

**AN ANALYSIS OF INSTRUCTIONAL RESOURCES FOR SANDWICH
PROGRAMME IN SA'ADATU RIMI COLLEGE OF EDUCATION,
KANO STATE, NIGERIA**

BY

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DEDICATION

This research work is dedicated to my beloved parents, children and the whole family members.

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Abstract

The study analyzed instructional resources used for sandwich programmes at Sa'adatu Rimi College of Education Kano State, Nigeria. The objectives of the study were to Identify the available Instructional resources used for Sandwich programmes at Sa'adatu Rimi College of Education, Kano State, to examine the Adequacy of instructional materials used for sandwich programmes at Sa'adatu Rimi College of Education, Kano State, to examine the quality of instructional materials used for sandwich programmes at Sa'adatu Rimi college of Education, to examine the impact of instructional Materials used for Sandwich programmes at Sa'adatu Rimi college of education ,Kano State. The research adopted a survey design and population of the research comprised 300 registered students on Sandwich course and 1020 students on conventional course at Sa'adatu Rimi college of Education, Kano State, amounting to 1320. A sample of 297 was drawn through simple random sampling technique, the research instrument used is NCCE benchmark checklist for direct observation and the other one is a questionnaire named Questionnaire for Instructional materials for sandwich programmes, (QIMFSP). The data collected were analyzed using frequency count and percentage. The findings show that: Instructional Materials Available for Sandwich programmes at Sa'adatu Rimi College of Education Kano State includes Lecturers, supporting staff, Laboratories, Computer set, Swivel typing chair, drop desk/typing convertible, Instructor desk, Instructor Chair, Stapling Machine, Stapling remover, Perforator, Stop watch, Wall clock, Demonstration stand and File cabinet. The Availability of Instructional resources for Sandwich Programme at Sa'adatu Rimi College of Education are enough and adequate. The Adequacy of Instructional materials used at Sa'adatu Rimi College of Education Sandwich Programme includes, all the facilities mentioned above. Also the quality of instructional materials for Sandwich programmes includes; qualitative Lecture note, Venue, and Welfare for Academic Staff, Offices and Toilets. The Impact of Instructional Materials in Sandwich programmes at Sa'adatu Rimi College of Education, Kano State Includes Instructional materials help in teaching and learning, if there is no available resources teaching will be problem, use of ICT helps a lot in sandwich programme, Sandwich programmes needs ICT materials for their activities, and e- books are available at sandwich centers. The recommendations include: the Availability of Instructional Material at Sa'adatu Rimi College of Education should be improve due to the increase number of the students for the programmes yearly. ICT materials should be provided.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

In Nigeria, there has been growing concern about the falling standard of education. Linked closely to this in recent times is the need for general improvement of primary school education, especially teacher competency. This concern brought about the need for sandwich program, distance, and part-time education opportunities for primary school teachers to upgrade their capabilities. Virtually almost all the universities and colleges in Nigeria are providing sandwich, distance or part-time education for the moral, intellectual, aesthetic and general improvement of employees in various establishments. Higher Education Authority of Ireland (2004) defines sandwich program as a program that has a significant period of work experience built into it such that the program is extended beyond the normal length of similar programmes without the sandwich element. However, sandwich program has been encountering many challenges all over the world; for example, one minister for education in Ghana called the attention of the principal officers of education in Ghana that they should not allow the teachers under their supervision to undergo sandwich programme. In Nigeria also, sandwich has many problems like inadequate funding from both three tiers of government and lastly in the Sa'adatu Rimi College of Education Kano State.

Education is generally recognized as an instrument for social, economic, political, scientific and technological development. This is the reason why no society can afford to ignore the education of its citizens as this would result in its underdevelopment (Azikiwe, 2010). Education is generally seen as an aggregate of all the process by which an individual develops his/her abilities, attitudes and behavior which are of value to the society in which

he/she lives. It is a conscious training of the young in a way which would be useful to him/her and to the society to which he/she belongs. Whether the end result is to advance at work, make a career move, or simply learn about a fascinating new topic, statistics from the U.S. Department of Education show that adult students are the fastest growing educational demography, with the numbers steadily increasing. In 1970, 28 percent of all college students were 25 years of age or older. In 1998 the number of adult learners had increased to 41 percent. The Association for Nontraditional Students in Higher Education (ANTSHE) reports that students who are over 25 make up as much as 47 percent of the new and returning student population on many of today's college campuses.

Many colleges and universities are making it convenient for various employees to return to school through distance learning opportunities, sandwich programmes, night and weekend classes, and entrepreneurial programmes that fit their unique needs. Hence, NCE programme has continued to be important and this is why there has been a growing concern in the last few years about the quality of education through sandwich program that has been offered in the nation's colleges and institutions. Devid books (2014) maintained that sandwich program is part of the innovative program in the field of Adult education in Nigeria. Hence, it is an aspect of the total education programmes. NCE through sandwich program encompasses education for teaching profession, economic understanding, business administration and a host of others. One can as well agree that NCE programmes is the instructions given in tertiary institutions to prepare students for jobs in teaching profession, industries, administration and other aspects of human endeavor. To this end NCE program should simply be seen as a means of adjustment of the individual to his teaching environment. However, NCE programme enables the recipient to:

- Develop intellectual skills for personal use in the future
- Acquire the basic knowledge and skills of teaching and learning process
- Relate the knowledge and skills acquired to national development
- Develop intellectual skills in academic line
- Prepare clients for further training in teaching profession
- acquire orientation and intellectual skills with which to start a life of work for those who may not undergo further training (Igboke, 2005:4)

A College of education is a post-secondary education institution in Nigeria, designed specifically to train and prepare students for the teaching profession. However, colleges of education provide exposure and learning for prospective teachers at the level on the Nigerian Certificate of Education (NCE) in instructional methodology/pedagogy and theories of instruction and curriculum. Hence, the National Policy on Education (2004) stipulates that the minimum entry qualification into the teaching profession shall be the NCE.

Sandwich education programmes at the colleges of education are designed to achieve the following objectives according to the National Commission for Colleges of Education NCCE (2008):

1. To produce well qualified and competent NCE graduates in teaching profession who will be able to teach subject in primary, secondary and other related educational institutions.
2. To produce NCE teachers who will be able to inculcate the methods and strategies of teaching and learning process into the society.
3. To produce NCE teachers who will be involved in the much desired revolution of teaching development right from primary and secondary schools.

4. To equip students with necessary competencies so as to qualify them for a post-NCE degree programmes in teaching profession.

In order to implement and achieve these objectives of education at Colleges of education, the National Commission for Colleges of Education (NCCE) which is the government regulatory and supervisory agency for the Colleges of Education in Nigeria has stipulated the minimum courses offering and resource inputs that need to be available for establishment and administration of National Certificate on Education programmes at that level.

The NCCE (2008) classified resources in education into the following: (1) Physical Facilities- classrooms, staff offices, libraries, laboratories and studios; (2) The Equipment and Supplies- photocopiers, tape-recorders, headphones, perforators, punching machines, stopwatch, stapling machine and others; (3) The Personnel- lecturers, instructors, technologists, and other support staff. Instructional resources are important aspect of these resource inputs. Instructional resources according to Ugwuanyi and Eze (2008) are those basic requirements that aid and facilitate effective school teaching and learning. Instructional resources comprise human beings (teachers), facilities and equipment for teaching and learning.

However, according to NCCE (2008), some of the minimum resources needed to run and administer NCE program in the college of education are: a classroom that can conveniently accommodate thirty students with passage space, minimum of nine lecturers in the various subject areas and five support staff, well furnished staff offices, library stocked with current and up-to-date books/journals, at least one typing laboratory, shorthand studio, and a model office, all having the necessary equipment such as good and functional computers,

typewriters, stop watch, tape recorder/consoles, photocopier, file trays, file cabinets, adding and listing machines, punching machine and perforators among others.

Furthermore, in order to ensure that these minimum standards are maintained, the NCCE conducts a routine accreditation exercise of programmes run in the colleges of education. The major objective of accreditation programme according to National Board for Technical Education (2004) is to ensure that schools attain, sustain and ultimately exceed the minimum standards in curriculum, staffing, physical facilities and equipment.

