



BARRIERS TO EFFECTIVE TEACHING AND LEARNING OF BUILDING CONSTRUCTION IN GOVERNMENT SCIENCE AND TECHNICAL COLLEGES IN KOGI WEST SENATORIAL DISTRICT, KOGI STATE, NIGERIA.

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Abstract

The main purpose of this study was to find out the Barriers To Effective Teaching and Learning of Building Construction in Government Science and Technical Colleges in Kogi West Senatorial District. These are also to hurl in probable solutions to problems that are under studied in this research work. The instrument used in this research work was the structured questionnaires. The target population for this study are all the five hundred principal, eight-hundred Teachers and one-thousand targeted students of the school they are teaching building construction in Government Science Technical Colleges in Kogi West Senatorial District of Kogi State. The sample size of principal was narrowed down to twelve. (1) One in each school: and that of Teachers was 4 in each school, making the total of 48; while students were narrowed down to one-hundred and ninety (190): However, Random Sampling technique was used to facilitate unbiased section and final results. Statement of the problem emanated as a result of backward and retro progressive statement about happenings in teaching and learning building construction which implies that the course is meant for dropout or push out, Olaitan (1984). Amongst other, the study specifically intends to find out whether there is enough provision for qualified teachers in the secondary and technical colleges in Kogi West Senatorial District. Also, three research questions were raised. There were two hypotheses formulated and significant of the study was for students, Ministry of Education, Stake -holders and so on. The scope of the study include all Government Science /Technical Colleges (GSTC) in Kogi State. Further, some of the findings were non provision of adequate teachers is barrier to effective teaching and learning of building construction in (GSTC) Kogi West Senatorial District of Kogi State and so on. Howbeit, the following recommendations were suggested: Correlation between students' achievement and teachers' qualification, a research work should be carried out in the area of instructional materials. Intensive study should be carried out in the area of curriculum investigation, planning and implementation.

Introduction

The adoption of the national policy in education (NPE) in 1977 by the Federal Government of Nigeria brought in a new system of education popularly known as 6-3-3-4. The 6-3-3-4 system of education gave significant recognition to vocational and Technical education (VTE) as an instrument for technological industrial and economic development of Nigeria. To achieve the full benefits of VTE program, relevant VTE subjects were included as parts of Nigerian Schools Curriculum. With regards to secondary school level, Nigerian government converted the five years secondary school system to a six year secondary school system consisting of a three-year junior secondary school (JSS) and three-year senior secondary school (SSS) presently; it is 9-3-4 Curriculum. Relevant VTE subjects were made part of secondary schools curriculum. The inclusion of the relevant VTE subjects at the (SSS) level was to make secondary school learners immediately employable after their graduation (NPE, 2004). However, problems which one can basically define as discrepancies between objectives and evaluated performance set in along side. These range from instructional and communication media problem,

personnel (qualified academically), inadequate funding of schools and VTE problems, general acceptance of VTE programs and all innovations it brings with it like employability.

This research is set to look at barriers to effective teaching and learning of building construction and proffering probable solutions. It is in realization of some of the nagging problems like, instructional and communication media problem, personnel (qualified academically), cost of funding schools and VTE problems, general acceptance of VTE programs and all innovations it brings with it that more Federal and State and Colleges of Education (Technical) were established and some polytechnics were equally granted approval to run NCE technical program. The Federal government also introduced the technical Teacher Training Program (TTTP), a scholarship program to aid in training potential technical teachers. To monitor and maintain quality in all the NCE awarding institutions, Federal government in 1989 established the National commission for Colleges of education (NCCE) in spite of these initiatives, Orami (1992), asserted that the training provided in most secondary and NCE awarding institutions has not matched critical employment needs of

these graduates. Studies have revealed that Nigeria is grossly deficient in number and standard of technical school graduates and teachers. Despite ambitious efforts being made to address the issue. The problem, according to Aina (1991), is complicated by identified drawbacks which are inimical to training.

