



# INSTRUCTIONAL FACILITIES AND THE ABILITIES OF NIGERIAN CERTIFICATE IN EDUCATION GRADUATES IN FEDERAL COLLEGE OF EDUCATION, YOLA

Ibrahim Gambo (Ph.D)<sup>1</sup>, Lawson Luka<sup>2</sup> and Kwabe Tumba Madube (Ph.D)<sup>3</sup>

<sup>1,2</sup> Department of Educational Foundations, School of General Education, Federal College of Education, Yola, Adamawa State

<sup>3</sup> Department of Geography, School of Arts and Social Science Federal College of Education, Yola, Adamawa State

## ABSTRACT

*This study was designed to assess the effects of instructional facilities on the abilities of Nigerian Certificate in Education Graduates in Federal College of Education, Yola. Two objectives were formulated to guide the conduct of the study. The study adopted the survey design. The population of the study comprises of all the graduates of the college from 2017 to 2022, lecturers and laboratory technicians of the departments in the various schools in the Federal College of Education, Yola. Due to the large number of lecturers in the individual departments of the various schools, and the laboratory technicians of the departments in the various schools in the Federal College of Education, Yola, the researchers selected a sample of 383 graduates, 69 lecturers and 23 laboratories technicians. The stratified, purposive and simple random sampling (SRS) techniques were adopted for the selection of the sampled population. The primary data was obtained for the study through the use of questionnaire designed by the researchers. The data collected for the study were analyzed using the simple percentage method of data analysis to analyze the respondent's demographic data and ANOVA statistics to test the null and alternative hypotheses. The finding of the study revealed that instructional facilities have an influence on the academic performance of the NCE graduates. Based on the above conclusions the following were recommended; Communities need to embark on initiatives to tap funds to ensure that the school facilities are replenished and Government should provide facilities like modern laboratories, functional libraries, and comfortable classrooms for better academic performance;*

**KEYWORDS:** *Instruction Facilities, Abilities, Nigerian Certificate on Education and Graduates*

## INTRODUCTION

Teaching facilities such as information and communication technology and laboratory have changed the way that teaching/learning impact on the facilitation of our graduate's performance over the years. Facilities transform instructional process by contributing some components of innovation to teaching/learning situations. Effective teaching facilities are an influential instrument for providing educational opportunities to learning. It is impossible to envisage future learning/teaching situations that are not facilitated with availabilities of teaching materials such as ICT facilities, equipped library, Management Information System (MIS), rich Teaching technology center, qualified facilitators, effective laboratories etc., (UNESCO, 2002). Students who received learning / teaching through use of available rich and functional teaching facilities, retain learning and graduate successfully at the end of the academic programs.

According to Akinyemi, Lawal, and Owosoro (2021) facilities comprises of all the instructional spaces and audio-visual aids, as well as other materials resources utilized in educational institutions for the aim of attaining successful teaching and learning. On his part, Sigilai (2013) observed that books, audio-visual, educational technology software and hardware, chalkboards, and shelves on which instruments for practical are organized are examples of facilities that are offered to aid

students' learning outcomes. Other include information and communication rooms, laboratories, multi-purpose halls, medical sick-boys and functional kitchen, are other facilities that are needed in Colleges to ensure quality and effective teaching for positive achievement of the graduates.

Based on the foregone analysis, instructional materials or teaching/leaning facilities, can be described as well items and equipment used by a teacher during lesson presentation to enhance teaching by simplifying difficult concepts and ideas through the use of pictures, charts, diagrams, real objects, projected materials and non-projected materials. Materials o facilities should consist of use of pleasurable objects and method to enhance the performance of prospective program graduates. The teacher should try to appeal to the graduate's senses of seeing, hearing, smelling, testing and feeling and to appeal to the senses above, the teacher needs to adequately use instructional facilities for impacting knowledge to the graduates in training.

