EVALUATION OF IMPLEMENTATION OF ELEMENTS OF SPECIAL EDUCATION CURRICULUM IN NCE-AWARDING INSTITUTIONS IN NIGERIA

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CERTIFICATION

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DEDICATION

This work is dedicated
to the

Evergreen Memories of My Father, Omezue Otu Eleri & his Industrious wife Madam Ogeri Otu Eleri who both laboured to see their children through Western Education but never lived to see the attainment of this particular goal.

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ABSTRACT

The need to empower teachers with knowledge and skills for teaching exceptional learners led to the introduction of "elements of special education programme" into the Nigerian teacher preparation programmes. The extent to which the curriculum is being implemented towards the achievement of its objectives has, however, continued to raise concerns among educators which calls for a review of the programme. This study therefore, evaluated the implementation of Elements of Special Education Curriculum in institutions that award the Nigeria Certificate of Education (NCE).

The study adopted the *expost-facto* type of the descriptive survey design with the Context, Input, Process and Product (CIPP) model of curriculum evaluation. One thousand, three hundred and seventy-five students from fifty-five NCE-awarding institutions in Nigeria were selected through the proportionate stratified random sampling technique. Two hundred and seventeen lecturers teaching the course ("Elements of Special Education") in the institutions were purposively selected for the study. The instruments used were: Students' Questionnaire on Curriculum Objectives (r = 0.83); Lecturers' Questionnaire on Curriculum Objectives (r = 0.79); Students' Questionnaire on Content Coverage of Elements of Special Education (r = 0.72); Lecturers' Questionnaire on Content Coverage of Elements of Special Education (r = 0.78); Facilities, Equipment and Resources Inventory (r = 0.77); Questionnaire on Problems of Curriculum Implementation (r = 0.88); Strategies for Teaching Special Education Content (r = 0.79); Observational Schedule for Classroom Teaching of Elements of Special Education (r = 0.82); Test of Students' Knowledge of Special Education (r = 0.82) and Students' Attitude to Special Education Scale (r = 0.76). Eight research questions were answered and four hypotheses tested at the 0.05 level of significance. Data collected were analysed using descriptive statistics and t-test.

Each of the institutions had an average of four experienced lecturers who were academically but not professionally qualified to teach elements of special education. Both students (weighted mean = 3.53) and lecturers (weighted mean = 3.68) had a good perception of the curriculum. Most of the required facilities were not available ($\bar{x}$ < 1.50), not adequate ($\bar{x}$ = < 1.50) and not utilised ($\bar{x}$ = < 2.00). Most lecturers (57.5 to 96.3%) did not teach some of the specified content areas while the lecture method was predominantly used ($\bar{x}$ = 3.40). Also, various aspects of classroom teaching were ineffective (means range from 2.08 to 2.63). Students possessed an average level of achievement (58.45%) and positive attitude to special education ($\bar{x}$ = 2.77). Females obtained significantly higher positive attitude score ($\bar{x}$ =29.61) than their male ($\bar{x}$ = 28.86) counterparts (t = 3.07; df = 1373; p < 0.05). Lecturers' qualifications and experience did not significantly affect the effectiveness of their teaching.

The elements of special education curriculum in NCE-awarding institutions in Nigeria have been poorly implemented. To achieve effective special education teacher preparation in Nigeria, government should employ professionally qualified personnel and ensure that the specified content areas are taught, and adequate facilities are provided towards achieving the objectives of the curriculum.

Keywords: Curriculum Evaluation, NCE- awarding institutions, Special Education, Achievement and Attitude to special education

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CHAPTER ONE
INTRODUCTION

1.1 Background to the study

The history of the current system of Nigerian education dates back to the National Curriculum Conference held in Lagos in 1969. At that conference, experts, professionals and groups from various sectors were represented. It was the first ever move by Nigerians to fashion out a new course of education for her citizenry. Another milestone in the Nigerian educational system was the National Seminar on Nigerian Education in 1973 which fashioned out a new structure, content and direction of formal education in the country. This new structure of education, the 6-3-3-4 system has been summarized in a document produced in 1977 (but revised in 1981, 1998 and 2004) to form "the National Policy on Education".

The National Policy on Education (2004) addresses different sections of Nigerian educational system, including special education. This policy document describes special education as a formal educational training given to people (children and adults) with special needs. It further classifies this group of people into three broad categories namely the disabled, the disadvantaged and the gifted/talented.

Special Education and indeed the care of children and youths with disabilities were handled largely by charitable and humanitarian organisations before 1974. These organisations sometimes received meagre assistance from the government. In 1974, there was direct government involvement in the education and rehabilitation of these groups of people. The Federal Ministry of Education provided the much needed leadership by establishing a special education unit within the Ministry in December, 1974. It also made funds available not only for the training of all categories of special education personnel, but also for the setting up of special education units within the State Ministries of Education (SMoE) to provide educational programmes for special needs children across the country (Mba,1982).

There has been a major shift in the way students with special needs are educated during the past 30 or 40 years. Formerly, students with high- incidence disabilities (such as reading disabilities) went unidentified and were educated in general classrooms. General education teachers did not always recognize these disabilities, and even if they did, they might not have had the knowledge and skills to effectively help the students in the general classroom setting. Students with more profound learning disabilities were typically taught in isolated, self-contained classrooms by a single teacher for the entire day.

Today two important changes have occurred. First, there is now an increased effort to

identify and assist students with disabilities while keeping them in general education classrooms for most of their instructional needs. Second, students with more profound disabilities are frequently placed in general education classrooms for all or part of the day, sometimes with a paraprofessional assisting them, and sometimes with a special education teacher advising and assisting the teacher. This change has been brought about by federal legislation and by a deeper understanding of how students with special needs learn. Teacher preparation also has been changing in response to the emphasis on educating special-needs students in ways that support their diverse needs, which could be educational, emotional, behaviour or cultural (Kavale, 2005; Maheady, 1997; Pugach, 2005; Pugach & Seidl, 1995).

The introduction of the Universal Primary Education (UPE) in 1976 meant that every child of school going age would be in school. This led to phenomenal increase in enrolment figure in the nation's Primary school system. The awareness created by the introduction of the UPE, therefore, generated the much needed interest in Western education. As the nation experienced astronomical increase in enrolment, so also were increase in the number of children with special educational needs in the system. The free Universal Primary Education created a situation whereby children with special needs were admitted into the regular school system. There was population explosion that posed a great challenge to teachers, parents, education authorities and policy makers. This situation gave cause for a re-think on how best to meet the challenges of children with special needs in the regular schools. However, the manpower requirement needed to cope with this new challenge was at this stage lacking.

The pressure of severe shortage of professionals in special needs education and the mainstreaming of special needs learners led to the consideration of the following:

(a) focus on training specialist in special education to teach in special schools even though it may mean a decrease in the required numbers in the mainstream; and

(b) integration of elements of special education into regular teacher education curricula so that every teacher will have some basic knowledge of special needs education to use in the classroom.

The later option of integrating elements of special education into regular teacher education programme was considered a better option. The then Nigerian Educational Research Council (NERC) now Nigerian Educational Research and Development Council (NERDC) therefore spearheaded the development and implementation of elements of special education by integrating them into the regular teacher education curricula. According to FME (1988), integrating elements of special education into regular teacher education curricula is like

preparing a clinician educator capable of providing diagnosis and remediation of the variety of learning difficulties presented by children with special needs.

Addressing the manpower shortage required to cope with the influx of children with special needs into the regular school system by the founding fathers of special education in Nigeria led to the proposal for the establishment of a College of Education (Special) in Oyo. Today, the Federal College of Education (Special), Oyo produces special personnel for the education of children with special needs not only for Nigeria, but also for other countries in Sub-Saharan Africa.

The purpose of teacher education, according to the National Policy on Education (2004) is to "provide teachers with the intellectual and professional background adequate for their assignments, and make them adaptable to any changing situations". However, a responsive general teacher education environment needs to be ensured by educational practitioners in order to achieve this goal. To this end, the Massachusetts curriculum frameworks lists certain supportive practices related to instruction and learning. These include:

- clear learning objectives;
- emphasis on effort as the key to achievement;
- active and varied learning activities across subject areas;
- providing both oral and visual directives for assignments;
- using a variety of teaching approaches, including teacher-directed instruction and practice, group discussion, problem solving, cooperative learning and research projects;
- using a variety of formal and informal assessment procedures;
- providing immediate and specific feedback about students' performance;
- providing reinforcement of desired student behaviours;
- collaborative and team teaching; and
- homework assignments that enhance student learning and reinforce it.

The curriculum which is the key to all educational activities must be flexible enough to cope with the diverse and changing needs of the people and the society. It must also relate to the needs of the country and the personal development of the individual, with special emphasis on those with special needs. Equally, teachers who are at the centre of all instructional implementation must be adequately empowered (Ogunleye, 2011).

Special education professionals have consistently pointed out that the education of

children with special needs should be seen as capital development in the sense that it is a sound investment in human resource development. Government not only agrees with this point of view but also believes that, given the necessary support, special education can become an important instrument for effecting educational change in Nigeria, as it labours to find how all children can learn to the maximum level of their potentials.

The idea of including elements of special Education in the teacher education curricula can be traced to October 1974 when the Federal Government noted the age-long neglect of Special Education for persons with disabilities and declared that this aspect of education would be part and parcel of the overall educational system in Nigeria. Consequently, the National Policy on Education (NPE, 1977) in section 8 paragraph 56 (4) provided the mandate for the integration of Elements of Special Education into the curriculum of all teacher education programme. The same year, the then Nigeria Educational Research Council (NERC) now Nigerian Educational Research and Development Council (NERDC) hosted a National Seminar on the mode of implementation.

Under the auspices of the NERC, a broad overview of Element of Special Education Curriculum was evolved. However, that curriculum was not introduced in time and in the light of changing needs, it became necessary to design a curriculum on Elements of Special Education for Teachers' Grade II Colleges. This was designed to be comprehensive enough to include the principal categories of special needs, and yet is succinct and concise enough to fit adequately into all teacher education programmes and to require only one or two periods of instruction a week for an average of two years.

The need to incorporate Elements of Special Education into the programme of the Teacher Education among others include:

- equipping the teacher in-training with the knowledge and necessary skills of identification and referral;
- making teachers appreciate the ever changing needs and demands posed by these special groups in the regular school system;
- stimulating government interest and creating awareness of the existence of these groups of children in our regular school system and to make adequate provisions for them too; and
- guiding those with special educational needs through self-discovery to appreciate their worth and restore their dignity through a more meaningful and fulfilling life devoid of dependency (FME, 1986).

The ultimate aim of special education which is geared towards making the individual live a more fulfilled and purposeful life would not be realized, if teachers in training are not exposed to the rudiments of special education as provided for in the Elements of Special Education Curriculum. A handful of studies analyze the impact of special education programs on the achievement of students with disabilities. Hanushek et al. (2002) investigated the effects of participation in special education programs using state-wide individual-level data from Texas, United States of America. They found that special education boost the achievement of students with disabilities.

The contents of the curriculum would provide pre-service teachers with general knowledge about children and their learning problems. It was also meant to create an insightful understanding of the children they would teach viz: their areas of strengths and weaknesses, their potentials and actual levels of achievement. The curriculum include such contents as, introduction to special education, identification, assessment and management techniques used with learners in the eight principal areas of exceptionality- the gifted, mentally-retarded, learning disabled, behaviour disordered, the physical and health impaired, the hearing impaired, the visually impaired and the speech and language impaired. Available support services, rehabilitation and preventive measures were also included. The curriculum was organized under six headings namely namely: topics, objectives, contents, suggested teaching methods and activities, suggested teaching materials and evaluation.

Furthermore, the 6-3-3-4 system of education that was adopted in 1976 brought a change into the curriculum of Teacher Education. The Nigeria Certificate in Education (NCE) became the minimum qualification expected to be held by any teacher in the educational system of the country. It was expected that the least qualified teacher in the primary school will be in possession of the NCE. In order for the government to achieve these laudable goals, the Teachers' Grade II Colleges were phased out in most states of the Federation while colleges of education for the training of NCE teachers were established. Today, Nigeria has 92 institutions offering courses leading to the award of NCE. These institutions also mounted programmes on sandwich courses mainly to upgrade the grade II teachers in order to ensure that the Nigeria Certificate in Education was the lowest qualification for teachers in the schools.

The implementation of the Elements of Special Education in the Colleges of Education and indeed other institutions offering teacher training programmes was being done without envisaging possible problems. Even if the National Curriculum for Teachers' Colleges did,

such envisage problems were not spelt out in the document. Considering the wide range of areas of exceptionality among students across the educational levels viz: gifted and talentedness, intellectual disabilities, learning-disabilities, behaviour disorders, hearing impairment, visual impairment and speech and language impairment, the dearth of qualified specialized personnel to train all pre-service teachers becomes a challenge.

The re-authorized Individuals with Disabilities Education Act (IDEA) of the USA require teachers of children with disabilities to have necessary skills and knowledge derived from practices that have been determined through expertise and research. Special Education teachers, according to the US Department of Labour, Bureau of Labour Statistics (2008), work with children and youths who have a variety of disabilities. While a small number work with students with severe cases of mental retardation and autism, the majority work with children with mild to moderate disabilities, using or modifying the general education curriculum to meet the children's special needs. To this end, every teacher in general education setting such as the primary and secondary schools require some dose of Elements of Special Education Curriculum content knowledge. The extent to which this curriculum is being implemented to achieve these objectives was evaluated in this study.

Special education teachers use various techniques to promote learning. Such methods can include individual instruction, problem-solving, assignment and small group work. Therefore, it is desirable to investigate the various methods and strategies used in these institutions to implement the curriculum on Elements of Special Education in order to achieve the objectives of the curriculum.

Also, specialized materials and equipment need to be available, adequate and utilized. Strategies for implementation could also be a limiting factor in the success of the programme. The design and organization of learning activities and proper assessment techniques, funding, the amount of time allocated for teaching the concepts, people’s attitude towards those with disabilities and a host of others were also looked into as to whether or not they were enabling factors or constraints in the teaching and learning of the Elements of Special Education in all the NCE awarding institutions.

Akobundu (1995) and Geossling (2000) report that attitudes towards individuals with disabilities occupy a central position in rehabilitation and special needs provision. Also, Ozoji (1991) argues that if suitable services were to be provided to individuals with disabilities, positive societal attitude is vital. To this end, the attitude of the teacher who is charged with the responsibility of helping the child and rehabilitating the child with disability needs to be very

positive if the objectives of special education would be achieved. With these in view, the Elements of Special Education curriculum in NCE awarding institutions needed to be evaluated. This would help to determine the extent to which the entire programme is being implemented based on the objectives of the programme.

1.2 Statement of the Problem

A number of issues attending to effective implementation of Elements of Special Education Curriculum has cropped up over the years. These range from societal attitudes towards learners with special needs and lack of qualified personnel and support staff to poor learning outcomes of students with special needs. This study therefore evaluated the implementation of Elements of Special Education Curriculum in NCE-Awarding Institutions in Nigeria using the Context, Input, Process and Product (CIPP) model. This is in terms of the extent to which the curriculum objectives are currently being achieved, the relevance of the objectives to the needs of the society, the suitability of the personnel available for the implementation (qualification, experience, number), availability, adequacy and utilization of facilities, equipment and resources, methods and strategies for teaching the curriculum content, the problems encountered in the course of implementation, as well as, the learning outcomes as measured by students' achievement in and attitude towards special needs education.

1.3 Research Questions

The study sought answers to the following research questions:

1. What is the status of the NCE-awarding institutions with respect to:
    (a) number of lecturers available
    (b) lecturers' qualification
    (c) lecturers' experience
    (d) lecturers' Gender
    (e) students' gender?
2. What is the perception of students and lecturers on the introduction of the Elements of Special Education into Teacher Training Programmes and their relevance to societal need
3. What is the level of availability, adequacy and utilization of facilities, resources, and equipment necessary for the implementation of the curriculum?
4. How comparable is the content taught with the content specified in the Elements of Special Education Curriculum?
5. What strategies are adopted by the lecturers in the course of implementing the Elements

of Special Education Curriculum in the NCE-awarding institutions in Nigeria?

6. What are the problems encountered by the lecturers' in the implementation of the Elements of Special Education Curriculum?
7. What are the students' level of learning outcomes in Elements of Special Education as indicated by students' achievement and their attitude to Special Education?

1.4 Hypotheses

This study formulated and tested the following null hypotheses at $\infty = 0.05$ level of significance.

1. There is no significant difference in the male and female students' achievement in Elements of Special Education Curriculum in NCE-awarding Institutions in Nigeria.
2. There is no significant difference in the attitude of male and female students towards Elements of Special Education Curriculum in NCE-awarding Institutions in Nigeria.
3. There is no significant difference in the lecturers' teaching effectiveness in Elements of Special Education based on their educational qualification.
4. There is no significant difference in the lecturers' teaching effectiveness in Elements of Special Education based on the teaching experience.

1.5 Purpose of the Study

The purpose of this study was to evaluate the implementation of Elements of Special Education Curriculum in NCE-awarding institutions in Nigeria using the CIPP model. The specific purposes intended for the study were:

1. to evaluate the context aspect of the implementation as it affects institutions, students and lecturers' data such as gender, qualification, experience and number of personnel available;
2. to evaluate the input variables such as facilities and equipment necessary for the implementation of the curriculum;
3. to carry out process evaluation on the actual classroom teaching, as well as, problems of implementation of the curriculum; and
4. to investigate students' learning outcomes in terms of achievement and attitude towards elements of special education curriculum.

1.6 Significance of the Study

Findings of this study would provide information on the desirability, continuation, review or stoppage of the Elements of Special Education Curriculum in NCE-awarding Institutions in Nigeria. Specifically, findings would highlight the level of comparability of content taught by the lecturers with the specified content. This would provide information for the lecturers so that they would be in a better position to assess their level of implementation of the programme and their levels of success.

Findings from the study would also be beneficial to the nation as a whole in meeting its aspirations on the success of special education. This is to the extent that the teachers in training become capable of effectively delivering special education instruction when they eventually get on the job and when they are confronted with situations in the general education setting which demand skills in special education.

Furthermore, policy makers in education would find the results useful as they would have first hand information about the extent to which Elements of Special Education curriculum is achieving the purpose for which it was designed. This would in turn help them make functional and rational decisions on better ways of implementing the curriculum, as well as, make revisions as necessary in the curriculum.

Educational Researchers would find the information obtained in this study very useful in updating their knowledge on Special Education Curriculum Evaluation and carry out further studies on specific aspects that require more in-depth investigation.

Special Educators/professionals would make use of the findings of this study to revise and update curriculum development efforts that would change the trend of events in the discipline in the near future. Where possible, new programs or strategies might emerge as a result of the findings of this study.

For the government, this study would sensitize its officials on the importance of Special Education and its relevance to national development. This would attract the required funding, commitment and necessary support for Special Education at all levels of Education.

Finally, the society would become better off given the fact that information obtained from this study would show the extent to which Special Education Curriculum is being implemented so that necessary changes might be demanded from government by individuals, corporate bodies and non-governmental organisations. When this is effected as it relates to the provision of functional education to students with special needs in our society, they would lead to greater improvement in our general education programme.

1.7 Scope of the Study

This study covered one thousand, three hundred and seventy five students from fifty five NCE-awarding institutions in Nigeria, as well as, all the two hundred and seventeen lecturers who teach the course "Elements of Special Education" in the selected institutions. The study evaluated the extent to which Elements of Special Education Curriculum was being implemented in these institutions.

1.8 Operational Definition of Terms

Elements of Special Education – These refer to the basic knowledge of special education required of pre-service teachers. It has to do with introduction to special education, identification, assessment and management technique used with learners in the principal areas of exceptionality, available support services, rehabilitation and preventive measures.

Elements of Special Education Curriculum - This is a programme designed to expose teachers-in-training to the rudiments of special education. It consists of planned experiences; opportunities and activities to be provided in the institutions to assist the pre-service teachers attain the designed learning outcomes and desired change in behaviour.

Evaluation of Implementation – This means any attempt made towards determining the extent to which a programme, curriculum, policy or teaching activity is being carried out towards achievement of the purpose for which it was designed.

Persons with Disability – This refers to individuals with a condition that makes it difficult for him or her to perform some or all of the basic tasks of daily life.

Teaching Effectiveness – This refers to the extent to which the teaching and learning activities of the content of elements of special education curriculum meet the needs, interests and ensures the achievement of the learning outcomes.

Students' Achievement – This connotes the students' level of mastery of the contents of the Elements of Special Education in NCE – Awarding institutions in Nigeria as measured by Test of Students' Knowledge in Special Education (TSKSE)

Students' Attitude – Students Attitude means the dispositions, interests and enthusiasms which students put up or display in the learning of Elements of Special Education in NCE – Awarding institutions in Nigeria as measured by Students' Attitude to Special Education Scale (SASES)

Special Needs Education – Requirements made necessary by challenges: the requirements, especially in education, that some people have because of physical disabilities or learning difficulties.

CHAPTER TWO
LITERATURE REVIEW

2.0 This chapter presents literature pertinent to this study. The sub-titles around which the review was done here include:

2.1 Theoretical Framework

- **2.1.1** Meaning of Evaluation
- **2.1.2** Models of Evaluation
- **2.1.3** The Countenance or Antecedents, Transaction and Outcomes Model (ATO)
- **2.1.4** Discrepancy Evaluation Model
- **2.1.5** Formative and Summative Evaluation Model
- **2.1.6** Tyler's Model of Evaluation
- **2.1.7** The Composite Goal Model
- **2.1.8** Context, Input, Process and Product (CIPP) Evaluation Model
- **2.1.9** Curriculum Evaluation
- **2.1.10** The Concept of Curriculum
- **2.1.11** Concept and Rationale for Special Education
- **2.1.12** Regulatory Roles of National Commission for Colleges of Education (NCCE)

2.2 Empirical Literature

- **2.2.1** Attitude and Special Needs Provision
- **2.2.2** Societal Attitude and Disabilities
- **2.2.3** Attitude of Regular Classroom Teachers towards Persons with Special Needs
- **2.2.4** Teachers' attitudes and Student Learning Outcomes
- **2.2.5** Teacher Qualification and Student Learning Outcomes
- **2.2.6** Teachers' Teaching Experience and Students' Learning Outcomes
- **2.2.7** Teacher Effectiveness and Student Learning Outcomes
- **2.2.8** Appraisal of Literature Reviewed

2.1 Theoretical Frame Work

The Context, Input, Process and Product (CIPP) model of curriculum evaluation (Stufflebeam, 1971) informed the theoretical framework for this study. The CIPP model is represented schematically in figure I below.

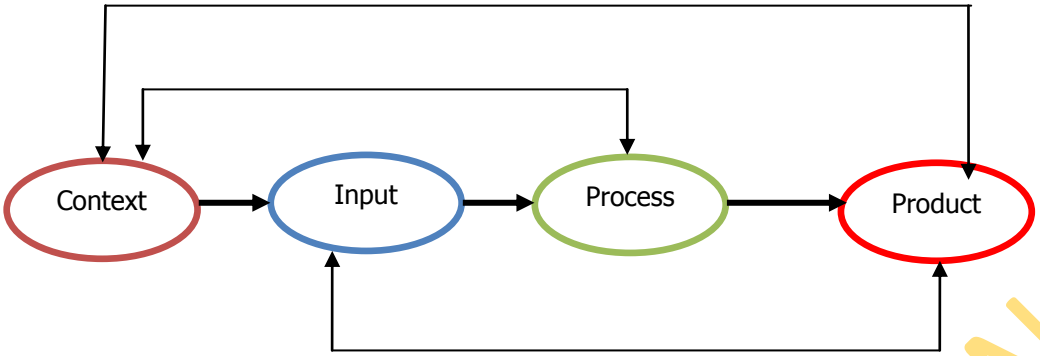

Fig.1: Evaluation Model

This model informed the conceptual framework for this study and this is presented in Fig. 2 below.