Similarly, findings of studies of Aina (1991), Abdulwahab (2004) and Goro (2000) revealed that the requisite or curriculum support facilities such as infrastructure, equipment, supplies, library facilities, Communication, recreational facilities and environment in most of Nigerian secondary and technical training institutions are such that could not promote effective teaching and learning. Curriculum support facilities available in most of this institution under studied were found to be too obsolete, poor, non-functional, and inadequate in type, quality and availability or not in existence.

Also, serving technical staff that would have raised the morals of building construction subjects were reported to have no access to

current literature and textbooks. This no doubt, passes a constraint to quality and delivery of essential skills, knowledge and attitude necessary for effective job performance for the various schools.

Building construction teaching in Government Science and Technical Colleges (GSTC) is a new phenomenon and it, therefore, faces a number of problems. These hinder effective learning and teaching of building construction in Secondary and Technical (GSTC) institutions. In the last decade, it is added that about 75 percent of the teachers involved in the teaching of building construction in secondary schools do not know precisely the meaning of building construction and particularly they are from other related disciplines, (McKay& McKay, 1970). It is also an opinion that many building construction syllabi do not in corporate the new Approach to teaching the subjects in secondary schools.

The single-subject specialists like Bachelor of Science degree in Economics, Mathematics, Physics, Geology, and Geography and so on are the building construction teachers in most Nigerian secondary schools who may or may not know the consequence of the fact that the subject differs from old methodology given to building construction program. It is of paramount opinion that its nature, scope and perspective be known as it relates to building subjects in Secondary Schools. A major educational aim in Nigeria is the development of usable skills, desirable attitudes and values in the recipient. National policy on education (NPE, 2004) has reflected it should be inculcation of the right type of skills for the survival of the individual and the Nigerian populace. This will enable the recipient to be employable and filling to the society he or she belongs. Hence, the triad of goals of employability, employment and equality as

enunciated by (Coster and Poplin, 1978). Where they further stated that increasing the opportunity to train for employment including instances in which the trainee is paid a stipend while understanding training for employment.

Purpose of the study

The main purpose this study is to identify the barriers to effective teaching and learning of building construction in (GSTC) in Kogi West Senatorial District of Kogi State, Nigeria. Specifically, the study intends to:

1. Find out whether there is enough provision of qualified teachers in the Secondary and Technical Colleges in Kogi West Senatorial District.
2. Establish inadequacies in instructional materials like textbooks that can aid teaching and learning procedures.

3. Identify discrepancies that are entrenched in the curriculum of building construction in Secondary Institutions in Kogi West Senatorial District.
4. Establish if there are inadequacies of infrastructural developments like laboratories in the Secondary/Technical College under study.
5. Establish if there were lack of incentives for teachers and interest in building construction, barriers to effective teaching and learning.
6. Identify if there are enough periods allocated on the time table for building construction in Secondary/Technical Colleges in Kogi West Senatorial District of Kogi State.
7. Examine students' attitudes towards building construction in Secondary/Technical Colleges in Kogi West Senatorial District.
8. Examine teachers and students interpersonal relationship in the classroom.

Research questions

The following research questions were raised to guide the study:

1. To what extent were not provisions of adequate qualified teachers a barrier to effective teaching and learning of building construction in (GSTC) Kogi West Senatorial District of Kogi State?
2. To what extent are inadequacies in instructional materials like textbooks barrier to effective teaching and learning of building construction?
3. To what extent are the discrepancies that are entrenched in the curriculum of building Kogi construction in (GSTC) institutions in the Kogi West Senatorial District barriers?
4. To what extent are inadequate infrastructural developments like laboratories in the Secondary\Technical Colleges under study barriers to effective teaching and learning of building construction?

