junior secondary schools, the total number of which is 2.291 according to U.B.E.C. (2011). Other constituents of the population are SUBEB officials within the zone' and NCE lecturers in colleges of education within the study area. The total number of SUBEB officials according to U.B.E.C. (2011) is 1,548 while the NCE lecturers in the geopolitical zone are 5,553 according to N.C.C.E. (2013). The breakdown of the study population is shown in table 3.2.1.

Table 1: Breakdown of Study Population

S/N	Study Groups	Population
1.	JSS teachers with NCE	17,048
2.	Principals of junior secondary schools	2.291
3.	SUBEB officials within the zone	1,548
4.	Lecturers of NCE programme	5,553
TOTAL:	**26,440**	

Source: UBEC, 2011, NCCE, 2013, M.O.E. 2013

3.4 Sample and Sampling Techniques

The cluster random sampling technique which according to Oche (2008) and Sambo (2008) is the frequently used form of sampling in large-scale studies was used to select the sample. The sampling technique also reflects and ensures a reasonable representation of the various cluster elements (states, local governments and so on) of the study population.

The cluster sampling strategy adopted here is a multistage type, involving the following steps:

1. Step 1: A purposeful selection of three out of the seven states of the northwest geopolitical zone was made. This, as stated above, is due to the desire to have all parts of the study area rationally represented. The states so selected are Sokoto, Kaduna, and Kano.

2. Step 2: From each of the three purposefully selected states, three local governments were randomly selected, using simple draw of lucky tip from hay and pick; the local governments so selected include: Gada, Kebbe, Sokoto North (Sokoto State); Tarauni, Kano Municipal, Rano (Kano State); and, Kubau, Zaria and Kajuru (Kaduna State)
3. Step 3: A College of Education from each of the three selected states was purposefully selected
4. Step 4: The following sampling units (SU) were then identified:
   (a) Every public junior secondary school teacher with NCE as his highest teaching qualification, in the northwest geo-political zone of Nigeria was identified as a targeted population (PU) of the Study Group A. Their total population is 17,048, according to the Universal Basic Education Commission-U.B.E.C (2010).
   (b) All the 2291 principals of the junior secondary schools of the northwest geo-political zone (U.B.E.C. 2010) accordingly form the sample units for the Study Group B.
   (c) All the SUBEB officials of the seven (7) states of the northwest geopolitical zone were identified as the sampling units for the Study Group C. Their total number, according to U.B.E.C. (2010) is 1,548
   (d) All lecturers of N.C.E. in the public colleges of education were identified as the sampling units for study group 4. They are, according to N.C.C.E. (2013) 5,553.

5. Step 5: From the total population of the study groups which is 26,440, 380 was determined as the sample size for the study, using of Krejcie and Morgan's table for determining sample sizes in table 3.4.1.

Table 2: Study sample using Krejcie and Morgan table

Study group	**Population**			**Sample size**
	Male	***Female***	***Total***	
JSS Teachers with NCE	12,501	4,544	17,048	176
Principals of JSS	1,603	688	2,291	64
SUBEB Officials	1,064	484	1,548	68
Lecturers of NCE	4,530	1,023	5,553	72
	TOTAL		**26,440**	**380**

Source: Krejcie and Morgan table (1970)

The above table shows the total population of the present study which is twenty-six thousand, four hundred and forty (26,440) and the population sample size of three hundred and eighty (380).

3.5 Instrumentation

The research utilized two instruments which were designed by the researcher. The first instrument, a questionnaire, contained twenty five items on Nigeria Certificate in Education (NCE), tagged Teachers' Attainment Goals Questionnaire" (TAGQ). The respondents are (JSS) teachers, with (NCE), principals of junior secondary schools (JSS), SUBEB officials within the study areas, and lecturers of (NCE) programme in colleges of Education in the study areas.

3.5.1 Validity of the Instruments

The questionnaire used for the study was ascertained to be valid, content wise, by the researchers' supervisors in the department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria. The contents of the questionnaire were found to have appropriately reflected the goals of the N.C.E. programme and that the questionnaire is a good measure of the topic of research.

3.5.2 Pilot Study

For the purpose of determining the reliability of the instrument that is, the research questionnaire, a pilot study was undertaken in Zamfara state, which is not among the randomly selected states for the actual study. Bungudu local government was then randomly selected for the study and thirty (30) copies of questionnaire were accordingly distributed to various respondents in the Local Government Area. These questionnaires were distributed and personally retrieved by the researcher.

3.5.3 Reliability of the Instrument

The data collected from the pilot study were statistically analyzed for the purpose of reliability co-efficient (See Appendix B). The Alpha Cronbachs reliability coefficient was used. Consequently, reliability co-efficient of alpha level of 0.957 was obtained for the importance of the NCE goals while reliability co-efficient of alpha level of 0.972 was obtained for the Competence or attainment goals. These reliability co-efficients were considered adequate for the internal consistencies of the instruments as confirmed by Ofo (2009) and Olayiwola

(2010). According to them, an instrument is considered reliable if it lies between 0 and 1, and that the closer the calculated reliability coefficient is to zero, the less reliable is the instrument, and the closer the calculated reliability co-efficient is to 1, the more reliable is the instrument. This therefore confirms the reliability of the data collection instrument used and renders the instrument fit for the main work.

3.6 Procedure for Data Collection

The researcher was assisted by four (4) research assistants duly trained for the job by the researcher for a period of three (3) days (Refer to Appendix G for training manual of the research assistants). They undertook different visits to distribute and collect the questionnaire. The three selected states of the study were each assigned a research assistant who went to the sampled local governments, twice. The first visits were for the purpose of distributing the questionnaire and the second visits were for the collection of the distributed questionnaire. Three hundred and eighty (380) questionnaires were administered and all were successfully retrieved for further action.

3.7 Procedures for Data Analysis

In analyzing the bio-data of the respondents, the descriptive statistics of frequency tables and charts were used. In analyzing the research questions, the descriptive analysis of percentage, mean, and standard deviation were used, while all the null hypotheses were tested using Wilcoxon Sgned Ranks, tests at 0.05 alpha levels of significance.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

The study assessed Nigeria Certificate in Education (NCE) teachers' attainment goals in Junior Secondary Schools of Northwest geopolitical zone of the country. The Statistical Package for the Social Sciences (SPSS) IBM 20th Edition was used for the analysis of data. A total of 380 respondents, grouped into Teachers, Principals, SUBEB officials and lecturers, were used for the study. The analysis of this study is presented in two (2) major sections for easy comprehension. The first section is that of descriptive analyses which comprises of two parts; part A which presents the data analysis of the bio-data variables in frequencies and percentages and part B which presents the answers to research questions. The second section is that of inferential analysis which tests the five null research hypotheses, using the non-parametric tests of Wilcoxon signed rank test. All hypotheses were tested at 0.05 alpha value of significance. The discussion of all the major findings was also presented in this chapter and recommendations given.

4.1 Descriptive analysis

Descriptive statistics was used in analyzing the demographic data as follows:

A) Data analysis of the bio- data variables

Table 3: Distribution of respondents by status

Status	Frequency	Percent
Teachers	176	46.3
Principals	64	16.8
SUBEB Officials	68	17.9
Lecturers	72	18.9
Total	380	100

The table above shows that 176 or 46.3% of the respondents are teachers, 64 or 16.8% are principals, 68 or 17.9% are SUBEB officials. The remaining 72 or 18.9% are lecturers.

Table 4: Distribution of respondents by Sex

Gender	Frequency	Percent
Male	303	79.7
Female	77	20.3
Total	380	100.0

Regarding sex of respondents, a total of 303 or 79.9 are male and the rest 77 representing 20.3% are female. Thus male respondents are greater in number than female respondents

Table 5: Distribution of respondents by Marital Status

Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Married	313	82.4	82.4	82.4
Single	67	17.6	17.6	100.0
Total	380	100.0	100.0	

A total of 313 representing 82.4% of the respondents are married and the rest 67 representing 67.6% are single. Thus the number of married respondents is far greater than that of the unmarried ones.

Table 6: Distribution of respondents by Location

Location	Frequency	Percent
Urban	156	41.1
Rural	224	58.9
Total	380	100.0

A total of 156 or 41.1% of the respondents are from urban areas and the rest 224 or 58.9% are from rural areas. This implies that respondents from rural areas are more in number than respondents from urban areas.

Table 7: Distribution of respondents by teaching Qualifications

Teaching qualification	Frequency	Percent
NCE	320	84.2
Others	60	15.8
Total	380	100.0

A total of 320 or 84.2% possess their NCE while the rest 60 or 15.8% possess other teaching qualifications. By implication, highest percentage of the respondents possessed.

Table 8: Distribution of Respondents by Institutions the NCE certificates were obtained

Educational Institution	Frequency	Percent
College of Education	304	80.0
Polytechnic	67	17.6
University	9	2.4
Total	380	100.0

Regarding the institutions NCE certificates were obtained, 304 or 80.0% of the respondents obtained theirs from colleges of education. 67 or 17.6% of the

respondent on the other hand obtained theirs from polytechnics and the rest 9 or 2.4% obtained theirs from universities.

Table 9: Distribution of respondents by Years of Teaching experience

Age	Frequency	Percent
0 - 10 years	285	75.0
11 - 20 years	84	22.1
21-30 years	9	2.4
31 - 40 years	2	.5
Total	380	100.0

On respondents' years of teaching experience, a total of 285 or 75.0% had less than 10 years, 84 or 22.1% have between 11-20 years, 9 or 2.4% have between 21-30 years and the rest 2 or 0.5% have between 31 – 40 years

Table 10: Distribution of respondents by Highest educational qualification

Educational Qualification	Frequency	Percent
NO RESPONSE	6	1.6
NCE	190	50.0
BA	91	23.9
B. Ed	38	10.0
MA	32	8.4
M. Ed	23	6.1
Total	380	100.0

The table above reveals the respondents' highest educational qualifications. While 6 or 1.6% of the respondents did not respond, a total of 190 of them, representing 50.0% possess NCE, 91 or 23.9% possess BA, 38 or 10.0%,possess B.Ed., 32 or 8.4% possess MA and the rest 23 or 6.1% possess M. Ed degrees.

4.2 Research Questions

Research Question One: What is the NCE teachers' attainment goal of high quality classroom teachers for junior secondary schools in northwest geopolitical zone, Nigeria?