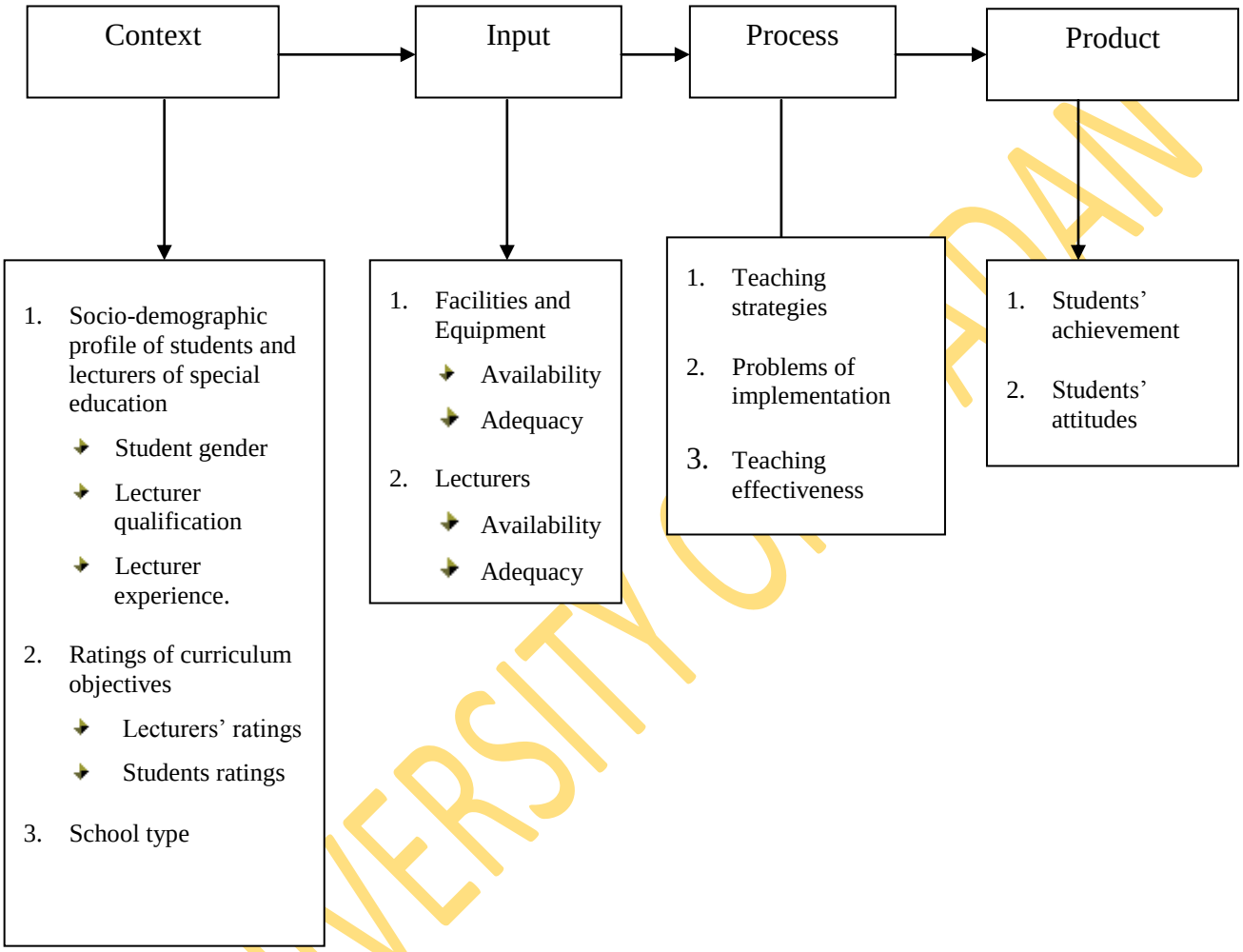

Fig. 2: Conceptual framework for the Evaluation

2.1.1 Meaning of Evaluation

Evaluation is the systematic acquisition and assessment of information to provide useful feedback about some object (Trochim, 1999). In the field of education, evaluation involves collecting and analyzing data in order to determine whether, and to what extent, objectives have been, or are being achieved. Evaluation is often defined as a broad and continuous effort to inquire into the efforts of utilizing educational content and process according to clearly defined goals. However, if evaluation is to be a broad and continuous effort, it must rely upon a variety of instruments that are used. According to Doll (1974), these instruments are meant to carefully ascribe purposes of the evaluation for which they are used. Evaluation of any school program can be both formal and informal. The informal level of evaluation entails judging, estimating or giving opinions about the extent to which changes in school program occurred. At a more formal level it involves careful collection and treatment of data based on predetermined goals. In both cases however, evaluation involves the collection of evidence of some kind. According to Akubuilo (2005), the evidence might reveal aimless or purposeful action.

From educational point of view, evaluation is any systematic continuous process of determining the extent to which specified educational objectives previously identified and defined are attained to determine the effectiveness of the learning experiences provided in the classroom as well as determining how well the goals of education have been accomplished (Bassavanthappa, 2009). Rossi, Lipscy and Freeman (2004) defined evaluation as a systemic, rigorous and meticulous application of scientific methods to assess the design, implementation, improvement or outcomes of a programme. Reeve & Peerbhoy (2007) defined evaluation as the critical assessment, in as objective a manner as possible, of the degree to which a service or its component parts fulfils stated goals. The focus of this definition is on attaining objective knowledge, and scientifically or quantitatively measuring predetermined and external concepts. Kahan & Goodstadt (2005) describe evaluation as a family of research methods that are used to systematically investigate the effectiveness of policies, programmes, projects and other types of social intervention, with the aim of achieving improvement in the social, economic and everyday conditions of people's lives.

According to Government Social Research Unit (2007), the real purpose of an evaluation is not just to find out what happened, but to use the information to make the project better. The document further describes evaluation as an integral part of all aspects of the educational process and its major purpose is to improve instruction and student learning. In

their own words, Thorndike and Hagen (1977) describe evaluation as a process of delineating, obtaining and providing useful information for judging decision alternatives. This implies that the generic goal of most evaluations, both in public and private sectors, is to influence decision-making or policy formulation through the provision of empirically-driven feedback. Scriven (2007) describe evaluation as course of action used to assess the value or worth of a program. Farell, Kratzmann, McWilliam, Robinson, Saunders, Ticknor and White (2002) define evaluation as a set of research questions and methods geared to reviewing processes, activities and strategies for the purpose of improving them in order to achieve better results. Evaluation is the reflective link between the dream of what should be and the reality of what is.

Cronbach (1970) describe evaluation as a continuous and systematic process administered at regular intervals and which underlines all good teaching and learning processes while it has been defined simply as the assessment of merit (Popham, 1975). From the foregoing, "evaluation" (a word that indicates estimation of value or worth) is increasingly used to estimate the worth of the results of a program or activity.

A term which is often confused with evaluation is measurement. In the simplest term, measurement is the description of data in terms of numbers. More precisely, measurement is defined as the assignment of numerals to objects or events according to rules. From the given definitions, it follows that evaluation is a much more comprehensive and inclusive terms than measurement. Evaluation covers both quantitative and qualitative descriptions of pupils' behavior plus value judgment concerning the desirability of that behavior. In other words, it covers the cognitive, affective and psychomotor domains of the pupils' behavior. Measurement is however, limited to the quantitative description of pupils' behavior.

From the analysis above, evaluation may or may not be based on measurement but when it does, it goes beyond the simple quantitative descriptions. A sound evaluation process will therefore include measurement and non-measurement techniques a process referred to as methodological pluralism Eisner, 1993: Ewert, 1987). There are various models and they are used in different ways.

2.1.2 Models of Evaluation

The theoretical basis for the problem of this study is provided against the background of the need to know the efficacy of elements of special education curriculum on NCE-awarding institution students through the use of an evaluation model. Fitz-Gibbon and Morris (1988) observed that evaluation models serve primarily to conceptualize the field and set boundaries for an evaluation. In addition, Rose and Nyre (1977) noted that the purpose of evaluation

model is to guide and focus inquiry. From the forgoing, models assist in structuring the type of questions to ask and data to collect. Onwuakpa (1998) sees an evaluation model as a design or an approach for conducting an evaluation exercise. He says further that it shows the framework or schedule whereby an evaluation is carried out.

2.1.3 *The Countenance or Antecedents, Transaction and Outcomes Model (ATO)*

This was developed by Stake (1967) and it consists of three stages of data sources. It could be included in both descriptive and judgmental acts. These elements are: Antecedents, Transactions and Outcomes (ATO). It is known as ATO model which is the acronyms of the three stages involved. The antecedent data includes those conditions that existed prior to the programme implementation. The transaction data constitute the instructional process of implementation or educational aspect of the programme. While the outcome data is the specific output from the process. Yoloye (1978) affirms that ATO model could be adopted or use in evaluating educational programmes. The antecedent data would include entry behaviour, the training environment and rationale for the training. The transaction data would be the processes of the programme implementation and the classroom interaction. The outcome data include the specific skills, attitude and achievement as a result of the programme.

2.1.4 *Discrepancy Evaluation Model*

Provus' (1971) Discrepancy model evaluates difference between actual and intended programme outcomes. Provus (1971) defines evaluation as a process of:

i. determining programme standards (Objectives)
ii. identifying whether there is a discrepancy between some aspect of programme performance and the standards set for performance; and
iii. using information about discrepancy whether to improve, terminate or continue the programme or some aspect of it.

The model provides feedback for improving programme performance since any discrepancy noted provides basis for monitoring group.

2.1.5 Formative and Summative Evaluation Model

Scriven (1974) describes formative evaluation as the developer-author-publisher oriented evaluation. Ohuche and Akeju (1977) assert that formative evaluation is designed to assist both student and teacher to point out where the learner has failed to learn or what the

programme has failed to achieve in order to rectify the failure in future. Okpala et al (1993) identified other purposes of formative evaluation thus:

i. identifying and defining programme goals;
ii. pacing student learning;
iii. quality control of an educational product;
iv. monitoring process during instruction;
v. trial testing of curriculum materials;
vi. ensuring the success and efficiency of a programme; and
vii. modifying of defective aspects of the programme or activity.

Onwuakpa (1998) observes that summative evaluation is an evaluation at the terminal stage of a programme or a class lesson. Summative evaluation provides report on overall effectiveness of a programme. It is mostly used by the policy makers. Okoronka (1995) in his case attempts to compare formative and summative evaluation. He says that formative evaluation improves the sequences of an instructional programme while summative evaluation appraises the worth of a completed instructional programme in comparison with other competing ones. In the light of various assertions above, it could be concluded that this study is both formative and summative.

2.1.6 *Tyler's Model of Evaluation*

Tyler (1968) proposed one of the best known models of educational evaluation (Lewy, 1977). He described education as a process in which three different foci are distinguished: educational objectives, learning experience, and examination of achievement. Evaluation according to his conception means an examination of whether desired educational objectives are or not attained. Tyler's model has been used basically to evaluate the achievement level either individual learner or a group of learners. The model stresses that any educational model has three components as shown below:

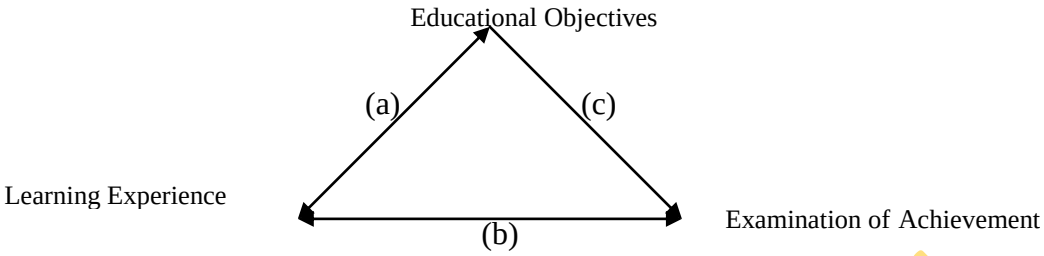

Fig. 3: Tyler's Model of Evaluation

According to Onwuakpa (1998), the model ascertains that level of achievement of educational outcomes depends on the extent to which the educational objectives have been transformed into learning experiences. Lewy (1977) observed that Tyler's model deals with a variety of aspects of an educational programme and describes different activities that are connected with curriculum education. Nevertheless, it has been criticized, for it disregards several important aspects that should be considered before making concrete decisions on an educational programme.

Glass (1969) and Scriven (1974) have observed that the Tyler Model does not deal with unplanned or unintended occurrences while Stake (1967) criticized Tyler's model for its emphasis on the outcome of the programme and for refusing to take cognizance of process variables and examination of the antecedent conditions that might have caused the success of the programme. This study considers the objective of the curriculum (content) financial, human and material resources (input), implementation procedure (process) and outcome (product) of the elements of special education curriculum package. Therefore, Tyler's model of evaluation is not suitable for this kind of study as it could not provide answer to all the aspects identified in the study.

2.1.7 *The Composite Goal Model*

As Balogun (1974) observes, the Composite-Goal model is associated with the evaluation methodology proposed by Scriven (1974) and Stake (1967). The rationale put forth for this model is that any input into an instructional programme (antecedent) the operating procedures (transactions) and end-results (outcome) determines the success or failure of the programme. The data are to be analyzed in terms of what actually happen (observation) and in terms of congruence between what is intended and what actually happens.

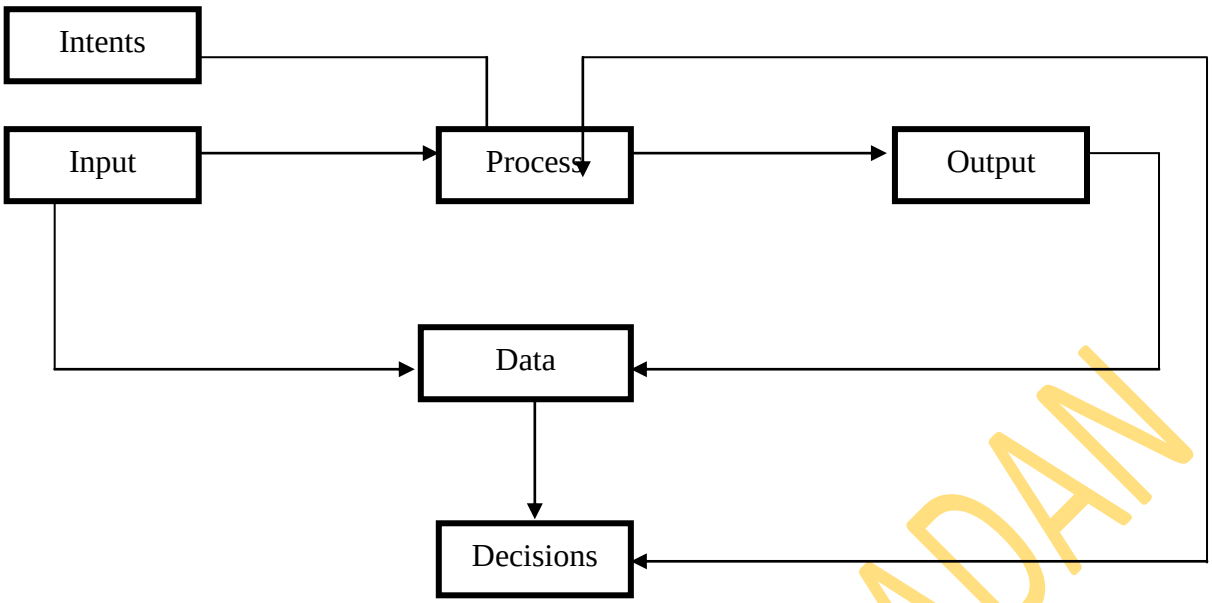

Fig. 4: Elements of the Goal-Composite Model

Source: *Balogun, T. A. (1974) Towards a Management Systems Model of Evaluation in Education in Nigeria (P. 10).*

2.1.8 Context, *Input, Process and Product (CIPP) Evaluation Model*

The CIPP model was developed by Guba and Stufflebeam (1970). It is an evaluation framework to serve policy makers who are faced with four different kinds of decisions. In this case, the study endeavors to examine the overall impact of elements of special education curriculum. In essence, context, input, process and product will be assessed carefully. As Galvin (1982) notes, the CIPP is decision-oriented and it focuses on providing information to decision makers. He listed some advantages of the CIPP model to include: practicality, effectiveness, efficiency, comprehensiveness, balance and usability.

In carrying out an evaluation study according to Onwuakpa (1998), the evaluator is expected to identify the objectives of his evaluation, the areas or variables to be evaluated, design valid instruments to collect data, and analyze the data before decision is made based on the results. Moreover, the choice of an evaluation model depends on the objectives of the evaluation and decisions to be made.

The purpose of this study is to evaluate the implementation of Elements of Special Education Curriculum in NCE-awarding institutions in Nigeria. Therefore, the CIPP model is adopted for the study and it will provide information as to how the products (outcomes) are being explained by the context, input and process. This will also help towards making recommendations for policy makers on whether to continue, terminate, or refocus the

programme.

The study adopts the Context, Input, Process and Product (CIPP) model which was developed by Guba and Stufflebeam (1970). Guba and Stufflebeam (1970) in Rose and Nyre (1977) define evaluation as the "process of delineating, obtaining and providing useful information for judging decisions alternatives". This definition addresses three important points. Firstly, evaluation is seen as a systematic, continuing process. Secondly, the process involves three basic steps:

i. delineating the questions to be answered;
ii. obtaining relevant information in order to answer the questions; and
iii. providing the information for decision makers.

Thirdly, evaluation aids decision-making. The primary focus of this model is on decision-making. Guba and Stufflebeam (1970) assert that the CIPP model answers four questions on decision making:

i. What objectives should be accomplished?
ii. What procedures should be followed so as to accomplish the objectives?
iii. Are the procedures working properly?
iv. Are the objectives being achieved?

The Stufflebeam's (1974) systems-oriented CIPP model provides a comprehensive framework for this evaluation. The CIPP is an acronym comprising four elements or types of evaluation, namely:

- Context
- Input
- Process; and
- Product

The CIPP model provides a plan, which structures the type of data to be collected based on the types of questions asked with respect to the worth of the aspect of the curriculum to be evaluated. The CIPP model of curriculum development as revised by Stufflebeam (1984) have the following primary components:

Context Evaluation: This is concerned with the assessment of the social and educational contexts in order to identify the target audience, the determination of the needs to be met and the objectives to be addressed. Context is the element, which questions the rationale for a

curriculum and what the parameters of such curriculum will be in terms of aims, goals and objectives. Context evaluation guides planning decisions with regards to needed changes.

Input Evaluation: This is designed to determine available resources, possible alternative strategies and plans in relation to how best to meet the objectives of the program. Essentially, input evaluation provides information to decide what strategies should be employed to implement the program. Specifically, questions such as the quality of staff, time, budget requirements, potentials, procedural barriers, resources available and so on are addressed by input evaluation.

Process Evaluation: Process evaluation examines how well the plan was implemented. This means that it deals with information about the implementation of the educational processes set in motion by the program. Process evaluation is necessary to provide feedback to persons implementing the plans and procedures of the program.

Product Evaluation: This examines results obtained, whether needs were met and the kind of planning for the future that is required. Product evaluation examines the effect of the curriculum on the students who have passed through it. This kind of evaluation guides decision about recycling i.e. identifying and assessing how well a course of study is working leading to a decision to continue, drop or modify the programme. Its purpose is to measure and interpret attainments not only at the end of a project cycle, but as often as necessary during the project term.

2.1.9 Curriculum Evaluation

Curriculum evaluation as a process involves much more than the concept of evaluation. Inyang-Abia and Umoren (1995) define curriculum evaluation as a maintenance process in that it helps to envisage the future for curriculum development. It is equally a process through which a systematic and scientific approach is used to assess the strengths and weaknesses of a curriculum. It seems that the processes, strategies and techniques variously employed to estimate, adjust and control the fit between the planned activities and the actual outcome of instruction are what is often referred to as Curriculum Evaluation. Almost invariably, public funds are involved in administering curriculum activities, a justification for advocating education as evidenced of accountability. Its objective is to estimate whether learning experiences provided in the school curricula are meeting the set goals and objectives in bringing about socially desirable development among students. It enhances not only the cognitive ability of the students to meet program objectives but also the background of the students, which are expected to be functions of students' learning (Ogunleye, 2010).

The last step in designing the curriculum is evaluation. This seeks to determine the extent to which the projected objectives have been achieved. The nature of or approach to evaluation is determined by the nature of objectives being pursued. For example, the objectives may be cognitive, affective or psychomotor in nature. In each case a different set of assessment instrument may be used to obtain data on the degree of change in learner's behavior.

According to Ogunleye (2002), evaluation serves a number of purposes in the curriculum. It gives direction to instructional activities. It provides empirical bases for curricular activities. It determines the merits and limitations of the instructional programme through the provision of data on learner achievement. In addition, it supplies data for a comprehensive judgment on the individual learner.

For a programme of evaluation to be functional, it should possess a number of characteristics. It should be valid, that is, intimately related to instructional purposes since evaluation among other things, and seeks to determine how far the objectives are being achieved. In addition, it should be progressive or continuous and comprehensive in scope such that the trends in the development of the individual are not only monitored on a continuous basis but also the data to be obtained should sample all the dimensions of the learner's behaviors - the cognitive, affective and psychomotor (Ogunleye, 2002).

Evaluation data are useful to the extent that they form the basis for a modification of the various steps of the curriculum. Thus, evaluation is not an end in itself, but a means to an end which is the modification of various components of the curriculum (Egwali & Osubor, 2007).

To evaluate comprehensively, two types of data have been solicited by Stakes (1967), these are:

i. Objectives description of goals, environmental, personnel's strategies, learning experiences and outcome; and

ii. Personal judgment as the quality and appropriateness of those goals, environment, personnel strategies, learning experiences and outcome.

2.1.10 *The Concept of Curriculum*

Definitions of curriculum differ depending on the value and the educational philosophy of curriculum definers, and what they perceive as the purpose and focus of curriculum like the

present needs of society, the needs or the nature of transaction expected of the learner and the wider society in the future. The problem of curriculum definition thus lies in determining what really it is for the individual and the society to be functional. Curriculum then in its pervasive nature, makes scholars to conclude that it eludes any single definition like most concepts which one chooses normally depend upon one's discipline, perspective or purpose.

However, the word curriculum has a Latin origin "Currus" (Offorma, 1994) meaning "running" which is figuratively used in education to refer to the course or programme of learning ran by learners towards their being certificated as a mark or prize of success. This makes curriculum to be central to education. It is often regarded as all the planned learning experiences offered to learners by educational institutions. From the educational perspective, Alade (2006) defines curriculum as a programme of education prepared for definite group of learners within a time frame in order to achieve the intended behavioural outcomes.

Alade (2006) in his description of curriculum sees it as the inner engine which propels education to achieve for both the individual and the society what they hold up as prize. Offorma (1994) defines curriculum as a programme of learning planned for a target group of learners for a specific period of time in order to achieve certain pre-determined educational goals. Thus, he further asserted that curriculum is the meeting point for the programme of teaching and learning. It means the sum total of the activities in a programme of education whose purpose is to achieve broad goals and related specific objectives of education to the best of learners' abilities. Any curriculum worth its salt provides meaningful experiences and purposeful activities all of which must be directed towards achieving social goals.

In the view of Offorma (1994), the term curriculum is defined as a deliberately and systematically planned attempt to change the behaviour of the young and experienced and, also, to enable them gain the insight that will enable them to build a better society. It is the medium through which educational institutions seek to translate the societal values into concrete reality. Through it, educational institutions actualize what the society considers as desirable learning. In practice, curriculum consists of a number of plans, in a written form and of varying scope, which delineate the desired learning priorities. The curriculum in this respect, may be a unit, a course, a sequence of courses, or the educational institution's entire programme of learning which may take place within and/ or outside the classroom or school. Ivowi (1993) described curriculum as a "race –course" comprising a series of activities gained knowledge, skills and attitude targeted to stimulate adult life.

On the whole, curriculum straddles all societies from the illiterate, pre-literate to the

illiterate (Alade, 2006). It has been the heartthrob of development and progress from the ancient Hellenic period to the present computer age Nneji, Ogunyemi, Onyeukwu, Ukponson, and Agbato (2003). As education is central to society, so ia curriculum the heart and life wire of education. Alade (2006) reiterated that curriculum is indeed an indispensable aspect of education. The implication of this according to Alade (2006), is that, no society can rise above the level of its educational system, so can no educational system tower above the level of the values inherent in its curriculum.