However, the use of instructional resources, have been observed as an important factor to qualitative and quantitative education. The importance to teaching and learning of the provision of instructional resources cannot be over-emphasized. Facilities and equipment constitute a strategic factor in organizational functioning and determine to a very large extent the smooth functioning of any social organization or system including education (Owoeye & Yara, 2011). Similarly, availability and adequacy of instructional resources promote effective teaching and learning activities in schools while their inadequacy and/or unavailability may affect the academic performance of the learner negatively. The success of any system is a function of the available resources to run the system. Sandwich education programme as a program can only be effectively implemented with adequate educational resources. Teaching facilities and equipment help to stimulate the interest of the students. Whenever these facilities and equipment are optimally utilized, they generate greater students' interest in the learning system and also enhance retention of ideas. The realization of the objectives of any educational programme depends on a number of factors such as the availability and adequacy of instructional resources. Availability and adequacy of relevant equipment, materials and

tools in teaching facilitates learning, stimulate both teachers and students and enhances students' achievement.

Oyeniya (2010) maintained that by inference, instructional resources have been positively linked with educational efficiency, students' academic performance and their capabilities when they leave school. This is why there has been a growing concern about the standard of education offered in this nation's schools. Ukoh and Ahia (2004) observed that in colleges of education, a lot of fraud is being perpetrated by management in the effort to meet the accreditation agency's stipulations. In their view, equipment and facilities are often borrowed only to be returned once the accreditation is over leaving the programme not richer after the accreditation visit. This is the situation of many tertiary institutions in Nigeria. This unwholesome situation of education in Nigeria has subsequently brought serious concern about the quality and quantity of trained teachers and facilities in the schools.

Hence, the study is set to examine the instructional resources for sandwich programmes in Sa'adatu Rimi College of education, Kano State, Nigeria. However, the examination of the above instructional resources is based on the minimum Standards stipulated by NCCE (2008) as its benchmark.

1.2 Statement of the Problem

Instructional resources and facilities are necessary for the utmost realization of the goals of education. In this era of accelerated technological development, modern instructional facilities and equipments are not only important; they are expected to be available in a reasonable state as well as qualitative and properly utilized in our schools. The improvement of the teaching and learning process has been of great concern to educators. According to Williams (1973) classroom congestion and inadequate facilities characterize several schools

in the less developed countries. The situation does not favor the development of students' potentials.

On the other hand, the number of student needs to match with the number of instructional resources for the successful conduct of the programmes. Hence, there is the need to analyze the instructional resources available for sandwich programmes at Sa'adatu Rimi College of Education Kano State, Nigeria in relation to NCCE standards.

1.3 Objectives of the Study

The objectives of this study were to:

- i. Identify the available Resources used for Sandwich Programmes at Sa'adatu Rimi College of Education, Kano State.
- ii. Examine the Adequacy of Instructional Materials used for sandwich Programmes in Sa'adatu Rimi College of Education Kano State.
- iii. Examine the Quality of Instructional Materials used for sandwich programmes at Sa'adatu Rimi College of Education Kano State.
- iv. Examine the Impact of Sandwich programmes at Sa'adatu Rimi College of Education Kano State, in relation to NCCE Standards.

1.4 Research Questions

The following research questions guided the study;

- I. What are the available resources used for Sandwich Programme at Sa'adatu Rimi College of Education Kano State?

ii. What is the adequacy of Instructional Materials used for Sandwich Programmes in Sa'adatu Rimi College of Education Kano State?

iii. What is the quality of Instructional materials for Sandwich Programmes in Sa'adatu Rimi College of Education Kano State?

iv. What is the Impact of using Instructional Materials for Sandwich Programmes in Sa'adatu Rimi College of Education Kano State?

1.5 Scope and Delimitation of the Study

The study focuses on the availability, adequacy and quality of instructional resources for teaching NCE through sandwich programmes at Sa'adatu Rimi College of Education Kano State of Nigeria in relation to NCCE standards. Its coverage is delimited to the analysis of the available instructional materials, in terms of availability, adequacy and quality in the Sandwich Programmes of Sa'adatu Rimi College of Education Kano State of Nigeria.

1.6 Significance of the Study

The findings of this research would be of benefit to the authorities in colleges of education, the government and/or proprietors of the colleges of education and of course, the National Commission for College of Education (NCCE) and other stakeholders especially researchers in sandwich NCE programmes and other related fields. This study was to provide facts and information on the level of quality and quantity of instructional material available for sandwich NCE programmes of Sa'adatu Rimi College of Education Kano State. This could enable the authorities of the colleges of education to plan recruitment and employment policies such that more staff was employed where inadequate. Also, the findings of the study was no doubt, help the authorities of colleges of education to plan for the procurement of

facilities and equipment where needed as well as update with the necessary state-of-the-art equipment for the NCE programme.

Similarly, the government/proprietors of colleges of education will be aware of the resources needs of the colleges of education by virtue of the information that would be provided by the findings of this investigation. The awareness could enable the government and/or proprietors to re-direct funds where needed.

The study also provides facts and indicates the colleges of education with serious problem of instructional resources. These facts will help the NCCE to plan for its supervisory and regulatory activities and beam its search light on those institutions.

Also, researchers and other stakeholders in NCE program and related fields will be provided with input materials, data, facts and ideas for other researches through the findings of this study.

1.7 Operational Definition of Terms

The following terms were defined in the context of their usage in the study as follows:

Instructional Resources; It refers to both human and material resources used in teaching and learning process for sandwich programme at sa'adatu rimi college of education Kano State.

Quality; ability of a teacher to teach what he|she was expected to teach and the durability of the material resources for great achievement of the sandwich programmes at Sa'adatu Rimi College of Education , Kano State.

Adequacy; It refers to the total number of human and material resources found available for sandwich programmes at Sa'adatu Rimi College of Education, Kano State against the NCCE standards.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter was to review literature related to the variables of the study. The review of related literature for this study is organized under the following headings:

2.1 National Commission for Colleges of Education Benchmark

2.1.1 Concept of Instructional Resources

2.1.2 Types of Instructional Resources

2.1.3 Open and Distance Education

2.1.4 Sandwich Programmes Meaning and Objectives

2.2 National Commission for Colleges of Education Benchmark on Sandwich Programmes

2.3 Quality of Instructional Resources for Sandwich Programmes

2.4 Impact of Instructional Resources for Sandwich Programmes

2.5 Summary of Literature Review and Uniqueness of the Study

2.1 National Commission for Colleges of Education Benchmark

The National Commission for Colleges of Education (NCCE) as the governing body of colleges of education was established by an Act in 1989 as the third leg of the tripod of excellence in the supervision of tertiary education in Nigeria. Its mandate includes inter alia, the laying down of minimum standards (Benchmark) for all programmes of teacher education and accrediting their certificates and other academic awards.

(a) Availability of Resources for Sandwich Programme by NCCE Benchmark

A well planned programme will fail if at the stage of implementation, the necessary resources are not supplied (Obi & Akume, 2002). Education is knowledge and competency based discipline; therefore resources (facilities and equipment) are highly required for its effective

implementation. However, this is not to say that equipment or a good teacher is more important than a well planned programmes but it does say that, it is not possible for a good teacher to accomplish his/her objectives of a well-planned programmes without the necessary and adequate resources. Azih (2008) rightly pointed out that learning would be less meaningful without the use of teaching facilities and equipment and that student would grope in darkness for long before they can get a grasp of what the teacher says. The success of any programmes is dependent on the available resources. Ugwuanyi and Eze (2008) maintained that the provision of adequate and appropriate learning experiences which generate effective or meaningful learning requires adequate resources. Similarly, Bongotons and Onyenwe (2010), reiterating the need for availability and adequacy of educational resources in education programme believe that this will accelerate the achievement of all round preparation of a teacher's education. They further opined that resources availability enhances education students' acquisition of knowledge and technical skills required in one or more areas of teaching occupations, hence providing enough practical experience. Azuka (2003) submitted that the success or failure of any classroom interaction depends to a large extent on the availability and functionality of instructional equipment and facilities, the teacher and the curriculum. It is in recognition of the above that the school regulatory body such as the National Commission for Colleges of Education (NCCE) stipulates the minimum standards required of colleges of education in terms of resources and curriculum. For instance, the NCCE (2008) minimum standard for education programme (sandwich) stipulates that in terms of personnel, a minimum of nine lecturers is required, all computer literate. Atleast, one academic staff (lecturer) per subject area with a minimum qualification of a second degree. The document maintains that staff/students ratio for skilled subject like; shorthand, typewriting and accounting should be 1:20 and 1:30 for other subjects. Other personnel as

required by NCCE (2008) are, at least one school officer, two secretaries, two typists, two clerical officers, one technician, two studio/laboratory attendants and two cleaners and messengers.