5. To what extent is lack of incentives for teachers and interest in building construction are barriers to effective teaching and learning?
6. To what extent are inadequate periods allocated on the time – table for building construction in Secondary/Technical Colleges in Kogi West Senatorial District of Kogi State barriers to effective teaching and learning building construction?
7. To what extent are student's attitudes towards building construction in Secondary/Technical Colleges in Kogi West Senatorial District of Kogi State barriers to effective teaching and leaning of building construction?
8. To what extent are teachers and students' interpersonal relationship in the classroom a barrier to effective teaching and learning of building construction?

Methodology

The research design adopted is ex-post facto design. This is adduced as a result of collection of data and opinions from people and

analyzing their categorical behaviors and data so collected as of the time of this Research. Variables and their effects like urban, semi-urban and rural areas and other variables used had already been in existence.

The population of the study consists of all the five hundred (500) principals, eight hundred (800) Teachers and One thousand (1000) sampled students of the schools that offer building construction in GSTC in Kogi West Senatorial District of Kogi State which consists of 12 (twelve) schools.

Out of 12 Government Science and Technical College in Kogi West Senatorial District of Kogi State, the sample size of 250 was drawn.

They are distributed as follows:-

- Teachers (4) each (4X12); total 48.
- Principal in each School; total 12.
- Students number; total 190
- Total number of sample 250

Random Sampling technique was used.

The major instrument for data collection was the structured questionnaire. The questionnaire has two sections A&B. Section A, consists of general questions in personal data while section B consists of questions that are related to the questions that elicited information on the research questions. Also, there are two types of questionnaires: one for teaching staff while the other for the students accordingly in Kogi West Government Science and Technical Colleges Senatorial District.

To measure the reliability index of the instrument, it was administered twice in the respondents different from the sample: 25 Agric teachers, 30 integrated teachers, 40 students from Public Schools different from sample in Kogi West Senatorial District. The method of test retest which spanned a period of two weeks was used. The two tests were then correlated through re use of Pearson Product Moment Correlation Co-efficient. The result of $r = 0.80$ was obtained.

Method of data collection

The researcher personally went to the selected Secondary Schools in Kogi West Senatorial District in Kogi State to administer the copies of the questionnaires on the respondents. He immediately collected the filled copies of the questionnaires from the respondent for processing.

Method of Data Analysis

The data collected were analyzed using mean and standard deviation to answer the research questions.

Data Presentation

Data analysis and interpretation are presented in the following order. The preliminary bio data of the respondent as contained in section “A” of the questionnaire are hereby presented.

Distribution of Respondents by Status and Gender

Table 1:

GENDER	TEACHERS		PRINCIPAL		TOTAL	
	FREQUENCY	%	FREQUENCY	%	FREQUENCY	TOTAL
MALE	30	66.6	10	66.6	40	99.9
FEMALE	18	33.4	02	33.4	20	0.1
TOTAL	48	100	12	100	60	100

Table 1 shows the following distribution (30) Male Teachers are having 66.6% the rest 18(33.4%) are female. This shows that there are more male teachers than female that are qualified. Also, Principal frequency shows the following distribution; male 10(66.6%) while female 02(33.4%). One could also deduce from the above analyses that male got to the post of principals than female.

Distribution of Principals and Teachers by Qualification

Table 2

QUALIFICATION	TEACHERS	%	PRINCIPAL	%	TOTAL	%
OND/NCE	10	20	–	–	10	20
B.SC(ED)	30	30	10	35	40	65
M.SC(ED)	8	10	2	5	10	15
TOTAL	48	60	12	40	60	100

Table 2: showed that 40(65%) teachers and principals are graduates while 10(15%) teachers and principal obtained a post graduate degree. The remaining 10(20% teachers are either OND or NCE holders.

Distribution of Respondents by Teaching Experience

Table 3:

RESPONDENT	(6-10) YRS	(11-15) YRS	(16-29) YRS	TOTAL
PRINCIPALS	–	4(15%)	8(25%)	12(40%)
TEACHERS	6(10%)	10(20%)	32(30%)	48(60%)
TOTAL	6(10%)	14(35%)	40(55%)	60(100%)

Result in table 3: showed 14(35%) principal and teachers attained (11-15) years of experience in teaching while 40(55%) of them attained (16-29) years of teaching experience. Only 6(10%) teachers have (6-10) years of teaching experience.