Table 11: Stakeholders Opinions on the NCE attainment goal to produce quality classroom teachers for junior secondary schools

Wilcoxon Signed Ranks Test

Variable	**N**	**Mean**	**S.D**
(NCE Pedagogical goal)			
High quality teachers (JSS Teachers)	276	173.75	38398.50
SUBEBs and Lecturers	104	112.42	10117.50
Total	380		

The calculated mean ranking of the NCE teachers' attainment goal and their ranking of teacher competence in relation to the goal were 173.75 and 112.42, respectively. The irrespective standard deviation were38398.50 and 10117.50, in NCE goals and teachers attainment goals respectively. This shows that their ranking of NCE goals is higher than their ranking of competence implying that the acquired attainment of NCE goal in producing quality teachers of junior secondary schools was quite inadequate based on the respondents opinions.

Research Question Two: What is the NCE teachers' attainment goal of spirit of enquiry and creativity, for junior secondary schools in northwest geopolitical zone, Nigeria?

Table 12: Stakeholders Opinion on the NCE teacher's attainment goal to enhance the spirit of enquiry and creativity in teachers for junior secondary school

Wilcoxon Signed Ranks Test

Variable (NCE Pedagogical goal)	**N**	**Mean**	**S.D**
The spirit of enquiry and creativity in teachers (JSS Teachers)	284	18.96	531.00
SUBUB and Lecturers	96	14.14	199.00
Total	380		

The calculated mean rankings of the NCE goal and their ranking of the teachers' competence in them were 18.96 and 14.14, respectively. Their respective standard deviations were 531.00 and 199.00. This shows that ranking of NCE attainment goal is higher than their ranking of competence implying that the acquired of NCE goal to enhance spirit of enquiry and creativity to teachers of junior secondary schools was grossly inadequate and dissatisfactory based on respondents opinions.

Research Question Three: To what extent has the NCE teachers' attainment goal of fitting into the social life of the immediate community for junior secondary schools in northwest geopolitical zone, Nigeria, been attained?

Table 13: Stakeholders Opinions on the NCE teacher's attainment goal in helping teachers fit into the social life of the immediate community

Wilcoxon Signed Ranks Test

Variable (NCE Pedagogical goal)	N	Mean	S.D
JSS Teachers fit into social life of immediate community	150	23.83	929.00
SUBEBs and Lecturers	230	29.33	1056.00
Total	380		

The calculated mean rankings NCE goals and teachers' competency were 23.83 and 29.33 respectively. Their respective standard deviations were 929.00 and 1056.00.This shows that the ranking of NCE goals is significantly low than the ranking of the teachers' competency to fit into the social life of the immediate community in relation to the goals. The opinions of stakeholders indicate that teachers teaching in junior secondary school adapt to the immediate community in northwest geopolitical zone in Nigeria.

Research Question Four: What is the NCE teachers' attainment goal of intellectual and skills acquisition, for junior secondary schools in northwest geopolitical zone, Nigeria?

Table 14: Stakeholders Opinions on the NCE teachers' attainment goal to enhance intellectual and skills acquisition to teachers of junior secondary schools

Wilcoxon Signed Ranks Test

Variable (NCE Pedagogical goal)	N	Mean	S.D

JSS Teachers intellectual and skills acquisition	250	16.50	346.50
SUBEBs and Lecturers	130	12.50	259.50
Total	380		

The calculated mean rankings of the NCE goal of teachers' intellectual and skills acquisition and teachers' competency in them were16.50 and 12.50, respectively. Their respective standard deviations were 346.50 and 259.50. The ranking of the relevance of the NCE goal is therefore higher than their ranking of the teachers' competence in relation to the goal. This implies that the acquired NCE goal of intellectual and skills to teachers teaching in the junior secondary schools was inadequate and far from satisfactory based on respondents opinions.

Research Question Five: What is the NCE teachers' attainment goal of commitment to national objectives, for junior secondary schools in northwest geopolitical zone, Nigeria?

Table 15: Stakeholders Opinions on the NCE of teachers' attainment goal inculcating commitment to national objectives of teachers of junior secondary schools

Wilcoxon Signed Ranks Test

Variable	**N**	**Mean**	**S.D**
(NCE Pedagogical goal)			
Teachers' commitment to national objectives	126	158.38	929.00
SUBEBs and Lecturers	254	191.47	1056.0 0
Total	380		

The calculated mean rankings of the NCE goal of teachers' commitment to national objectives with mean of 158.38 signifies NCE goal while 2.54 with means of 19.147 signifies competence and the standard deviation was 929.00 and 10.56 respectively. It therefore implies that the NCE teachers attainment goals of inculcating commitment to national objectives was high and satisfactorily position based on the respondent opinions.

4.3 Inferential Analysis (Hypotheses Testing)

The research hypotheses were tested using inferential statistic of non-parametric statistic of Wilcoxon signed rank test. The justification of the use of this statistical tool is because the variables studied were not normally distributed and the sample purposely selected not randomly selected. These conditions permit the use of non-parametric statistical package in a survey study.

Hypothesis One: There is no significant difference between the NCE teachers' attainment goal and production of high quality classroom teachers for junior secondary schools in northwest geopolitical zone, Nigeria.

Table 16: Analysis of stakeholder's Opinions on the ranking of ranking of the NCE teachers' attainment goal of production of quality teachers in the junior secondary schools of Northwest geopolitical, Nigeria (determined using the non-parametric statistic test of Wilcoxon)

Wilcoxon Signed Rank Test - Decision Rule

Reject: Ho if x^2 cal>x^2crit

Accept: Ho if x^2 cal<x^2crit

Variable (NCE Pedagogical goal)	**N**	**Mean Rank**	**Sum of Rank**	**Z score**	**P**
Production of high quality teachers	380	173.75	38398.50	8.918	0.000
Total	380				

In the table above, the non-parametric test statistic of Wilcoxon shows that significant difference exists between ranking of the NCE teachers attainment goal and their rating as high quality classroom teachers' in junior secondary schools of northwest geopolitical zone of Nigeria. This is because the calculated sig (p) value of 0.000 is lower than the 0.05 alpha level of significance. Their sums of rank and mean rank were 38398.50 and 174.75 respectively. The respondents' ranking indicates poor performance of teachers in their teaching

responsibility implying that there is inadequate quality teachers at junior secondary school level of education. Therefore, the null hypothesis which states that there is no significant difference in the opinions of stakeholders on the NCE teachers' attainment goals and production of high quality classroom teachers in junior secondary school of northwest geopolitical zone of Nigeria is hereby rejected.

Responses on item 1 from the structured interview were analyzed and the mean (4.217) and standard deviation of (1.910) were obtained, which are higher than the 0.05 alpha level of significance. The null hypothesis of the study was thus rejected. See appendix (c).

Hypothesis Two: There is no significant difference between the NCE teachers' attainment goal and the spirit of enquiry and creativity of teachers for junior secondary schools of northwest geopolitical zone, Nigeria.

Table 17: Analysis of stakeholders' Opinions on the ranking of ranking of NCE Teachers' attainment goal of enhancing spirit of enquiry and creativity, in the junior secondary schools of northwest geopolitical zone, Nigeria

Wilcoxon Signed Rank Test - Decision Rule

Reject: Ho if x^2 cal>x^2crit

Accept: Ho if x^2 cal<x^2crit

Variable (NCE Pedagogical goal)	N	Mean Rank	Sum of Ranks	Z score	P
Enhancing spirit of enquiring and creativity of teachers	380	173.75	38398.50	8.918	0.000
Total	380				

In the table above, the non-parametric test statistic of Wilcoxon signed rank test shows that significant difference exists on respondents ranking of the NCE teachers' attainment goals and the NCE goal of developing spirit of enquiry and creativity in teachers of junior secondary schools of northwest geopolitical zone of Nigeria. This is because the calculated sig (p) value of 0.000 is lower than the 0.05 alpha level of significance. The respondents' calculated mean ranking and sum of ranks were 173.75 and 38398.50 on importance and competency, respectively. This indicates that NCE teachers could not adequately exhibit spirit of enquiry and creativity in junior secondary schools of northwest geopolitical zone of Nigeria. Therefore, the null hypothesis which states that there is no significant difference in the opinions of stakeholders on the NCE teacher attainment goal and spirit of

enquiry and creativity of teachers in junior secondary schools of northwest geopolitical zone of Nigeria was hereby rejected.

The structured interview responses on item (2) were analyzed, a mean of (4.6500) and a standard deviation of (1.021) was obtained which were found to be higher than the 0.05 alpha level of significance. Therefore the null hypothesis (2) was rejected. See appendix (c).

Hypothesis Three: There is no significant difference between the NCE teachers' attainment goal and the NCE teachers' fitting into the life of the immediate community, for junior secondary schools in northwest geopolitical zone, Nigeria.

Table 18: Analysis of stakeholders' stakeholders Opinions on the ranking of the NCE teachers' attainment goal- to fit into social life of the immediate community, in the junior secondary schools of northwest geopolitical zone, Nigeria

Wilcoxon Signed Rank Test - Decision Rule

Reject: Ho if x^2 cal>x^2crit

Accept: Ho if x^2 cal<x^2crit

Variable (NCE Pedagogical goal)	**N**	**Mean Rank**	**Sum of Rank**	**Z score**	**P**
Teachers fit into social life of the immediate community	380	191.47	3622.8	1.486	0.555
Total	380				

Result of the non-parametric statistic, Wilcoxon test above, shows that there is no significant difference between the study groups in their ranking of the junior secondary schools NCE teachers' attainment goal in the northwest geopolitical zone of Nigeria. This is because, the calculated significant P value of 0. 555was found to be higher than the 0.05 alpha value of significance. The mean perceptions of the study groups on the teachers' competency are 191.47, 3622.8, by teachers, principals, SUBEB officials and lecturers, respectively. This indicates that NCE teachers adapt to the immediate community while teaching at JSS level. Therefore, the null hypothesis which states that there is no significant difference between the study groups (lecturers, NCE teachers, Principals, and SUBEB officers) in their rating of NCE teachers attainment goal of teachers fit into social life of the immediate community is retained.

The structured interview responses on item (3) were analyzed, a mean (0.0182) and standard deviation (0.024) were obtained, which are lower than 0.05 alpha level of significant. Therefore, the null hypothesis (3) was confirmed, accepted and retained. See appendix (c)

Hypothesis Four: There is no significant difference between the NCE teachers' attainment goal and intellectual and skills acquisition of teachers, for junior secondary schools in northwest geopolitical zone, Nigeria.