(b) Personnel in Sandwich Programme by NCCE benchmark

Among basic facts of planning considered in sandwich programmes as an educational enterprise, is the management of personnel resources. The personnel resources in an academic understanding would encompass all the persons (both men and women) from the top to the bottom hierarchy of an organization (Aliyu, 2006).

Personnel resource is the available manpower or labour force which an organization has at a given period and being used for the production of goods, and services. Esene (2002) stated that personnel resources not capital, nor income, nor material resources, constitutes the ultimate basis of wealth of nations. Esene added that in education, the personnel resources include the teachers, administrative and supporting staff as well as other workers. These personnel have skills, values, attitudes and experiences which are crucial for producing high quality students. Thus, for personnel resources to be relevant to academic programmes specifically, they have to be trained and re-trained on the job to qualify as resource persons.

There is no gain-saying the fact that any organization's success (including the school system) depends to a great extent on the quality and efficiency of its personnel whose functions are necessary for the fulfillment of its stated goals and objectives.

Education programmes succeed only to the extent to which the quality of the personnel engaged in the educational process carryout their responsibilities in a most effective manner. Hence, therefore the National Policy on Education (FRN, 2004) stated that no educational

system can rise above the quality of its teachers. This fact was acknowledged by Ndinechi (2001) when he noted that the teacher of the curriculum and the success of any curriculum are directly related to the teacher. For this reason, Ndinechi further added that, it is extremely important that teacher at all levels are exposed to a wide variety of teaching options. It is the teacher that determines the quality of education. The teacher's position as a control figure in any educational endeavor is universally recognized. The society expects so much from teachers. Okoro (2008) puts it like this; the students expect teachers to impart knowledge, parents expect teachers to ensure discipline and sound moral values among students, development planners expect them to initiate ideas and actions toward community development, curriculum reformers expect them to adopt innovative techniques of teaching, adult literacy planners expect them to help the local people become literate and the government expect them to inculcate in students attitudes toward national unity and respect for the state. All these expectations are incumbent on the position occupied by the teacher and such expectations indicate that teaching is very demanding and a complex activity. This is why Arubayi (2003) posited that quality education is impossible without teachers. They constitute the most vital factor of any educational system as upon their quality, the effectiveness of all educational system must chiefly depend.

Therefore, Nigeria requires highly trained, experienced and dedicated teachers in the right quality, quantity and mix in order to achieve the overall objectives of the education sector.

Teachers alone without other staff members of the school system cannot make it. In education profession particularly, the actualization of its goals and objectives does not rest on the teachers alone but entirely on all the resources. Aliyu (2001) listed the following as support staff in education program, administrative officers, clerks, secretaries, typists,

cleaners and messengers, studio attendants, technicians and instructors. Without the assistance of these people, the teacher alone cannot complete the process of teaching and learning. In another way, Aihievboraria (2005) on staffing, asserted that the school is an essentially human organization, because it has human operatives, clients and products and he added that, the importance of adequate staffing of a school is clearly demonstrated by the way secondary school students continue to drift from one school to another in search of school with better and more staff strength. It therefore behooves on those responsible for curriculum planning and regulation of schools to identify the right quality and quantity of staff and be adequately accommodated in the curriculum to guide unambiguously those who are at the implementation end (Akpotowho, 2005).

Taking a cursory look at the 2008 NCCE minimum standards for a department of education, it stipulates a minimum of nine academic staff, at least one lecturer per subject area with a minimum of second degree. It states that one of the lecturers should be a computer specialist although it required all lecturers to be computer literate. It recommends that computer literacy must be one of the criteria for first appointment. The document also added that lecturers/instructors must hold a minimum teaching qualification of NCE or its equivalent. This provision recognized the importance of both academic and non-academic staff in the attainment of sandwich programmes goals. Amaewhule (200) and Okwuanaso (2004) noted that, there are inadequate teachers and other technical staff in schools. They maintained that this constraint applies not only to secondary schools but also to Polytechnics, Colleges of Education and Universities. Similarly, Okoro (2008) observed that, there is dearth of teachers in terms of quality and quantity to teach education courses in our schools. In the same vein, Arowolo (2004) observed that the calibers of teachers in Nigerian schools also constitute some of the problems faced in the implementation of NCE education curriculum. He added

that majority of the teachers are not trained educators but deployed to teach specialized courses in education. This is what Osuala in Okoli (2010) called interlopers. This shortage of personnel resources in education has been a serious concern to educators particularly and other stakeholders in general.

2.1.1 Concept of Instructional Resources

Resources in education are those basic requirements that aid and facilitate effective teaching and learning. Mmou and Olutila (2000) defined instructional resources as comprising of human and non-human materials such as site building, machine, laboratory and equipment, learners, tools, teachers and non-teaching staff provided in the school for the purpose of administration, teaching and learning and research processes.

2.1.2 Types of Instructional Resources

Instructional resources are very important because of its role in the achievement of educational objectives and goals.

For the purpose of this study, instructional resources are classified into personnel, physical facilities, instructional equipment and supplies.

Personnel (human resources) are the lecturers and other supporting staff such as laboratory attendants, Instructor, Technologist. Physical facilities could be considered as the entire scope of the physical infrastructures such as classroom, furniture, library, laboratory/studio, model offices and staff office. Instructional equipment and supplies are the tools that the

teacher and learner use in the teaching and learning process in sandwich programmes. These include computer, typewriter, scanner amongst others.

2.1.3 Open and Distance Education

There are several approaches to defining the term open and distance learning (ODL). Adebayo (2007) defined open and distance learning as the type of education that takes place outside the conventional school system; it is imparted without necessarily having personal interaction with the students or learners. Creed (2001) defined distance learning as ‘an educational process in which a significant proportion of the teaching is conducted by someone far removed in space and / or time from the learners.

Distance learning in Nigeria dates back to the colonial time. Owoeye (2004) opines that since the colonial period correspondence colleges from United Kingdom have provided intermediate and advanced level training to a number of qualified Nigerians via correspondence courses. Distance studies in Nigeria started around the 70s at the University of Ibadan and this was followed by correspondence study part-time programmes offered by conventional universities and other schools, continuing education programmes of Adult Education Department, programmes offered by NTI, the National Open University of Nigeria and Sandwich Programmes offered by universities and other institutions. The Sandwich Programmes were established in the mid 80s and run by some Nigerian universities and colleges of education.

According to UNESCO (2002) ODL is one of the most rapidly growing fields of education, and its potential impact on all education delivery systems has been greatly accentuated through the development of internet based information technologies, and in particular the

world wide web presenting approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners.

2.1.4 Sandwich Programmes Meaning and Objectives

The Sandwich programme represents a broad and diverse discipline that is included in all levels of educational delivery system (Amesi, 2010). Sandwich Programmes were established in the mid 80s and run by some Nigerian universities and colleges of education. The Sandwich Programmes were originally designed and run during the school long vacations to create opportunities for participation by workers, especially teachers. These programmes are open to all categories of learners with varied entry qualifications ranging from primary school certificate, attempted school certificate, school certificate holders, TC 11 teachers, National Certificate of Education (NCE) and first degree holders.

What is Sandwich program? There are bound to be different interpretations depending on the orientations, background and conceptual beliefs of the respondents. To the lay-man it means two pieces of bread with cheese, meat, vegetables, cooked eggs and others. Longman Dictionary of Contemporary English defines sandwich as “to be in a very small space between two other things. The educationists viewed it as follows: A sandwich program is one that has a significant period of work experience built into it such that the program is extended beyond the normal length of similar program without the sandwich element.