Distribution of Respondents by School location

Table 4:

SCHOOL LOCATION	TEACHERS	%	PRINCIPALS	%	TOTAL	%
URBAN	30	40	6	20	36	60
SEMI URBAN	10	16	4	12	14	28
RURAL	8	04	2	8	10	12
TOTAL	48	60	12	40	60	100

Furthermore, result in table 4 showed that 36(60%), 14(28%) and 10(12%) respondents are respectively located in the urban, semi-urban and rural schools. This calculation showed that majority of the participants (respondents) come from urban schools.

In addition, research questions one and two were analyzed.

Research question one:

To what extent is not provision of adequate qualified teacher a barrier to effective teaching building construction in (GSTC) in Kogi West Senatorial District in Kogi State?

Analysis=>

x	x^2	Df	\bar{X}	SD	CV	Ctv
36	1946	4	7.2	18.367	18.367	2.776

Null hypothenis (H_0) is rejected.

Inference: None provision of adequate qualified teachers are barriers to effective teaching and learning of building construction in (GSTC) in Kogi West Senatorial District of Kogi State.

Research question two

To what extent are inadequate instructional materials like textbooks barriers to effective teaching and learning of building construction?

Analysis=>

x	x^2	Df	\bar{X}	SD	CV	Ctv
36	298	4	7.2	2.78	2.78	2.776

Null hypothesis (H_0) is rejected.

Inference: Inadequate instructional materials like textbooks are barriers to effective teaching and learning of buliding constrution.

DISCUSSION OF RESULT

The findings of reserching question one in respect of whether none provision of adequate qualified teachers are barriers to effective teaching and learning of buliding constrution in Kogi West Senatorial District in Kogi State is in affirmative. This is futher asserted by Amaefulu (1998) when he said that quality of teachers is a major determinant in the quality of education of any nation. As the foregoing states, “No education system can rise above the quality of its teachers”.

In addition, the finding of research question two, in respect of inadequacies in instrutional materials like textbooks if they are barriers to effective teaching and learning of buliding construction is buttressed by Aina (1991) Abdulwahab (2004) and Goro (2000) that the requisite or Curriculum supports facilities such as infastructure, equipment suppies, library facilities, coummuncation, recreational facilities and environment in most Nigerian Secondary and Technical

institutions are such that can not promote effective teaching and learning. From the result, it proves that, their inadequacies are barriers to effective teaching and learning buliding constrution.

Conclusion

The researcher, from the analyses and syntheses of collected data from GSTC Colleges in Kogi West Senatorial District of Kogi State was able to deduce the following findings as barriers to effective Teaching and Learning Buliding Construction.

1. The none provision adequate qualified teachers are barriers to effective teaching and learning of building construction in GSTC in Kogi West Senatorial District of Kogi State.

2. Inadequacies in instructional maertials like textbooks are barriers to effective teaching and learning of building construction.

Recommendations

Based on findings, the researcher therefore recommends the followings to the Government, Interset groups, Stake holders, Ministry of Education and the Public that have interest in

Science/Technical Colleges in Kogi State Senatorial District of Kogi State as follows:

1. Adequate and qualified teachers must be provided.
2. Adequate instructional materials like textbooks must be provided.
3. Discrepancies / faults or misgiving entrenched in the Curriculum must be corrected to give room to effective teaching and learning of building construction in GSTC Colleges of Kogi West Senatorial District of Kogi State.

Areas for further research:

1. Motivations
2. Procurement of equipment, materials and facilities.
3. Correlation between students' achievement and teachers qualification.
4. A research work must be carried out in the area of instructional materials.
5. Intensive work must be carried out in the area of curriculum investigation, planning and implementation.

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