2.1.11 Concept and Rationale for Special Education

Several definitions of special education have been propounded by authors. However, Adima, Ladipo and Abosi (1981) defined special education as an aspect of education that treats people as individuals and makes allowances for the use of special equipment and methods of teaching according to individual needs. Kasoude and Moberg (2001) defined special education simply as an individually planned, systematically implemented and carefully evaluated instruction to help learners who need extra support in learning. Obaje (2007) defined special education as an area within the framework of general education that provides teachers with the training for special needs children who cannot benefit from regular classroom setting. Iregbu and Longkam (2008) described special needs education as an area within the framework of general education that provides the right facilities, special materials and teachers with adequate training for all types of children with unusual learning needs.

Hallaham and Kauffman (2003) defined special education as a kind of education specially designed to meet the unusual needs of exceptional students using special materials, teaching techniques, or equipment and facilities that may be required. According to Obani (2004), sees special education as the education specially designed to suite the special needs of children who may experience learning problem and difficulties as a result of disabilities or handicapped or other forms of special educational needs.

In addition to the above, Obani (2003) submits that special education is a field of education well structured, with unique modules, approaches and methods to achieve its objectives and goals of amelioration, repair, restoration, compensation, habilitation and rehabilitation of functions in individuals with special educational needs. From this educational point of view, special education therefore requests that different exceptionalities be well planned for according to the needs of each category. This idea is supported by the National Policy on Education (2007).

Bower (2001) defined exceptional child as a child who deviates from average of normal

child in mental characteristics, sensory abilities, neuro-muscular or physical characteristics, social or emotional behavior, communication abilities or multiple handicaps to such an extent that requires a modification of school practices or special educational services in order to develop him to his maximum capacity.

All these definitions have one thing in common: the exceptionality constitutes a problem to the learner in the teaching and learning situation, effective use of all organs at one time or the other are needed in the process of skill acquisition. Like wise, any of the exceptionality needs some complementary assistance if learners would be able to function and perform excellently.

Special education, according to Obani (2004) is education specially designed to suit the special needs of children who may experience learning problems and learning difficulties as a result of disabilities or handicaps or other forms of special educational needs. It is, or should be a utility type of education primarily aimed at the problems of the child. The operative ideas are education by 'special methods' and for the 'special needs' of children with serious learning problems. Simply, special education is education that aims at reducing the limiting effects of a handicap/disability on a child's learning ability and permits the child to approach as near normal a life as possible, while still taking the handicapping condition into objective consideration. Special education recognizes educational problems due to different forms of handicap and provides various means, including special subjects and methods to try to solve these educational problems.

> *The National Policy on Education (2004) defines Special Education as: Special education is the education of children and adults who have learning difficulties because of different kinds of handicaps-blindness, partially-sightedness, deafness, hardness-of-hearing, mental retardation, social maladjustment, limb of deformity or malformation, etc. due to circumstances of birth, inheritance, social position, mental and physical health patterns, or accident in later life. As a result, such children and adults are unable to cope with the regular school class organization and method (page 40).*

This definition of special education as contained in the document is not ignorant of these individuals, who are specially gifted and talented, who are intellectually precocious and found themselves insufficiently challenged by the programmes of the regular school system and who may take to stubbornness and apathy in resistance to it.

The policy document also explains the objectives of special education as follows:

(a) *To give concrete meaning to the idea of equalizing educational opportunities for all children, their physical, mental, emotional disabilities not withstanding;*

(b) *To provide adequate education for all handicapped children and adults in order that they may fully play their roles in the development of the nation; and*

(c) *To provide opportunities for exceptionally gifted children to develop at their own pace in the interest of the nation's economic and technological development (NPE 2004).*

Baine (1986) defines special education as that aspect of education that concerns itself with the provision of educational facilities to groups of learners who do not fall within the range of normalty either physically, emotionally, socially or intellectually. The provision of education to such persons is with a view to compensating for whatever deficiency nature or nurture may have imposed on them. Its thrust is therefore largely remediating ameliorative, positive, caring and helping. These interests can be summarized as integrating the individual to live peacefully and productively in his environment with a full respect for his worth and dignity as a human person.

Apart from the teaching aspect of special education, it is also an instrument of intervention. The purpose of such intervention is to eliminate or at least reduce the obstacles that might keep someone with disabilities from full and active participation in school and society at large. Heward (1996) outlines three basic types of intervention efforts: preventive, remedial and compensatory.

2.1.12 Regulatory Roles of National Commission for Colleges of Education (NCCE)

One of the recommendations of the Ashby Commission of 1962 was instrumental to the establishment of the Commission. The Ashby Commission, with foresight, sensed the indispensability of a solid structure or an agency that would attend to the peculiar needs of Teacher Education and teacher production in Nigeria. This recommendation ultimately crystallized into the promulgation of the enabling decree (now Act) No.3 of 1989. It was this Act that gave birth to the establishment of the National Commission for Colleges of Education (NCCE) as a supervisory agency for sub-degree Teacher Education, according to NCCE Brochure (2007). The Federal Government set up the National Commission for Colleges of Education (NCCE) to ensure that standards are maintained and that the activities of the Colleges of Education are in tune with national educational objectives. The NCCE is a

regulatory body for all NCE programmes and is situated at the Federal Capital Territory, Abuja. It sets the standards for the programmes of the Colleges of Education, oversees their activities and approves all new programmes of the Colleges.

The enabling Decree (now Act) mandates the Commission to among other functions to:

(a) advise the Federal Government, through the Honourable Minister of Education on, and co-ordinate all aspects of, non-degree teacher education in Nigeria;

(b) make recommendations on the National Policy necessary for full development of teacher education and the training of teachers;

(c) harmonize entry requirement and duration of courses in the Colleges of Education, lay down minimum standards for all programmes of teacher education and accredit their academic programmes and awards after obtaining the approval of the Minister of Education;

(d) act as the agency for channeling all external aids to Colleges of Education in Nigeria;

(e) make recommendations on the development of pre-vocational, technical, agricultural, business and home economics education in all primary and secondary schools and to advise as necessary, provision of facilities for them, the course requirements, the relative contributions of government and industry and how to ensure that women take full part in these,

(f) enquire into and advise the Federal Government on the financial needs of the colleges and receive block grants from the government and allocate to the colleges based on approved formula;

(g) collate, analyze and publish information relating to teacher education in the country;

(h) undertake periodic review of terms and conditions of service of personnel in the Colleges of Education and make recommendations thereon to the government;

(i) determine after consultations with relevant agencies, the qualified teacher needs of the nation.

The National Commission for Colleges of Education (NCCE) therefore completed the third leg of the tripod of excellence in tertiary education supervision in Nigeria. The other two legs of the tripod are the National Board for Technical Education (NBTE) and the Nigerian Universities Commission (NUC). The establishment of the NCCE was predicated upon the importance which the government of Nigeria attaches to quality teacher education. Similarly, the establishment of NCCE explains the aphorism enshrined in our National Policy on

Education (2007) that, no education system can rise above the quality of its teachers. The NCCE has become even more strategic given the fact that the Nigeria Certificate in Education (NCE) has become the basic minimum qualification for entering into the teaching profession in Nigeria.

2.2 Empirical Literature

2.2.1 Attitude and Special Needs Provision

Evidence from all over the world indicates that the effects of society's attitudes towards individuals with disabilities has, for many centuries, occupied a central position in rehabilitation and special needs provision (Akobundu, 1995; Goessling, 2000). It has been argued that the provision of services for individuals with disabilities may be hindered or accelerated by the perceptions and conceptions of a society concerning this category of persons (Kisanji, 1993). Ozoji (1991) observes that a society's awareness of the needs of individuals with disabilities manifests in the society's attitudes and standard specification for service provision and outcome expectation for these groups of people. Ozoji further argues that if suitable services are to be provided for these people, positive societal attitude is vital. Ozoji considers that if the relevant services are to be provided to individuals with disabilities, the society's thinking, feelings and actions towards individuals with disabilities should be such that promotes respect and acceptance for these individuals, Ozoji (1991) also observes that:

> *the attitudes of tolerance, accommodation of individual differences and differential individual treatment that accord with one's capacity are some subtle social imperatives which, when allowed to prevail, will in turn produce individuals who accept them as modus operandi in the society (page 25)*

Clearly, positive societal attitude is imperative for the provision of meaningful services to individuals with disabilities. Indeed, Pratkanis, Breckler and Greenwald (1989) have observed that attitudes are important for several reasons and can, positively or otherwise, affect the provision of quality of service because:

(a) attitudes can be pervasive;

(b) attitudes can predict behaviour towards their objects;

(c) attitudes can be a selective force in perception and memory; and

(d) attitudes serve various psychological functions.

Similarly, Kisanji (1995) argued that societal attitudes is important in the provision of services to individuals with disabilities in that people react to other people and situations on the

basis of how such people and situations are evaluated. Indeed, Akobundu (1995) observed that societal attitude is important in the provision of special needs services in that it reflects the feelings, beliefs, values and views of the society or community about people with disabilities and their needs. Akobundu (1995) argues that if societal attitude is favourable and empathetic, an understanding of the needs of individuals with disabilities will be demonstrated in providing appropriate service to adequately address their developmental and growth needs. In contrast, if societal attitude is negative, the needs of people with disabilities will not be acknowledged and appropriate efforts made to address them.

2.2.2 *Societal Attitude and Disabilities*

Evidence suggests that negative societal attitudes predominate and affect adversely the quality of services provision for people with disabilities in many countries of the world (Abang, 1991; 1992; Eleweke, 1996; Goessling, 2000). Ysseldyke, Algozzine and Thurlow (1992) have observed that the history of society's treatment of people with disabilities all over the world is characterized by ignorance, isolation, insulation and integration. Goessling (2000) considers that as a consequence of negative societal attitudes, students with severe disabilities frequently have been marginalized and segregated by school administrators, teachers, classmates and the society in general. Continuing Goessling adds that many students with severe disabilities in the nineteenth century were rejected by their families and society and were "put away" in "specialized" institutions and asylums.

Thornburn (1994) who has researched extensively into the issues affecting special needs provision in Jamaica and other developing countries reports that one of the fundamental difficulties and barriers hindering the achievement of providing quality services, full participation, social integration and solidarity for people with disabilities is attitudinal. Thornburn posits that low levels of awareness of the needs of people with disabilities and negative attitudes preclude the rights of these people being upheld, give rise to misconceptions about causes of disabilities, the potentials of people with disabilities and about the need for the provision of appropriate services to them. Gash and Goffey (1995) have also observed that attitudes towards persons with disabilities are critical to their success in life. For instance, Cambra (1996) considers that during the building of self concept, one's self perception is influenced by the attitudes and levels of acceptance of significant individuals in one's immediate environment and in society as a whole. Relating this to the development and success of people with disabilities in life, Cambra conducted a comparative study in Spain to determine the personality descriptions attributable to individuals who are deaf, blind, or with

no sensory disability. The data indicate that "certain stereotypes still mark the social representation" of this category of individuals. These stereotypes, argues Cambra, can influence adversely the self-concept of individuals with disabilities and consequently the level of success which they attain be limited.

The question remains as to what factors induce and foster unfavourable societal attitudes towards people with special needs across the world. Ozoji (1994) suggests that the manifestation of positive or negative attitudes by a society towards individuals with disabilities is influenced by some external prevailing conditions. Similarly, Ozoji, Abosi and Kolo (1993) argue that attitudes are not easy to comprehend because of their intrinsic location in the mesh of other related personality characteristics such as motives and values. Nonetheless, Ozoji et al (1993) comment that if appropriate are to be provided for individuals with special needs, it is imperative that governments manifest positive attitudes in the areas of planning of services and acceptance of special needs provision as a legal responsibility. Ozoji et al (1993) further argue that the manifestation of favourable and vibrant attitudes by governments towards those with special needs should be able to suppress intruding situational competitors in the provision of appropriate educational and related services for the learners with disabilities. Such positive attitudes will motivate the society in general towards dismantling barriers built by government ambivalence in the past in policy determination and implementation, as well as those fuelled by ignorance and apathy.

The importance of favourable societal attitude in the provision of services to individuals with disabilities is well documented; research suggests that one major factor undermining the provision of effective services for people with disabilities in many countries of the world remains problem of unfavourable attitudes. For instance, Mba (1982) studies the factor affecting service provision for deaf people in nineteen Developing Countries (DCs) in Africa and Asia. The result indicated that the greatest problem affecting service provision in these countries is the unhealthy attitude of the society towards deaf people, which precluded the provision of appropriate services receiving the priority, it deserved. The data indicated that these negative attitudes have their roots in superstitions and the tendency of people to ascribe to supernatural beings, any confounding phenomenon.

In many of the countries, it was found that some aspects of service provision for instance, establishment of educational institutions for deaf people, were non-existent despite the introduction of general education several decades ago in many of the countries. Further, it was found that as a result of negative attitudes, ignorance and naivety, efforts were not made in

many of these countries to provide relevant services for people with severe hearing impairment because government officials were questioning the justification for providing for the needs of such individuals while a large proportion of the 'normal' population remained without services.

In another study on the status of service provision for the deaf and other individuals with special needs in thirty-two African and other DCs in Latin America and Asia (Mba, 1983), it was further confirmed that negative attitudes by families, communities and service provision agencies which limit the quality and quantity of services provided are the major difficulties facing the development of the potentials of deaf and other individuals with special needs in these countries.

Etin (1995) observes that due to the predominance of negative attitudes, individuals with disabilities in Nigeria and other DCs are not recognized as full citizens and consequently their needs are not identified and addressed. Similarly, Eleri (1995) report "the societal attitude to people with disabilities in modern day Nigeria has largely been characterized by smug indifference or at best philanthropic showmanship. It is an attitude fraught much more with pessimistic sympathizing than optimistic empathizing, a situation that breeds and reinforces the feelings of learned helplessness in these individuals with disabilities. This type of attitude has held sway at the individual, public, governmental and policy making levels" (p.233).

Shindi (1991) has also reported that the prevailing attitudes to people with disabilities in Nigeria, which are reflected in various forms such as the vocabulary used to refer to this group of people, have remained largely negative, unfavourable, discriminating, and irritating. Shindi observes that because attitudes serve as a mediating construct in behaviour, they constitute significant implications concerning the provision of services for individual with disabilities. Eleweke (1996) argues that as a result of the problems of negative attitudes, the society not only ignores the needs of individual with disabilities but also creates attitudinal and structural difficulties, which could affect people with disabilities more than the problem associated with their conditions.

2.2.3 Attitude of Regular Classroom Teachers towards Persons with Special Needs

The attitude one has towards a thing is usually seen as one's predisposition to respond in a certain way towards that thing. Hence, we can speak of one's attitude towards another person, towards a situation or object, and even towards ideas, abstract as these may seem. In fact, (Mukherjee 1978) defines attitude as one's feelings, thoughts, and predisposition to

behave in some particular manner towards some aspects of one's environment. According to him, attitudes are best expressed when individuals make statements about their feelings or opinions about certain persons, objects, issues or things. Some times one's attitude to something may be positive, as when one is favourably predisposed to the thing. At other times, it may be negative, as when one is unfavourably predisposed to the thing.

Down though the ages, different cultures have shown certain attitudes and reactions towards the handicapped as a group. Some of these cultures are known to have held and spread negative attitudes towards the handicapped in their midst. The result is that the handicapped are often discriminated against in various ways. Meadow (1982), for instance, revealed that from the earliest history, handicapped persons have been viewed with a mixture of fear, scorn, awe, misunderstanding and pity. (Ansah-Yanoah, 1986) confirmed similar attitudes towards handicapped persons among the Akan people of Ghana. In Nigeria, (Umedum, 1983) indicated that before the introduction of formal education in Nigeria, handicapped children were more or less regarded as accursed and freak people.

Teachers are considered as important members of the community and their impact on the development of the Nigerian youth is considerable. Particularly, their attitude towards handicapped youth is not to be taken lightly. This is more so because both the federal and state governments have begun to give increased attention to current movements to integrate handicapped children into regular classrooms.

Allen (1978) studies the attitude of teachers towards such integration (mainstreaming) and towards handicap. Surprisingly, Allen found that regular pre-service teachers were more positively predisposed to the concept of integration than special pre-service teachers. Moreover, special pre-service teachers who had more experience with the handicapped than regular pre-service teachers had significantly more negative attitude towards handicapped children.

2.2.4 Teachers' Attitudes and Student Educational Outcomes

The National Policy on Education (2007) outlines the necessity for the inclusion of children with special needs within regular classrooms. Such advocacy alone, however, cannot ensure that the policy is favourably accepted by those most responsible for its effective implementation, namely, classroom teachers. It has long been accepted that teachers' attitudes and expectations impact upon their students' educational outcomes (Good & Brophy, 1997), and this is of particular concern where teachers hold less than positive attitudes towards individuals with a disability or the educational policy of inclusion (see, for example, Buell,

Hallam, Gamel-McCormick & Scheer, 1999; Forlin, Douglas & Hattie, 1996; Murphy,1996).

Historically, teachers have not been favourably disposed to the policy of increased inclusion of children with special needs within the regular classroom (Center & Ward, 1987; Forlin et al., 1996). Their concerns include the amount of individualized time children with special needs might require, possibly to the detriment of other students; apprehension as to the quality of work produced by children with special needs; lack of adequate support services; and teachers' concerns about deficiencies in their own training and preparation in the skills required to support inclusive educational practice (Bender, Vial & Scott, 1995; Tait & Purdie, 2000).

Cook investigates teachers' attitudes toward their included students according the disability degree (mild and severe disability). The study sample consisted of 70 teachers, which 'nominated three students to promote corresponding with the attitudes of attachment, concern, indifference, and rejection' (Cook, 2001). On one hand Cook found that students with severe disabilities were significantly over represented among teachers' nominations in the indifference category, on the other hand, students with mild disabilities were significantly over represented in the rejection category, also the results indicated that teachers demonstrated different attitudes depending on the degree of disability. Therefore the study suggested that those students were at risk of getting appropriate educational interactions (Cook, 2001). Praisner surveyed 408 elementary school principals in order to determine their attitudes toward inclusion. It was found that 1: 5 principals' attitudes were positive, when the variable of special education concepts had been taken into account. In this study it was positive relationship between the attitude and principals' experience and training (Praisner, 2003). In terms of effects of included students with disabilities on students without disabilities, a literature review by Paterson, indicated, that when students with disabilities are include in regular classrooms with their peers without disabilities 'is neither detrimental nor beneficial on students without disabilities' in respect to academic achievement, but inclusion is useful in terms of the 'social development' (Paterson, 2000).

Teachers' attitudes are additionally influenced by the level of disability they are asked to accommodate within their classroom. Center and Ward (1987) found that while the majority of teachers expressed a generalised agreement with the policy of inclusion, when asked specifically about their own willingness to include students with particular disabilities within their classrooms, they were only willing to accept the inclusion of students with mild physical disabilities. They were reluctant to include students with more severe physical disabilities, or

students with intellectual disabilities. Such results, indicating that teacher support for inclusion varied with the severity of the disability, have been consistently reported in research studies in the United States (Rainforth, 2000; Scruggs & Mastropieri, 1996), and have been replicated by Forlin et al (1996) with educators in Western Australia.

These attitudes to inclusion appear to have important correlates with actual classroom practice, although the direction of causality is not clear. Buell et al (1999) reported a positive relationship between teachers' attitudes towards inclusion and their belief that they could influence the educational outcomes of children with special needs. Teachers with more positive views of inclusion had more confidence in their ability to support students in inclusive settings, and to adapt classroom materials and procedures to accommodate their needs. In all areas assessed, general classroom teachers rated their self efficacy, ability, and understanding, in relation to inclusive practice, to be lower than did special education teachers, and expressed a greater need for related in service training and increased support and resources. Similarly, Bender et al (1995) found that teachers with more negative attitudes towards inclusion reported much less frequent use of instructional strategies known to facilitate the effective inclusion of children with learning disabilities. No relationship was found between attitudes towards inclusion and teachers' perceptions of their own efficacy in the general classroom. There are teachers with high self efficacy who are not favourably disposed to inclusive practice. This emphasises the need to intervene to change teachers' attitudes to inclusion and their willingness to use associated effective instructional strategies.

While teachers' attitudes towards inclusion are clearly influential in the effective implementation of inclusive policy within the classroom, a related body of research has investigated teachers' attitudes towards disability per se, since these may affect teachers' attitudes towards inclusion, and the effectiveness of their inclusive practices. Several important research studies in Australia have used the Interaction with Disabled Persons Scale (IDP) (Gething & Wheeler, 1992) in order to investigate attitudes towards disability of various professionals including pre-service teachers (Forlin, Tait, Carroll & Jobling, 1999b; Tait & Purdie, 2000). The research literature on teachers' attitudes towards disability suggests that negative attitudes ''lead to low expectations of a person with a disability'' (Forlin et al., 1999b) which in turn could lead to reduced learning opportunities, beginning a cycle of impaired performance and further lowered expectations, both by the teacher and the child. Consequently, Tait and Purdie (2000) argued the importance of pre-service teachers developing positive attitudes towards disability early in their professional development.

With this objective in mind, a number of studies have examined ways of promoting more positive attitudes in pre-service teachers. There is general agreement that traditional university information-based courses, designed to prepare teachers to work with children with special needs, while increasing knowledge, have little impact on attitudes towards disability (Forlin et al; 1999b; Hastings, Hewes, Lock & Witting, 1996; Tait & Purdie, 2000). Nor does direct contact with people with disabilities necessarily lead to favourable changes in attitude (Rees, Spreen & Harnadek, 1991), although in general, level of contact has emerged as a significant factor in determining positive attitudes towards disability (Forlin, Fogarty & Carroll, 1999a; Gregory, 1997; Hastings et al; 1996). Several studies have indicated that the most effective way of altering attitudes in a favourable direction is to combine formal instruction either with structured and direct contact with people with disabilities (Ford, Pugach & Otis-Wilborn, 2001; Mayhew, 1994; Rees et al., 1991; Westwood, 1984), or with some other simulation or role playing activities that provide for more experiential learning (Forlin et al; 1999b; Pernice & Lys, 1996).

2.2.5 Teacher Qualification and Student Learning Outcomes

Aggarwal (1997) states that education is a continuous and lifelong process. It is the process of development from infancy to maturity. It includes the effect of everything which slate and a teacher could write any thing on it. Others were of the view that a child was just like clay and a teacher like a potter could make anything out of it. Tania (2004) quoted Sanaullah (2002) who comments that teachers play an important role in fostering environmental consciousness in the society; therefore, more efforts are needed to sharpen the skill of teachers to integrate local environmental content in their teaching methods and activities. Sial (2005) quoting Shah (1995) states that the position of teacher in system of education is important and that no system of education can be better than its teacher. The teacher is the kingpin in the educational setup.

Formal instruction does not work in vacuum. School environment, teacher qualifications, curriculum and instructional approaches, and many other factors interact to produce growth in student academic skills and knowledge. There is sufficient empirical evidence that suggests that the achievement of school children relies substantially on the teachers they are assigned. Teacher characteristics are more strongly related to students' achievement than school effects (Kilplinger: 1997). Fuller and Clark (1994) remarked, what really matters is the teachers- knowledge of the subject. Elaborating the importance of teacher knowledge as criterion for producing better results in the teaching learning process, Fawns and

Nance (1993) state that, teacher knowledge, reason and judgment rather than teaching behaviour should be emphasized as the basis of an account of exemplary teaching. Lafayette (1993) has shown strong correlation between the subject knowledge of the language teacher and the learning outcomes. He argues that a sound command of the target language gives the teacher a high degree of confidence to meet the requirements of the learners ultimately affecting their performance.