The most common reason always advanced for low use of instructional facilities, are that they are difficult to obtain and expensive to purchase. However, a few simple materials, a moderate imagination and a lot of care are needed to improvise and produce instructional facilities for the teacher and the graduates to modify, alter or change and the rule is to be imitative,



adaptive and creative in the use of the learning and teaching facilities.

Some of the factors to be considered by teachers before using any teaching/learning facilities are their availabilities, appropriateness, effectiveness and familiarity in teaching/learning process. Material appropriateness should include the following;

- i. They should be large and adequate to be seen/used by the teacher and training students. In the case of pictures, diagrams and sketches, they must be thoroughly prepared neat, attractive and educative.
- ii. Pictures and diagrams, should not be overcrowded with minutes' details and the most important points should be inclusive for easy comprehension.
- iii. Teaching facilities should not be too many so as not to cause disorder in the classroom or laboratory.
- iv. Pictures and diagram, should be real and simple to read.
- v. Teaching facilities instructions, must be in simple and sound language of interpretation.
- vi. They must be well labeled and bold and legible in hand writing by the teacher.
- vii. They must be relevant to the lesson being taught, brief and easy to comprehend, familiar to student's environment and experience.

### OBJECTIVES OF THE STUDY

The main objective of the study is to assess the effects of instruction facilities on the abilities of Nigerian Certificate on Education Graduates in Federal College of Education, Yola. Specifically, the study is designed to:

1. Assess the effects of teaching and learning facilities, on the academic performance of NCE Graduates
2. Assess the influence of educational facilities on the effectiveness of teachers in the skills development of NCE Graduates

### RESEARCH QUESTIONS

Two research questions were raised to guide the conduct of this study;

1. What are the effects of teaching and learning facilities, on the academic performance of NCE Graduates?
2. What is the influence of educational facilities on the effectiveness of teachers in skills development?

### RESEARCH HYPOTHESES

The following hypotheses will be tested at 0.05 level of significance

**H<sub>01</sub>:** Instructional facilities in colleges of education have no significant effects on the academic performance of Nigeria Certificate of Education graduate

**H<sub>a1</sub>:** Instructional facilities in colleges of education have significant effects on the academic performance of Nigeria Certificate of Education graduate

**H<sub>02</sub>:** Instructional facilities have no significant influence on the effectiveness of NCE graduates in skills development

**H<sub>a2</sub>:** Instructional facilities have significant influence on the effectiveness of NCE graduates in skills development

### CONCEPTUAL LITERATURE

Academic performance is seen as a concept that represents an individuals' achievement in relation to a given academic activity especially in school, college, or university (Steinmayr et al., 2017). Students' academic performance is considered as the desirable changes in students' behaviors after a period of teaching and learning in a school as related to learning outcomes which provide information to students, teachers, school administrators, and parents on the level of the achievement of learning outcomes (Oyedele, 2004). According to Mushtaq & Khan, (2012) students' performance in tertiary institutions (Like College of Education) is measured by GPA and CGPA based on their test and examination results.

The term instructional facilities according to Ihuoma (2008), are a combination of facilities that facilitate the teaching and learning process in the school system. The term Teaching and Learning Facilities refers to the entire scope of human, material, physical, and social infrastructures provided in the school for the purpose of teaching and learning (Okokoyo, Nwaham & Ikpeba, 2002). Lawanson and Gede (2011) on their part see educational facilities as all the materials and resources that are needed for effective teaching and learning process. Educational facilities enable the teacher to do his work very well and help the learners to learn effectively.

Akinfolarin (2008) defined Teaching / Learning facilities as major factors contributing to students' academic performance in the school system. Bandele (2013) stated that the importance of school facilities cannot be overemphasize. This is because teaching and learning facilities are to be put in place in all schools to facilitate the teaching and learning process. Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. He stated that schools that are endowed with more materials performed better than schools that are less endowed.

### EMPIRICAL LITERATURE

Usen (2016) conducted a study to examine the relationship between teachers' utilization of school facilities and the academic achievement of student nurses in Human Biology in schools of Nursing in Akwa Ibom State. The findings of the study revealed that there exists a significant relationship between teachers' utilization of school facilities and academic achievement of student nurses in Human Biology.