Table 19: Analysis of stakeholders Opinions on the ranking of NCE teachers' attainment goal of ensuring intellectual and skills acquisition, in the junior secondary schools of northwest geopolitical zone, Nigeria

Wilcoxon Signed Rank Test - Decision Rule

Reject: Ho if x^2 cal>x^2crit

Accept: Ho if x^2 cal<x^2crit

Variable (NCE Pedagogical goal)	**N**	**Mean Rank**	**Sum of Ranks**	**Z score**	**P**
Teachers intellectual and skills acquisition	380	16.50	346.50	3.274	0.001
Total mean	380				

In the table above, the non-parametric test statistic of Wilcoxon shows that significant difference exists between the stakeholders' ranking of the NCE goals and teachers' attainment goal of intellectual and skills acquisition, in junior secondary schools of northwest geopolitical zone of Nigeria. This is because the calculated sig (p) value of 0.001 is lower than the 0.05 alpha level of significance. The respondents' calculated mean rankings of importance and competency were 16.50 and 346.50 respectively. This shows that the respondents' ranking of the NCE teachers' attainment goal of intellectual and skills acquisition, among junior secondary school teachers of northwest geopolitical zone of Nigeria, is low. This indicates NCE teachers are ineffective in intellectual knowledge of subject(s) matter and could not perform effectively in skills of lesson delivery. Therefore, the null hypothesis which states that there is no significant difference between the

NCE teachers' attainment goal and intellectual and skill acquisition of teachers in junior secondary schools in northwest geopolitical zone, Nigeria, is hereby rejected.

The structured interview responses on item (4) was analyzed and a mean (4.07011) and standard deviation (1.053) were obtained and found to be higher than 0.05 alpha level of significance. Therefore, the null hypothesis (4) of the study was rejected. See appendix (c).

Hypothesis Five: There is no significant difference between the NCE teachers' attainment goal and the teachers' commitment to national objectives, for junior secondary schools in northwest geopolitical zone, Nigeria.

Table 20: Analysis of stakeholders of Opinions on ranking of the NCE teachers' attainment goal on teachers' commitment to national objectives in the junior secondary schools of northwest geopolitical zone, Nigeria

Wilcoxon Signed Rank Test - Decision Rule

Reject: Ho if x^2 cal>x^2crit

Accept: Ho if x^2 cal<x^2crit

Variable (NCE Pedagogical goal)	**N**	**Mean Rank**	**Sum of ranks**	**Z score**	**P**
Teachers commitment to national objectives	380	191.47	323.11	1.988	0.469
Total	380				

Result of the Non parametric Wilcoxon test above shows that there is no significant difference between the study groups' (lecturers, NCE teachers, Principals, and SUBEB officers) ranking of the NCE goals and their rating of the teacher' attainment goal of commitment to national objectives, in junior secondary schools in northwest geopolitical zone, Nigeria. This is because the calculated significant P value of 0.469 was found to be higher than the 0.05 alpha value of significance. The mean perceptions of the study groups on the NCE teachers' attainment goals of teachers' commitment to national objectives are 191.47 and 323.11 respectively. This indicates that teachers are committed to national objectives. Therefore, the null hypothesis which states that there is no significant difference on ranking of NCE teachers' attainment goals and teachers' commitment to national objective was hereby accepted and retained.

The structured interview responses on item (5) were analyzed, a mean (0.0130) and standard deviation (0.022) was obtained lower than the 0.05 alpha level of significant. Therefore the null hypothesis (5) was confirmed accepted and retained. See appendix (c).

4.4 Summary of Findings

This study was conducted in Northwest Geopolitical Zones of Nigeria on assessment of Nigeria Certificate of Education (NCE) Teachers Attainment Goals in junior secondary schools. The major findings are presented on responses of the respondents on the research questions and the results obtained from hypotheses tested.

1. The study revealed that there was significant difference in the opinions of stakeholders (JSS teachers, principals, SUBEB officials and lecturers) between the NCE goal and the NCE teachers' attainment goal of production of highly quality teachers. This indicates poor quality of NCE teachers that are presently teaching in northwest geopolitical zone in the country.
2. The study discovered that there was significant difference in the opinions of stakeholders on NCE teachers' attainment goal and enhancing spirit of enquiry and creativity to teachers. This shows majority of NCE teachers are ill equip to exhibit spirit of enquiry and creativity in teaching job.
3. The study revealed there that there is no significant difference in the opinion of stakeholders on NCE teachers attainment goals and teachers fit into social life of the immediate community. This indicates that NCE teachers adapt to the immediate community to teach at various level of education in the country.
4. The study revealed that there is significant difference on the opinion on NCE teachers attainment goal and teachers intellectual and skills acquisition. This situation indicates ineffectiveness in NCE teachers to adequately exhibit high intellectual knowledge of subject(s) matter and pedagogical skills of classroom instruction.
5. The study revealed that there was no significant difference in the opinions of stakeholders of NCE teachers attainment goal and teachers commitment to national objectives. This indicates that teachers were committed to national objectives, majority of NCE holders could be

found in the teaching profession in the Northwest geopolitical zone of the country.

4.5 Discussion of Findings

The purpose of this study was to assess the NCE teachers' attainment goals in junior secondary schools in northwest geopolitical zone of Nigeria. The major finding of this study is that in the perception of all the study groups (secondary school teachers, principals, SUBEB officials and lecturers), there was a significant gap between the NCE goals and the attainment of he goals by NCE teachers in junior secondary school. This is to say that in the opinions of all the study groups, the NCE training the teachers received does not satisfy their pedagogical needs of teaching in the junior secondary schools. In other words, the curriculum contents in the perception of all the study groups could not adequately prepare the teachers' pedagogical needs of the junior secondary school. For this reason, the first, second and fourth null research hypotheses were rejected. These were: There is no significant difference in the opinions of stakeholders on NCE teachers attainment goals and production of quality teachers (competence) in junior secondary schools of northwest geopolitical zone of Nigeria; there is no significant difference in the opinions of stakeholders on the NCE teachers attainment goals and enhancing spirit of enquiry and creativity and there is no significant difference on the NCE teachers attainment goals and intellectual and skills acquisition. While null research hypotheses three and five were retained; There is no significant difference on teachers fit into social life of the immediate community and that of commitment to national objectives in junior secondary schools of northwest geopolitical zone, Nigeria.

Many empirical research findings like those of Iyunade, (*2011*), Kumazhege and Zir (2010), Uwameiye (2012),Patrick (2009)Lawal, Onipede, Oketoobo and Famiwole (2014) Olaitan, Alaribe and Amusa (2010) are in line with the above major research finding, as is the position of the NCCE, the body concerned with the preparation of teachers for primary and junior secondary education in Nigeria. The researchers above have, in accord with this finding, identified several areas of pedagogical need and deficiency among Nigeria secondary school teachers. Some such a finding are: that the teachers' level of preparation for the universal basic education was relatively low and that teachers are not adequately prepared in terms of intellectual and skillfulness to handle large class size(Iyunade,2011); that the introductory technology teachers have deficiencies in various aspects of introductory technology spirit of creativity and enquiry and need further training in various aspects of introductory technology*(*Kumazhege & Zir, 2010); and, that teachers of Business Studies need improvement in instructional planning, implementation and evaluation skills, as well as in core Business skills in relation to the teaching of office practice, shorthand and keyboarding as well as in commerce, bookkeeping and ICT (Uwameiye (2012).Science education activities have also been discovered to have suffered serious setback in science classrooms in secondary schools including insufficient time allocation in school time table, persistent use of lecture method in science teaching, persistence of teacher dominated teacher-student interaction in science classroom, non-coverage of science schemes of work, non-regular giving and marking of assignments, non-proper supervision of instructions, non-conduction of practical lessons and non-assessment of students in all the domains Patrick

(2009). Other research finding that support the research finding under discussion are that teachers of agricultural science need capacity building in planning and organizing school farm, implementing school farm practical, coordinating and evaluating school farm practical Lawal, Onipede, Oketoobo and Famiwole, (2014), and that secondary school teacher of agriculture need capacity building in pig production competencies; in planning, housing management, feeding of pigs, health management and marketing of pig products(Olaitan, Alaribe and Amusa, 2010).

Researches in line with the above finding of the present study also include that of Okolocha, and Onyeneke (2013) which reported the principals of junior secondary schools in Anambra state as having rated the secondary school business studies teachers as ineffective in adhering to some aspects of time management; classroom management and lesson note preparation and delivery for optimal achievement of instructional goals and improved students' academic achievements and consequently incompetence in terms of lesson delivery. It is also in accord with that of Samba and Odoh (2011) who found that junior secondary school teachers were not at home with improvisation, meaning that low creativity in these type of teachers other accordant researches are those of Iwuamadi and Ajeka (2015) which discovered that most of the Social Studies teachers do not possess adequate competency in ICT application and Omoniyi & Quadri (2013) which found that most teachers in secondary schools studied do not have the required competence and that academic qualification and teaching experience of a teacher do not have any effect on teacher's competence in ICT. Another related research in line with the present research finding is that of Adeosun (2010) who discovered

in his study that only 33.7% of the teachers sampled by the study claimed to have personal computer, while 27.5% admitted to being introduced to some ICT during their training as teachers and as much as 41.4% claimed they never visited the internet at all and that only 5.8% who do so went there for the purpose of research.

Some empirical research findings like those of Oyeronke and Fagbohun (2013), Olukayode (2012), Rabiu (2014) and Popoola and Odili (2011) do not however agree with the above major finding of the present study that the NCE curriculum in the opinion of secondary school teachers, principals, SUBEB officials and lecturers, is not relevant to the pedagogical needs of the junior secondary school teachers that have undergone it. Oyeronke and Fagbohun (2013) have discovered in their study that majority of the teachers sampled were computer and ICT literate. Olukayode (2012) has found that Social Studies teachers in the junior secondary schools are generally competent in affective evaluation and that about 50% of the teachers evaluate the affective domain to an acceptable level. Rabiu (2014) discovered that majority of junior secondary school students in Sokoto State perceived their Basic science teachers as having positive attitude in discharging their duties of teaching. Hence, hypothesis five was retained in the study that has to do with teachers' commitment to national objectives. Moreover, there is no significant difference in the perception of male and female JS III students on the Attitude of Teachers Teaching Basic Science as a subject in junior secondary schools located in Sokoto State. Popoola and Odili (2011) discovered that the teachers' pedagogical knowledge correlated significantly with practice and that there is a significant correlation between teachers' preparation and teacher characteristics with practice in mathematics.