Qualifications of teacher play an important role in teaching but professional education or training is more important in teaching, because a trained teacher can teach better than an un-trained teacher. Generally, it is claimed that a trained teacher knows well how to teach effectively. Ruhela and Singh (1990) on the importance of teacher training writes that the schools could not succeed with out trained teachers. In accomplishing teaching as a responsible profession he also specifies the general areas of study in teacher education. Habiba (2004) also states that competency is knowledge, skill or characteristic we want students to acquire. If a trained teacher teaches the students, the performance of the student would be good because in the process of education, the teacher is considered the most crucial element. There is a direct relationship between the qualification of the teacher and the performance of the students besides other factors. Effective teaching is therefore necessary for effective learning.

Teachers' subject area certification or authorization is one of the teacher qualifications most consistently and strongly associated with improved student achievement, especially in middle and high school mathematics (Betts et al. 2003, Cavalluzzo, 2004, Goldhaber & Brewer, 2000). Carr (2006) also indicates that highly qualified teachers, or those with both full certification and demonstrated subject matter competency, are associated with increased elementary and middle school achievement in reading, science, and social studies as well as in mathematics.

While there have been no studies that directly estimate the effects of pre-service education or in-service professional development on a teacher's contribution to achievement of students with disabilities, a number of studies investigate the relationship between the training of special education teachers and their classroom practice (Algozzine, Morsink, & Algozzine 1988; Sindelar, Daunic, & Rennells 2004; Nougaret, Scruggs, & Mastropieri 2005). Using observations of classroom performance and principal ratings, Sindelar et al. (2004) find that graduates of a traditional special education teacher program had superior classroom practices compared with their counterparts from a university-district partnership and from a district "add-on" program. Nougaret et al (2005) find similar results indicating that traditionally

licensed teachers are better than emergency licensed teachers on several dimensions such as planning and preparation, classroom environment management, and instruction.

Teachers' qualifications encompass teachers' scores on tests and examinations, their years of experience, the extent of their preparation in subject matter and in pedagogy, what qualifications they hold in their area of expertise, and their ongoing professional development. Student learning is taken simply as the gain scores students attain on achievement tests. Cochran-Smith (2001) went on to posit the relationship between teacher qualification and student learning as the percentage of variance in student scores accounted for by teacher qualifications when other variables are held constant or adjusted.

Research on the performance of the general student population has produced a general consensus that the most important school-based determinant of student achievement is teacher quality (Rockoff 2004; Rivkin, Hanushek, & Kain 2005; Aaronson, Barrow, & Sander 2007; Harris & Sass 2008). Thus the logical starting point for any policy to address the achievement of students with disabilities is the quality of teachers instructing special education students. However, little is known about the effect of teacher quality on the ability of teachers to promote achievement and enhance educational outcomes for students with disabilities. We seek to fill this void by focusing on the relationship between the achievement of students with disabilities and various aspects of teacher training, including formal pre-service university education, in-service professional development, and informal training acquired through on-the-job experience. Determining the relationship between teacher training and student outcomes is particularly important given the difficulty schools face in the adequate staffing of special education programs. Over 12 percent of teachers employed to provide special education services to children ages 6-21 are not fully certified compared to 10.5 percent of teachers in general education (Boe & Cook 2006; U.S. Department of Education 2006). High percentages of uncertified educators staffing special education programs enter teaching each year (Billingsley, Fall, & Williams 2006). Evidence suggests that these uncertified teachers are less likely to stay in their positions (Miller, Brownell, & Smith 1999) and attrition rates among beginning teachers with minimal preparation are twice as high compared to those with more extensive preparation (Boe, Cook, & Sunderland 2006). Our work has potentially important implications for a variety of policy issues including the composition of both general education and special education teacher training programs, "alternative" certification programs for special education teachers, and recruitment and retention policies for special education teachers.

In many countries, teacher qualifications that are considered to be related to student learning have become targets of education reform. However, the nature of this reform is under debate. Some perceive the main problem to be the low academic and cognitive level of those who go into the teaching profession and call for policies aimed at attracting more capable candidates through shorter, less regulated alternative routes (Ballou & Podgursky 1997, 1999, 2000; Goldhaber & Brewer, 2000; United States Department of Education, 2002). Others view the problem mainly as the result of inadequate teacher preparation and call for the "professionalization" of teacher education by making it longer, upgrading it to graduate programs, and regulating it through mechanisms of licensure, certification, and promotion aligned with standards (Darling-Hammond, 1998, 1999, 2000a; Darling-Hammond, Berry, & Thorenson, 2001; Darling-Hammond, Chung, & Frelow, 2002; National Commission on Teaching and America's Future, 1996).

The impact of these different approaches on student learning have been explored in several meta-analytic studies based mainly on United States data but also drawing from the databases of other countries (see, in this regard, Darling-Hammond, 1999, 2000b; Greenwald, Hedges, & Laine, 1996; Organisation for Economic Co-operation and Development, 2005; Santiago, 2002; Wayne & Youngs, 2003; Wilson, Floden, & Ferrini-Mundy, 2001). Other relevant studies have drawn more on local sources of data and have been targeted at specific (country-based) policies (Harris & Sass, 2007; Ingersoll, 2003; Wilson, Darling-Hammond, & Berry, 2001). In Israel, too, teacher qualifications have become the target of several recent reforms, such as those announced by different teacher unions (2004), the National Task Force for the Advancement of Education in Israel (Dovrat Committee, 2005), and the Committee of the Commission for Higher Education (Ariav, Olshtain, Alon, Back, Grienfeld, & Libman, 2006). The reforms suggested in Israel are more in line with the advocacy to professionalize teacher preparation. All suggestions thus far envision improving the candidate selection process, upgrading the disciplinary preparation of teachers, opening advanced degree Master of Education (M.Ed) or Master of Teaching (M.Teach) programs, and providing opportunities for professional development.

Different educationists explained effective teaching in their own way. According to Perrot (1982), effective teaching is a mode that produces inquiring, considering and seeking out at the correct or incorrect results and ability in teaching. It is just like plugging in the field for the sake of good crop. Mode of effective teaching is a function of a large number of variables e.g. standards of teaching, what you like to teach, what do you want your students to

learn, how much time is available and want is the frame of teaching. Mohanty (1995) describes the four activities of evaluating effectiveness: Workshop/seminars on techniques of evaluating teaching effectiveness, Evaluating of teaching of peers, Assistance to faculty members for assessment of their own teaching efficiency, follow up studies etc. Smith (1969) discusses the following four areas of knowledge for effective teaching: Command of theoretical knowledge about learning and human behaviour. Display of attitude that faster learning and genuine human relationship. Command of knowledge in the subject matter. Control of technical skills of teaching that facilitate student's learning.

Essential components of good teaching, Mills (1977) as quoted by Ali (1989) described seven stages of good teaching as objectives, preparation, presentation, reception, assimilation, assessment and feedback. Henke, (2000) says that a research have been done to prove the relationship between the student performance and teachers qualifications and quoted one example from research that over 15 years' interest in students performance and teacher qualification has intensified among education policymakers and teacher. During this time period, research has accumulated that links student achievement to the qualifications of teacher" The researcher found it imperative to ascertain this relation in Pakistani perspective.

2.2.6 Teachers' Teaching Experience and Students' Learning Outcomes

The importance of experienced teachers in schools has been highlighted by many researchers (Akinleye, 2001; Ogundare 2001; Commeyras, 2003). Researchers have also given different opinions about teaching experience and students' learning outcomes in schools (Al-methen, 1983; Schuler, 1984; Waiching, 1994; Ijaiya, 2000). Their arguments centred on the fact that experience improves teaching skills while pupils learn better at the hands of teachers who have taught them continuously over a period of years (Ijaiya, 2000). In investigating possible differences in teaching strategies, Schuler (1984) grouped teachers into three levels of teaching experience (3 - 6; 7 - 10 and more than 10 years). His findings revealed that experienced teachers' perception of their teaching objectives was significantly more subject-oriented than was that of first-year teachers. Hence, effective teaching could be measured by the level of a teacher's subject matter competence which Mullens (1993) regarded as a prime predictor of student's learning. However, teachers' theories about teaching are being guided by their previous experience as learners and as teachers (Waiching, 1994).

The relationship between teachers experience and student achievement receives considerable attention in the empirical literature, with somewhat mixed results. Several researchers find that experience, especially during the first couple of years in the classroom, is

positively associated with students' achievement in mathematics and reading at the elementary and middle school levels (Cavalluzzo, 2004; Hanushek et al., 2005; Rockof, 2004; Rowan, Chiang, & Miller, 1997). Several other studies however, do not detect meaningful difference between more or less experienced teachers (Carr, 2006; Gallagher, 2004, Harbison & Hanushek, 1992). It is interesting to note that three of the four studies that find no significant relationships between teacher experience and student achievement do not focus on traditional public school. Both Gallagher and Carr examine charter schools, and Harbison and Hanashek's research looks at impoverished schools in rural Brazil.

Studies on the effect of teacher experience on student learning have found a positive relationship between teachers' effectiveness and their years of experience, but the relationship observed is not always a significant or an entirely linear one (Klitgaard & Hall, 1974; Murnane & Phillips, 1981). The evidence currently available suggests that while inexperienced teachers are less effective than more senior teachers, the benefits of experience level off after a few years (Rivkin, Hanushek, & Kain, 2000).

The relationship between teacher experience and student achievement is difficult to interpret because this variable is highly affected by market conditions and/or motivation of women teachers to work during the child-rearing period. Harris and Sass (2007) point to a selection bias that can affect the validity of conclusions concerning the effect of teachers' years of experience: if less effective teachers are more likely to leave the profession, this may give the mistaken appearance that experience raises teacher effectiveness. Selection bias could, however, work in the opposite direction if the more able teachers with better opportunities to earn are those teachers most likely to leave the profession.

However, the desire by government to engage more teachers of long years standing is perhaps hampered by the high cost of education. Hence, Adeyemi (1998) exclaimed that the more experienced teachers in a school system, the higher would be the recurrent cost of education. As such, Charles (2002) suggested the need to involve retired teachers because of their long years of teaching experience to teach in Nigerian schools.

The importance of experienced teachers in schools has been argued as being necessary for school effectiveness (Zaku, 1983). Several studies have found a positive effect of experience on teachers' effectiveness; specifically, the learning by doing" effect is most obvious in the early years of teaching (Dunkin, 1997; Rice, 2004; Bauer, 2005). In measuring teachers' effectiveness, Stiggins and Duke (1990) suggested three parallel evaluation systems. These include an induction system for novice teachers with a focus on meeting performance

standards; a remediation system for experienced teachers in need of remediation to correct deficiencies in performance and a professional development system for competent, experienced teachers pursuing excellence in particular areas of teaching.

2.2.7 Teacher Effectiveness and Students' Learning Outcomes

Teaching performance is being inferred from students' performance what they learned in the course. Theall and Franklin (2001) noted consistently high correlations between student ratings of "amount learned" and overall ratings. Further, there are significant correlations between student ratings and performance on final exams (Cohen, 1981). Despite these relationships, establishing student performance on learning outcomes as an independent, valid measure of teaching effectiveness is fraught with numerous difficulties. The crux of the problem is isolating teaching as the sole explanation for student learning. Performance throughout a course on tests, projects, reports, and other indicators may be influenced by the characteristics of the students, the institution, and the outcome measures themselves, over which faculty have no control (Berk, 1988, 1990).

For a long time, there have been arguments about which factors influence the student's achievement. Some researchers attribute the student's achievement to the school; others indicate that the school makes little impact on academic outcome. Numerous studies in recent years have investigated the relationship between various teacher characteristics and the performance of students they teach (see Harris and Sass 2008 for a review). Most include general measure of teacher experience and attainment of advanced degrees, but relatively few contain specific measures of pre-service preparation or in-service professional development.

Other researchers say that the effective teacher is the only one who can play the main role in terms of student progress. All the factors (teacher, school context, classroom context and the community around the school) contribute or impact student's achievement. The effective school factors, which influence students, are: professional leadership, learning environment, high expectation, positive reinforcement, monitoring student's progress and parent-school co-operation (Ayres, Sawyer, & Dinham, 2004; Bentley, 2000; and Owens, 1998). The effective teaching or teacher's characteristics are: "lesson clarity, instructional variety, teacher task orientation, and engagement in the learning process and student success rate"(Borich, 2000).

Teaching effectiveness is assessed in terms of student productivity; that is, it is outcomes-based. After all, if a factory worker's performance can be measured by the number of widgets he or she produces over a given period of time; why not evaluate a faculty by his or

her students' productivity or success on outcome measures? The arguments for this factory worker−teacher productivity analogy were derived from the principles of a piece-rate compensation system (Murnane and Cohen, 1986). Piece-rate contracts is the most common form of payment by results (Pencavel,1997). These contracts provide a strong incentive for workers to produce, because high productivity results in immediate rewards.

When this system is applied to teaching it breaks down for two reasons. First, a factory worker uses the same materials (e.g., plywood and chewing gum) to make each product (e.g., widget). Faculty work with students whose characteristics vary considerably from class to class. Second, the characteristics of a factory worker's materials rarely influence his or her skills and rate of production; that is, the quality and quantity of widget production can be attributed solely to the worker. Key characteristics of students, such as ability, attitude, motivation, age, gender, and maturation, and of the institution, such as class size, classroom facilities, available technology and learning resources, and school climate, can affect student performance irrespective of what an instructor does in the classroom.

Fenwick (2001) recommends that the results of standard outcome measures, such as tests, problem solving exercises, projects, and simulations, be aggregated across groups of students for program evaluation decisions about teaching methods and program improvement. Also, multiple measures can be combined to give meaningful feedback to faculty about patterns in outcomes.

Fenstermacher and Richardson (cited in Berliner, 2005) distinguish between *good* teaching and *successful* teaching as follows:

By "good teaching" we mean that the content taught accords with disciplinary standards of adequacy and completeness and the methods employed are age appropriate, morally defensible and undertaken with the intention of enhancing the learner's competence with respect to content. By "successful teaching" we mean that the learner actually acquires some reasonable and acceptable level of proficiency from what the teacher is engaged in teaching.

Because of psychometric difficulties in assessing teachers by their normative attributes—the logical, the psychological, and (especially) the ethical, which are defined differently across cultures (Alexander, 2000)—the tendency to evaluate teacher qualities on the basis of student performance is given even greater emphasis. With the increased demands for accountability in line with performance standards and with the growing demand for evidence-based policymaking, student achievement is considered an accurate measure of teacher effectiveness and has become a basis for value-added teacher assessment systems (Braun, 2005; McCaffrey,

Lockwood, Koretz, Louis, and Hamilton, 2004; Sanders, 2000; Sanders and Rivers, 1996).

These notions have also found favour with regard to the effectiveness of teacher education systems. After tracing the development and reform of teacher education in terms of the major questions shaping this field of education, Cochran-Smith (2001) argues that "the outcome" question is what currently motivates teacher education research and policymaking.

2.2.8 Appraisal of Literature Reviewed

Literature reviewed showed that the regular school system witnessed a major shift in the way children with special needs were educated. Formerly, children with high incidence of disabilities went unidentified and were educated in general classroom settings. General education teachers did not always recognise these disabilities, and even if the did, they may not have had the tools to effectively help the children in the general classroom.

Also, works in literature revealed that teacher preparation has been changing in response to the emphasis to educate special needs children in ways that support their diverse needs. Empirical reports from different parts of the world showed that for many years, educators and researchers had debated over which variables influence student achievement. A growing body of evidence suggests that schools can make a great difference in terms of students' achievement, and a substantial portion of that difference is attributed to teachers. Students who are assigned to an ineffective teacher after another have significantly lower achievement and learning than those who are assigned to a sequence of several highly effective teachers. Thus, the impact of teacher effectiveness (or ineffectiveness) seems to be additive and cumulative.

Literature also showed that most teacher quality studies on general classroom teachers focused solely on inputs, such as education, certification and experience, rather than on what teachers actually do in the classroom. Other teacher quality researches had defined teacher quality by outcomes (i.e. what students actually learn in the classroom) typically measured by standardised tests – a sort of backward mapping in which teacher quality is defined empirically by students' test scores.

Recent studies reviewed concerning inclusion, teacher attitudes and effectiveness concluded that significant differences still exist concerning students with disabilities and teachers' attitudes and perceptions of providing effective instruction. These findings validated the concern for effective instruction for students with disabilities in accessing general education. Most researches also reported a bias toward students with disabilities in relationship to instructional needs and regular school teachers lack of preparation to meet those needs.

Studies on demographic variables of age, gender and educational level for postsecondary level technical educators revealed that only gender significantly influenced attitude, with females having a more positive attitude towards students with disabilities. Age, years of teaching and education levels were not found to be significant demographic variables.

From this appraisal, so many studies have been carried out in the area of inclusive education, education of students with special needs achievement in and attitude to special needs education and even government effort at improving the curricula of school subjects for students with special needs. These studies were mostly on a particular area of interest or factor. Hence, non-adopted a holistic approach to the investigation of every aspect of special needs education in a single study. This present study, with the adoption of the CIPP model attempted a comprehensive evaluation of elements of special education curriculum in NCE – awarding institutions in Nigeria. In a second dimension, most of the studies reviewed were on the provision of education to students with special needs and not teacher preparation programmes. To this end, this current study attempted to fill this gap.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter dealt with the research methodology which included the research design, variables in the study, the evaluation framework, population and sampling procedures, instrumentation, procedure for data collection as well as the statistical tools for data analysis.

3.1 Research Design

This study adopted the descriptive survey design. It made use of the Context, Input, Process and Product (CIPP) model of curriculum evaluation since the study was also evaluative in nature and purpose. The CIPP model provided a plan to structure the type of data which was collected and the kind of questions rose. Also, since all the variables of interest have already occurred, they were studied *expost-facto*. Thus, the variables were not manipulated in any way in the course of the study.

3.2 Variables of the study

The variables of this study were:

A. *Context Variables:*

- Students' gender
- School type
- Lecturers' qualification
- Lecturers' teaching experience
- Students' rating of the objectives
- Lecturers' rating of the objectives.

B. *Input Variables:*

- Availability of facilities and equipment
- Adequacy of facilities and equipment
- Availability and adequacy of lecturers

C. *Process Variables*

- Strategies for teaching the topics
- Problems of implementation

- Teaching effectiveness.

D. *Product Variables*

- Students' achievement in elements of special education
- Students' attitude to special education

3.3 Evaluation Framework

This study made use of the Stufflebeam's (1971) Context, Input, Process and Product (CIPP) model of curriculum evaluation along with the National Commission for Colleges of Education (NCCE) minimum standards for Nigeria Certificate in Education which specifies the objectives of Special Education component of Nigeria Certificate of Education (NCE) awarding institutions in Nigeria. The main aspects of the CIPP evaluation model and the specific issues emphasized are outlined in the following section.

Context Evaluation: This component identified and described the socio-demographic profile of the students and lecturers of Special Education courses in these institutions. It also investigated and reported their ratings of the pre-specified objectives of the curriculum.

Input Evaluation: Here, the facilities and equipment necessary for proper implementation of the curriculum were assessed in terms of their availability, adequacy and utilization in terms of whether they act as enhancements or hindrances in the course of curriculum implementation.

Process Evaluation: This component focussed on the actual implementation of the curriculum. It covered the strategies employed in the course of instructional delivery, the problems encountered as well as the effectiveness of the teaching.

Product Evaluation: Focus was on the collection of data from students through tests and other scales to measure the actual outcomes of the teaching-learning of the content of the elements of special education curriculum in these institutions. This was with the purpose of investigating the extent to which the NCCE specified curriculum objectives of Elements of Special Education have been attained.

3.4 Population

The population of this study comprised all students in the institutions offering programmes leading to the award of Nigeria Certificate in Education (N.C.E) in Nigeria. These include all the ninety two institutions offering courses leading to the award of the NCE. It also included all the two hundred and seventeen lecturers teaching elements of special education curriculum in these institutions.

3.5 Sampling Procedure and sample

The 92 institutions offering NCE programmes in Nigeria were stratified along the criterium of type of institution. To this end, Table 1 presents the number of institutions in each stratum

Table 1.

NCE Awarding Institution in Nigeria

S/N	TYPE OF INSTITUTION	NUMBER
1.	Federal Colleges of Education	**21**
2.	Other Federal NCE Awarding Institutions (Army, NTI)	**02**
3.	State Colleges of Education	**43**
4.	Privately owned Colleges of Education	**19**
5.	Polytechnics Offering NCE	**07**
	TOTAL	**92**

Source: National Commission for Colleges of Education – List of accredited and approved NCE Awarding Institutions in Nigeria as at 30th January, 2009.

However, the twenty - one institutions under Federal Colleges of Education include the Federal College of Education (Special) Oyo which was excluded due to the fact that the college was established for specialised training of Special Education teachers. The students, therefore, are not comparable with students of other NCE-awarding institutions who are exposed to only the Elements of Special Education Curriculum. This left twenty colleges in that stratum and ninety-one institutions altogether.

From the ninety-one institutions, 60.44% which comes to fifty-five institutions were selected using the proportionate stratified random sampling in line with Kish (1976) theory of sampling. In doing this, the 5 strata were recognised and 60.44% of the existing number of NCE- awarding institutions was selected randomly by balloting in order to remove the elements of bias in the process of selection.

Table 2 shows the distribution of the existing and selected number of NCE- awarding institutions.

Table 2.

Number of NCE Awarding Institution in Nigeria Selected

S/N	TYPE OF INSTITUTION	EXISTING NUMBER	NUMBER SELECTED
1.	Federal Colleges of Education minus Federal College of Education (Special), Oyo	**20**	**12**
2.	Other Federal NCE Awarding Institutions (Army, NTI)	**02**	**01**
3.	State Colleges of Education	**43**	**26**
4.	Privately owned Colleges of Education	**19**	**12**
5.	Polytechnics Offering NCE	**07**	**04**
TOTAL		**91**	**55**
%		**100%**	**60.44%**

From each of the selected institutions, twenty-five Year 3 students were selected using the disproportional stratified sampling technique. The number of students at this level was not taken into consideration. This gave a total of one thousand, three hundred and seventy five students in all. Also, all the two hundred and seventeen lecturers teaching elements of special education curriculum participated in the study.

3.6 Evaluation Instruments

Instruments used in this study include:

1. Students' Questionnaire on Curriculum Objectives (SQOCO)
2. Lecturers' Questionnaire on Curriculum Objectives (LEQOCO)
3. Students' Questionnaire on Content Coverage of Elements of Special Education (SQCOESE)
4. Lecturers' Questionnaire on Content Coverage of Elements of Special Education (LQCOESE)
5. Facilities, Equipment and Resources Inventory (FERI)
6. Questionnaire on Problems of Curriculum Implementation (QOPCI)
7. Strategies for Teaching Special Education Content (SPEC)
8. Observation Schedule for Classroom Teaching of Elements of Special Education

(OCTESE)

9. Test of students' knowledge of Special Education (TESK)
10. Students' Attitude to Special Education Scale (SASES).

1. **Students' Questionnaire on Curriculum Objectives (SQOCO)**

This questionnaire sought information from the students about their Socio-demographic data i.e. College, Age, Sex, Subject combination etc. The second section covered the rating of the Curriculum Objectives by the students. This section consists of twenty five items presented using the 4-point Likert scale of Very Important (VI), Just Important (JI), Not important (NT) and Very Unimportant (VU). For scoring, 4, 3, 2 and 1 were attached to the points respectively (See Appendix I)

Validation of SQOCO

SQOCO was validated for face, content and construct by first comparing the items with the objectives specified for Elements of Special Education curriculum in NCE-awarding institutions by NCCE. Further, 6 draft copies were given to teacher educators in the area of Special Education in the Universities and Colleges of Education. Their comments and criticisms were then collated and used to make necessary amendments. For reliability, twenty draft copies of the instrument were administered to Special Education students in a College of Education which was not part of the main study. Responses were analyzed using Cronbach alpha method and a high alpha value of 0.83 was obtained. This indicate that the instrument has a good measure of internal consistency and therefore, reliable.

2. Lecturers' Questionnaire on Curriculum Objectives (LEQOCO)

This is similar to the students' Questionnaire on Curriculum Objectives (SQOCO) with the difference being only in section A – Socio-demographic information. For LEQOCO, information such as qualification, teaching experience etc were sought from the lecturers (See Appendix II).