Anwo (2021) investigated the influence of teaching facilities and teachers' quality on the academic performance of senior school students in Physics. The result showed that teaching facilities and teachers' quality influence the academic performance of senior school Physics students. The study also showed that schools in Ilorin metropolis have a high level of qualified teachers but inadequate teaching facilities.



Osuji (2016) studied the Impact of School Facilities on Students 'Academic Performances in Public secondary schools in Zaria and Giwa Education Zones in Kaduna State, Nigeria. The findings of the study revealed that there is no significant difference in the opinions of teachers and principals on the impact of teaching facilities on students 'academic performance in Public Secondary Schools in Giwa and Zaria Education Zones in Kaduna State.

## METHODOLOGY

The study adopted the survey design, the survey research design was adopted because of the fact that all categories of information needed for descriptive and inferential use in research can be obtained through the use of survey research design. The population of the study comprises of all the 9319 NE graduate of the College between 2017 and 2022, all the 84 lecturers in the individual departments of the various schools that are using Laboratories, and all the 25 the laboratory technicians of the departments in the various schools in the Federal College of

Education, Yola. Due to the large number of NCE graduates between 2017 and 2022, lecturers and the laboratory technicians of the departments in the various schools in the Federal College of Education, Yola, the researchers selected a sample of 475 respondents using the Taro Yamane method of determining sample size. The 475 respondents comprises of 383 graduates, 69 lecturers and 23 laboratories technicians. The stratified sampling technique, simple random sampling (SRS) and purposive sampling were adopted for the selection of the sample population.

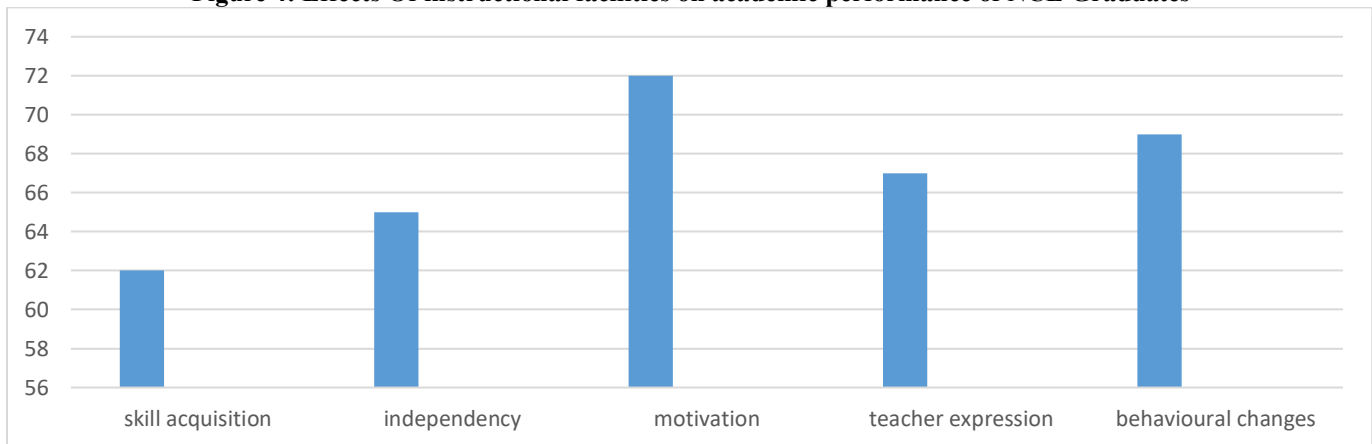
The instrument is a 20 item questionnaire designed to elicit responses from the respondents on effects of instructional materials on the academic performance of NCE graduates in Federal College of Education, Yola.

The data collected for the study were analyzed using the simple percentage method of data analysis to answer the research questions and ANOVA statistics to test the null and alternative hypotheses.