Sandwich programmes are of two-types; thick-sandwich programmes have one long placement period (usually an academic or a calendar year). Thin-sandwich programmes are usually links to professional practice and involve several shorter periods of placement in a

professional setting interspersed with periods of academic study. This is usually in teacher training, nursing, medicine, social work and similar areas that require overt demonstration of skills and competences. From these definitions of the course, it is clear that not only teachers take the advantage of sandwich program, but poor, illiterate, women, marginalized and those living in remote areas and many workers from different fields.

2.2 National Commission for Colleges of Education Benchmark on Sandwich Programmes

Physical facilities and instructional equipment in education (sandwich program) are expected to be adequately available and sufficient in a reasonable state. Okorie (2000) posited that the workshops, laboratories, and the other teaching materials must be adequately supplied so as to reflect the actual working environment beyond the classroom. He added that an equipped environment will expose students to the use of the equipment in a way that will lead them to acquire relevant knowledge and skills. This fact underscores the importance of facilities and equipment in education Programme generally. Regrettably, Umunadi (2009) noted that lack of facilities and equipment was a significant problem in the Nigerian education system. Filani (2006) lamented that it is very disturbing that teaching of vocational education programmes in schools is very much retarded in terms of technological and modern equipment. The teacher lack tools with which to teach his students, workshops are poorly equipped or equipped with obsolete materials which lack maintenance and spare parts (Azuka, 2003). Azuka further noted that most teachers resort to lecture method as the only way of teaching because there are no facilities to match and demonstrate instruction. Teaching is basically theorizing in Nigeria. Availability of adequate facilities and equipment aids learning and improves efficiency. Certain equipment is designed to enhance the teaching

of certain skills in some subjects without which such skills cannot be acquired. Availability of requisite facilities is important for the effective execution of any assigned task. Okoro and Iyeke (2004) maintained that, the qualification and background of teachers can only be completed when the right and adequate instructional facilities are provided for effective teaching and learning. In the same vein, Okwuanaso (2004) noted that availability of adequate facilities and equipment are required to make the teaching and learning more effective. Okwuanaso further added that a teacher cannot effectively teach a student the home-keys of a typewriter or how to operate the adding machine without having the machines in the classroom. Availability and utilization of equipment and facilities will stimulate students' senses and generate greater interest in the learning system and assist in the retention of ideas. From the operational point of view, facilities and equipment are important in the development of the three domains of knowledge, abilities and skills that reside in every man. Okoro (2008) posited that, if facilities and equipment are to enhance the technique and make learning more effective for student, it will do at least one or preferably several of the following:

- a- Make an explanation clearer
- b- Enable the learner to discover a relationship
- c- Sharpen or extend the senses
- d- Provide the learner an opportunity for practice
- e- Pose a problem
- f- Make learning more enjoyable

- g- Extend the learner's experience
- h- Generate increased learner's interest and curiosity
- i- Reinforce or apply knowledge gained to foster longer retention
- j- Permit student to proceed at his own pace
- k- Supply an example of or an exception to general principle
- l- Stimulate thought and discussion
- m- Inspire to higher levels of achievement
- n- Suggest broader horizons or add to vision or ambition.

On the other hand, physical facilities such as school buildings are also basic sine-qua-non and indispensable tools for the delivery of educational purposes spelt out in the curriculum. School buildings provide shelter for staff and other instructional equipment such as computers, books, machines etc and creates conducive environment for teaching and learning. Unfortunately, Ntikudem (2005) noted that there are inadequate lecture halls, classrooms and seats to cope with the ever growing students' enrolment in education program Hence classroom is not conducive and teaching will be haphazardly done and desired result will not be achieved. Similarly, Esene (2002) maintained that physical facilities such as classrooms, lecture halls, chairs, table, departmental library, hostels and departmental bill boards are insufficient in the teaching of education courses. Considering the place of physical facilities in schools, it is necessary to explain each of them carefully. Some of the examples of these facilities and equipments are as follows:

(a) School Buildings: School buildings and education are closely interwoven and related. Apart from providing shelter from the sun, rain, heat, cold, the school building represents a learning environment which has tremendous impact on the comfort, safety and performance of students (Musibau & Oluwarotimi 2011).

Owoeye and Yara, (2011) put it this way succinctly that school buildings are very vital input to educational system, emphasizing that even though they do not teach but their use may facilitate or impede learning. Within the school buildings are classrooms, halls, dining hall, toilet, offices to mention a few. However, when planning to construct a new school building, expanding or renovating old one, Musibau and Oluwarotimi (2011) submitted that the following factors should be put into consideration;

a- The educational use to which the building will be put

b- Proper ventilation

c- Adequate lighting, whether by artificial illumination or natural lighting or both

d- The quality of room must be standard, so that sound effect can be effectively controlled.

e- They must be economical to operate.

f- The size and location of other buildings must be borne in mind.

g- The comfort and safety of the users must not be forgotten.

h- Safety gadgets must be installed.

i- The number of students and teachers who will use the building must be considered, bearing in mind the potential expansion of students and teachers number.

(b) Office Accommodation: The importance of office in an organization cannot be overemphasized. In the academic circle, the office is more than a home. It is described as a second home for teachers, because much of the academic time is spent in the office engaging in one form of research, preparing for lecture, attending to students and the likes. Emphasis is placed on such things as lighting, ventilation, furniture, convenience, air-conditioning, office layout and others when planning for construction of offices so that it will be stable to perform task.

NCCE Benchmark, (2008) expects colleges running sandwich education programme to meet the above specifications and criteria. The document categorically states that each senior staff should be provided with a furnished office. There should also be offices for support staff with relevant equipment.

(c) Books and Library: The most used of self-instructional facility has been the book. The book is still the most economical, most easily accessible and means of conveying information and ideas, considering the cost, size and operating problems of most instructional media. It is indeed the primary and basic source of information and idea in education. Altbach in Owoeye and Yara (2011) opined that, nothing has ever replaced the printed words (book) as the key element in the educational process and as a result, textbooks are central to schooling at all levels. In schools, book's collections are found in the library. The library is a repository and/or reservoir of books, tapes, newspapers etc for people to read study, or borrow. The chief purpose of library is to make available to students, teachers and researchers at easy convenience, all books, periodicals and other reproduced materials which are of interest and value to them.

The importance of library has been demonstrated by the government in the National Policy on Education (FRN, 2004) when it states that every state needs to provide funds for the establishment of libraries in all her educational institutions. The library supports all functions of teaching and learning and provides services to its users. Therefore, libraries should not only be available but be up-to-date in its collections. Yara and Otieno (2010) in their study found that student's achievement is related to library and its collection. The absence of an organized library would continue to spell dooms for thousands of students, teachers and researchers.

(d) Laboratory/Studio: Laboratory has been conceptualized as a room or a building specially built for teaching by demonstration of theoretical phenomenon into practical terms. Laboratory is essential to the teaching of subjects that require practical skills and the success of most of the courses is much dependent on the laboratory and the provisions made for it. The teacher assumes a position of dispenser of guide to learning and laboratory as a place where knowledge is discovered. Hence Yadar (2007) posited that some courses in science and vocational education cannot be considered as complete without including some practical work. This practical work is carried out in the laboratories. In terms of academic achievement, Soyibo and Nyong in Owoeye and Yara (2011) showed that schools with well-equipped laboratories have better results in the school certificate science examinations than those that are ill-equipped or not even available. So laboratories occupy a central position in the teaching and learning process.

Furthermore, Obi and Akume (2002) observed that, the objectives of education program can hardly be achieved when teaching and research equipment and infrastructure are in short supply.

For the teaching-learning process to effectively take place, both human and material resources needed to be provided adequately for instruction. No matter how good teaching staff are, they may not be able to function effectively and efficiently without appropriate teaching equipment and adequate infrastructure like workshops, lecture halls, laboratories, studio, libraries and materials like books and current journals, nor is the teacher likely to cope when he is overloaded with lectures and practical courses. Complete absence of appropriate and adequate facilities and equipment for teaching and learning means complete absence of effective and efficient teaching and learning process, and the purpose of education will be defeated.

Resources in education enable the learner to develop problem-solving skills and scientific attitudes and when provided to meet relative needs of a school system, students will not only have access to the reference materials by the teacher, but individual students will also learn at their own paces (Owoeye & Yara, 2011). Akano (2005) and Eze (2002) pointed out that resources can only be utilized when they are available and that there should be investment in that wise in educational institutions for proper utilization of material resources and skills for effective teaching and learning. Olagunju and Abiona (2008) recommended that educational resources should be provided in quality and quantity in classrooms and laboratories for effective teaching and learning process.