Validation of LEQOCO

After peer and expert review of the instrument, twenty copies were administered to Special Education lecturers outside the sample selected for the main study. Cronbach alpha was then used to determine the reliability of the instrument. This yielded a Cronbach alpha value of 0.79.

3. Student Questionnaire on Content Coverage of Elements of Special Education (SQCOESE)

This instrument presents the forty five content areas specified in the content of the elements of special education curriculum for NCE-awarding institutions in Nigeria. The students were to tick the contents taught and those not taught (See Appendix III).

Validation of SQCOESE

SQCOESE was validated using the original copy of the curriculum to ensure that the listed content areas were exhaustive. It was also tested for reliability using Cronbach method which yielded an alpha value of 0.72.

4. Lecturers' Questionnaire on Content Coverage of Elements of Special Education (LQCOESE)

This is the same as SQCOESE except that it was meant for lecturers. The purpose was to be able to cross-validate information given by students with those of lecturers to see how correlated they are (See Appendix IV).

Validation of LQCOESE

This was also validated using the curriculum content and reliability test of Cronbach. The Cronbach alpha of 0.78 was obtained.

5. Facilities, Equipment and Resources Inventory (FERI)

This instrument was designed to elicit information from lecturers of Elements of Special Education in NCE- awarding institutions concerning available facilities, equipment and resources for the teaching and learning of Elements of Special Education Curriculum in the institutions. It also covers adequacy and utilization of the available items (See Appendix V).

Validation of FERI

The content and construct validity of the instrument were ascertained by comparing the list on the instrument with those that the NCCE curriculum specifies as necessary for the effective implementation of Elements of Special Education curriculum in the institutions and ensuring that the facilities, equipment and resources were all reflected. For reliability, the Cronbach alpha was computed based on the responses of twenty selected lecturers to whom the instrument was administered. An alpha value of 0.77 was obtained.

6. Questionnaire on the Problems of Curriculum Implementation (QOPCI)

This instrument was used to find out the particular problems which lecturers see as actually hindering the effective and smooth delivery of instructions as well as successful

implementation of the curriculum. The problems stated were those found in literature as well as those envisaged by the curriculum designers as possible hindrances to the actualization of the objectives. This questionnaire was structured along the 3-point Likert scale of the Very Serious (VS), Serious (S) and Not Serious (NS) for items which have been rated as constituting problem by indicating "Yes" in the questionnaire (See Appendix VI).

Validation of QOPCI

QOPCI was face- and content-validated by comparing the problems with those available in literature while peer and expert review was also carried out. Reliability was ascertained by computing Cronbach alpha having administered twenty copies to the lecturers who did not participate in the main study. This procedure gave 0.88 as the reliability index.

7. Strategies for Teaching Special Education Content (SPEC)

This instrument elicited information from the lecturers on the strategies which they employ in the implementation of the curriculum. The format of the instrument was also patterned along the 4-point Likert scale of Always (A), Sometimes (S), Rarely (R) and Never (N) to which 4, 3, 2 and 1 were attached (See Appendix VII).

Validation of (SPEC)

After face, content and construct validation through peer and expert review of the items in the questionnaire, draft copies were administered to twenty lecturers for the purpose of validating the instrument for reliability. Cronbach alpha method was computed for the determination of internal consistency of the items. An alpha value of 0.79 was obtained.

8. Observation Schedule for Classroom Teaching of Element of Special Education (OCTESE)

This instrument was designed to observe lecturers during classroom teaching. It has 20 items on a 5-point rating scale. The items spanned from class atmosphere, instructional objectives, teaching techniques to evaluation and assignments (See Appendix VIII).

Validation of OCTESE

After peer/expert review, the instrument was used by a team of 4 observers who independently observed the same lecturer during classroom teaching at the same time. Their different ratings were then analysed for reliability using Scott's π. A coefficient of 0.82 was obtained.

9. Test of students' Knowledge of Special Education (TESK)

This test, designed to measure Special Education Students' Knowledge of the subject,

was based on the curriculum content specified for the institutions. It consisted of 20 multiple choice objective items. Following each of the items were five options lettered A-E. Each correct option ticked by the students attracted a score of 1 mark (See Appendix IX). The table of specification is presented below:

Table 3.

Table of Specification for TESK

S/N	Content Area	Cognitive Development			Total
		Knowledge	Understanding	Application	
1	Basic Concepts in Special Education	3 (2,9,11)	3 (1,3,9)	1 (4)	07
2	Intellectual Disabilities	1 (6)	1 (5)	2 (17,20)	04
3	Visual Impairment	1 (7)	-	-	01
4	Hearing Impairment	1 (13)	1 (16)	2 (10,18)	04
5	Learning Disabilities	2 (12,14)	1 (15)	1 (19)	03
Total		08	06	06	20

Validation of TESK

TESK was validated first using peer and expert review of the items alongside the content of the curriculum. In this, 6 lecturers in Special Education and 5 Ph.D students in Special Education at the University of Ibadan participated. Then, twenty copies were administered to Special Education Students who were not part of the main study. The responses were then analyzed using Kuder-Richardson formular 21 in order to determine the difficulty index and reliability. The reliability index of 0.82 and an average item difficulty index of 0.42 were obtained. This shows that the instrument is reliable and the test is not too difficult nor too simple.

10. Students' Attitude to Special Education Scale (SASES)

This instrument measured students' attitude to special education. It consists of twenty items of equal number of positively worded items and negatively-worded items to which students responded on a 4-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). These were scored 4, 3, 2 and 1 respectively if positively worded but 1, 2, 3 and 4 respectively if negatively-worded (See Appendix X).

Validation of SASES

5 academic colleagues and 6 lecturers in Special Education were asked to critique the items. Consequently, draft copies produced were administered to twenty students of a College of Education outside the sample selected. Their responses were analyzed using Cronbach alpha to determine reliability. The reliability index obtained was 0.76.

3.7 Procedure for Data Collection

The researcher first embarked on familiarization visits to each of the institutions selected for the study. Then the five instruments for the lecturers viz: Lecturers' Questionnaire on Curriculum Objectives (LEQOCO), Lecturers' Questionnaire on Content Coverage of Elements of Special Education (LQCOESE), Facilities, Equipments and Resource Inventory (FERI), Questionnaire on the Problems of Curriculum Implementation (QOPCI) and Strategies for Teaching Special Education Content (SPEC) were administered one after the other in the order listed with the intervals of one week.

The four instruments for students were administered beginning from the sixth week of study. To this end, Students Questionnaire on Curriculum Objective (SQOCO) were first administered. On the seventh week, the Student Questionnaire on Content Coverage of Elements of Special Education (SQCOESE), Test of Students' Knowledge of Special Education (TESK) and Student Attitude to Special Education (SASES) were administered but on different days of the week. The administration of instruments in all the institutions was done simultaneously. The study lasted ten weeks.

3.8 Method of Data Analysis

Data collected were analyzed using descriptive statistics of frequency count, mean, standard deviation and percentage. Also, the inferential statistics of t-test and One-way Analysis of variance (ANOVA) were employed in testing the four hypotheses formulated.

CHAPTER FOUR

RESULTS

4.0 This chapter presented the results obtained from the study. The presentation was made in two broad sections: the research questions and the hypotheses.

4.1 Answers to the Research Questions

Research Question1: What is the status of the NCE-awarding institutions in terms of:

a. Number of lecturers available
b. Lecturers' qualification
c. Lecturers' experience
d. Lecturers' gender
e. Students' gender?

Table 4.1.

Descriptive Table for Number of Lecturers Available for Teaching Elements of Special Education in the Institutions

No. of institutions	Lecturers Available					
N	Minimum	Maximum	Sum	Mean	Std. Deviation	Range
55	1	5	217	3.95	1.73	4

Note: The abbreviation No. of institutions means number of institutions in full. Also, Std. Deviation means standard deviation in full.

Table 4.1 shows that across the fifty-five NCE-awarding institutions sampled, the lowest number of lecturers available for the course: elements of special education is one while it is five at the maximum. This shows that the number is low when considered on the basis that all students in the institutions offer the course. The average number of lecturers available is 3.95 which means about four lecturers are available per institution on the average and this finding is justified as the range of four is so small. Hence, the result is applicable to the entire fifty-five institutions selected.

Table 4.2.

Qualification of the Lecturers

Qualification	Frequency	Percent
Bachelor of Education	48	22.1
Bachelor of Science + PGDE[a]	8	3.7
Master of Education	86	39.6
Master of Science + PGDE[a]	39	18.0
[b]Ph.D. without Education	16	7.4
[b]Ph.D. with Education	20	9.2
Total	**217**	**100.0**

Note: The subscript alphabets indications the following: PGDE[a] means postgraduate diploma in education. [b]Ph.D indicates Doctor of Philosophy.

Table 4.2 shows that majority of the lecturers hold the M.Ed. (N=86; 39.65). In proportion, this group is followed by those with B.Ed. (N=48; 22.1%). Also, 39 lecturers (18.0%) hold the M.Sc. with PGDE. Those in the minorities are B.Sc. + PGDE (N = 8; 3.7%), Ph.D without Education (N=16; 7.4%) and Ph.D with Education (N=20; 9.2%). These various categories are qualified except that the B.Ed. and B.Sc. + PGDE could be considered low for teaching in tertiary institutions such as NCE-awarding institutions.

Table 4.3.

Years of Experience of the Lecturers

Experience (years)	Frequency	Percent
Below 5	41	18.9
5-10	44	20.3
11-15	36	16.6
16+	96	44.2
Total	**217**	**100.0**

Note: The subscript + means and above.

From Table 4.3, the highest proportion of lecturers have more than 16 years of teaching experience (N=96; 44.2%) while 41(18.9%) have below 5 years. This implies that the level of experience of the teachers is at the upper side of the continuum. Hence, their quality of teaching is expected to be effective.

Table 4.4.

Lecturers' Gender Distribution

Sex	Frequency	Percent
Male	146	67.3
Female	71	32.7
Total	**217**	**100.0**

Table 4.4 reveals that there are more males than females. Male lecturers are 146 (67.3%) while the female lecturers are 71 (32.7%). All the same, about one-third of the lecturers are females which mean that the females are still available in fairly large number in teaching of Special Education in the institutions.

Table 4.5.

Gender Distribution of the Students

Sex	Frequency	Percent
Male	795	57.8
Female	580	42.2
Total	**1375**	**100.0**

From Table 4.5, the male students are 795 (57.8%) out of the 1,375 students. The remaining 580 (42.2%) are females. This proportion shows that the two gender groups are studying for the award of NCE in the institutions, they are also included in this study for gender equity and balance.

Research Question 2: - What is the perception of students and lecturers on the introduction of the elements of Special Education into teacher training programmes and their relevance to societal needs?

Table 4.6.

Students' Perception of Elements of Special Education as Course.

Item	The NCE programme should develop in me	VI 4	JI 3	NI 2	VU 1	Mean	Std Dev
1	An understanding of the basic concepts in Special Needs Education	1244 (90.5)	96 (7.0)	15 (1.1)	20 (1.5)	3.86	.47
2	Knowledge about students with special needs	1079 (78.5)	204 (14.8)	59 (4.3)	33 (2.4)	3.69	.66
3	Ability to discuss the history of special needs education in Nigeria.	1000 (72.7)	291 (21.2)	54 (3.9)	30 (2.2)	3.64	.76
4	Sound knowledge of the importance of special needs education to career development in general education	962 (70.0)	298 (21.7)	58 (4.2)	57 (4.1)	3.57	.76
5	Basic understanding of society's attitude towards students with special needs.	924 (67.2)	333 (24.2)	63 (4.6)	55 (4.0)	3.54	.76
6	Recognition of gifted and talented children in regular classrooms.	1078 (78.4)	182 (13.2)	64 (4.7)	51 (3.7)	3.66	.73
7	Capacity to select and use appropriate teaching methods for teaching students with special needs.	1133 (82.4)	137 (10.0)	55 (4.0)	50 (3.6)	3.71	.70
8	Skills for the identification of students with learning disabilities.	981 (71.3)	249 (18.1)	74 (5.4)	71 (5.2)	3.55	.81
9	Ability to locate referral and supportive services for students with Learning disabilities.	775 (56.4)	412 (30.0)	101 (7.3)	87 (6.3)	3.36	.87
10	Adequate knowledge to adapt the curriculum for learners with special needs.	905 (65.8)	303 (22.0)	109 (7.9)	58 (4.2)	3.49	.81
11	Recognise children with behaviour disorders in school.	876 (63.7)	307 (22.5)	104 (7.6)	86 (6.3)	3.43	.87
12	Skills to identify students with behaviour disorders in school.	886 (64.4)	290 (21.1)	145 (10.5)	54 (3.9)	3.46	.83
13	Preventive mechanisms to use against students with behaviour disorders.	833 (60.6)	309 (22.5)	155 (11.3)	78 (5.7)	3.37	.89
14	Demonstration of good management skills of curbing behaviour disorders	883 (64.2)	308 (22.4)	121 (8.8)	63 (4.6)	3.46	.83
15	A good mastery of what intellectual disabilities is all about.	832 (60.5)	389 (28.3)	66 (4.8)	88 (6.4)	3.42	.85
16	Ability to use appropriate teaching methods in teaching students with intellectual disabilities in the class.	1032 (75.1)	145 (10.5)	93 (6.8)	105 (7.6)	3.53	.91
17	An understanding of signs, causes and problems of individuals with physical and health disabilities.	998 (72.6)	246 (17.6)	43 (3.1)	88 (6.4)	3.56	.83
18	Preventive measures I can take against students with physical and health disabilities.	877 (63.8)	310 (22.5)	147 (10.7)	41 (3.0)	3.47	.80
19	Capacity for using simple informal tests to identify students with physical and health problems.	805 (58.5)	419 (30.5)	86 (6.3)	65 (4.7)	3.42	.80
20	Ability to appreciate and identify student with speech and hearing impairment.	885 (64.4)	377 (27.4)	65 (4.7)	48 (3.5)	3.52	.74
21	Appropriate informed strategies to use to meet the needs of students with speech and language impairment	909 (66.1)	345 (25.1)	66 (4.8)	55 (4.0)	3.53	.76
22	Basic knowledge and understanding of the problems of students with visual impairment.	919 (66.8)	246 (17.9)	86 (6.3)	124 (9.0)	3.42	.95
23	Skills for identifying students with visual impairment in the class	868 (63.1)	357 (26.0)	87 (6.3)	63 (4.6)	3.47	.80
24	A broad knowledge of various types of referral services available for students with visual impairment	755 (54.9)	451 (32.8)	112 (8.1)	57 (4.1)	3.38	.80
25	Appropriate use of suitable teaching aids to help students with visual impairment in my class.	1088 (79.1)	163 (11.9)	52 (3.8)	72 (5.2)	3.64	.78
Weighted Average = 3.53							

Note: The sample size is = 1,375. VI denotes very important, JI means just important, NI implies not important, and VU means very uninportant respectively. Std. Dev means standard deviation.

Table 4.6 shows that the students generally have high perception of the introduction of the Elements of Special Education into the NCE programme. This is obvious from the high mean scores of between 3.36 and 3.86 indicating Just Important and Very Important respectively for the 25 items. This shows that they perceive the course as Very Important. It is therefore expected that the students should have good aptitude, attitude, interest and motivation towards learning the course. It is also expected that the pre-science teachers would be more ready to learn, use and apply knowledge gained from the curriculum in their future teaching of students especially those with special needs.

Table 4.7.

Lecturers' Perception of Elements of Special Education as a Course.

Item	The NCE Programme should develop in the students	VI 4	JI 3	NI 2	VU 1	Mean	Std Dev
1	An understanding of the basic concepts in special needs education	205 (94.5)	12 (5.5)	-	-	3.94	.22
2	Knowledge about students with special needs	181 (83.4)	32 (14.7)	4 (1.8)	-	3.81	.43
3	Ability to discuss the history of special needs education in Nigeria.	143 (65.9)	70 (32.3)	4 (1.8)	-	3.64	.51
4	Sound knowledge of the importance of special needs education to career development in general education	169 (77.9)	36 (16.6)	12 (5.5)	-	3.72	.55
5	Basic understanding of society's attitude towards students with special needs.	181 (83.4)	24 (11.1)	8 (3.7)	4 (1.8)	3.76	.60
6	Recognition of gifted and talented children in regular classrooms.	163 (75.1)	46 (21.2)	4 (1.8)	4 (1.8)	3.69	.60
7	Capacity to select and use appropriate teaching methods for teaching students with special needs.	177 (81.6)	28 (12.9)	8 (3.7)	4 (1.8)	3.74	.61
8	Skills for the identification of students with learning disabilities.	185 (85.3)	24 (11.1)	4 (1.8)	4 (1.8)	3.79	.55
9	Ability to locate referral and supportive services for students with Learning disabilities.	153 (70.5)	40 (18.4)	12 (5.5)	12 (5.5)	3.53	.83
10	Adequate knowledge to adapt the curriculum for learners with special needs.	143 (65.9)	62 (28.6)	4 (1.8)	8 (3.7)	3.56	.71
11	Recognise children with behaviour disorders in school.	165 (76.0)	48 (22.1)	-	4 (1.8)	3.72	.55
12	Skills to identify students with behaviour disorders in school.	161 (74.2)	48 (22.1)	-	8 (3.7)	3.66	.66
13	Preventive mechanisms to use against students with behaviour disorders.	135 (62.2)	70 (32.3)	8 (3.7)	4 (1.8)	3.54	.65
14	Demonstration of good management skills of curbing behaviour disorders	134 (61.8)	79 (36.4)	4 (1.4)	-	3.59	.52
15	A good mastery of what intellectual disabilities is all about.	153 (70.5)	52 (24.0)	4 (1.8)	8 (3.7)	3.61	.70
16	Ability to use appropriate teaching methods in teaching students with intellectual disabilities in the class.	163 (75.1)	42 (19.4)	8 (3.7)	4 (1.8)	3.67	.63
17	An understanding of signs, causes and problems of individuals with physical and health disabilities.	174 (80.2)	35 (16.1)	-	8 (3.7)	3.72	.64
18	Preventive measures I can take against students with physical and health disabilities.	-	47 (21.7)	12 (5.5)	4 (1.8)	3.61	.67
19	Capacity for using simple informal tests to identify students with physical and health problems.	131 (60.4)	78 (35.9)	4 (1.8)	4 (1.8)	3.54	.63
20	Ability to appreciate and identify student with speech and hearing impairment.	175 (80.6)	42 (19.4)	-	-	3.80	.39
21	Appropriate informed strategies to use to meet the needs of students with speech and language impairment	159 (73.3)	50 (53.0)	4 (1.8)	4 (1.8)	3.67	.60
22	Basic knowledge and understanding of the problems of students with visual impairment.	171 (78.8)	46 (21.2)	-	-	3.78	.40
23	Skills for identifying students with visual impairment in the class	155 (71.4)	58 (26.7)	-	4 (1.8)	3.67	.57
24	A broad knowledge of various types of referral services available for students with visual impairment	147 (67.7)	66 (30.4)	4 (1.8)	-	3.65	.51
25	Appropriate use of suitable teaching aids to help students with visual impairment in my class.	159 (73.3)	50 (23.0)	4 (1.8)	4 (1.8)	3.67	.60
Weighted Average = 3.68							

N=217

It is obtained from Table 4.7 that the perception of lecturers on Elements of Special Education as a course in the NCE-awarding institutions is very high. The very high mean scores ranging from 3.53 to 3.94 all depict their perception as "Very Important". This means that the various knowledge, skills and capabilities inherent in the exposure of students to the course are considered very important by the lecturers. The weighted average of 3.68 also shows that the lecturers generally perceive the introduction of the Element of Special Education into the NCE programme as very necessary.

Research Question 3: - What is the level of availability, adequacy and utilization of facilities, resources and equipment necessary for the implementation of the curriculum?

Table 4.8.

Availability of Facilities, Equipment and Resources for Implementing the Curriculum.

S/N	Facilities, Equipment and Resources	Availability		Mean	Std Dev
		Available 2	Not Available 1		
1	Snelen chart for eye screening	8(3.7)	209(96.3)	1.03	.18
2	Braille machine	12(5.5)	205(94.5)	1.05	.22
3	Slate with stylus	4(1.8)	213(98.2)	1.01	.13
4	Abacus	32(14.7)	185(85.3)	1.14	.35
5	Reading aids	28(12.9)	189(87.1)	1.12	.33
6	Hand held magnifier	12(5.5)	205(94.5)	1.05	.22
7	Spectacle	36(16.6)	181(83.4)	1.16	.37
8	Close circuit television	20(9.2)	197(90.8)	1.09	.28
9	Large print books	16(7.4)	201(92.6)	1.07	.26
10	Television magnifier	20(9.2)	197(90.8)	1.09	.28
11	Reading devices	16(7.4)	201(92.6)	1.07	.26
12	Optacon, tape recorder	32(14.7)	185(85.3)	1.14	.35
13	Computer with voice synthesizer	12(5.5)	205(94.5)	1.05	.22
14	Mobility cane	12(5.5)	205(94.5)	1.0	.22
15	Thermoform machine	4(1.8)	213(98.2)	1.01	.13
16	Typewriter	67(30.9)	150(69.1)	1.30	.46
17	Hearing aids	20(9.2)	197(90.8)	1.09	.28
18	Audiometers	4(1.8)	213(98.8)	1.01	.13
19	Speech trainers	20(9.2)	197(90.8)	1.09	.28
20	Overhead projectors	76(35.0)	141(65.0)	1.35	.47
21	Projectors	71(32.7)	146(67.3)	1.32	.47
22	Sign language book	38(17.5)	179(82.5)	1.17	.38
23	Sign language interpreters	15(6.9)	202(93.1)	1.06	.25
24	Note takers	39(18.0)	178(82.0)	1.17	.49
25	Computer centre	100(46.1)	117(53.9)	1.46	.49
26	Resources centre	95(43.8)	122(56.2)	1.43	.50
27	Computers	110(50.7)	107(49.3)	1.50	.49
28	Learning aids/Picture	87(40.1)	130(59.9)	1.40	.47
29	Slides	75(34.6)	142(65.4)	1.34	.48
30	Maps	79(36.4)	138(63.6)	1.36	.48
31	Microphones	81(37.3)	136(62.7)	1.37	.47
32	Video recorders	71(32.7)	146(67.3)	1.32	.48
33	Video players	79(36.4)	138(63.6)	1.36	.48
34	Radio Cassettes	91(41.9)	126(58.1)	1.41	.49

N=217

Table 4.8 shows that between 53.9% and 98.8% of the lecturers reported that facilities, equipment and resources for the implementation of the Elements of Special Education Curriculum are not available. This is true for out of the thirty-four items listed. Hence, facilities such as Snelen chart, Braille machine, Status, Abacus, Spectacle, computer with voice synthesizer, projectors, note-takers among others are not available. Only computer systems are said to be available (N=110; 50.7%). This generally shows that, necessary facilities and equipment for effectively implementing the curriculum in the institutions are not available.

Table 4.9.