Yet the finding of the present study that the NCE curriculum in the opinion of secondary school teachers, principals, SUBEB officials and lecturers is not relevant to the pedagogical needs of the junior secondary school teachers that have undergone it is a very imposing one that needs ardent attention. For one thing, the studies with opposing view are not, to the researchers' observation not many when compared with the opposing findings like that of the present study. Moreover, the existing several evidences thateducational standard in the country is low (Ola, 2010, Joshua, 2008, Akiri & Ugborugbo, 2009, Fasasi, 2007 and Offorma, 2006), is in support of the above finding of the present study. Furthermore, there exist several empirical research evidences that there is a very big positive relationship between teachers' level of training and competence on the one hand and students' achievement on the other hand, which makes the above finding a very important one. In one study for example, Hakim (2015), discovered that, partially pedagogical, personal competence, professional competence and social competence has a significant influence in improving learning performance. The contribution of all the teaching competencies simultaneously or jointly declared significant has influence in improving the quality of performance in the learning process. In a more specific study, Fakeye (2012) investigated extent to which teachers' qualification and subject mastery could predict students' achievement in English language among senior secondary students in Ibarapa Division of Oyo state and found out that teachers' teaching qualification has a significant relative contribution to students' academic achievement in English language. In a still related specific research, Owolabi (2012) who examined the effect of teacher qualification on the performance of Senior Secondary School

students in Physics discovered that a teacher's ability to impact knowledge on his students is not affected by the teacher's gender, much as he/she is a skilled teacher in that field of study but the experience of the teacher is significant at impacting the students' academic performance in Physics. Bassey, Okon, Asu and Ottong (2011) also found that a significant relationship exist between training and retraining and productivity of teachers in terms of punctuality to school, organizing extra-lessons for students, timely submission of examination grades and participation in extra-curricular activities.

Some possible empirical causes of the ineffectiveness of the NCE programme to the needs of the junior secondary school teachers in the northwest geopolitical zone of Nigeria, as discovered by the above finding of the present study can be attributed to the curriculum and educational settings that characterize teacher education in the country today. Adeyanju (2008) has for example discovered that educated but untrained persons are employed to train teachers for secondary schools. Other reasons, according to him include lack of standardization of teacher training courses and the failure of the public to evaluate teachers in terms of the schooling needed for the job. Ekpo (2005) attributed the problem of the irrelevance to the absence of curriculum change in the country, and to the professional conservatism of teachers; their isolation, and their lack of ability to implement changes due to limitations set by the teachers' academic ability, lack of relevant equipment and overwork. A study by Iyamuand Otote (2010) found that NCE teacher Educators are incompetente in using enquiry method, a finding which according to him corroborates the views of Mkpa (2010) and Popoola (2000) that the major problem of social studies education in Nigeria

is the gross lack of appropriate pedagogical skills and competencies by the teachers. Oguntimehin (2009) who assessed the effectiveness of teaching personnel of the National Teachers' Institute (NTI) Kaduna for the Nigeria Certificate in Education (NCE) distance learning programme in Ogun State of Nigeria found among others that the teaching personnel were qualitatively inadequate but quantitatively adequate. Adeosun, Oni, Oladipo, Onuoha and Yakassai (2009), confirmed through a research that although the content of PES curriculum in Nigeria colleges of education is adequate, the teaching strategies need a lot of improvement. This, he noted, has serious implications for the successful implementation of basic education in Nigeria. Similarly, Tella (2012) investigation on the level of availability and use of ICT in some South-western Nigeria Colleges of Education revealed low level of usage of ICT gadgets and non-availability of some ICT equipments. The respondents were also disgruntled with the sluggish use and integration of ICT. In a related research by Jegede (2009) which examined the nature and impact of ICT trainings received by the teacher educators in Southwestern Nigeria teacher training institutions, it was discovered that although more than half of the educators had been exposed to one form of ICT training or the other, the trainings had hardly included the use of ICT in instruction.

One other finding of the present research is that the study groups (secondary school teachers, principals, SUBEB officials and lecturers) did not differ significantly in their ranking of the importance of the pedagogical goals of NCE. They rated item six: “Develop in teachers, a positive attitude toward continued independent education” as the first in importance and Item one: “To

produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system" the next (second) in importance. Item five: "To encourage further the spirit of creativity of teachers" was rated the third in importance. By according the highest importance to development of a positive attitude toward continued commitment to national objectives in teachers, the respondents who are also some of the stake holders in the Nigeria junior secondary education have indicated the importance of dynamism in teaching profession, spirit of enquiry and creativity which stresses the necessity of continuous learning and retraining.

The importance of lifelong learning which makes teachers able to adapt to changing situations and fit into social life of the immediate community cannot be overemphasized. As Adeosun (n. d) noted, teachers are key personnel in realizing the national goal of a knowledgeable society and as such they need to be lifelong learners themselves, in order to shoulder the heavy responsibilities entrusted to them and be capable of positively influencing the students in their thoughts, behaviors and lifestyle. Unfortunately today, many of the Nigeria teachers, even when professionally qualified, are occupationally incompetent, because they do not update their knowledge and skills. Moreover, as Obike, (n. d),Mohammed, (2006), and Uwaifo and Uwaifo,(2009) have observed, not much is done in this country in the area of helping serving teachers to update their professional and academic training, especially teachers in primary and post primary institutions.

Other empirical studies that point to the necessity of continuous learning, training and retraining in teaching profession include those of Laursen (2007), Zeichner and Tabachnick in Korthagen (2009) and Korthagen**, (**2009). Teacher trainees according to some researches do not consider theory with seriousness and often find it difficult to transform theories into practice. In one study, Laursen (2007) investigated student teachers' conceptions of theory and practice in teacher education and found that student teachers often complain that theory in teacher education is not relevant to practice and as a product of other persons'. They do not view theorizing as anything they do or can do themselves. They primarily want to learn to teach, not to reflect on teaching and therefore they want theories to be useful and to be 'tool-like'. They do not want recipes or manuals; they want freedom to develop their own way of teaching. Zeichner and Tabachnick in Korthagen (2009) also discovered that the transfer of theory to practice is meager or even non-existent and that many notions and educational conceptions, developed during pre-service teacher education, were washed out during field experiences. Korthagen**, (**2009) also found that teachers encounter a huge gap between theory and practice during their induction in the profession. Consequently, they pass through a quite distinct attitude shift during their first year of teaching, in general, creating an adjustment to current practices in the schools and not to recent scientific insights into learning and teaching. It follows therefore that learning must be a continuous undertaking for every good teacher in order for him to understand and practice the knowledge and theories that have bearing to his profession.

Another important finding of the present study is that in their rating of the junior secondary school teachers' pedagogical performance (competence) in the geopolitical zone, the study groups (secondary school teachers, principals, SUBEB officials and lecturers) did not differ significantly. They rated the teacher competence: "To produce highly motivated and quality classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system" with the highest mean response of 4.4105. They also rated the teacher competence: "Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement" as the next highest, with the mean response of 4.3658. Teacher competence: "Provide meaningful feedback to leaner's and their parents/guardians about their developing intellectual knowledge and skills and inform them of further strategies for improvement" was rated the third by the respondents, with the mean response of 4.2737.

The study groups did not also significantly differ in their rating of the junior secondary school teachers' pedagogical performance. The criteria they used in rating the pedagogical performance (competence) of the junior secondary school teachers in relation to the NCE pedagogical goals must have ranged from the teacher' course credentials, the teachers' student performance, observing the teacher's performance, teachers' knowledge and qualities often associated with students' performance, and so on. The fact that the study has found similarity among the study groups in rating the teachers' competence is in accord with the finding of Shuli (2008) that principals and teachers differ only slightly from one another on the ground of the purpose to be served when the teacher is evaluated. In a related study, Simms (2007) discovered that both the principals and teachers

found a given criteria to be both relevant and feasible for use in evaluating teachers. A study by Imhanlahimi (2009) however discovered that teachers are biased in their self-assessment of teaching effectiveness, and that students and researchers are more objective in their assessment of teachers' effectiveness than the teachers are when they assess themselves.

The rating, by the study groups, of the three teacher competencies, namely; to produce highly motivated classroom teachers of our educational system; develop, select, and effectively use appropriate curriculum processes for maximum learner achievement; and, Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement, as the first three highest competencies observed in the junior secondary school teachers, is revealing and in line with a number of findings by some other researchers. Ojugo (2003) for example discovered that the Nigerian teachers were competent on some of the standards of evaluation such as providing appropriate feedback to students/pupils; planning collection of information that facilitates decision making; interpreting informal assessment results; using accumulated assessment information to organize instructional plan; and, explaining why grades assigned are rational and justified; and, communicating to students/pupils, parents/guardian how to assess students'/pupils' educational progress. Ololube (2007) found that trained teachers in Nigeria take into account the individual differences that exist among students when teaching and that there are differences in the way and approaches trained and untrained teachers go about their role in the instructional process.

Many other researchers have however arrived at findings contrary to the above one. On the methodological competence of the junior secondary school teachers, for example, Okigbo and Okeke (2010) found in their study that teachers find the application of educational technology in teaching mathematics as a difficult task, the teachers' gender notwithstanding. In another study, Kiadese (2011) who investigated the teaching effectiveness of prevocational subject teachers discovered that there was a relatively low teaching effectiveness among prevocational subject teachers. Samba and Odoh (2011) found that their studied secondary school teachers were not at home with improvisation and are lacking in the ability to effectively use or handle local materials in the process of improvisation. In the area of evaluation of learners, Omo-Egbekuse*et.al* (2011) discovered in their study that teachers are incompetent in those standards dealing with recognition of unethical practices, namely, describing laws that affect assessment practices, explaining how assessment procedures can be misused, and knowing harmful consequences of overused/misused assessment procedures. A study by Obioma (2009) also discovered that Nigerian primary and secondary school teachers in general demonstrated poor knowledge of the elementary concept of Continuous Assessment (CA) and that many of them misapplied the CA instruments leading to more of continuous testing of learners instead of continuous assessment. Moreover, a vast majority of them demonstrated poor knowledge of the basic concept of CA.