2.3 Quality of Instructional Materials for Sandwich Programme

From the review of literature, it is discovered that sandwich programmes in colleges is faced with gross inadequacies of facilities, equipment and personnel. It is a known fact that the teaching and learning in NCE programmes is equipment based. So, one will wonder about the quality of graduates that the programmes will produce when these resources are not

provided. There are several ways that can be adopted in order to improve resources in the teaching and learning process through sandwich programmes in colleges. One of the greatest problems facing education in Nigeria is inadequate funding. Utulu (2001) and Ukeje (2002) posited that the budget allocation to education at both federal and state levels is poor and erratic. So, poor funding has been a major setback to the procurement and development of resources in education in Nigeria. Okwuanaso (2004) opined that adequate funding is essential for effective and qualitative education because it is both capital and labour intensive. In the same vein, Okoro and Okoro (2004) pointed out that funds are necessary ingredients for education program to survive as a result of numerous facilities to be bought for effective instructional methods. In the light of the above, Oke (2003) had recommended that some departments must look beyond funds from proprietors of schools through sponsorship and partnership with multinational companies, industries, international organizations, non-governmental organizations (NGOs), philanthropists and other private entities. This position agreed with the observation of Zaidi (2011) who noted that provision of educational facilities and resources in India has been collaboratively sponsored and undertaken by both the government and private organizations such as multinational firms, NGOs and other individuals. In the findings of Balogun (2003), government has been giving much attention to the procurement and development of science resources at the expense of other educational field especially vocational education. Hence, Okeke and Eze (2010) recommended that government should not lay emphasis on the study of science alone but also on vocational education to enable it acquire the necessary human and material resources to meet its contemporary challenges for improving the quality of education.

2.4 Impact of Instructional Materials for Sandwich Programme

Sandwich programmes are mainly designed for special student who cannot cope with regular school system. Although, sandwich programmes has been found to have inadequate facilities and equipment but the few existing ones should be maintained on a regular basis to make them always functional and long lasting for student to take advantage to improve their level of education. Chuke (2003) posited that maintenance culture is completely non-existent in most schools of Sandwich education programmes. Chuke added that efforts should be made to have a continuous improvement resident maintenance officer or technicians to constantly put the equipment and facilities in good order that can give the student chance to acquire additional certificates through sandwich programmes. Human resources on the other hand, should be trained and retrained to enhance and improve its performance and efficiency. Staff development and training is important for all sandwich programmes personnel to currently up-date their knowledge to meet up with current challenges in the world of work. When knowledge is not refreshed and retrained, it becomes obsolete and forgets previous knowledge (Okoro, 2008). It is on this ground that Njoku (2000) observed that even the few available facilities in our higher institutions are not adequately utilized. Njoku concluded that the possible reason for this is that most lecturers lack the competencies and technical know-how of most modern equipment. Hence, Chuke (2003) advocated that staff should be trained and retrained especially on short courses such as workshops, seminars within the industries for first-hand knowledge. This will enable the staff to impart knowledge on the use of machinery equipment appropriately and improve their efficiency and productivity in the teaching and learning process. That will make the student of Sandwich programmes to develop what they want in order to improve their capacity.

2.5 Summary of Literature Review and Uniqueness of the Study

This study began with the National Commission for Colleges of Education (NCCE) Benchmarks (2008), Availability of Facilities and Equipments in Sandwich Programme in Sa'adatu Rimi College of Education, Quality of Resources (human and materials) for Sandwich Programme in Sa'adatu Rim College of Education Kano State. Furthermore, this study has discussed issues with the regards to Impact of Instructional Materials for Sandwich Programme in Sa'adatu Rimi College of Education Kano State.

However, this study is unique because other research conducted at south- south or south east. Example, Ugwuanyi and Eze (2008) conducted a study on the assessment of educational resources available for implementing the mandates of secretarial studies programmes in Nigerian polytechnics while this research is in Sa'adatu Rimi College of Education Kano. It also differs in Instrument used, Sample Size, and design as well as the findings in relation to Instructional Resources for Sandwich Programme with particular reference to Sa'adatu Rimi College of Education Kano State based on NCCE standard.

CHAPTER THREE

METHODOLOGY

This chapter describes the methodology that was adopted for the study. The method is discussed under the following sub-headings: research design, population of the study, instrument for data collection, method of data collection and method of data analysis.

3.1 Research Design

This study adopted a survey research design. According to Akuezuilo and Agu (2003), survey design seeks to identify, define, or justify conditions associated with certain occurrence, outcomes, situation or process by analysis of past events or of existing conditions.

The reason for selecting this design is that using the available check list inventory the researcher could have a chance to interact with the available sample and tick the appropriate answer as in the inventory schedule.

3.2 Population for the Study

This study took place in Sa'adatu Rimi College of Education, Kano State. The population of the study comprises of 1020 students on conventional courses, 300 students of sandwich courses registered and 30 staff, in the sandwich programmes courses of Sa'adatu Rimi College of Education in Kano State in the 2013/2014 session making the total of 1350 (Field survey 2016).

3.3 Sample and Sampling Procedure

A total of 297 respondents were used as sample for the study. The sample was drawn based on the following categories; Sandwich courses, conventional courses and 30 staff. The choice

of the sample is in accordance with Krejcie and Morgan (2006) population table, whereby they stated that a population of 1320 requires a sample of 297. A sampling procedure of selecting the sample is proportional sampling techniques in which the researcher takes the large number of the two samples as his sample.

3.4 Instrument for Data Collection

The researcher adopted the use of two instruments in the study. The first is the NCCE Benchmark inventory for instructional resources with regards to sandwich programmes for finding out the available resources. The NCCE Benchmark inventory as an instrument for data collection does not require validation and reliability test. Hence, there was no validation and reliability test of the instrument. This instrument is a structured and a guide by National Commission for Colleges of Education. The second one is the self-developed instrument named Questionnaire For Instructional Materials For Sandwich Programme (QIMFSP). This consists of two sections that is section C and D with five items each and the options are Likert scale in which the respondents are expected to fill.

3.5 Procedure of Data Collection

The inventory was completed through a direct observation that was conducted by the researcher in the college of education Sa'adatu Rimi. However, the researcher obtained an introductory letter from his head of department to enable him get permission and access to the instructional resources for sandwich programme in the departments under study. The questionnaire was distributed to the respondent to fill within a week and returned back to the researcher for collection.

3.6 Method of Data Analysis

In order to answer the research questions, the data collected were analyzed using frequency and percentage score. The researcher compare the recommended number for the population of the students, number available and the specification given by the NCCE benchmark in the analysis of the data obtained to work out the percentage.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

This chapter presents the results of data analysis based on the research questions. These consist of demographic data of respondents, data presentation and analysis, summary of findings and discussion.

4.1 Demographic Data of Respondents

S/N	Variable	Options	Frequency	Percentage
1	Sex	Male	189	64%
		Female	108	36%
2.	Age	Less than 20	0	0%
		20-24	0	0%
		25-29	75	25%
		30-34	25	12%
		35-39	82	28%
		40-45	96	35%
		50-above	0	0%
3.	Marital Status	Single	87	29%
		Married	45	15%
		Widow	98	32%
		Separated	0	0%
		Divorce	67	24%
4	Occupation	Unemployment	35	12%
		Artisanship	65	22%
		Civil Servant	71	24%
		Farming	65	22%
		Others	63	20%
5	Level of Education	Non- formal Education	0	0%
		Adult Literacy Cert	60	20%
		Drop out	51	17%
		WASCE/GCE	52	18%
		TC/NECO	25	9%
		NCE/HND	90	30%
Others	19	7%		

Source: (Field Survey, 2016)

Table 4.1 Present demographic data of the respondent. The demographic data includes Sex, Age, Marital status, Occupation, and Level of education.