Adequacy of the Facilities, Equipment and Resources

S/N	Facilities, Equipment and Resources	Adequacy		Mean	Std Dev
		Adequate 2	Not Adequate 1		
1	Snelen chart for eye screening	8(3.7)	209(36.3)	1.03	.18
2	Braille machine	4(1.8)	213(98.2)	1.01	13
3	Slate with stylus	-	217(100.0)	1.00	.00
4	Abacus	24(11.1)	193(88.9)	1.11	.31
5	Reading aids	16(7.4)	201(92.6)	1.07	.26
6	Hand held magnifier	4(1.8)	213(98.2)	1.01	.13
7	Spectacle	-	217(100.0)	1.00	.00
8	Close circuit television	8(3.7)	209(96.3)	1.03	.18
9	Large print books	8(3.7)	209(96.3)	1.03	.18
10	Television magnifier	4(1.8)	213(98.3)	1.01	.13
11	Reading devices	4(1.8)	213(98.3)	1.01	.13
12	Optacon, tape recorder	8(3.7)	209(96.3)	1.03	.18
13	Computer with voice synthesizer	4(1.8)	213(98.3)	1.01	.13
14	Mobility cane	8(3.7)	209(96.3)	1.03	.18
15	Thermoform machine	8(3.7)	209(96.3)	1.03	.18
16	Typewriter	24(11.1)	193(88.9)	1.11	.31
17	Hearing aids	12(5.5)	205(94.5)	1.05	.22
18	Audiometers	4(1.8)	213(98.2)	1.01	.13
19	Speech trainers	12(5.5)	205(94.5)	1.05	.22
20	Overhead projectors	16(7.4)	201(92.6)	1.07	.26
21	Projectors	16(7.4)	201(92.6)	1.07	.26
22	Sign language book	16(7.4)	201(92.6)	1.07	.26
23	Sign language interpreters	8(3.7)	209(96.3)	1.03	.18
24	Note takers	16(7.4)	201(92.6)	1.07	.26
25	Computer centre	32(14.7)	185(85.3)	1.14	.35
26	Resources centre	36(16.6)	181(83.4)	1.16	.37
27	Computers	20(9.2)	197(90.8)	1.09	.28
28	Learning aids/Picture	16(7.4)	201(92.6)	1.07	.26
29	Slides	28(12.9)	189(87.1)	1.12	.33
30	Maps	24(11.1)	193(88.9)	1.11	.31
31	Microphones	28(12.9)	189(87.1)	1.12	.33
32	Video recorders	32(14.7)	185(85.3)	1.14	.35
33	Video players	32(14.7)	185(85.3)	1.14	.35
34	Radio Cassettes	36(16.6)	181(83.4)	1.16	.37

N= 217

Table 4.9 shows that all the listed facilities, equipment and resources are not adequate. The mean scores for the items range from 1.01 to 1.16 and cluster around 1.00 which is the code for 'Not Adequate'. In fact, very high percentage of respondents (83.4%-100.0%) reported that all the facilities are not adequate. This is in congruence with the fact that a facility which is not available cannot be adequate as availability is a necessary condition for adequacy although not enough condition for adequacy.

Table 4.10.

Utilization of the Facilities, Equipment and Resources

S/N	Facilities, Equipment and Resources	Utilization			Mean	Std Dev
		Always Used 3	Sometimes Used 2	Never Used 1		
1	Snelen chart for eye screening	4(1.8)	4(1.8)	209(96.3)	1.05	.29
2	Braille machine	8(3.7)	-	209(96.3)	1.07	.37
3	Slate with stylus	4(1.8)	-	213(98.2)	1.03	.26
4	Abacus	8(3.7)	8(3.7)	201(92.6)	1.11	.26
5	Reading aids	4(1.8)	16(7.4)	197(90.8)	1.11	.41
6	Hand held magnifier	4(1.8)	12(5.5)	201(92.6)	1.09	.36
7	Spectacle	8(3.7)	4(1.8)	205(94.5)	1.09	.34
8	Close circuit television	-	8(3.7)	209(96.3)	1.03	.39
9	Large print books	-	16(7.4)	201(92.6)	1.07	.18
10	Television magnifier	4(1.8)	8(3.7)	205(94.5)	1.07	.26
11	Reading devices	-	12(5.5)	205(94.5)	1.05	.35
12	Optacon, tape recorder	8(3.7)	12(5.5)	197(90.8)	1.12	.22
13	Computer with voice synthesizer	8(3.7)	12(5.5)	197(90.8)	1.12	.43
14	Mobility cane	4(1.8)	-	213(98.2)	1.03	.26
15	Thermoform machine	12(5.5)	4(1.8)	201(92.6)	1.12	.47
16	Typewriter	12(5.5)	24(11.1)	181(83.4)	1.22	.53
17	Hearing aids	4(1.8)	4(1.8)	209(96.3)	1.05	.29
18	Audiometers	4(1.8)	4(1.8)	209(96.3)	1.05	.29
19	Speech trainers	-	8(3.7)	209(96.3)	1.03	.18
20	Overhead projectors	4(1.8)	32(14.7)	181(83.4)	1.18	.43
21	Projectors	8(3.7)	20(9.2)	189(87.1)	1.16	.46
22	Sign language book	4(1.8)	4(1.8)	209(96.3)	1.05	.29
23	Sign language interpreters	-	12(5.5)	205(94.5)	1.05	.22
24	Note takers	16(7.4)	12(5.5)	189(87.1)	1.20	.55
25	Computer centre	20(9.2)	31(14.3)	166(76.5)	1.32	.63
26	Resources centre	36(16.6)	16(7.4)	165(76.0)	1.40	.75
27	Computers	28(12.9)	24(11.1)	165(76.0)	1.36	.70
28	Learning aids/Picture	16(7.4)	28(12.9)	173(79.7)	1.27	.59
29	Slides	12(5.5)	44(20.3)	161(74.2)	1.31	.57
30	Maps	12(5.5)	32(14.7)	173(79.7)	1.25	.55
31	Microphones	4(1.8)	32(14.7)	181(83.4)	1.18	.43
32	Video recorders	4(1.8)	44(20.3)	169(77.9)	1.23	.46
33	Video players	4(1.8)	52(24.0)	161(74.2)	1.27	.48
34	Radio Cassettes	4(1.8)	68(31.3)	145(66.8)	1.35	.51

N= 217

Table 4.10 shows that all the listed thirty-four facilities are not utilized by the lecturers. To this end, between 74.2% and 98.2% of the lecturers never used the listed resources. This is expected as the equipment which are not available and not adequate and cannot be utilised in the teaching-learning situation.

Research Question 4: - How comparable is the content taught with the content specified in the Elements of Special Education curriculum?

To answer this research question, responses of the lecturers were used but later cross-validated with students' responses.

Table 4.11.

Content Taught by the Lecturers

Item	Content	TAUGHT 2	NOT TAUGHT 1
1	Basic Concepts and Definition of some terminologies used in Special Education.	193(88.9)	24(11.1)
2	Role of voluntary agencies in the development of Special Education in Nigeria.	151(69.6)	66(30.4)
3	Importance of Special Education to general education.	201(92.6)	16(7.4)
4	Society's attitude towards exceptional children.	177(81.6)	40(18.4)
5	Definition of gifted children.	205(94.5)	12(5.5)
6	Characteristics of gifted children.	8(3.7)	209(96.3)
7	Identification and assessment of gifted children.	189(87.1)	28(12.9)
8	Areas of superior abilities.	145(66.8)	72(33.2)
9	Appropriate teaching techniques for Gifted children.	173(79.7)	44(20.3)
10	Definition of learning disabilities.	201(92.6)	16(7.4)
11	Signs, causes and problems associated with learning disabilities.	205(94.5)	12(5.5)
12	Preventive measures against learning disabilities.	193(88.9)	24(11.1)
13	Informal techniques for identification of the learning disabled.	129(59.4)	88(40.6)
14	Supportive and referral services available for the learning disabled.	133(61.3)	84(38.7)
15	Curriculum adaptations for the learning disabled.	133(61.3)	84(38.7)
16	Types and causes of behaviour disorders in children.	193(88.9)	24(11.1)
17	Problems associated with behaviour disorders.	197(90.8)	20(9.2)
18	Procedures for identification and assessment of behaviour disorders.	169(77.9)	48(22.1)
19	Referral and remedial services on behaviour disorders.	137(63.1)	80(36.9)
20	Management techniques and preventive measures against behaviour disorders.	149(68.7)	68(31.3)
21	Definition of Mental Retardation.	205(94.5)	12(5.5)
22	Signs causes, types and problems associated with mental retardation.	197(90.8)	20(9.2)
23	Informal techniques for identifying mental retarded children.	157(72.4)	60(27.6)
24	Referral services available for the mentally retarded.	145(66.8)	72(33.2)
25	Classroom organization and management for the mentally retarded.	149(68.7)	68(31.3)
26	Preventive measures against mental retardation.	169(77.9)	48(22.1)
27	Definitions of what constitute physical and health impairments.	169(77.9)	48(22.1)
28	Signs, causes and problems associated with physical and health impairments.	161(74.2)	56(25.8)
29	Administration of simple informal test in physical and health impairments.	93(42.9)	124(57.1)
30	Referral and supportive services available in the locality for Physical and health impairments.	113(52.1)	104(47.9)
31	Group and individualized classroom procedures for physical and health impairments.	129(59.4)	88(40.6)
32	Some preventive measures against physical and health impairments	165(76.0)	52(24.0)
33	Definitions of speech impairment and hearing impairment.	193(88.9)	24(11.1)
34	Some signs, types, causes and problems associated with speech disorder and hearing impairment.	193(88.9)	24(11.1)
35	Use of informal techniques for identification of speech disorders.	145(66.8)	72(33.2)
36	Group and individualized instructional methods for speech disorders.	153(70.5)	64(29.5)
37	Referral services available for speech disorders.	141(65.0)	76(35.0)
38	Preventive measures against speech disorders.	165(76.0)	52(24.0)
39	Definition of visual impairment.	201(92.6)	16(7.4)
40	Signs, causes and problems associated with visual impairment.	209(96.3)	8(3.7)
41	Characteristics of children with visual problems.	201(92.6)	16(7.4)
42	Formal techniques for identification and assessment of children with visual problems.	177(81.6)	40(18.4)
43	Referral services available for children with visual problems.	147(79.7)	68(31.3)
44	Management methods and suitable aids for visual impairments.	173(79.7)	44(20.3)
45	Prevention of visual impairment.	189(87.1)	28(12.9)

N=217

From Table 4.11, the lecturers claimed that they taught all the content areas (52.1% and above) except characteristics of gifted children (3.70%) and administration of simple informal tests in physical and health impairments (42.9%). A closer look at the contents not taught shows that as low as 3.70% do not teach signs, causes and problems associated with visual impairment while as high as 96.3% do not teach characteristics of gifted children. The other contents come in-between with such percentages as 11.1, 24.0, 33.2, and 40.6 and 57.1. These are too high percentages as no specified content is expected to be left untaught in the first place.

Table 4.12.

Contents Taught According to the Students

Item	Content	TAUGHT 2	NOT TAUGHT 1
1	Basic Concepts and Definition of some terminologies used in Special Education.	1261(91.7)	114(8.3)
2	Role of voluntary agencies in the development of Special Education in Nigeria.	1019(74.1)	356(25.9)
3	Importance of Special Education to general education.	1162(84.5)	213(15.5)
4	Society's attitude towards exceptional children.	1129(82.1)	246(17.9)
5	Definition of gifted children.	1300(94.5)	75(5.5)
6	Characteristics of gifted children.	1254(91.2)	121(8.8)
7	Identification and assessment of gifted children.	1198(87.1)	177(12.9)
8	Areas of superior abilities.	766(55.7)	609(44.3)
9	Appropriate teaching techniques for Gifted children.	1081(78.6)	294(21.4)
10	Definition of learning disabilities.	1183(86.0)	192(14.0)
11	Signs, causes and problems associated with learning disabilities.	1175(85.5)	200(14.5)
12	Preventive measures against learning disabilities.	997(72.5)	378(27.5)
13	Informal techniques for identification of the learning disabled.	987(71.8)	388(28.2)
14	Supportive and referral services available for the learning disabled.	837(60.9)	538(39.1)
15	Curriculum adaptations for the learning disabled.	899(65.4)	476(34.6)
16	Types and causes of behaviour disorders in children.	1172(85.2)	203(14.8)
17	Problems associated with behaviour disorders.	1133(82.4)	242(17.6)
18	Procedures for identification and assessment of behaviour disorders.	901(65.5)	474(34.5)
19	Referral and remedial services on behaviour disorders.	836(60.8)	539(39.2)
20	Management techniques and preventive measures against behaviour disorders.	884(64.3)	491(35.7)
21	Definition of Mental Retardation.	1152(83.8)	223(16.2)
22	Signs causes, types and problems associated with mental retardation.	1165(84.7)	210(15.3)
23	Informal techniques for identifying mental retarded children.	1058(76.9)	317(23.1)
24	Referral services available for the mentally retarded.	971(70.6)	404(29.4)
25	Classroom organization and management for the mentally retarded.	1082(78.7)	293(21.3)
26	Preventive measures against mental retardation.	984(71.6)	391(28.4)
27	Definitions of what constitute physical and health impairments.	1075(78.5)	300(21.8)
28	Signs, causes and problems associated with physical and health impairments.	1095(79.6)	280(20.4)
29	Administration of simple informal test in physical and health impairments.	786(57.2)	589(42.8)
30	Referral and supportive services available in the locality for Physical and health impairments.	644(46.8)	731(53.2)
31	Group and individualized classroom procedures for physical and health impairments.	742(54.0)	633(46.0)
32	Some preventive measures against physical and health impairments	810(58.9)	565(41.1)
33	Definitions of speech impairment and hearing impairment.	1129(82.1)	246(17.9)
34	Some signs, types, causes and problems associated with speech disorder and hearing impairment.	1147(83.4)	228(16.6)
35	Use of informal techniques for identification of speech disorders.	962(70.0)	413(30.0)
36	Group and individualized instructional methods for speech disorders.	844(61.4)	531(38.6)
37	Referral services available for speech disorders.	765(55.6)	610(44.4)
38	Preventive measures against speech disorders.	853(62.0)	522(38.0)
39	Definition of visual impairment.	1132(82.3)	243(17.7)
40	Signs, causes and problems associated with visual impairment.	1150(83.6)	225(16.4)
41	Characteristics of children with visual problems.	1144(83.2)	231(16.8)
42	Formal techniques for identification and assessment of children with visual problems.	1045(76.0)	330(24.0)
43	Referral services available for children with visual problems.	979(71.2)	396(28.8)
44	Management methods and suitable aids for visual impairments.	1013(73.7)	362(26.3)
45	Prevention of visual impairment.	1087(79.1)	288(20.9)

N = 1375

Table 4.12 shows that the students claimed that the specified content areas were taught with the exception of referral and supportive services available in the locality for physical and health impairment (46.8%). This is in congruence with the lecturers' views generally but specifically, the students claimed that they were taught characteristics of gifted children as against the lecturers' report that they were not taught. This is also the case with administration of informal test in physical and health impairments. Generally, it could be summarized that to a large extent, contents specified were taught but the little areas not covered are too important to be neglected.

Research Question 5: - What strategies are adopted by the lecturers in the course of implementing the Elements of Special Education curriculum in NCE-awarding institutions?

Table 4.13.

Strategies Adopted by the Lecturers

SN	Strategies	Always 4	Sometimes 3	Rarely 2	Never 1	Mean	Std Dev
1	Lecture method	118 (54.4)	76 (35.0)	16 (7.4)	7 (3.2)	3.40	.76
2	Discussion	72 (33.2)	123 (56.7)	8 (3.7)	14 (6.5)	3.16	.77
3	Demonstration	82 (37.8)	72 (33.2)	44 (20.3)	19 (8.8)	3.00	.96
4	Laboratory	4 (1.8)	36(16.6)	52(24.0)	125 (57.6)	1.62	.82
5	Project	28 (12.9)	75 (34.6)	48 (22.1)	66 (30.4)	2.29	1.03
6	Excursion/Field Trip	20 (9.2)	68 (31.3)	40 (18.4)	89 (41.0)	2.08	1.04
7	Group Work	40 (18.4)	135 (62.2)	12 (5.5)	30 (13.8)	2.82	.88

N=217

Table 4.13 shows that the lecture method (Mean = 3.40; SD = .76) is the most frequently used strategy for teaching Elements of Special Education by the lecturers. This is followed by the discussion method (Mean = 3.16; SD = .77). These two strategies could have been chosen by the lecturers due to the very large class sizes taught by very few of them. Further, the table shows that demonstration is also sometimes used (Mean = 3.00; SD = .96) indicating that facilities, equipment and apparatus which could not go round all the students cannot but be demonstrated by the lecturers for the students to merely 'observe' the lecturers do the activities. Group work (Mean = 2.82; SD = .88) is also sometimes used usually perhaps due to the inability of lecturers to teach effectively in whole class activities and discussion. The three other strategies are rarely used by the lecturers. These include laboratory (Mean = 1.62; SD = .82), project (Mean = 2.29; SD = 1.03) and excursion/field trip (Mean = 2.08; SD = 1.04).

Research Question 6: - How effective is the actual classroom teaching of Elements of Special Education curriculum content in the NCE-awarding institutions in Nigeria?

Table 4.14.

Classroom Situation for Teaching Elements of Special Education.

S/N	LESSON FEATURES	5	4	3	2	1	Mean	Std Dev
1	**Class Atmosphere** Conduciveness of the classroom to the teaching of special education	2 (10.0)	2 (10.1)	4 (20.0)	9 (45.0)	3 (15.0)	2.55	1.19
2	Arrangement of seats in line with the strategy used, ease of movement and proper ventilation.	1 (5.0)	5 (25.0)	4 (20.0)	7 (35.0)	3 (15.0)	2.70	1.17
Weighted Average = 2.63								

N=20

Table 4.14 shows that the classroom is fairly conducive (Mean = 2.55; SD =1.17) and the arrangement of seats is also fair (Mean = 2.70). These mean scores are about the average score considering the 5.00 maximum score obtainable. The 2.63 weighted average depicts a classroom atmosphere which is not good enough for the effective teaching of Elements of Special Education.

Table 4.15.

Instructional Objectives in the Teaching of Elements of Special Education

S/N	LESSON FEATURES	5	4	3	2	1	Mean	Std Dev
1	**Instructional Objectives** Instructional objectives well communicated to the students.	1 (5.0)	2 (10.0)	7 (35.0)	2 (10.0)	8 (40.0)	2.30	1.26
2	Extent to which the content and activities relate to the objectives.	3 (15.0)	-	5 (25.0)	2 (10.0)	10 (50.0)	2.20	1.47
3	Coverage of relevant aspects of the topic based on the objectives.	1 (5.0)	1 (5.0)	3 (15.0)	2 (10.0)	13 (65.0)	1.75	1.20
Weighted Average = 2.08								

N = 20

From Table 4.15, instructional objectives are not well communicated to students (Mean = 2.30; SD = 1.26), content and activities are poorly related to the objectives (Mean = 2.20; SD = 1.47) and relevant aspects of the topics based on the objectives are not covered (Mean = 1.75; SD = 1.20). This situation is so poor as attested to by the low weighted average score of 2.08 out of 5.00. Hence, the use of instructional objectives in guiding the course of instruction is poor.

Table 4.16.

Techniques Used in Teaching Elements of Special Education

S/N	LESSON FEATURES	5	4	3	2	1	Mean	Std Dev
1	**Teaching Techniques** Evidence of well planned and internally consistent lesson.	2 (10.0)	2 (10.0)	5 (25.0)	3 (15.0)	8 (40.0)	2.35	1.38
2	Evidence of subject matter mastery by the lecturer.	2 (10.0)	2 (10.0)	3 (15.0)	1 (5.0)	12 (60.0)	2.05	1.46
3	Variety and effectiveness of procedures/strategies in line with the principles of special education	-	2 (10.0)	8 (40.0)	2 (10.0)	8 (40.0)	2.20	1.10
4	Use of lecture/project/concept mapping Analogies/Topic study/ Dramatization/Combination of methods.	1 (5.0)	3 (15.0)	5 (25.0)	9 (45.0)	2 (10.0)	2.60	1.04
5	Skill in questioning (type, frequency, relevance, distribution, provocativeness, answerability).	9 (45.0)	-	-	4 (20.0)	7 (35.0)	3.00	1.89
6	Reflection of real-life challenges and problems in classroom teaching.	8 (40.0)	-	-	6 (30.0)	6 (30.0)	2.90	1.80
7	Potential of the lesson in developing special skills and positive attitudes in students.	9 (45.0)	-	-	6 (30.0)	5 (25.0)	3.10	1.80
8	Creation of avenues for solving hypothetical problems.	3 (15.0)	4 (20.0)		1 (5.0)	12 (60.0)	2.25	1.68
9	Skill and language of communication of the lecturer.	3 (15.0)	-	2 (10.0)	7 (35.0)	8 (40.0)	2.15	1.38
10	Provision and effectiveness of relevant instructional materials and equipment.	2 (10.0)	1 (5.0)	2 (10.0)	11 (55.0)	4 (20.0)	2.30	1.17
11	Involvement of students in class activities and discussion.	3 (15.0)	-	1 (5.0)	9 (45.0)	7 (35.0)	2.15	1.34
Weighted Average = 2.46								

N = 20

Table 4.16 shows that three out of the eleven items yielded high mean scores ranging from 2.90 to 3.10. These are items 5, 6 and 7. To these ends, the lecturers' skills in questioning, reflection of real-life problems as well as the development of special skills and attitude in the students are demonstrated effectively. The use of effective instructional strategies is only fairly effective (Mean = 2.60; SD = 1.04) while the remaining seven items yielded very low mean scores (means range between 2.06 and 2.35). The weighted average of 2.46 out of 5.00 suggests that the teaching techniques adopted are not effective.

Table 4.17.

Evaluation and Assignments in the Teaching of Elements of Special Education

S/N	LESSON FEATURES	5	4	3	2	1	Mean	Std Dev
1	**Evaluation and Assignments** Adequate evaluation of attainment of instructional objectives.	3 (15.0)	2 (10.0)	2 (10.0)	7 (35.0)	6 (30.)	2.45	1.43
2	Coverage of the six domains viz knowledge comprehension, application, analysis, synthesis and evaluation.	2 (10.0)	2 (10.0)	-	10 (50.0)	6 (30.0)	2.20	1.28
3	Relevant and adequate assignments on the issue taught.	8 (40.0)	1 (5.0)	1 (5.0)	6 (30.0)	4 (20.0)	3.15	1.69
4	Relevant and adequate home/out of class project or activities based on the concepts taught.	4 (20.0)	-	2 (10.0)	4 (20.0)	10 (50.0)	2.20	1.57
Weighted Average = 2.50								

N = 20

Table 4.17 shows that relevant assignments are adequately given to students on issues taught (Mean = 3.15; SD = 1.69). However, evaluation was not adequate (Mean = 2.45; SD = 1.43), the six domains are not covered in the evaluation done (Mean = 2.20; SD = 1.57) and homework and projects are not used (Mean 2.20; SD = 1.57). Above all, the weighted average of 2.50 is just half of the maximum obtainable score of 5.00. This shows that evaluation and assignments in the Elements of Special Education are not well implemented.

Research Question 7: - What are the problems encountered by the lecturers' in the implementation of the Elements of Special Education curriculum?

Table 4.18.

Problems Encountered by Lecturers in Implementing the Curriculum.

SN	Possible Problems		Extent			Mean	Std Dev
		Yes	Very Serious 3	Serious 2	Not Serious 1		
1	Students apathy to Special Education	70 (32.3)	8 (11.4)	20 (28.6)	42 (60.0)	1.51	0.41
2	Death of qualified lecturers	55 (25.3)	4 (7.2)	10 (18.2)	41 (74.6)	1.32	0.23
3	Poor exercise on the part of lecturers	36 (16.6)	4 (11.0)	3 (8.3)	29 (80.6)	1.31	0.31
4	Students' lack of interest in Special Education	78 (35.9)	12 (15.4)	30 (38.5)	36 (46.1)	1.69	0.18
5	Society's negative attitude to disable people	126 (58.1)	50 (39.7)	28 (22.2)	48 (38.1)	2.01	0.12
6	Students level of seriousness is low	94 (43.3)	20 (21.3)	12 (12.8)	62 (65.9)	1.55	0.14
7	Lack of facilities and equipment	154 (71.0)	81 (52.6)	33 (21.4)	40 (26.0)	2.27	0.31
8	High cost of Equipment	154 71.0)	80 (51.9)	30 (19.5)	44 (28.6)	2.23	0.28
9	Lack of funds	154 (71.0)	78 (50.6)	28 (18.2)	48 (31.2)	2.19	0.12
10	Ineffective teaching methods.	40 (18.4)	5 (12.5)	6 (15.0)	29 (72.5)	1.40	0.33

N = 217

Table 4.18 shows that identified problems are lack of facilities and equipment (N = 154; 71.0%), high cost of equipment (N = 154; 71.0%) lack of funds (N = 154; 71.0%) and society's negative attitude to people with special needs (N = 126; 58.1%). More than fifty per cent of the lecturers ticked these problems. Further, out of all the listed problems, lack of facilities and equipment is the most serious (X =2.23; SD =0.31) followed by high cost of equipment (X =2.23; SD = 0.28), lack of funds (X = 2.19; SD =0.12) and society's negative attitude to people with special needs (X =2.01; SD=0.12). Also of serious magnitude are students' lack of interest in special education (X=1.69; SD=0.18), students' low level of seriousness (X = 1.55; SD =0.14) and students' apathy to Special Education (X = 1.51; SD = 0.41). All the others are not serious problems confronting the implementation of the curriculum.