One other finding of the research is that the ranking of the importance of the NCE pedagogical goals and the rating of the junior secondary school teachers' pedagogical performance (competence) by the study groups was not significantly

influenced by the environmental factors of fit into social life of the immediate community of the respondents. This finding is in accord with a number of findings by some other researchers. Owolabi (2012) for instance, examined the effects of teacher' qualification on the performance of Senior Secondary School students in Physics and discovered that students taught by teachers with higher qualifications performed better than those taught by teachers with lower qualifications, the teachers' adaptability notwithstanding. Okigbo and Okeke (2010) also discovered that the perceived level of difficulty experienced by Mathematics teachers in using the skills of integrating certain educational objectives and educational technology into Mathematics classes was independent of the teachers' adaptability to the immediate community. The above finding by the present study is however contrary to research findings by Adodo (2014) who assessed the competency of the secondary schools teachers of Ondo state in evaluating students' cognitive and psychomotor achievement in BST with the teachers' fit into the learning environment, used of second language, years of experience and qualification as variables and found out that significant difference exist between teachers' and their competency in evaluating sciences learning outcome.

Finally, the present study also discovered that teachers commitment to national objectives had no bearing on the respondents' ranking of the importance of the NCE pedagogical goals and rating of the pedagogical performance (competence) of the junior secondary school teachers of the study area. In other words, there was found no significant difference between the respondents' opinions in their ranking of importance of the NCE pedagogical goals and their rating of the junior secondary school teachers' pedagogical performance

(competence) in the geopolitical zone. This is opposed to the finding by Adegbemile *et a*l (2011) that a significant difference exists between the mean rating of teachers commitment to national objectives for effective teaching and learning . It also differs from the finding by Akpotu and Oghuvbu (2009) that the student subjects of their study perceived their teachers as competent and dedicated more cordial relationship with students.

CHAPTER FIVE

SUMMARY, COONCLUSION AND RECOMMENDATIONS

5.1 Summary

The aim of the research was to assess the NCE teachers' attainment goals in junior secondary schools in the northwest geopolitical zone of Nigeria. It aimed at identifying how the NCE training acquired by the Nigeria secondary school teachers, with particular reference to Northwest geopolitical zone of the country, enable the teachers discharge their primary assignment of teaching. In chapter one which is general introduction of the research, the statement of the problem was made after discussing the background of the study. Despite the fact that effective, efficient and well-motivated teachers' are a necessity for the continued advancement of any nation in all fields of life and the fact that such teachers are only tenable through sound training, which must be relevant to the teacher's professional and specifically pedagogical needs, many Nigerians have come to maintain the view that the quality of teachers in the country leaves much to be desired and this has prompted the present research. To investigate this opinion, five (5) research objectives, five (5) research questions were formed, with five (5) corresponding hypotheses. The study was considered significant because as a needs assessment, it provides valuable information to curriculum planners and developers since it provides a mechanism for developing, defining and validating curriculum-less goals. It is also the bridge by which curriculum is subsequently selected, shaped, implemented, evaluated and improved. Moreover, needs assessments also identifies the areas of discrepancy in order of their priorities thereby enabling the NCE curriculum planners, developers and educational

administrators especially the NCCE, to plan, develop and implement the curriculum in order of the priorities so identified. For the sake of concentration and better output however, the study was delimited to teachers of public junior secondary schools and lecturers of public colleges of education in the geopolitical zone. Parents were also not included among the study groups despite the fact that they can also assess the products of the NCE programmes to some extent since they have contact with them.

In chapter two, the related literature was reviewed, noting that the NCE programme and its goals evolved in the country over a period and that many of its goals are of pedagogical relevance and therefore form the basis of the present assessment. It was also observed in the review that the subject educational needs assessment is a relatively new area of study in Nigeria when compared to countries abroad, and needs assessment researches on Nigerian Certificate in Education (NCE) are accordingly very scanty. Consequently, a lot of foreign literature on the topic, which was often theoretical and conceptual, could not be avoided in the review. Such literature however, provides some methodological direction for the research at hand. Even the related literature on the assessment, evaluation, and appraisal etc of teachers by the study groups (the teachers themselves, SUBEB officials, the principals, and NCE lecturers) is not quite adequate. Even the little that exists does not make the goals of teachers' professional trainings their basis, thus providing a sufficient justification for the present study. The review concluded that the present research is justified since the various researches reviewed did not adopt the pedagogical goals of the NCE as their basis of appraisal. This to say that although those researches contain a

number of valuable findings related the research topic; they did not adopt the needs assessment format intended by the present study.

Chapter three discussed the research design, research population, sample and sampling techniques, research instruments, procedure for data collection and procedure for data analysis. As a needs assessment that covers a large population and a large geographical entity, the study is a needs assessment in form of a survey. Four study groups were sampled to work with, including lecturers of NCE students in colleges of education within the geopolitical zone, NCE teachers of junior secondary schools, principals of the schools, and SUBEB officers in the geopolitical zone. The population of this study includes all junior secondary school teachers with NCE, in the North West Geological zone of Nigeria. These are 17,045, according to the Universal Basic Education Commission UBEC (2010). The population also includes all the principals of these junior secondary schools, the total number of which is 1,548 according to UBEC (2010). Other constituents of the population are SUBEB officials within the zone' and NCE lecturers in colleges of education within the study area. The total number of SUBEB officials according to UBEC (2010) is 1,548 while the NCE lecturers in the geopolitical zone are 5,553 according to NCCE (2013). It was found more convenient for the study to adopt cluster random sampling technique, which, according to Nachmias and Nachmias (1996) in Oche (2008) is the frequently used form of sampling in large-scale studies because it is least expensive. The sampling technique also reflects and ensures a reasonable representation of the various cluster elements (states and local governments and so on.) of the study population. Questionnaire and structured interview was used as the research

instruments. Its content validity were determined through a panel of specialists in the field of curriculum evaluation who rated the questionnaire and structured interview at face value, on the extent to which are appropriate in measuring what the research intends to measure. The opinion of the judges was that the contents of the questionnaire appropriately reflect the pedagogical goals of the N.C.E. programme and that the questionnaire is a good measure of the topic of research. The supervisors are found in accord with the opinion of the researcher that the contents of the questionnaire have taken all pedagogical goals of NCE into consideration. The Cronbachs reliability coefficient was used to determine the reliability of the questionnaire. Reliability co-efficient of alpha level of 0.957 was obtained for the importance of pedagogical goals while reliability co-efficient of alpha level of 0.972 was obtained for the Competence of pedagogical goals. This reliability co-efficient were considered adequate for the internal consistencies of the instruments. This was a confirmation of test of reliability by Spiegel (2008), in Olayiwola (2010).

5.2: Conclusion

In view of the study "assessment of Nigeria Certificate in Education (NCE) to teachers attainment goals in Junior secondary schools in North West geopolitical zone, Nigeria". The study clearly revealed that the training received by trainee teachers during NCE programme did not adequately prepared (NCE) teachers to effectively instruct the students at junior secondary schools. The NCE teachers at junior secondary schools were discovered to be in shortfall of mastering JSS curriculum contents as it's reflect their subject(s), specialization. These problems were discovered to be responsible to poor performance (in

competence) by the present employed (NCE) teachers observed in North West zone.

In addition, some of the NCE (teachers) lack adequate intellectual knowledge of subject(s) and pedagogical skills of classroom instruction. The teachers could not effectively exhibit spirit of enquiring and creativity in teaching and learning activities in some basic schools. Similarly, the teachers' commitment to National objectives as contentious and efficient teachers to inspired and facilitates students to learn was discouraging based on respondents' opinions. By implication, the Nation hope of transforming the education system at Universal Basic Education (UBE) level is a mirage and doubtful.

Furthermore, based on the findings, there is serious gap between pedagogical relevance of NCE goals and NCE teachers' performance (competence) in Junior secondary schools in North West zone, Nigeria. However, the NCE programme can still be salvage to bridge the existing gap if some of the recommendations of this study are used to improve the quality of production of (NCE) teachers from teacher training institutions in the country.

5.3 Recommendations

In the light of the research findings, the following recommendations are hereby made:

1. Highly motivated and quality teachers should be enhanced through capacity building programme such as workshops, seminars orientation courses and other useful educational activities.

2. The pedagogical goal of spirit of enquiry and creativity of teachers should be developed and enhanced through well planned and organized study trips at various level of NCE I, NCE II and NCE III training programme, as against the present practice in the trips commence only during the final NCE III Semester sessions in most colleges of education.
3. Government should make provisions for teachers' welfare packages including provision of accommodation and housing loan schemes, to help pre-service and in-service teachers fit into social life of immediate community and to improve productivity among teachers.
4. The curriculum contents of NCE programme should be reviewed and teaching practice period be made one year as against six months of the present practice in some teacher training institutions, to enhance intellectual and skills acquisition among student teachers.
5. Government should provide facilities and other instructional materials to public schools so as to enhance commitment of teachers to national objectives and to make them teach students effectively.

5.4 Implication of Findings

The study revealed that there is gap between the pedagogical relevance of NCE goals and teachers performance (competence) in teaching at junior secondary schools in northwest geopolitical zone, Nigeria. Consequently, teachers of NCE certificate are found wanting in implementation of junior secondary schools curriculum effectively. These situations have serious implication to students' academic performance at (JSS) level of education. Another implication is that universal Basic Education (UBE) programme may not attain its targeted

goals as expected due to present of NCE teachers in such schools that are incompetence.

The problem is associated with inability to produce highly motivated, quality teachers, as well as present of some teachers with low level of intellectual and skills of pedagogical knowledge. One could be infer to say, the teacher education curriculum programme is grossly inadequate in teacher preparation for UBE Programme. These call for review of the curriculum content to meet up with the demand of transforming Nigeria teachers for the 21st century challenges

5.5 Contribution to Knowledge

1. The study has identified an existing gap between the NCE goals and the NCE teachers' attainment goal of quality classroom teachers.
2. The NCE teachers' attainment goal of spirit of enquiry and creativity in northwest political zones, Nigeria, is grossly inadequate.
3. NCE teachers' attainment of fitting into social life of the immediate community is adequate but that does not enhance their instructional quality in junior secondary schools in northwest zone, Nigeria.
4. There is pedagogical relevance gap among NCE holders and their intellectual and skills acquisition to handle teaching job effectively.
5. Teachers' low commitment to national objectives was discovered as a result of pedagogical relevance gap in NCE programme.