Following the result on the table 4.1, it indicates that (189) of the respondents are Males, while (108) are females. About age those who are less than 20 are (0) which makes 0% ,and 20-24 are also 0,which makes 0% of the total respondents while (75) are of 25-29 that makes 25% of the respondent, and (25) are of Age 30-34 which makes 12% of the respondent and only about 82 are 35-39 which makes 28%, and those of 40-45 are (96) which makes 35% and 50- above are (0) which makes 0% respectively. With regards to marital Status the results show that those who are single are (87) which makes 29% , those who are married are (45) which shows 15% of the respondents and widows are (98) which make about 32%, and only 0% for separation and for divorce it is (67) which makes 24%. Based on the Occupations the result indicates that those unemployed are 35 which make 12%, artisanship are (65) which is 22% and civil servant are (71) which is 24%, farmers are about (65) which is 22% and those belonging to others are only 63 which makes 20% of the total respondents. With regards to levels of education the result indicates that 0 of the total respondent have non-formal education which makes 0%, and 60 shows that they have adult education certificates which makes 20%, and only 51 indicates drop-out, which is 17% and 52 of respondent indicates WASCE/GCE which is 18%, and for TCII/NECO the result indicates 25 which is 9%, and for NCE/HND the result indicates (90) which shows 30% respectively and lastly for others the results indicates 19 only which shows 7% of the total respondents.

4.2 Data Presentation and Analysis

4.2.1 Analysis of Research Question One

Research Question One: What is the Available Instructional Resource used for Sandwich Programme at Sa'adatu Rimi College of Education, Kano State?

Table 4.2.1 Available Instructional Resource for Sandwich Programmes at Sa'adatu Rimi College of Education, Kano State.

Instructional Resources	Sandwich Course and Students' Population: 300	Conventional Course and Students' Population: 1020
Computer Set		
NCCE Bench Mark	1:3	1:3
Recommended Number In Relation To Bench Mark	30	130
Number Available	35	35
% Available	116%	26%
Swivel Typing Chair		
NCCE Bench Mark	30:30	30:30
Recommended Number	300	1020
Number Available	320	320
% Available	100%	31%
Instructor Table		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34
Number Available	10	10
% Available	100%	29%
Instructor Chair		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34

Number Available	10	10
% Available	100%	29%
Stapling Remover		
NCCE Bench Mark	4:30	4:30
Recommended Number	40	136
Number Available	40	40
% Available	100%	29%
Perforator		
NCCE Bench Mark	2:30	2:30
Recommended Number	150	510
Number Available	160	160
% Available	106%	31%
Wall Clock		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34
Number Available	11	11
% Available	110%	32%
Demonstration Stand		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34
Number Available	10	10
% Available	100%	29%
English/Shorthand Dictionary		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34
Number Available	13	13
% Available	130%	38%

File Cabinet		
NCCE Bench Mark	1:30	1:30
Recommended Number	10	34
Number Available	15	15
% Available	150%	44%

Source: Filed Survey 2016

Table 4.2.1 present available resources used for sandwich program at Sa’adatu Rimi College of Education, Kano State. The study identified available instructional resources as present of computer set, swivel typing chair, instructor table, instructor chair, stapling remover, perforator, wall clock, demonstration stand, English dictionary and file cabinet.

From table 4.2.1 it indicates that 116% is the available percentage of the computer set for sandwich program which is adequate for the programme while 26% is the available percentage computer set for the conventional programme for Sa’adatu Rimi College of Education which is not adequate for the programme. 100% is the available percentage of swivel typing chair for sandwich programme which is adequate for the programme while 31% is the available swivel typing chair for conventional programme which is not adequate for the programme. 100% is the instructor table for sandwich programme which is adequate for the programme while 29% is for conventional programme which is not adequate for the programme. 100% is the available percent of instructor chair for sandwich programme which is adequate for the programme while 29% is for the conventional programme which is not adequate for the programme. 100% is also the available percent of stapling remover for sandwich programme which is adequate for the programme while 29% is the available percent for conventional programme and is not adequate for the programme. 100% is the available percent of perforator for sandwich programme which is adequate for the

programme while 31% is the available percent for conventional v which is not adequate for the programme. 110% is the available percent of wall clock for sandwich programme which is adequate for the programme while 32% is the available percent for conventional programme which is not adequate for the programme while 32% for conventional programme which is not adequate for the programme. 130% is the available percent of dictionary for Sandwich programme which is not adequate for the programme. 150% is the available percent of file cabinet for sandwich programme which is adequate for the programme while 44% is for conventional programme which is not adequate for the programme.

The data show that the availability of instructional resources for sandwich programme is adequate and enough.

4.2.2. Research Question Two: What is the Adequacy of Instructional Materials used for Sandwich Programmes at Sa’adatu Rimi College of Education, Kano State?

The research question was answered through direct observation and the result are shown in table 4.2.2

Table 4.2.2: Adequacy of Instructional Materials used for Sandwich Programmes in Sa’adatu Rimi College of Education, Kano State.

S/N	Facilities	Sandwich Course	Conventional Course
1.	Class Room (Chair and Desk)	6	9
	NCCE Bench Mark (Seat)	30:30	30:30
	Student’s Population	300	1020

	Recommended Number	300	1020
	Number Available	300	300
	% Available	100%	29%
2.	Typing Laboratory		
	NCCE Bench Mark	1	1
	Student's Population	300	1020
	Recommended Number	1	1
	Number Available	6	6
	% Available	100%	100%
3.	Shorthand Studio		
	NCCE Bench Mark	1	1
	Student's Population	300	1020
	Recommended Number	1	1
	Number Available	1	1
	% Available	100%	100%
4.	Model Office		
	NCCE Bench Mark	1	1
	Student's Population	300	1020
	Recommended Number	1	1
	% Available	100%	100%
5.	Library		
	NCCE Bench Mark (Books)	1:10	1:10
	Student's Population	300	1020
	Recommended Number	3000	10200
	Number Available	3000	3000
	% Available	100%	29%
6.	Staff Offices		
	NCCE Bench Mark	1:1	1:1
	Number of Lecturer	10	10
	Recommended Number	10	40

	Number Available	36	36
	% Available	100%	90%
7.	ICT Laboratory		
	NCCE Bench Mark	1	1
	Number Available	0	0
	Recommended Number	1	1
	% Available	0%	0%

Source: *Field Survey, 2016.*

Table 4.2.2 present the adequacy of Instructional Materials used for Sandwich Programme at Sa’adatu Rimi College of Education, Kano State. The study identified the instructional Materials as classroom/Theaters, Laboratories/ Typing pool, Staff Offices, Library, Computer set.

According to the table 4.2.2 the result indicates that 6 Classrooms are available and adequate for the Sandwich programmes not with conventional programmes, also with regards to laboratories it observed that 6 laboratories/typing pools are available and adequate for conventional programmes, then shorthand studio is 1 which is adequate, then model office is also 1 and adequate for the programmes then library is 1 and adequate for the programmes, then staff offices are adequate which is about 36 offices, finally ICT laboratory which is absent in the college. According to the NCCE Benchmark, the adequacy of instructional materials for Sandwich Programmes at Sa’adatu Rimi College of Education is enough and adequate for the programmes.

4.2.3 Research Question Three: What is the Quality of Instructional Materials Used for Sandwich programme at Sa’adatu Rimi College of Education, Kano State?

The research question was answered and the result was analyzed using simple frequency count and percentage as presented in table 4.2.3

Table 4.2.3 Quality of Instructional Material Used for Sandwich Programmes at Sa’adatu Rimi College of Kano State

S/N	INSTRUCTIONAL MATERIALS	STATUS	PERCENTAGE
1.	Lecturers are first degree holders	187	63%
	Lecturers are second degree holder	98	33%
	Lecturers are PhD holders	12	4%
	Lecturers are professors	0	0%
	TOTAL	297	100%
2.	Each unit course has its own course outlines	110	37%
	Each units course has its own note	87	29%
	Each unit course note is up to date	58	20%
	There are relevant textbooks for each course	42	14%
	TOTAL	297	100%
3.	There are qualitative theatres for lectures	123	42%
	There are qualitative classes for lectures	114	38%
	Theatres are wide enough to carry the student	30	10%
	Classes are wide enough to carry the student	30	10%
	TOTAL	297	100%
4.	Qualitative and Quantitative instructional Materials Supplied	297	100%
	TOTAL	297	100%
5.	There are qualitative Staff Offices	267	90%
	There are qualitative Staff Toilets	30	10%
	TOTAL	297	100%

Source: Field Survey, 2016

Table 4.2.3 present the Quality of instructional Materials Used for Sandwich program at Sa’adatu Rimi College of Education, Kano State. The study identified among other variables Quality of teachers, lecture notes, venue of studies, materials, and Staff Welfare.