Research Question 8: - What are the students' level of learning outcomes in Elements of Special Education as indicated by students' achievement and their attitude to special education?

Table 4.19.

Descriptive Statistics of Students' Achievement in Elements of Special Education.

N	Minimum	Maximum	Mean	Std Deviation
1375	1.00	14.00	11.6909	2.7641

From Table 4.19, out of the one thousand, three hundred and seventy-five students sampled, the lowest score obtained was 1 out of 20 marks while the highest score was 14. This distribution is not good enough as no student scored up to 15 marks out of 20 and some students scored as low as 1 mark. Also, the 11.69 mean score for all the students show that the students' achievement in the course is around the average.

Table 4.20.

Students' Attitude to Special Education.

Item	Statements	SA 4	A 3	D 2	SD 1	Mean	Std Dev
1	I am interested in studying more about how to teach children with special needs.	891 (64.8)	387 (28.1)	49 (3.6)	48 (3.5)	3.54	.72
2	I can acquire the ability to teach learners with special needs well.	546 (39.7)	691 (50.3)	72 (5.2)	66 (4.8)	3.24	.76
3	Only special education students in the college need to learn about how to teach students with special needs.	342 (24.9)	190 (13.8)	355 (25.8)	488 (35.5)	2.28	1.18
4	Teaching every student in the college the basic issues in special education is a waste of time.	209 (15.2)	119 (8.7)	344 (25.0)	703 (51.1)	1.87	1.09
5	I need to be able to adapt the curriculum of the regular school to suit the needs of special needs students.	546 (39.7)	632 (46.0)	105 (7.6)	92 (6.7)	3.18	.84
6	Students with disabilities need to be in special schools, not to mix up with students in regular schools.	164 (11.9)	166 (12.1)	277 (20.1)	768 (55.9)	3.19	1.05
7	I will be frustrated trying to teach learners with special needs.	234 (17.0)	367 (26.7)	427 (31.1)	347 (25.2)	2.35	1.03
8	Diagnosis and identification of students with special needs is an interesting exercise.	495 (36.0)	549 (39.9)	250 (18.2)	81 (5.9)	3.06	.88
9	I enjoy learning about sign language and other specialised means of communicating with students with special needs.	648 (47.1)	536 (39.0)	122 (8.9)	69 (5.0)	3.28	.82
10	I like teaching and working with students with special needs.	513 (37.3)	633 (46.0)	140 (10.2)	89 (6.5)	3.14	.84
Weighted Average = 2.77							

N = 1375

Table 4.20 shows that out of the ten items listed on attitudinal issues in Special Education, 6 yielded high mean scores of between 3.06 and 3.54 while the remaining 4 items yielded low mean values of 1.80 to 2.35. on the whole, the weighted average of 2.77 out of a maximum score of 4.00 indicate that the attitude to Special Education is only above average. This is not good enough especially for those who are undergoing training to become teachers.

4.2 Testing the Hypotheses

Ho1: - There is no significant difference in the male and female students' achievement in Elements of Special Education curriculum in NCE-awarding institutions in Nigeria.

Table 4.21.

T-test Comparison of Male and Female Students' Knowledge of Special Education

Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig.	Remarks
Male	795	11.6000	2.8013	9.935E-02	1.428	1373	.153	n.s
Female	580	11.8155	2.7097	.1125				

n.s = not significant at p <..05

Table 4.21 shows that female students obtained higher mean score in knowledge of special education (Mean = 11.82; SD = 2.71) than their male counterparts (Mean 11.60; SD = 2.80). This difference is, however, not significant (t = 1.428; df = 1373; p<.05). Hence, hypothesis 1 is not rejected and it is concluded that there is significant difference in the male and female students' knowledge of special education.

Ho2: - There is no significant difference in the attitude of male and female students towards Elements of Special Education curriculum in NCE-awarding institutions in Nigeria.

Table 4.22.

T-test of Male and Female Students' Attitude to Special Education.

Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig.	Remarks
Male	795	28.8591	4.6554	.1651	3.07	1373	.002*	Significant
Female	580	29.6121	4.2714	.1774				

*significant at p<.05

From Table 4.22 the female students' attitude to special education is higher (Mean = 29.61; SD = 4.27) than that of their male counterparts (Mean = 28.86; SD = 4.66). This difference is significant (t = 3.066; df = 1373; p<.05). This means that there is a significant difference in attitude to special education of male and female students. Hence, hypothesis 2 is rejected.

Ho3: - There is no significant difference in the lecturers teaching effectiveness in Elements of Special Education based on their qualification.

Table 4.23.

Descriptive Table for Teaching Effectiveness and Lecturers' Qualification.

Qualification	N	Mean	Std. Deviation
B.Ed	48	54.3542	14.7814
B.Sc + PGDE	8	61.2500	18.2502
M.Sc	86	52.0698	13.7480
M.Sc + PGDE	39	53.7436	14.5126
Ph.D	16	51.3500	16.7498
Ph.D with Education	20	55.1250	12.7534
Total	**217**	**53.3733**	**14.4762**

Note: This applies as already mentioned

Table 4.23 shows that lecturers with B.Sc. plus PGDE had the highest mean score in teaching effectiveness (Mean = 61.25; SD = 18.25). This is followed by lecturers with Ph.D. in Education (Mean = 55.13; SD = 12.75), those with B.Ed. (Mean = 54.35; SD = 14.78) and then those with M.Sc. plus PGDE (Mean 53.74; SD =14.51). Those with M.Sc. (Mean = 52.07; SD = 13.75) and Ph.D. without education (Mean = 51.35; SD = 16.75) fall on the lower part based on the magnitude of means scores.

Table 4.24.

ANOVA (One-way) Table for Teaching Effectiveness by Qualification.

Source of Variance	Sum of Square	Df	Mean Square	F	Sig.
Between Groups	824.969	5	164.994	.783	.563$^{n.s}$
Within Groups	44439.796	211	210.615		
Total	**45264.765**	**216**			

n.s = Not significant at p<.05

Table 4.24 shows that the difference in the teaching effectiveness of lecturers based on their qualification is not significant (F = .783; p<.05). Hence, Hypotheses 3 is not rejected.

HO4: - There is no significant difference in the lecturers' teaching effectiveness in Elements of Special Education based on their teaching experience.

Table 4.25.

Teaching Effectiveness of Lecturers with Different Levels of Experience

Experience	Number	Mean	Standard Deviation
Blow 5	41	55.6585	15.0326
5-10	44	53.4773	14.3535
11-15	36	48.3889	14.0779
16 + above	96	54.2188	14.2358
Total	**217**	**53.3733**	**14.4762**

Table 4.25 shows that lecturers with less than 5 years teaching experience had the highest mean score (Mean = 55.6; SD = 15.03) in teaching effectiveness. This group is followed by those with 5-10 years (Mean = 53.48; SD = 14.35). The lecturers with 11-15 years had the lowest mean score (Mean 48.39; SD =14.08).

Table 4.26.

ANOVA (One-way) Table for Teaching Effectiveness by Years of Experience of Lecturers.

Source of Variance	Sum of Square	Df	Mean Square	F	Sig.
Between Groups	1177.606	3	392.535	1.896	.131[n.s]
Within Groups	44.87.159	213	206.982		
Total	**45264.765**	**216**			

n.s = Not significant at p<.05

From Table 4.26, the difference in the teaching effectiveness of the lecturers as obtained in Table 4.25 is not significant (F = 1.896; p<.05). Hence, hypothesis 4 is not rejected.

4.3 Summary of Findings

Findings of the study are summarized as:

1. The number of lecturers available is grossly inadequate for teaching Elements of Special Education.
2. The lecturers teaching the course are mostly academically qualified but not professionally qualified.
3. Students and lecturers alike perceive the course as very important in teacher preparation.
4. Facilities, equipment and resources for the teaching of Elements of Special Education are not available, not adequate and not utilized by the lecturers.

5. Certain areas of the content of the course are not taught by the lecturers.
6. Lecturers of Elements of Special Education predominantly use the lecture method while they occasionally adopt discussion and demonstration methods.
7. The classroom teaching of the course is not effective enough considering class atmosphere, use of instructional objectives, teaching techniques, evaluation and assignments.
8. Problems constraining effective implementation of the course include lack of facilities and equipment, high cost of equipment, lack of funds, society's negative attitudes and students' low level of seriousness.
9. Students possess average level of achievement and an attitude which is slightly positive in Special Education.
10. There is no significant difference in male and female students' achievement in Special Education. However, there is significant gender difference in attitude to Special Education. Both cases favour females.
11. Qualification and experience of lecturers of Elements of Special Education do not significantly affect their teaching effectiveness. Those with B.Sc. + PGDE and those with below 5 years experience teach more effectively than the other classes of lecturers.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 This chapter presented the discussion of the findings of the study; the conclusion reached in line with the objectives and presented recommendations to the various stakeholders based on the findings.

5.1 Discussion

Findings of the study revealed that lectures are available in numbers considered to be grossly inadequate for the effective implementation of the Elements of Special Education Curriculum in the NCE-awarding institutions in Nigeria. It is grossly inadequate in relation to the number of students that offer the course. Elements of Special Education are a core course and are made compulsory for all second year NCE students in the institutions (NCCE Minimum Standards, 2007). Further, because there are few lecturers to interact with very many students, this could lead to the lecturers having large classes. The prevalence of large classes could lead to lecturers not having enough time to measure, assess or even evaluate on regular basis how much of the contact objectives have been mastered by the students. However, this could lead to overdependence or dependence on one short examination by these institutions turning out graduates who are not properly trained (Kaval, 2005; Pugach, 2005) in the skills of identification and appropriate referral.

It was also found that the lecturers were mostly academically qualified. This present finding on the qualification of the personnel who teach in these institutions sampled was contrary to the finding of Boe and Cook (2006) as well as Billingsloy, Fall and Williams (2006) which revealed high percentage of uncertified educators staffing special education institutions in the USA. This was a development which was cheery in spite of the fact that the academic qualifications of many of them is not directly in special education. Indeed, some of them studied such education courses as: Education Psychology, Guidance and Counseling, Educational Management and the likes. These lecturers were appointed and assigned the course with the unjustifiable assumption that they could teach special education effectively. This could lead to the situation where topics which are technical or beyond the level of the teacher would be left untaught with attendant poor students' performance in the course. This finding corroborates the reports of Trait and Purdie (2000), Cook (2001) and Praisner (2000) who all berated poor qualification of personnel in Special Education

However, this phenomenon should be looked into by the Federal Government of Nigeria because of the importance attached to using teachers who are qualified to teach

learners (Betta, Zau and Rice, 2003, Hannshek et al. 2002). Further, allowing this scenario outline by the present study to continue has the capacity of jeopardizing the governments noble intentions for establishing these institutions. This is because, it has been reiterated by researchers (Rockoff 2004, Horronson, Barrowo and Sauder,. 2007) that the logical starting point for any policy to address the achievement of students with special needs is the quality of teachers instructing them.

Further, the perception of lecturer and students on the introduction of elements of special education into the NCE programme is good. This is also an area of strength for the programme as the lecturers motivation, interest and zeal would be on the high side. This is in tune with Goessling (2000) and Kisanji (1993) that the perception of certain categories of people including teachers are germane towards effective special needs provision They are more likely to muster necessary efforts towards teaching the course effectively thus making possible sacrifices in order to make the programme a success. On the part of the students, their aptitude and passion are likely to be high, with ample readiness to learn. This trend ordinarily should make for effective implementation and achievement of desired objectives given that other factors are in their proper place.

The study also found that facilities, equipment and resources are not available, not adequate and not effectively utilized in the course of implementation of the curriculum. To this end, it is almost certain that not much gain is expected from the programme. Facilities of specialized equipment are required in teaching Element of Special Education. Indeed, pre-science teachers need to be trained in their use or at least have a first hand interactive experience with the materials.

This practice may not augur well with the experiences the teachers in training are exposed to and may affect their classroom behaviour during practice. This is so viewed because research has shown that relationship exists between types of training special education teachers and their classroom practices (Algozzine, Morsink & Nougaret 1988; Nougaret, Scruggs & Nastropieri, 2005). This result also runs contrary to the objectives of setting up teacher education institutions in Nigeria. Graduates of NCE who are not exposed to the skills of identification, specialized equipment like Braille machines and so on would negate the whole essence of the programme especially now that basic education in Nigeria is free and compulsory for all Nigerian children. With the non availability, inadequacy and non-utilization of the equipment in the NCE-awarding institutions, the course, Elements of Special Education is far from being well implemented. These tallies with the arguments of Trait and Purdie

(2000) that lack of facilities in any educational programme would make for the failure of such programme.

From the results also, certain aspects of the content were not taught by the lecturers. This could be due to the lecturers' non-qualification in Special Education as major course of study while in the university. The implication of this finding is that the students in the institutions would lack knowledge of those areas left untaught and therefore cannot perform tasks, teaching assignments and services in such aspects relevant to their future students with special needs. Kilplinger (1997) is of the opinion that teacher characteristics are more strongly related to students' achievement than school effects. Fuller and Clark (1994) remarked that what really matters is the teachers knowledge of the subject. They further elaborated the importance of teacher knowledge as criterion for producing better results in the teaching learning process. The knowledge of the subject is directly proportional to the students' academic achievement scores. Besides, the availability of qualified teachers will result in better learning outcomes.

Results also showed that the lecture method was predominant in the implementation of the course with the discussion and demonstration methods occasionally used. This is despite the widespread criticism of the lecture method as ineffective and outdated. Also both discussion and demonstration would not make for the interaction of the students with materials, equipment and practical exploration of resources for the diagnosis of the diverse special needs of students in the school system. According to the works of Harris and Sass (2008), teachers' classroom practices must include use of effective teaching strategies to make teaching effective. This is also in line with Bentley (2000) and Borich (2000) findings.

Findings further revealed that the classroom teaching is not effective in every ramification ranging from class atmosphere, use of instructional objectives, teaching techniques, evaluation and assignments. This could be traced to the problem of large class size, workload of the few lecturers available, lack of facilities and equipment, high cost of these specialized equipments, lack of funds, society's negative attitude and student apathy as obtained also from the other sections of the results. Ineffective classroom teaching found in this study is in tandem with findings of Braun (2005), McCaffery et al. (2004) and Sanders (2000) who traced poor student performance to teachers poor effectiveness in teaching.

It is not surprising that students' achievement and attitude to Special Education is not good enough as this could be rationalized from the poor level of implementation observed in availability of lecturers and ineffective teaching. This is in line with the assertion that no

educational enterprise can rise above the quality of teachers who implement the curriculum (FRN, 2007). It is also noteworthy that females are faring better than males in the course against the popular and general outcry of female marginalization and disadvantaged position in educational pursuits. This finding is in line with the reports of Ogunleye (2002; 2010) that females even achieved better than their male counterparts in chemistry and practical work.

5.2 Conclusion

This study evaluated the elements of special education curriculum in NCE-awarding institutions in Nigeria and exposed the areas of strengths and weaknesses in the course of its implementation. Strengths included good perception of both students and lecturers on the course, the teaching of most of the topics listed and the frontline position of female students in both achievement and attitude towards special education. On the other hand, weaknesses which need to be improved upon included inadequate lecturers, lack of facilities, neglect of some aspects of the course in teaching, poor teaching strategies, ineffective teaching, lack of funds among other problems of implementation and poor performance on the part of students. If these areas identified were given the desired attention and the problems tackled by relevant stakeholders, the task of teacher preparation in Special Education in the Nigerian education system would have been easier and the quality of such teachers trained would not only improve, they would be able to identify, teach, assist, remediate and refer students with special needs in the school system towards more meaningful learning by such students..

5.3 Recommendations

Based on the findings of the study, the following recommendations were made.

1. The government and the management of the NCE-awarding institutions should in the immediate future, employ adequate number of qualified personnel to teach the course, Elements of Special Education in the institutions.
2. In-service training need to be periodically organized for lecturers of the course in order to expose them to innovative strategies and practices.
3. Facilities, equipment and instructional resources are required in adequate quantities for the effective teaching of elements of special education.
4. Lecturers of the course are encouraged to teach all the specified topics in the course as all are equally important. In doing this, lecturers need to adopt innovative strategies other than lecture method.

5. Team teaching of the course can be initiated by the Heads of Departments so that senior and experienced lecturers would co-teach with their junior counterparts who might be of low experience.
6. Government need to adequately fund the institutions towards provision of necessary materials and resources that would help solve most of the problems identified.
7. Greater efforts by the lecturers and students in the teaching-learning process towards improved achievement in Special Education are hereby solicited.
8. Intervention which could improve students' attitude to Special Education need to be sought and used especially for male students and generally among all students.

5.4 Suggestions for Further Studies

The following suggestions were made in order to extend the findings obtained in this study.

1. Content analysis and possible review of the Elements of Special Education Curriculum in NCE-awarding institutions in Nigeria should be embarked upon.
2. Investigation of certain intervention for improving students' attitude to special education generally and among pre-service teachers specifically.
3. Appraisal of effects of identified innovative and novel strategies in the teaching of special education.
4. Relationship among availability, adequacy and utilization of equipment and facilities and achievement and attitude to Special Education.
5. Correlates of Special Education teachers' teaching effectiveness in NCE-awarding institutions in Nigeria.

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APPENDIX 1

STUDENTS' QUESTIONNAIRE ON CURRICULUM OBJECTIVES (SQOCO)

Dear Respondent,

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio-Demographic Information

Name of Institution: _____

Age: Below 18 years ☐

19 – 21 years ☐

Above 21 years ☐

Sex: Male ☐

Female ☐

Subject Combination: _____

Section B: Rating of Curriculum Objectives

Kindly tick as appropriate

KEY: VI - Very Important

JI - Just Important

NI - Not Important

VU - Very Unimportant

Item	The NCE Programme should develop in me	VI	JI	NI	VU
1	An understanding of the basic concepts in special education				
2	Knowledge about students with disabilities				
3	Ability to discuss the history of special education in Nigeria.				
4	Sound knowledge of the importance of special education to career development in general education				
5	Basic understanding of society's attitude towards students with special needs				
6	Recognition of gifted and talented children in regular classrooms.				
7	Capacity to select and use appropriate teaching methods for teaching students with special needs.				

8	Skills for the identification of students with learning disabilities				
9	Ability to locate referral and supportive services for students with learning disabilities.				
10	Adequate knowledge to adapt the curriculum for student with special needs.				
11	Recognise behaviour disorders in school children				
12	Skills to identify causes and problems of behaviour disorders in students				
13	Preventive mechanisms to use against behaviour disorders in students.				
14	Demonstration of good management skills of curbing behaviour disorders				
15	A good mastery of what intellectual disabilities is all about				
16	Ability to use appropriate teaching methods in teaching students with intellectual disabilities in the class.				
17	An understanding of signs, causes and problems of students physical and health disabilities				
18	Preventive measures I can take against physical and health impairments in students.				
19	Capacity for using simple informal tests to identify students with physical and health problems.				
20	Ability to appreciate and identify speech and hearing impairments among students.				
21	Appropriate informed strategies to use to meet the needs of speech and hearing impaired students.				
22	Basic knowledge and understanding of the problems of visual impairment among students.				
23	Skills for identifying students with visual impairment in the class				
24	A broad knowledge of various types of referral services available for learners with visual impairment				
25	Appropriate use of suitable teaching aids to help students with visual impairment in my class.				

APPENDIX II

LECTURERS' QUESTIONNAIRE ON CURRICULUM OBJECTIVES (LEQOCO)

Dear Respondent,

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio-Demographic Information

Name of Institute: _____

……Qualification:
- B.Ed ☐
- B.Sc + PGDE ☐
- M.Sc. ☐
- M.Sc + PGDE ☐
- Ph.D without Education Qualification ☐
- Ph.D with Education Qualification ☐

Teaching Experience:
- Below 5 years ☐
- 5-10 years ☐
- 11-15 years ☐
- 16 years above ☐

Sex:
- Male ☐
- Female ☐

Section B: Rating of Curriculum Objectives

Kindly tick as appropriate

KEY: VI - Very Important

JI - Just Important

NI - Not Important

VU - Very Unimportant

Item	The NCE Programme should develop in me	VI	JI	NI	VU
1	An understanding of the basic concepts in special education				
2	Knowledge about students with disabilities				
3	Ability to discuss the history of special education in Nigeria.				
4	Sound knowledge of the importance of special education to career development in general education				
5	Basic understanding of society's attitude towards students with special needs				
6	Recognition of gifted and talented children in regular classrooms.				
7	Capacity to select and use appropriate teaching methods for teaching students with special needs.				
8	Skills for the identification of students with learning disabilities				
9	Ability to locate referral and supportive services for students with learning disabilities.				
10	Adequate knowledge to adapt the curriculum for student with special needs.				
11	Recognise behaviour disorders in school children				
12	Skills to identify causes and problems of behaviour disorders in students				
13	Preventive mechanisms to use against behaviour disorders in students.				

14	Demonstration of good management skills of curbing behaviour disorders				
15	A good mastery of what intellectual disabilities is all about				
16	Ability to use appropriate teaching methods in teaching students with intellectual disabilities in the class.				
17	An understanding of signs, causes and problems of students physical and health disabilities				
18	Preventive measures I can take against physical and health impairments in students.				
19	Capacity for using simple informal tests to identify students with physical and health problems.				
20	Ability to appreciate and identify speech and hearing impairments among students.				
21	Appropriate informed strategies to use to meet the needs of speech and hearing impaired students.				
22	Basic knowledge and understanding of the problems of visual impairment among students.				
23	Skills for identifying students with visual impairment in the class				
24	A broad knowledge of various types of referral services available for learners with visual impairment				
25	Appropriate use of suitable teaching aids to help students with visual impairment in my class.				

APPENDIX III

STUDENT QUESTIONNAIRE ON CONTENT COVERAGE OF ELEMENTS OF SPECIAL EDUCATION (SQCOESE)

Dear Respondent,

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio-Demographic Information

Name of Institution: _____

Age: Below 18 years ☐

19 – 21 years ☐

Above 21 years ☐

Sex: Male ☐

Female ☐

Subject Combination: _____

Section B: Content Coverage

Kindly tick (√) against the contents either taught or not taught in the 'Elements of Special Education' course.

Item	Content	TAUGHT	NOT TAUGHT
1	Basic Concepts and Definition of some terminologies used in special education.		
2	Role of voluntary agencies in the development of special education in Nigeria.		
3	Importance of special education to general education.		
4	Society's attitude towards exceptional children.		
5	Definition of gifted children.		
6	Characteristics of gifted children.		
7	Identification and assessment of gifted children.		
8	Areas of superior abilities.		
9	Appropriate teaching techniques for gifted children.		
10	Definition of leaning disabilities.		
11	Signs, causes and problems associated with learning disabilities.		
12	Preventive measures against learning disabilities.		
13	Informal techniques for identification of the learning disabled.		
14	Supportive and referral services available for the learning disabled.		
15	Curriculum adaptations for the learning disabled.		
16	Types and causes of behaviour disorders in children.		
17	Problems associated with behaviour disorders.		
18	Procedures for identification and assessment of behaviour disorders.		
19	Referral and remedial services on behaviour disorders.		
20	Management techniques and preventive measures against behaviour disorders.		
21	Definition of mental retardation.		
22	Signs causes, types and problems associated with mental retardation.		
23	Informal techniques for identifying mental retarded children.		
24	Referral services available for the mentally retarded.		
25	Classroom organization and management for the mentally retarded.		
26	Preventive measures against mental retardation.		
27	Definitions of what constitute physical and health impairments.		
28	Signs, causes and problems associated with physical and health impairments.		