5.6 Suggestions for further Research

Since no research can be said to exhaustive, this research work has identified a number of research areas for further studies, towards effective

utilization of NCE programme for educational development in the country. The following are areas of gaps that further studies can exploit.

1. Strategies for enhancing relevance of NCE in achieving UBE programme in Nigeria.
2. Stakeholders perception of NCE programme in promoting access to junior secondary schools in Nigeria.
3. Impact of NCE teachers to children of special needs in primary schools in northwest geopolitical zone, Nigeria
4. Teacher education programme and the production of teachers in colleges of education in Northwest geopolitical zone, Nigeria
5. The pedagogical relevance of NCE programmes in achieving skills acquisition in students of junior secondary schools in Nigeria.

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Appendix A:

Research Questionnaires

RESEARCH QUESTIONNAIRE ON *NIGERIA CERTIFICATE IN EDUCATION (NCE) TEACHERS ATTAINMENT GOALSIN JUNIOR SECONDARY SCHOOL TEACHERS OF NORTHWEST GEOPOLITICAL ZONE OF NIGERIA*(FOR TEACHERS)

Introduction:

Please Sir/Ma, carefully go through this questionnaire, and kindly supply the requested responses, to be used in assessing the pedagogical relevance of Nigeria Certificate in Education Programme to the needs of Nigeria Junior Secondary School Teachers of Northwest geopolitical zone of the country. The questionnaire consists of three (3) sections, A-C. All responses to the questionnaire will be treated confidentially.

Section A: Personal Information

Instruction:

Tick and fill the appropriate box, or supply the appropriate data requested for, in items 1-8 of this section:

1. State (place) of work……...

2. Sex: ☐

(a) Male ☐ (b) Female ☐

3. Marital Status:

(a) Married ☐ (b) Single ☐

4. Location of the school of work:

(a) Urban ☐ (b) Rural ☐

5. Teaching qualifications obtained:

(a) N. C. E. ☐ (c) Others (specify)……..

6. The institution from which NCE Certificate was obtained:

(a) College of Education ☐ (b) Polytechnic ☐

(b) University ☐ (c) Others (specify)……

7. Years of Teaching experience

(a) 0-10 Years ☐ (b) 11-20 Years ☐

(b) (e) 41 Years &above ☐

(c) 21-30 Years ☐ (d) 31-40 Years

8. Highest Educational qualification obtained

(a) NCE ☐ (b) B.A ☐

(b) B. Ed ☐ (c) M.A. ☐

(d) M.Ed ☐ (d) Others…….

Section B. Importance of the N.C.E. Goals and Teachers' Competencies in them:

Instruction

This section of the questionnaire lists a number of pedagogical goals of the Nigeria Certificate in Education Programme as can be deduced from the National policy on Education. Please indicate the following by circling the number that best represents your response for each goal:

1. The ***importance*** of each of the goals (in the left side of the listed goals)
2. The degree of **competence** you have acquired from your NCE training, in relation to the various goals (in the right side of the listed goals).

Your responses will be interpreted as follows:

IMPORTANCE:	COMPETENCIES
5. Very high importance	**5.** Very high competence
4. High importance	**4.** High competence
3. Moderate importance	**3.** Moderate competence
2. Low important	**2.** Low competence
1. Very low importance	**1.** Very low competence
0. No importance	**0.** No competence

Importance	NCE goals	Competence
0 1 2 3 4 5	To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To encourage further the spirit of enquiry of teachers	0 1 2 3 4 5
0 1 2 3 4 5	To encourage further the spirit of creativity of teachers	0 1 2 3 4 5
0 1 2 3 4 5	Develop in teachers, a positive attitude toward continued independent education	0 1 2 3 4 5
0 1 2 3 4 5	Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	0 1 2 3 4 5
0 1 2 3 4 5	Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	0 1 2 3 4 5
0 1 2 3 4 5	Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	0 1 2 3 4 5

0 1 2 3 4 5	Develop an understanding and respect for learners as individuals, and sensitivity to their social needs and the way they interact with others	0 1 2 3 4 5
0 1 2 3 4 5	Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting attitudes	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT in generating and imparting skills	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	0 1 2 3 4 5
0 1 2 3 4 5	Demonstrating proficiency in measuring and evaluating learning outcomes	0 1 2 3 4 5
0 1 2 3 4 5	Keep learners' profiles such as progress charts and dossiers on each learner, etc	0 1 2 3 4 5

0 1 2 3 4 5	Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement	0 1 2 3 4 5
0 1 2 3 4 5	To provide teachers with the intellectual background adequate for their assignment and make them adaptable to changing situation	0 1 2 3 4 5
0 1 2 3 4 5	To make teachers intellectually adaptable to changing situation	0 1 2 3 4 5
0 1 2 3 4 5	To make teachers professionally adaptable to changing situation	0 1 2 3 4 5

Section C: Suggested N.C.E. Pedagogical Goals and their Importance:

***Instruction*:**

In this section, you are to write down any other pedagogical goal you think the NCE programme has not included in the last section. You are also to rate the related importance of each of the suggested goals by circling the number that suits your response. Your rating of the importance of the suggested goals will be interpreted as in section "B" above.

SUGGESTED GOAL	IMPORTANCE
	0 1 2 3 4 5
	0 1 2 3 4 5
	0 1 2 3 4 5
	0 1 2 3 4 5

RESEARCH QUESTIONNAIRE *ON NIGERIA CERTIFICATE IN EDUCATION (NCE) TEACHERS ATTAINMENT GOALS IN JUNIOR SECONDARY SCHOOL TEACHERS OF NORTHWEST GEOPOLITICAL ZONE OF NIGERIA* (FOR PRINCIPALS AND SUBEB OFFICERS)

Introduction

Please Sir/Ma, carefully go through this questionnaire and kindly supply the requested information, to be used in assessing the pedagogical relevance of the Nigeria certificate in Education programme to the needs of Nigeria Junior Secondary School Teacher in the Northwest geopolitical zone of the country. The questionnaire consists of three sections, A-C. All responses to the questionnaire will be treated confidentially.

Section A: Personal Information

Instruction:

Tick and fill the appropriate box, or supply the appropriate data requested for, in items 1-6 of this section.

1. State (place) of work…….
2. Sex:

(b) Male ☐ (b) Female ☐

3. Marital Status:

(b) Married ☐ (b) Single ☐

4. Designation:

(a) Principal ☐ (b) SUBEB Official ☐

(c) Lecturer ☐

5. Highest Academic Qualification:

(a) B. A. ☐ (b) B. Ed ☐ (c) M. A (d) M. Ed. ☐

(e) Ph. D (d) HND/OND ☐ (e) N. C.E. ☐

(f) Others (Specify)……

6. Highest Teaching qualification:

(c) NCE ☐ (b) B.A ☐

(d) B. Ed ☐ (c) M.A. ☐

(d) M.A ☐ (d) Others…….

Section B: Importance of N.C.E. Goals and Teachers Competencies in Relation to them

***Instruction*:**

This section of the questionnaire lists a number of pedagogical goals of the Nigeria Certificate in Education Programme as can be deduced from the National policy on Education. Please indicate the following by circling the number that best represents your response for each goal:

4. The ***importance*** of each of the goals (in the left side of the listed goals)
5. The degree of **competence** you have acquired from your NCE training, in relation to the various goals (in the right side of the listed goals).

Your responses will be interpreted as follows:

IMPORTANCE:	COMPETENCE:
5. Very high importance	**5**. Very high competence
4. High importance	**4**. High competence
6. Moderate importance	**3**. Moderate competence
2. Low important	**2**. Low competence
1. Very low importance	**1**. Very low competence
0. No importance	**0**. No competence

Importance	NCE goals	Competence
0 1 2 3 4 5	To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	0 1 2 3 4 5
0 1 2 3 4 5	To encourage further the spirit of enquiry of teachers	0 1 2 3 4 5
0 1 2 3 4 5	To encourage further the spirit of creativity of teachers	0 1 2 3 4 5
0 1 2 3 4 5	Develop in teachers, a positive attitude toward continued independent education	0 1 2 3 4 5
0 1 2 3 4 5	Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	0 1 2 3 4 5
0 1 2 3 4 5	Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	0 1 2 3 4 5
0 1 2 3 4 5	Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	0 1 2 3 4 5
0 1 2 3 4 5	Develop an understanding and respect for learners as	0 1 2 3 4 5

	individuals, and sensitivity to their social needs and the way they interact with others	
0 1 2 3 4 5	Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting attitudes	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and ICT in generating and imparting skills	0 1 2 3 4 5
0 1 2 3 4 5	Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	0 1 2 3 4 5
0 1 2 3 4 5	Demonstrating proficiency in measuring and evaluating learning outcomes	0 1 2 3 4 5
0 1 2 3 4 5	Keep learners' profiles such as progress charts and dossiers on each learner, etc	0 1 2 3 4 5
0 1 2 3 4 5	Provide meaningful feedback to leaner’s and their parents/guardians about their developing knowledge and skills and inform them of further strategies for	0 1 2 3 4 5

	improvement	
0 1 2 3 4 5	To provide teachers with the intellectual background adequate for their assignment and make them adaptable to changing situation	0 1 2 3 4 5
0 1 2 3 4 5	To provide teachers with the professional background adequate for their assignment	0 1 2 3 4 5
0 1 2 3 4 5	To make teachers intellectually adaptable to changing situation	0 1 2 3 4 5
0 1 2 3 4 5	To make teachers professionally adaptable to changing situation	0 1 2 3 4 5

Section C: Suggested N.C.E. Goals

***Instruction*:**

In this section, you are to please write down any other goal you like to suggest for the NCE programme not included in the last session. You are to rate the importance of each of the suggested goals by circling the number that suits your response. Your rating of the suggested goals will be interpreted as in section "B" above.