From the result in table 4.2.3, indicates that with regards to lecturers one hundred and eighty seven (187) of the total respondents indicates lecturers are first degree holders which makes 63% and , while (98) of the respondent shows lecturers are second degree holders and makes 33% and also (12) indicates that lecturers are third degree holders which makes 4% and , while (0) of the respondent indicate indicates lecturers are professor which is 0% .This indicates the Quality of lecturers is enough. With regards to lecture notes the respondent indicates that each unit course has its own outlines which shows (110) which

makes 37%, then those with each unit has its own lecture note and the respondents indicate (87), which is 29%, then those who indicate that note is up to date are (58) which makes 20% then those that indicate Available text books are (42) which makes 14%. Also with regards to venue of lectures the result indicates that (123) of the respondent shows that there are available theater for lectures which shows 42%, then those that indicate classes for lectures are (114) which is 38% respectively, then those that indicate theater are wide enough are (30), which is 10%, and only (30) of the respondents also indicate classes are enough in size which is also 10%.

With regards to the quality of instructional materials the respondents indicate that all (297) indicate agree which is 100%. Then, with regards to the welfare of the staff the results indicate that (267) of the respondents indicate available offices for staffs which is 90%, then finally only (30) indicate available toilets for staff which is 10% respectively. So, the quality of instructional material for Sandwich Program at Sa'adatu Rimi College of Education are adequate and enough for the program.

4.2.4 Research Question Four: What is the Impact of Instructional Materials used for Sandwich Programme at Sa'adatu Rimi College of Education, Kano State?

The research question was answered and the results were analyzed using simple frequency count and percentage as in table 4.2.4.

Table 4.2.4: Impact of Instructional Materials used for Sandwich Programmes in Sa'adatu Rimi College of Education, Kano State

S/N	VARIABLES	FREQUENCY	PERCENTAGE
1.	Instructional Materials help in teaching and learning	69	23%
2.	If there is no available resources teaching will be problem	57	19%
3.	Use of ICT helps a lot in Sandwich programme	87	29%
4.	Sandwich programmes needs ICT material for their activities	46	15%
5.	Easy access to e-books at sandwich centers	38	14%
TOTAL		297	100%

Source: *Field Survey, 2016*

Table 4.2.4 present the impact of instructional materials used for Sandwich programmes in Sa'adatu Rimi College of Education, Kano State. The study identified among others impacts as Instructional materials help in teaching and learning, if there is no available resources teaching will be problem, use of ICT helps a lot in sandwich programme, Sandwich programmes need ICT material for their activities, and e-books are available at sandwich centers.

The results in table 4.2.4 indicate the impacts of instructional materials used for sandwich programmes at Sa'adatu Rimi College of Education, Kano State. The results indicate that sixty nine (69) of the respondents (23%) indicate instructional materials help in teaching and learning, and fifty seven (57) of the respondents (19%) indicate if there is no available resources teaching will be problem, and eighty seven (87) of the respondent indicates use of ICT helps a lot in sandwich programmes which is 29% and forty six (46) which is 15% of the respondents indicate Sandwich programmes need ICT material for their activities while thirty eight (38) of the respondents which is 14% indicate e-books are available at Sandwich center in Sa'adatu Rimi College of Education, Kano State.

4.3. Summary of Findings

At the end of the study the following findings were obtained:

1. The Availability of Instructional Resources for Sandwich programmes at Sa'adatu Rimi College of Education Kano State includes; Availability of computer set, swivel typing chair, instructor table, instructor chair, stapling remover, perforator, wall clock, demonstration stand, English dictionary and file cabinet.

2. The Instructional Materials for Sandwich Programmes at Sa'adatu Rimi College of Education Kano State include; classroom, theater, typing laboratory, shorthand studio, model office, library and staff offices.
3. The Quality of Instructional Materials used at Sa'adatu Rimi College of Education Sandwich Programmes includes; qualitative lecture note, Venue, available, instructional materials and welfare for academic staff, offices and toilets.
4. Some of the impact of Instructional Materials in Sandwich programmes at Sa'adatu Rimi College of Education, Kano State Include; Instructional materials assist in teaching and learning; the ICT helps a lot in sandwich programme; and the E-books facilitate teaching and learning.

4.3 Discussion of Findings

The findings of research question one on the availability of instructional resources used for Sandwich Programmes at Sa'adatu Rimi College of Education, Kano State revealed that instructional resources available for sandwich programmes are lecturers and supporting staff. Esene (2002) stated that personnel resources not capital, nor income, nor material resources, constitutes the ultimate basis of nations. Esene added that in education, the personnel resources include the teachers (lecturers), administrative and supporting staff. Education programmes succeed only to the extent to which the available personnel engaged in the educational process carryout their responsibilities in a most effective manner. Teachers should be trained and retrained to enhance and improve their performance and efficiency.

However, findings of research question two on the adequacy of instructional materials used for sandwich programmes in Sa'adatu Rimi College of Education Kano State, show that the adequacy of instructional materials for Sandwich programmes indicated that the Materials are adequate and enough for smooth running of sandwich programmes. Unconducive classroom creates stress on teachers and students resulting in a negative attitude towards school and learning by students. Resources below the approved standard could also lead to reduction in quality of teaching and learning in schools resulting to poor students' academic performance (Uwheraka, 2005). According to Adeogun, schools endowed with more resources performed better than schools that are less endowed. This agreed with the finding of Adeogun and Osifila (2008) that education resources had a significant effect on students' academic performance in Lagos State secondary schools. In the same vein, Adu, Ojelabi and Adeyanju (2009) simply viewed outcome of students in school as a function of teachers and facilities for teaching and learning in the school. This position was corroborated by Abayomi (2009) and Ijaduola, Oni and Muraina (2011) in their separate studies who remarked that educational resources and its school environment are the basic anvil upon which students achievement are built and nurtured. To this end, poor educational resources mean poor academic achievement.

The finding on research question three on the Quality of instructional Material used for sandwich Programme in Sa'adatu Rimi College of Education, Kano State, show that the quality of materials especially in lecture notes, lecture venue, nature of instructional materials, and availability of staff offices and toilet help in smooth running of Sandwich programmes. So, poor funding has been a major setback to the procurement and development of resources in education in Nigeria. Okwuanaso (2004) posited that adequate funding is essential for effective and qualitative education because it is both capital and labour

intensive. In the same vein, Okoro and Okoro (2004) pointed out that funds are necessary ingredients for education programme to survive as a result of numerous facilities to be bought for effective instructional methods. In the light of the above, Oke (2003) had recommended that some departments must look beyond funds from proprietors of schools through sponsorship and partnership with multinational companies, industries, international organizations, non-governmental organizations (NGOs), philanthropists and other private entities. This collaboration, of course, will strengthen and improve the resources base of sandwich programmes in our institutions, and increased the quality of teaching and learning. This position agreed with the observation of Zaidi (2011) who noted that provision of educational facilities and resources in India had been collaboratively sponsored and undertaken by both the government and private organizations such as multinational firms, NGOs and other individuals. In the findings of Balogun (2003), government had been giving much attention to the procurement and development of science resources at the expense of other educational field especially vocational education.