29	Administration of simple informal test in physical and health impairments.		
30	Referral and supportive services available in the locality for Physical and health impairments.		
31	Group and individualized classroom procedures for physical and health impairments.		
32	Some preventive measures against physical and health impairments		
33	Definitions of speech impairment and hearing impairment.		
34	Some signs, types, causes and problems associated with speech disorder and hearing impairment.		
35	Use of informal techniques for identification of speech disorders.		
36	Group and individualized instructional methods for speech disorders.		
37	Referral services available for speech disorders.		
38	Preventive measures against speech disorders.		
39	Definition of visual impairment.		
40	Signs, causes and problems associated with visual impairment.		
41	Characteristics of children with visual problems.		
42	Formal techniques for identification and assessment of children with visual problems.		
43	Referral services available for children with visual problems.		
44	Management methods and suitable aids for visual impairments.		
45.	Prevention of visual impairment.		

APPENDIX IV

LECTURERS' QUESTIONNAIRE ON CONTENT COVERAGE OF ELEMENTS OF SPECIAL EDUCATION (LEQCOESE)

Section A: Socio-Demographic Information

Name of Institute: _____

……Qualification: B.Ed ☐

B.Sc + PGDE ☐

M.Sc. ☐

M.Sc + PGDE ☐

Ph.D without Education Qualification ☐

Ph.D with Education Qualification ☐

Teaching Experience: Below 5 years ☐

5-10 years ☐

11-15 years ☐

16 years above ☐

Sex: Male ☐

Female ☐

Section B: Content Coverage

Kindly tick (√) against the contents taught by you in the 'Elements of Special Education' course.

Item	Content	TAUGHT	NOT TAUGHT
1	Basic concepts and definition of some terminologies used in special education.		
2	Role of voluntary agencies in the development of special education in Nigeria.		
3	Importance of special education to general education.		
4	Society's attitude towards exceptional children.		
5	Definition of gifted children.		
6	Characteristics of gifted children.		
7	Identification and assessment of gifted children.		
8	Areas of superior abilities.		

9	Appropriate teaching techniques for gifted children.		
10	Definition of leaning disabilities.		
11	Signs, causes and problems associated with learning disabilities.		
12	Preventive measures against learning disabilities.		
13	Informal techniques for identification of the learning disabled.		
14	Supportive and referral services available for the learning disabled.		
15	Curriculum adaptations for the learning disabled.		
16	Types and causes of behaviour disorders in children.		
17	Problems associated with behaviour disorders.		
18	Procedures for identification and assessment of behaviour disorders.		
19	Referral and remedial services on behaviour disorders.		
20	Management techniques and preventive measures against behaviour disorders.		
21	Definition of mental retardation.		
22	Signs causes, types and problems associated with mental retardation.		
23	Informal techniques for identifying mental retarded children.		
24	Referral services available for the mentally retarded.		
25	Classroom organization and management for the mentally retarded.		
26	Preventive measures against mental retardation.		
27	Definitions of what constitute physical and health impairments.		
28	Signs, causes and problems associated with physical and health impairments.		

29	Administration of simple informal test in physical and health impairments.		
30	Referral and supportive services available in the locality for Physical and health impairments.		
31	Group and individualized classroom procedures for physical and health impairments.		
32	Some preventive measures against physical and health impairments		
33	Definitions of speech impairment and hearing impairment.		
34	Some signs, types, causes and problems associated with speech disorder and hearing impairment.		
35	Use of informal techniques for identification of speech disorders.		
36	Group and individualized instructional methods for speech disorders.		
37	Referral services available for speech disorders.		
38	Preventive measures against speech disorders.		
39	Definition of visual impairment.		
40	Signs, causes and problems associated with visual impairment.		
41	Characteristics of children with visual problems.		
42	Formal techniques for identification and assessment of children with visual problems.		
43	Referral services available for children with visual problems.		
44	Management methods and suitable aids for visual impairments.		
45.	Prevention of visual impairment.		

APPENDIX V

FACILITIES, EQUIPMENT AND RESOURCES INVENTORY (FERI)

Dear Respondent,

Kindly complete this questionnaire by ticking (√). If available, to adequacy and utilisation. If not available do not tick anything on Adequacy and utilization.

Thanks.

S/N	**Facilities, Equipment and Resources**	AVAILABILITY		ADEQUACY		UTILIZAITON	
		Available	**Not Available**	**Adequate**	**Not Adequate**	**Utilized**	**Not Utilized**

APPENDIX VI

QUESTIONNAIRE ON THE PROBLEMS OF CURRICULUM IMPLEMENTATION (QOPCI)

Dear Respondent:

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio-Demographic Information (Lecturers)

Name of Institute: _____

……Qualification: B.Ed ☐

B.Sc + PGDE ☐

M.Sc. ☐

M.Sc + PGDE ☐

PhD without Education Qualification ☐

PhD with Education Qualification ☐

Teaching Experience: Below 5 years ☐

5-10 years ☐

11-15 years ☐

16 years above ☐

Sex: Male ☐

Female ☐

Section B: Rating of Curriculum Objectives

Kindly tick Yes (√) for any of the problems you encounter in the course of implementing the "Elements of Special Education Curriculum courses in your college. Where you tick Yes, (√) the extent of the problem.

SN	Possible Problems	YES	NO	Extent		
				Very Serious	Serious	Not Serious
1	Students apathy for Special Education					
2	Death of qualified lecturers					
3	Poor exercise on the part of lecturers					
4	Students' lack of interest in Special Education					
5	Society's negative attitude to disable people					
6	Students level of seriousness is low					
7	Lack of facilities and equipment					
8	High cost of Equipment					
9	Lack of funds					
10	Ineffective teaching methods.					

APPENDIX VII

STRATEGIES FOR TEACHING SPECIAL EDUCATION CONTENT (SPEC)

Dear Respondent:

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio Demographic Information for Lecturers

Name of Institute: _____

……Qualification: B.Ed ☐

B.Sc + PGDE ☐

M.Sc. ☐

M.Sc + PGDE ☐

PhD without Education Qualification ☐

PhD with Education Qualification ☐

Teaching Experience: Below 5 years ☐

5-10 years ☐

11-15 years ☐

16 years above ☐

Sex: Male ☐

Female ☐

Section B: Strategies for Implementation

Kindly tick (√) appropriate responses on each of the various method used for teaching Elements of Special Education Curriculum in your college.

SN	Strategies	Always	Sometimes	Rarely	Never
1	Lecture method				
2	Discussion				
3	Demonstration				
4	Laboratory				
5	Project				
6	Excursion/Field Trip				
7	Group Work				

APPENDIX VIII

OBSERVATION SCHEDULE FOR CLASSROOM TEACHING OF ELEMENTS OF SPECIAL EDUCATION (OSCTESE)

Name of institution:_____

Course:_____

Level:_____ **Time:**_____

Dear Observer,

Kindly rate the features observed by ticking from 1 to 5 as applicable. 1 indicate the lowest rating while 5 indicate the highest.

ITEM	LESSON FEATURES	5	4	3	2	1
1	**Class Atmosphere** Conduciveness of the classroom to the teaching of special education.					
2	Arrangement of seats in line with the strategy used, ease of movement and proper ventilation.					
3	**Instructional Objectives** Instructional objectives well communicated to the students.					
4	Extent to which the content and activities relate to the objectives.					
5	Coverage of relevant aspects of the topic based on the objectives.					
6	**Teaching Techniques** Evidence of well planned and internally consistent lesson.					
7	Evidence of subject matter mastery by the lecturer.					
8	Variety and effectiveness of procedures/strategies in line with the principles of special education.					

ITEM	LESSON FEATURES	5	4	3	2	1
9	Use of lecture/project/concept mapping. Analogies/Topic study/ Dramatization/Combination of methods.					
10	Skill in questioning (type, frequency, relevance, distribution, provocativeness, answerability).					
11	Reflection of real-life challenges and problems in classroom teaching.					
12	Potentiality of the lesson in developing special skills and positive attitude in students.					
13	Creation of avenues for solving hypothetical problems.					
14	Skill and language of communication of the lecturer.					
15	Provision and effectiveness of relevant instructional materials and equipment.					
16	Involvement of students in class activities and discussion.					
17	**Evaluation and Assignments** Adequate evaluation of attainment of instructional objectives.					
18	Coverage of the six domains viz knowledge comprehension, application, analysis, synthesis and evaluation.					
19	Relevant and adequate assignments on the issues taught.					
20	Relevant and adequate home/out of class projects or activities based on the concepts taught.					

APPENDIX IX

TEST OF STUDENTS' KNOWLEDGE OF SPECIAL EDUCATION (TESK)

Section A: Socio-Demographic Information

Name of Institution: ……

Age: Below 18 years ☐

19-21years ☐

Above 21 years ☐

Sex: Male ☐

Female: ☐

Section B: Instructions

Kindly tick √ the option that best suits the questions from the possible answers lettered A – D.

Attempt all Questions

Time allowed: 30 minutes.

1. Special Education as a discipline is education designed to:
   (a) teach how to relate with the disabled.
   (b) treat students' disabilities.
   (c) suit the special needs of children.
   (d) make a case for people living with disabilities

2. Beneficiaries of special education include the following except the:
   (a) gifted and talented
   (b) hearing impaired
   (c) maladjusted students
   (d) learning disabled

3. Delayed labour can lead to a child having …
   (a) visual impairment
   (b) mental retardation
   (c) physical disability
   (d) multiple disability

4. This group of people are usually very few in any population:
   (a) Hearing disabled
   (b) The mentally retarded
   (c) The gifted and talented
   (d) The visually impaired

5. The clinical classification of the mentally retarded persons identifies all of the following except:
   (a) Phenylketouria
   (b) Mongols
   (c) Morons
   (d) Hydrocephaly

6. When a person talks louder and speaks at a lower speed than others, it is likely that …
   (a) he or she is visually impaired
   (b) he or she is mentally retarded
   (c) he or she is learning disabled
   (d) he or she has hearing impairment

7. Visual impairment refers to …
   (a) blindness
   (b) inability to see clearly
   (c) eye problem
   (d) eye impairment

8. When a person is in a state of development characterized by incapability in adapting himself to the normal environment to his fellows or peers, he or she is said to be:
   (a) emotionally disturbed
   (b) physically handicapped
   (c) learning disabled
   (d) mentally retarded

9. The educational programme for the disabled can be provided in the following except …
   (a) normal school
   (b) Special school
   (c) Integrated school
   (d) Inclusive school

10. Educational approaches for the hearing impaired persons include …
   (a) repetition, oral and body movement
   (b) sign language, repetition and body movement
   (c) body movement, repetition and total communication
   (d) oral, manual and total communication

11. Significant developmental disparity found among children which requires special education is referred to as:
   (a) individual differences
   (b) learning disability
   (c) mental retardation
   (d) stunted growth

12. Enrichment is an educational programme for the …
   (a) visually impaired
   (b) hearing impaired
   (c) gifted and talented
   (d) learning disabled

13. To help the deaf, the teacher must ensure one of the following …
   (a) shouting loud in communication
   (b) frequent activities for the students

(c) proper sitting arrangement in the class
(d) giving more assignments to students

14. The following are characteristics of children with learning disabilities except...
(a) high frustration tolerance
(b) emotional instability
(c) hyperactivity
(d) short attention span

15. In cognitive information processing, persons with learning disabilities …
(a) only recall information
(b) can only learn by note
(c) can develop their own style of learning
(d) cannot memorize facts and information

16. Technological assistance that are available to the hearing impaired include …
(a) audio-visuals
(b) commuter assisted instruction
(c) simple speech equipment
(d) radio and television

17. When a person's behaviour is disturbed due to the dysfunction of the brain, the person becomes …
(a) mentally retarded
(b) delinquent
(c) learning disabled
(d) maladjusted

18. Communication involves the following except …
(a) ideas, feelings and needs
(b) message, sender, receiver
(c) two or more individuals
(d) communication disorders

19. To address learning disability, you as a teacher cannot use …
(a) organizational skills
(b) various learning tasks
(c) hearing aids
(d) short lesson periods

20. "A student is not blind and still can't see; not deaf but can't hear". He or she is …
(a) mentally retarded
(b) stubborn
(c) disabled in learning
(d) multiple disabled.

KEY TO TESK

1. C
2. C
3. A
4. C
5. C
6. A
7. B
8. D
9. A
10. D
11. B
12. C
13. C
14. A
15. D
16. B
17. C
18. D
19. C
20. C

APPENDIX X

STUDENTS' ATTITUDE TO SPECIAL EDUCATION SCALE (SASES)

Dear Respondent,

This questionnaire is purely for academic purposes, kindly respond as it applies to you by ticking (√) the appropriate options to the items.

Thanks.

Section A: Socio-Demographic Information

Name of Institution: _____

Age: Below 18 years ☐

19 – 21 years ☐

Above 21 years ☐

Sex: Male ☐

Female ☐

Subject Combination: _____

Section B: Attitude to Special Education Scale

Kindly tick as appropriate

KEY: SA - Strongly Agree

A - Agree

D - Disagree

SD - Strongly Disagree

Item	Statements	SA	A	D	SD
1	I am interested in studying more about how to teach children with special needs.				
2	I can acquire the ability to teach learners with special needs well.				
3	Only special education students in the College need to learn about how to teach students with special needs.				
4	Teaching every student in the college the basic issues in special education is a waste of time.				
5	I need to be able to adapt the curriculum of the regular school to suit the needs of special needs students.				
6	Students with disabilities need to be in special schools, not to mix up with students in regular schools.				
7	I will be frustrated trying to teach learners with special needs.				
8	Diagnosis and identification of students with special needs is an interesting exercise.				
9	I enjoy learning about sign language and other specialised means of communicating with students with special needs.				
10	I like teaching and working with students with special needs.				

APPENDIX XI

NATIONAL COMMISSION FOR COLLEGES OF EDUCATION

ABUJA

LIST OF ACCREDITED AND APPROVED NCE AWARDING INSTITUTIONS IN NIGERIA AS AT August, 2009

This publication shows:

1. The list of approved NCE awarding institutions in Nigeria as at 30th January, 2009
2. The list of Colleges of Education granted approval by the Federal Ministry of Education to run degree programmes in affiliation with various Universities.

- All Federal Colleges of Education willing to run degree programmes must have approval from the Honourable Minister of Education before entering into affiliation agreement with any University.
- State Colleges of Education willing to run degree programmes must have their enabling laws/ edicts amended by the States Houses of Assembly
- Colleges should note that ETF intervention projects are meant for the running of NCE programmes.
- Further enquiries can be obtained from the office of the Executive Secretary, National Commission for Colleges of Education, Abuja.

Federal Colleges of Education

S/No	Name of College	Address and Location	Year of Establishment
1	FCE Abeokuta	P.M.B. 2096, Ogun State	1976
2	FCE (T) Akoka	P.O. Box 269, Yaba , Lagos State	1967
3	FCE (T) Asaba	P.M.B., 1044, Asaba, Delta State	1986
4	FCE (T) Bichi	P.M.B., 3473, Bichi, Kano State	1988
5	FCE Eha- AMufu	P.M.B.2001, Eha-Amufu, Enugu State	1981
6	FCE (T) Gombe	P.M.B. 60, Gombe, Gombe State	1986
7	FCE (T) Gusau	P.M.B.1088, Gusau, Zamfara State	1986
8	FCE Kano	P.M.B.3045, Kano, Kano State	1965
9	FCE Katsina	P.M.B.2041, Katsina, Katsina State	1976
10	FCE Kontagora	P.M.B. 39, Kontagora, Niger State	1986
11	FCE Obudu	P.M.B. 1038, Obudu, Cross Rivers State	1986
12	FCE Okene	PMB 1026, Okene, Kogi State	1974
13	FCE (T) Omoku	P.M.B.11, Omoku, River State	1986
14	Adeyemi COE Ondo	P.M.B. 520, Ondo, Ondo State	1964
15	FCE (Special) Oyo	P.M.B.1089, Oyo, Oyo State	1977
16	FCE Pankshin	P.M.B.27, Pankshin, Plateau State	1974
17	FCE (T) Potiskum	P.M.B.1013, Potiskum Yobe State	1986
18	FCE (T) Umunze	P.M.B.189, Umunze, Anambra State	1986
19	FCE Yola	P.M.B.2043, Yola Adamawa State	1974
20	FCE Zaria	P.M.B.1041, Zaria, Kaduna State	1962
21	Alvan Ikoku FCE Owerri	P.M.B.1033, Owerri, Imo State	1963

State Colleges of Education

S/No	Name of College	Address and Location	Year of Establishment
1	Akwa Ibom COE	PMB 1019, Alfaha-Nsit Etinan, Akwa Ibom State	1991
2	COE Agbor	PMB 2090, Agbor, Delta State	1979
3	COE Akwanga	PMB 05, Akwanga, Nasarawa State	1978
4	COE Ankpa	PMB 1033, Ankpa	1981
5	Adamu Augie COE, Argungu	PMB 1012, Arungu Kebbi State	1993
6	COE Arochukwu	P.M.B. 1000, Arochukwu, Abia State	1993
7	COE Azare	PMB 44, Azare, Bauchi State	1977
8	Umar IBN Ibrahim Elkanemi COE	PMB 16, Bama, Borno State	1987
9	Isa Kaita COE	PMB 49, Dutse-Ma, Katsina State,	1991
10	COE Ekiadolor	PMB 1144, Benin, Edo State	1988
11	COE Gashua	PMB 02, Gashua Yobe State	1988
12	Kaduna State COE	PMB 1024, Gidan Waya, Kaduna State	1978
13	COE Gindiri	PMB 1000, Gindiri, Plateau State	1980
14	COE Gumel	PMB 1002, Gumel, Jigawa State	1987
15	COE Hong	PMB 2237, Hong, Adamawa State	1982
16	Ikere-Ekiti COE	PMB 250, Ikere, Ekiti State	1977
17	COE Ila-Orangun	PMB 207, Ila-Orangun, Osun State	1988
18	COE Ilesa	PMB 5089, Ilesa, Osun State	1977
19	COE Ilorin	PMB 1375, Ilorin, Kwara State	1974
20	COE Zing	PMB 1021, Jalingo, Taraba State	1978
21	COE Katsina-Ala	PMB 2008, Katsina-Ala, Benue State	1979
22	COE Kumbotso	PMB 3218, Kumbotso, kano State	1981
23	COE (T) Lafiagi	PMB 01, Lafiagi, Kwara State	1993
24	Kashim Ibrahim COE	PMB 1469, Maiduguri, Borno State	1978
25	COE Maru	PMB 1002, Zamfara State	2001
26	COE Minna	PMB 39, Minna Niger State	1978

27	Michael Otedola College of Primary Education	PMB 1028, LOCOPED Noforija-Epe, Lagos State	1995
28	COE Nsugbe	PMB 1734, Nsugbe, Anambra State	1981
29	COE Oju	PMB 2035, Oju, Otukpo Benue State	1992
30	COE Oro	PMB 309, Oro, Kwara State	1984
31	Adeniran Ogunsanya COE	PMB 007, Oto-Ijanikin Lagos State	1973
32	Delta State College of Physical Education	PMB 4088, Mosogar, Sapele, Delta State	2003
33	Emmanuel Alayande COE	PMB 1010, Oyo State	1980
34	COE-Port-Harcourt	PMB 5047, Port-Harcourt, Rivers State	1974
35	Shehu Shagari COE	PMB 2029, Sokoto State	1970
36	COE Waka-Biu	PMB 1502, Waka-Biu, Borno State	1986
37	COE Warri	PMB 1251, Warri, Delta State	1990
38	FCT COE Zuba	PMB 61, Garki-Abuja	1998
39	Mohammadu Goni College of Legal and Islamic Studies (MOGOLIS)	PMB 1526, Maiduguri, Borno State	1982
40	Ebonyi State COE (T)	PMB 002, Ikwo, Ebonyi State	2001
41	Enugu State COE (T)	PMB 01793, Abakaliki Rd, Enugu	2006
42	Tai Solarin College of Education	P.M.B 2128, Omu-Ijebu, Ijebu-Ode Ogun State	1977
43	Cross River State College of Education	P.M.B 1171 Akampa, Calabar, Cross River State. (Re-established)	2008

Privately owned Colleges

S/No	Name of College	Address and Location	Year of Establishment
1	Institute of Ecumenical Education (Thinkers Corner)	P.O. Box 2001, Enugu, Enugu State	2004
2	Jama'atu Nasril Islam COE	P.O. Box 96, Kaduna, Kaduna State	1997
3	OSISA Tech. COE	PMB 1161, Enugu, Enugu State	2001
4	St. Augustine COE	PMB 1140, (Project Time) 2 Moronfolu Street, Akoka Lagos State	1975
5	African Thinkers Community of Inquiry	PMB 15510, Enugu, Enugu State	2004
6	Ansar-Ud-Deen COE	6 Karimu Street, Isolo, Lagos State	2004
7	Delar COE Ibadan	PMB 6379, Ibadan, Oyo State	2003
8	Muftau Olanihun COE, Ibadan	PMB 2705, Agodi Gate, Ibadan Oyo State	2003
9	Redemption COE, Aba	P.O. Box 5216, Aba Abia State	
10	City College of Education Mararaba	P.O. Box 3094, Garki-Abuja	2003
11	Muhideen COE, Ilorin	13, Idiorombo Lane, P.O. Box 370 Ilorin, Kwara State	2008
12	College of Education, Offa	P.O. Box 433, Osunte Rd, Offa Kwara State	2006
13	Bauchi Institute of Arabic & Islamic Studies	Bakari Duku Primary School, P.O. Box 2031, Bauchi, Bauchi State	2005
14	Cornerstone College of Education	Jones Avenue Ikeja, Lagos	2006
15	All States College of	P.O. Box 31, Ero, Akure, Ondo State,	2006

	Education		
16	African Church COE, Lagos	P.M.B 21112, Agege, Lagos State	2008
17	Assanusiya COE, Odeomu, Osun State	PMB 2002, Odeomu, Osun State	2005
18	Best Legacy College of Education Ogbomoso	Oke-Owode Ikirun Road, P.O. Bix 1744, Ogbomoso,	2007
19	Yewa Central College of Education	P.MB 2014, Abeokuta, Ogun State	2003
20	Unity College of Education Aukpa-Adoka	P.O. Box 1289, Otukpo Benue State	2008
21	National College of Education Nsukka	P.M.B 2003 Nsukka, Enugu State	2008

Other Federal Institutions offering NCE

S/No	Name of College	Address and Location	Year of establishment
1	National Teachers Institute (NTI)	PMB 2191, Kaduna,, Kaduna State	1978
2	Nigeria Army School of Education	PMB 1410, Ilorin, Kwara State	1987

List of Polytechnics offering NCE programmes

S/No	Name of College	Address and Location	Year of Establishment
1	Plateau State Polytechnc Barkin Ladi	PMB 02023, Barkin ladi, Plateau State	1978
2	Abubakar Tatari Ali Polytechnic	PMB. 0094, Bauchi, Bauchi State	1992
3	Waziri Umaru Federa polytechnic, Birnin kebbi	PMB1034,Kebbi,kebbi state	1978
4	Kaduna polytechnic	PMB 2021,Kaduna state	1968
5	Hassan Usman Katsina polytechnic	PMB 2052,Katsina,katsina state	1973
6	Ramat Polytechnic	PMB 1070, Maiduguri,Borno state	1978
7	Mohammed Abdullahi Wase Polytechnic	PMB 3080 ,Kano, Kano state	1978

LIST OF COLLEGES OF EDUCATION THAT HAVE THE APPROVAL TO RUN DEGREE PROGRAMMES

S/No	**NAME OF COLLEGES**
1	Adeyemi College of Education ,Ondo
2	Federal College of Education, Zaria
3	Federal College of Education, Kano
4	Alvan Ikoku College of Education ,Owerri
5	Rivers state College of Education, Port-Harcourt

Summary

1.	Federal College of Education	-	21
2.	Other Federal NCE awarding institutions	-	02
3.	Sate of College of Education	-	43
4.	Privately Owned College	-	21
5.	Polytechnic Offering NCE	-	07
	Total	-	94

Approved Colleges of Education running degree programmes - 5

Professor Muhammad Ibn Junaid

Executive Secretary, (NCCE, Abuja)