SUGGESTED GOAL	IMPORTANCE
	0 1 2 3 4 5
	0 1 2 3 4 5
	0 1 2 3 4 5
	0 1 2 3 4 5

Appendix B:

Data processing output (Reliability)

Assessing the Nigeria Certificate in Education (NCE) Teachers Attainment Goals in Junior Secondary School Teachers of Northwest Geopolitical Zone of the Country

Importance of Nigeria Certificate in Education (NCE)

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	110	100.0
	Excluded[a]	0	.0
	Total	110	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.957	.957	24

Item Statistics

	Mean	Std. Deviation	N
To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	4.33	.920	110
To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	4.25	.962	110
To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	4.27	.947	110
To encourage further the spirit of enquiry of teachers	4.08	.997	110
To encourage further the spirit of creativity of teachers	4.27	.995	110
Develop in teachers, a positive attitude toward continued independent education	4.22	1.026	110
Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	4.08	1.118	110
Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	4.06	1.094	110
Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	4.16	1.071	110

Develop an understanding and respect for learners as individuals, and sensitivity to their social needs and the way they interact with others	4.19	1.036	110
Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	4.07	1.123	110
Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	4.02	1.226	110
Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	4.05	1.078	110
Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	3.99	1.113	110
Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting attitudes	3.85	1.132	110
Professionally combine use of conventional and ICT in generating and imparting skills	3.94	1.103	110
Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	3.89	1.112	110
Demonstrating proficiency in measuring and evaluating learning outcomes	3.91	1.113	110
Keep learners' profiles such as progress charts and dossiers on each learner, etc	4.01	1.169	110

Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement	4.04	1.248	110
To provide teachers with the intellectual background adequate for their assignment and make them adaptable to changing situation	3.95	1.305	110
To provide teachers with the professional background adequate for their assignment	3.87	1.271	110
To make teachers intellectually adaptable to changing situation	4.03	1.184	110
To make teachers professionally adaptable to changing situation	3.99	1.378	110

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.064	3.855	4.327	.473	1.123	.019	24

Competence of Nigeria Certificate in Education (NCE) Teachers Attainment goals

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	110	100.0
	Excluded[a]	0	.0
	Total	110	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.972	.972	24

Item Statistics

	Mean	Std. Deviation	N
To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	3.90	1.234	110
To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	3.95	1.176	110
To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	3.79	1.197	110
To encourage further the spirit of enquiry of teachers	3.65	1.215	110

To encourage further the spirit of creativity of teachers	3.85	1.235	110
Develop in teachers, a positive attitude toward continued independent education	3.83	1.210	110
Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	3.68	1.248	110
Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	3.71	1.176	110
Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	3.83	1.180	110
Develop an understanding and respect for learners as individuals, and sensitivity to their social needs and the way they interact with others	3.75	1.267	110
Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	3.82	1.279	110
Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	3.83	1.255	110
Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	3.62	1.361	110
Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	3.61	1.293	110
Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting attitudes	3.44	1.317	110
Professionally combine use of conventional and ICT in generating and imparting skills	3.66	1.229	110

Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	3.66	1.258	110
Demonstrating proficiency in measuring and evaluating learning outcomes	3.61	1.279	110
Keep learners' profiles such as progress charts and dossiers on each learner, etc	3.70	1.246	110
Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement	3.75	1.259	110
To provide teachers with the intellectual background adequate for their assignment and make them adaptable to changing situation	3.66	1.236	110
To provide teachers with the professional background adequate for their assignment	3.61	1.271	110
To make teachers intellectually adaptable to changing situation	3.73	1.292	110
To make teachers professionally adaptable to changing situation	3.68	1.256	110

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.721	3.436	3.955	.518	1.151	.013	24

Appendix C

Assessment of the Nigeria Certificate of Education (NCE) teachers attainment goals in junior secondary school in Northwest Geopolitical zone Nigeria.

INTERVEIW INSTRUMENT FOR PROVOSTS, DIRECTORS OF SUBEBS AND DIRECTORS OF M.O.E

This instrument is for a Ph.D research work. It is intended to assess the pedagogical relevance of NCE goals to teacher in junior secondary schools in Northwest Geopolitical zone Nigeria. This study is purely an academic exercise, as such you are ensured of the confidentiality of your responses.

KEY

Very high importance	(VH)
High Importance	(H)
Moderate Importance	(MOD)
Low importance	(LOW)
Very Low	(VL)
No Importance	(NO)

SECTION A: Demographic Data

ADDRESS - - - - -

RANK - - - - -

RESPONSIBILITY - - - - - -

Section B: Items of NCE teachers' attainment Goals in Junior Secondary Schools

S/no	Items	Response category						Mean	Std	Rank
		VH	H	MOD	LOW	VL	NO			
1.	To what extent can you rate the pedagogical relevance of NCE goal of production of highly motivated quality teachers in terms of teachers competence in teaching of JSS	5	09	15	7	12	2	4.217	1.910	2
2.	What is your general rating assessment of the pedagogical relevance of NCE goal in relation to spirit of enquiry and creativity to teachers competence teaching in junior	3	12	14	10	9	2	4.6500	1.021	3

	secondary schools (JSS)									
3.	How can you rate the pedagogical relevance of NCE goal of teachers to fit into the social life of the immediate community and teacher competency teaching in junior secondary school (JSS)	6	8	12	16	8	19	0.0182	24	1
4.	How can you rate the pedagogical relevance of NCE goals on teachers intellectual and skills acquisition and teachers competence teaching in junior secondary schools (JSS)	2	4	6	22	13	3	4.7184	1.053	21
5.	How can you rate the pedagogical relevance of NCE goals on teachers communicati	3	8	13	20	3	3	0.0130	0.022	

	on to national objectives and teachers competency teaching in junior secondary school (JSS)	

Appendix D

Respondents' Rating of Pedagogical goals on the basis of Importance

s/no	Items	RESPONSE CATEGORY						MEAN	STD	RANK
		VH	H	MOD	LOW	VL	NO			
1	To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	**131**	**101**	**61**	**65**	**15**	**7**	4.6500	**.910**	**2**
2	To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	**156**	**67**	**53**	**67**	**32**	**5**	4.6132	**.971**	**4**
3	To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	**113**	**87**	**97**	**14**	**44**	**25**	4.3579	**.968**	**8**
4	To encourage further the spirit of enquiry of teachers	**128**	**70**	**76**	**38**	**43**	**25**	4.3342	**1.020**	**9**
5	To encourage further the spirit of creativity of teachers	**108**	**102**	**121**	**25**	**13**	**11**	4.6158	**1.021**	**3**

6	Develop in teachers, a positive attitude toward continued independent education	**167**	**56**	**85**	**41**	**17**	**14**	4.7184	**1.053**	**1**
7	Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	**101**	**78**	**143**	**27**	**23**	**8**	4.4816	**1.139**	**5**
8	Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	**88**	**98**	**78**	**36**	**50**	**30**	4.1263	**1.103**	**19**
9	Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	**89**	**76**	**87**	**56**	**45**	**27**	4.0711	**1.053**	**21**
10	Develop an understanding and respect for learners as individuals, and sensitivity to their social needs and	**116**	**101**	**76**	**26**	**42**	**19**	4.4368	**1.049**	**6**

	the way they interact with others									
11	Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	**107**	**97**	**78**	**27**	**53**	**18**	4.3263	**1.143**	**10**
12	Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	**111**	**89**	**67**	**48**	**50**	**15**	4.3105	**1.247**	**12**
13	Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	**87**	**67**	**121**	**70**	**19**	**16**	4.2237	**1.082**	**15**
14	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	**87**	**68**	**101**	**81**	**34**	**9**	4.1737	**1.138**	**17**
15	Professionally combine use of conventional and ICT or other innovational instructional/learni	**90**	**78**	**81**	**83**	**44**	**4**	4.1974	**1.162**	**18**

	ng strategies in generating and imparting attitudes									
16	Professionally combine use of conventional and ICT in generating and imparting skills	**90**	**71**	**101**	**78**	**31**	**9**	4.2211	**1.114**	**16**
17	Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	**89**	**84**	**101**	**67**	**33**	**6**	4.2921	**1.126**	**13**
18	Demonstrating proficiency in measuring and evaluating learning outcomes	**101**	**89**	**76**	**70**	**34**	**10**	4.3237	**1.133**	**11**
19	Keep learners' profiles such as progress charts and dossiers on each learner, etc	**94**	**98**	**76**	**53**	**43**	**16**	4.2605	**1.185**	**14**
20	Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement	**93**	**67**	**89**	**37**	**51**	**43**	3.9605	**1.279**	**22**
21	To provide teachers with the	**107**	**71**	**76**	**32**	**66**	**28**	4.0974	**1.339**	**20**

	intellectual background adequate for their assignment and make them adaptable to changing situation									
22	To provide teachers with the professional background adequate for their assignment	**101**	**65**	**87**	**71**	**47**	**9**	4.1974	**1.280**	**18**
23	To make teachers intellectually adaptable to changing situation	**98**	**78**	**75**	**36**	**77**	**16**	4.0947	**1.209**	**20**
24	To make teachers professionally adaptable to changing situation	**123**	**72**	**71**	**85**	**19**	**10**	4.4342	**1.403**	**7**
	Cumulative mean							4.3133		

Appendix E

Respondents' Rating of Pedagogical goals on the basis of Teachers' Competence

s/no	Items	RESPONSE CATEGORY						MEAN	STD	RANK
		VH	H	MOD	LOW	VL	NO			
1	To produce highly motivated classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	121	67	65	61	54	12	4.4105	1.232	1
2	To produce highly conscientious classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	98	76	65	39	70	32	4.0895	1.195	10
3	To produce highly efficient classroom teachers (for Nursery, Primary and Junior Secondary levels) of our educational system	89	81	76	19	94	21	3.8316	1.219	19
4	To encourage further the spirit of enquiry of	78	87	70	59	70	16	4.0632	1.240	12

	teachers									
5	To encourage further the spirit of creativity of teachers	**89**	**64**	**85**	**45**	**87**	**10**	3.9658	**1.252**	**13**
6	Develop in teachers, a positive attitude toward continued independent education	**103**	**56**	**64**	**65**	**86**	**6**	3.9342	**1.247**	**16**
7	Studying learners appropriately to determine the most effective ways of relating to them to ensure their maximum achievement	**89**	**89**	**56**	**69**	**69**	**8**	4.1342	**1.263**	**7**
8	Know the learning strengths and weaknesses of the learners and become aware of the factors that influence their learning	**101**	**67**	**65**	**61**	**75**	**11**	4.0947	**1.189**	**9**
9	Develop awareness of the social, cultural, and religious backgrounds of the learners and treat them equitably	**99**	**77**	**65**	**37**	**70**	**32**	4.0974	**1.189**	**8**
10	Develop an understanding and respect for	**84**	**81**	**76**	**26**	**94**	**19**	3.6447	**1.282**	**15**

	learners as individuals, and sensitivity to their social needs and the way they interact with others									
11	Develop, select, and effectively use appropriate curriculum processes for maximum learner achievement	**89**	**89**	**76**	**64**	**32**	**30**	4.3658	**1.302**	**2**
12	Develop, select, and effectively use appropriate teaching strategies for maximum learner achievement	**89**	**64**	**85**	**45**	**87**	**10**	3.9658	**1.273**	**13**
13	Develop, select, and effectively use appropriate instructional materials for maximum learner achievement	**103**	**56**	**64**	**65**	**86**	**6**	3.9342	**1.355**	**16**
14	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting knowledge	**89**	**89**	**56**	**69**	**69**	**8**	4.0763	**1.285**	**11**