The result on the research question four on the Impact of instructional Materials used for Sandwich programme at Sa'adatu Rimi College of Education, Kano State indicates that the impact of instructional materials are many which includes, instructional materials helps in teaching and learning especially in Sandwich programmes, and it is indicated that if there are no available resources teaching will be a problem, use of ICT also help a lot in Sandwich programmes, and finally the e- books are also adequate and available at sandwich center at Sa'adatu Rimi College of Education, Kano State. This is in line with Ajayi, (2010) who posited that Human resources and material can increase and develop impact on the educational programmes on the other hand, teachers should be trained and retrained to enhance and improve their performance and efficiency. Staff development and training are

important for all sandwich programmes personnel to currently up-date their knowledge to meet up with current challenges in the world of work. When knowledge is not refreshed and retrained, it becomes obsolete and forgets previous knowledge (Okoro, 2008). It is on this ground that Njoku (2000) observed that even the few available facilities in our higher institutions were not adequately utilized. Njoku concluded that the possible reason for this was that most lecturers lacked the competencies and technical know-how of most modern equipment. Hence, Chuke (2003) advocated that staff should be trained and retrained especially on short courses such as workshops, seminars within the industries for firsthand knowledge. This will enable the staff to acquire knowledge on the use of machinery equipment appropriately and improve their efficiency and productivity in the teaching and learning process.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study was undertaken to analyze instructional resources for Sandwich programmes in Sa'adatu Rimi College of education Kano state. The specific objectives are to identify the Availability of instructional resources used for sandwich Programme in Sa'adatu Rimi college of education Kano State, to examine the adequacy of instructional materials used for sandwich programmes in Sa'adatu Rime College of Education to examine the quality of instructional materials used for sandwich programme in Sa'adatu Rimi college of education, to examine the impact of instructional materials in sandwich programmes in Sa'adatu Rimi College of Education Kano State.

Chapter two concerns with review of related literature which encompassed some of the topic related and their contribution toward conduct of this research work which includes:

Conceptual frame work on the concept of NCCE Benchmarks, Personnel and Material resources, availability of instructional resources, the adequacy of instructional material for Sandwich programmes, the quality of instructional material for sandwich, the impact of instructional material used for sandwich programmes Then Summary of related literature and Uniqueness of the Chapter.

Chapter Three which is methodology of the study consists of research design which the researcher adopted survey research and the other part of the chapter consist of population and sample, sample procedure, research instrument, validation of instrument, method of data collection and data analysis.

The study employed survey research design, and two hundred and ninety seven of respondents participated in the study. Two set of questionnaire and field observation note were used for the study. The analyses of data were done by using frequency and percentage counts.

Chapter four data analysis, result and discussion, data collected was analysed using sample frequency count and percentage, and the result were presented in tabular form, summary of findings and discussion follow.

The finding of the study revealed that most of the instructional materials are available for sandwich programme but there is the need for additional due to increase number of students yearly.

5.2 Conclusion

At the end of the study it was established that Instructional Materials are very important and relevant in Sandwich Programme at Sa'adatu Rimi College of Education, that is why the material resources and personnel are provided for successful delivery of the programmes.

It was also established that the quality and adequacy of instructional material assist greatly in the conduct of Sandwich programmes at Sa'adatu Rimi College of Education, Kano State. Resources such as e-books, ICT materials and other materials were used in the Sandwich Programme of the Sa'adatu Rimi College of Education, Kano State.

5.3 Recommendations

At the end of the study, the researcher recommends the following:

i The school management should consider the Availability of Instructional Material at Sa'adatu Rimi College of Education due to the increase number of students for the programmes yearly which includes computer, laboratory, and other teaching material.

ii The quality of instructional materials should be maintained.

iii. That the adequacy of instructional material should be increased and improved for the purpose of expecting additional students yearly for the development of the programmes and student at large.

Iv. New ICT materials need to be provided for more significant impact of instructional materials for Sandwich programmes in Sa'adatu Rimi College of Education Kano State.

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APPENDIX I

AVAILABILITY AND QUANTITY OF INSTRUCTIONAL MATERIALS

NCCE BENCHMARK OF RESOURCES

FACILITIES

- a. Classroom; Space that would take thirty (30) students conveniently with sufficient room for passage within the classroom space should be made available for each lecture and seminar for each subject.
- b. Laboratories/Studios; At least one (1) each of typing pool, shorthand laboratory, model office and information technology laboratory.
- c. Staff Offices; Each Senior Staff should be provided with a furnished office. The HOD should be provided with a computer facility.
- d. Books in the Library; There must be enough books to cover all the areas of the subject to the ratio of one student to ten books.

INSTRUCTIONAL MATERIALS

Typing Laboratory;

- 1 Typewriters
 - a. Manual-----30 of various makes and type
 - b. Computer-----number should be in the ratio of one (1) computer to three students
2. Swivel typing chairs-----30
3. Drop desk/typing convertible desk-----30
4. Instructors' table/desk-----1
5. Instructors chair-----1
6. Stapling machine -----4
7. Stapling remover-----4
8. Perforator-----2
9. Stopwatch-----2
10. Wall clock-----1

11. Demonstration stand-----	1
12. English/Shorthand Dictionary-----	1
13. Filing Cabinet-----	2

PERSONNEL

1. Academic

At least one(1) academic staff per subject area with a minimum of first degree(minimum of a second class lower division). A minimum of nine(9) lecturers(one of whom should be a computer literate) is required. All lecturers must be computer literate. The staff/student ratio should be 1:30.

APPENDIX II

STAFF QUESTIONNAIRE ON AVAILABILITY OF INSTRUCTIONAL MATERIAL (SQAIM)

Q. Tick the available items seen at Sa'adatu Rimi College of Education Sandwich Programme.

S/N	ITEM	Tick
1.	Laboratory	
2.	Computer	
3.	Swivel typing chair	
4.	Instructor desk/table	
5.	Instructor chair	
6.	Stapling	
7.	Stapling remover	
8.	Perforator	
9.	Stop watch	
10.	Wall clock	
11.	Demonstration stand	
12.	English/short hand dictionary	
13.	File cabinet	

APPENDIX III
BAYERO UNIVERSITY, KANO
DEPARTMENT OF ADULT EDUCATION AND COMMUNITY SERVICE
RESEARCH QUESTIONNAIRE
NCCE BENCHMARK INVENTORY

Dear Respondents,

Introduction

The researcher is an M.Ed Adult and Non-formal Education student of the above named institution, undertaking a research on analysis of instructional resources for sandwich program in Sa'adatu Rimi Collage Education Kano State.

In this regard, the researcher looks forward to your assistance by responding to the questions as they relate to you. All information provided in the study will be used for academic purpose only and treated as confidential.

Tick (✓) in the box as your response to each of the question.

SECTION A

Demographic Characteristics Of Respondents

1. Sex: [a] Male [] [b] Female []
2. Marital Status: [a] Single [] [b] Married [] [c] Widow []
[d] Separated [] [e] Divorced []
3. Age: [a] Less than 20 years [] [b] 20-24 years [] [c] 25-29 []
[d] 30-34 years [] [e] 35-39 year [] [f] 40-45 years []
[h] 50 and above
4. Occupation: [a] Unemployed [] [b] Artisanship []
[c] Civil service/Employment [] [d] Farming []
[e] Other []
5. Level of literacy: [a] Non Formal Education []
[b] Adult Literacy Certificate [] [c] Dropped Out []
[d] WASC/GCE/SSCET [] [e] TCI/NECO []
[f] NCE [] [g] HND/B.ED [] [h] Others (specify) []

SECTION B (QUALITY OF INSTRUCTIONAL MATERIALS)

Please, tick as appropriate

Use the following keys to complete questionnaire

SA = strongly agree; A=agree; D=disagree; SD= strongly disagree

S/N	VARIABLE	SA	A	D	SA
1.(a) (b) (c) (d)	The lecturers are first degree holders Second degree holders (masters) Third degree holders (Ph.D) Professors				
2.(a) (b) (c) (d)	Each unit course has its own course outline Each unit course has its own note prepared by the lecturers Each unit course note is up to dated There are relevance text books for each course unit				
3(a) (b) (c) (d)	There are theatres for lecture There are classes for lectures The theatres are wide enough to carry the students The classes are wide enough to carry the students				
4.	Qualitative and quantitative instructional materials supplied				
5.(a) (b)	There are staff offices There are toilet for staff				

SECTION C (IMPACT OF INSTRUCTIONAL MATERIALS)

Please, tick as appropriate

Use the following keys to complete questionnaire

SA = strongly agree; A=agree; D=disagree; SD= strongly disagree

S/N	Items	SA	A	D	SA
1.	Instructional Materials help in sandwich programme.				
2.	Without instructional Materials Programmes are poor.				
3.	Use of ICT helps a lot in Sandwich programmes.				
4	Students are benefitting a lot in sandwich programmes with available resources.				
5	Students are enjoying with e-books available at the center.				