15	Professionally combine use of conventional and ICT or other innovational instructional/learning strategies in generating and imparting attitudes	**87**	**89**	**65**	**65**	**65**	**9**	4.1474	**1.307**	**6**
16	Professionally combine use of conventional and ICT in generating and imparting skills	**98**	**74**	**65**	**63**	**74**	**6**	4.1526	**1.255**	**5**
17	Professionally combine use of conventional and other innovational instructional/learning strategies in generating and imparting skills	**98**	**67**	**58**	**63**	**77**	**17**	3.9605	**1.249**	**14**
18	Demonstrating proficiency in measuring and evaluating learning outcomes	**89**	**78**	**64**	**53**	**65**	**31**	3.8579	**1.277**	**18**
19	Keep learners' profiles such as progress charts and dossiers on each learner, etc	**89**	**79**	**76**	**67**	**58**	**11**	4.0947	**1.266**	**9**

20	Provide meaningful feedback to leaner's and their parents/guardians about their developing knowledge and skills and inform them of further strategies for improvement	**100**	**70**	**78**	**65**	**55**	**12**	4.2737	**1.283**	**3**
21	To provide teachers with the intellectual background adequate for their assignment and make them adaptable to changing situation	**109**	**78**	**58**	**47**	**79**	**9**	4.1526	**1.252**	**5**
22	To provide teachers with the professional background adequate for their assignment	**89**	**98**	**45**	**63**	**76**	**9**	4.2158	**1.288**	**4**
23	To make teachers intellectually adaptable to changing situation	**97**	**76**	**54**	**45**	**101**	**7**	3.9105	**1.313**	**17**
24	To make teachers professionally adaptable to changing	**98**	**80**	**65**	**48**	**84**	**5**	3.6632	**1.278**	**20**

situation	
Cumulative mean	4.0432

Appendix F: Data Processing Output

HYP 1
NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	176	95.6008	19.19778	26.00	120.00
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	176	88.3909	23.61029	24.00	120.00

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	Negative Ranks		117.95	18282.50
	Positive Ranks	176	82.29	4937.50
		176		
	Total	243		

Test Statistics[a]

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
Z	-7.314[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

NParTests hyp 2 prin

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	37	89.7297	21.32636	26.00	119.00
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	37	79.6486	25.05130	24.00	119.00

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	Negative Ranks	28[a]	18.96	531.00
	Positive Ranks	7[b]	14.14	99.00
	Ties	2[c]		
	Total	37		

b. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O > IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS

c. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O = IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS

Test Statistics[a]

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
Z	-3.542[b]
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

USE ALL.

```
COMPUTE filter_$=(STATUS=3).
VARIABLE LABELS filter_$ 'STATUS=3 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
NPAR TESTS
  /WILCOXON=IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS      WITH
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGI
CAL_NEEDS_O (PAIRED)
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NParTests hyp3 subeb

Descriptive Statistics[a,b]

	N	Mean	Std. Deviation	Minimum	Maximum
IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	68	93.6923	21.30869	26.00	120.00
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	68	88.0769	26.38910	24.00	120.00

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	Negative Ranks	36[a]	29.33	1056.00
	Positive Ranks	18[b]	23.83	429.00
	Ties	11[c]		
	Total	65		

a. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O < IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS

b. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O > IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
c. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O = IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS

Test Statistics[a,b]

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
Z	-2.702[b]
Asymp. Sig. (2-tailed)	.007

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

```
USE ALL.
COMPUTE filter_$=(STATUS=4).
VARIABLE LABELS filter_$ 'STATUS=4 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
NPAR TESTS
  /WILCOXON=IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS     WITH
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGI
CAL_NEEDS_O (PAIRED)
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests hyp 4 lect

Descriptive Statistics[a,b]

	N	Mean	Std. Deviation	Minimum	Maximum
IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	72	102.3714	14.05679	62.00	120.00

COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	72	96.0857	17.79850	49.00	120.00

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS	Negative Ranks	72	16.50	346.50
	Positive Ranks		8.50	59.50
	Ties			
	Total	72		

a. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O < IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
b. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O > IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
c. COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O = IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS

Test Statistics

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O - IMPORTANCE_OF_NCE_PADEGOGICAL_GOALS
Z	-3.274[b]
Asymp. Sig. (2-tailed)	.001

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

```
FILTER OFF.
USE ALL.
EXECUTE.
NPAR TESTS
  /K-W=NCE_PADEGOGICAL_GOALS BY STATUS(1 4)
```

/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

NPar Tests hyp5 importancerelevance all

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
NCE_PADEGOGICAL_GOALS	380	95.3263	19.52129	26.00	120.00
STATUS	380	1.7158	1.04932	1.00	4.00

Kruskal-Wallis Test

Ranks

	STATUS	N	Mean Rank
NCE_PADEGOGICAL_GOALS	teachers	243	191.47
	Principals	37	158.38
	SUBEB Officials	65	183.82
	Lecturers	35	230.11
	Total	380	

Test Statistics[a,b]

	NCE_PADEGOGICAL_GOALS
Chi-Square	7.988
Df	3
Asymp. Sig.	.046

a. Kruskal Wallis Test
b. Grouping Variable: STATUS

NPAR TESTS
/K-W=COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O BY STATUS(1 4)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

NParTests hyp 6 importance

Descriptive Statistics[a,b]

	N	Mean	Std. Deviation	Minimum	Maximum
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	380	88.1947	23.96818	24.00	120.00
STATUS	380	1.7158	1.04932	1.00	4.00

Kruskal-Wallis Test

Ranks

	STATUS	N	Mean Rank
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	teachers	243	191.79
	Principals	37	188.26
	SUBEB Officials	65	192.57
	Lecturers	35	182.37
	Total	380	

Test Statistics[a,b]

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O
Chi-Square	1.486
df	3
Asymp. Sig.	.555

a. Kruskal Wallis Test

b. Grouping Variable: STATUS

```
NPAR TESTS
 /M-W= IMPORANCE_NCE_PADEGOGICAL_GOALS BY sex(1 2)
 /MISSING ANALYSIS.
```

NParTests HYP 7 MALE AND FEMALE

Mann-Whitney Test

Ranks

	Sex	N	Mean Rank	Sum of Ranks
IMPORANCE_NCE_PADEGOGICAL_GOALS	Male	303	193.69	58688.00
	Female	77	177.95	13702.00
	Total	380		

Test Statistics[a]

	IMPORANCE_NCE_PADEGOGICAL_GOALS
Mann-Whitney U	10699.000
Wilcoxon W	13702.000
Z	-1.124
Asymp. Sig. (2-tailed)	.261

a. Grouping Variable: sex

```
NPAR TESTS
  /M-W=
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGI
CAL_NEEDS_O BY sex(1 2)
  /MISSING ANALYSIS.
```

NPar Tests HYP 8

Mann-Whitney Test

Ranks

	sex	N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	male	303	194.06	58800.00
	female	77	186.49	13590.00
	Total	380		

Test Statistics[a]

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O
Mann-Whitney U	10587.000

Wilcoxon W	13590.000
Z	-1.254
Asymp. Sig. (2-tailed)	.210

a. Grouping Variable: sex

```
NPAR TESTS
  /M-W= IMPORANCE_NCE_PADEGOGICAL_GOALS BY location (1 2)
  /MISSING ANALYSIS.
```

NPar Tests HYP 9 URBAN AND RURAL IMPORTANCE of paed goals by teachers

Mann-Whitney Test

Ranks

	location	N	Mean Rank	Sum of Ranks
IMPORANCE_NCE_PADEGOGICAL_GOALS	Urban	81	195.19	30449.00
	Rural	95	187.24	41941.00
	Total			

Test Statistics[a]

	IMPORANCE_NCE_PADEGOGICAL_GOALS
Mann-Whitney U	16741.000
Wilcoxon W	41941.000
Z	.695
Asymp. Sig. (2-tailed)	.487

a. Grouping Variable: location

```
NPAR TESTS
  /M-W=
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGI
CAL_NEEDS_O BY location(1 2)
  /MISSING ANALYSIS.
```

NPar Tests HYP 10 URBAN AND RURAL

Mann-Whitney Test

Ranks

	location	N	Mean Rank	Sum of Ranks
COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O	Urban	81	202.29	31556.50
	Rural	95	192.29	40833.50
	Total	176		

Test Statistics

	COMPETENCY_OF_NCE_PROGRMME_IN_MMEETING_THE_PADEGOGICAL_NEEDS_O
Mann-Whitney U	15633.500
Wilcoxon W	40833.500
Z	1.747
Asymp. Sig. (2-tailed)	.081

a. Grouping Variable: location

APPENDIX G:

MANUAL FOR TRAINING OF RESEARCH ASSISTANTS

The training for the research assistant is scheduled to hold as follows:

1. Topic:	Assessment of Nigeria Certificate In Education (NCE) Teachers' Attainment Goals for Junior Secondary Schools in Northwest Geopolitical Zone of Nigeria
2. Number of Research Assistants:	Four (4)
3. Training Venue:	School of Arts and Social Sciences, Federal College of Education, Zaria
4. Duration\ Time for the Training:	Three hours, for three days: 12th, 14th and 15th of January, 2016
5. Training Content:	**(**a) Physical and social environments of the three sampled states and Zamfara, the state for pilot study (12th January, 2017) (b) Contents of the two Instrument of Research-Questionnaire and Interview Schedule (c) How to Administer and Retrieve the Research Instruments