## RESULT AND DISCUSSION

**Research Question One:** What are the effects of instructional facilities, on the academic performance of NCE Graduates?

**Figure 4: Effects Of instructional facilities on academic performance of NCE Graduates**



**Source: Survey, September 2023**

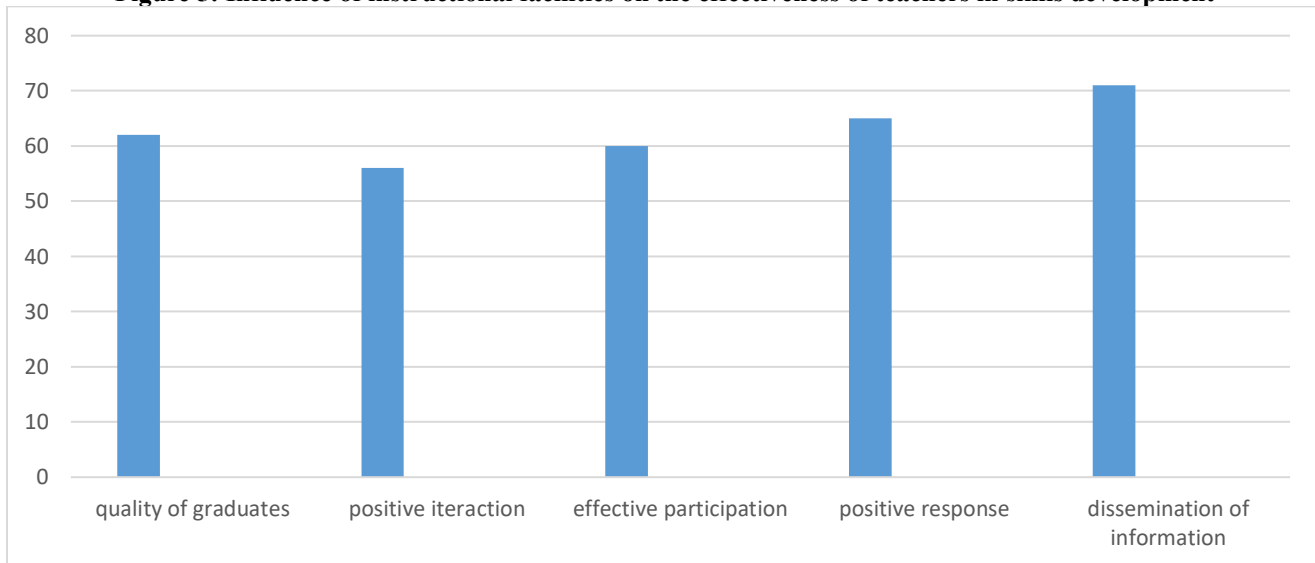
In fig 4 above, the result revealed the relationship between instructional facilities and the skill acquisition, independency, motivation, teacher expression and behavioral changes. These attributes are analyzed and describe using the simple percentage. Based on the responses of the respondents, the level of skill acquisition by the graduates' stands at 62 percent which is above average influence on the relationship. Similarly, graduate independency having used instructional facilities during teaching and learning is 65 percent which is above average in terms of relationship. The motivational influence of instructional facilities on the graduate is high at 72 percent. This indicate that teaching and learning is highly motivational when instruction facilities are used.

Similarly, the expression skills of graduates also correlates with the use of instructional facilities in teaching and learning, it is above average at 67 percent. In addition, instructional and learning facilities has as relationship with graduate behavioral change that is most of the graduates that used instruction facilities in learning has a changed in behavior as a result of the influences of instructional materials as indicated in the figure with a simple percentage of 69 percent. Finally, there is a little variation in the relationship of the attributes in fig 4 as acquired by the graduates in all the departments in the schools of the college.



**Research Question Two:** What is the influence of instructional facilities on the effectiveness of teachers in skills development?

**Figure 5: Influence of instructional facilities on the effectiveness of teachers in skills development**



Source: Survey, September 2023

The result in figure 5 indicates the responses of the respondents to the influence of educational facilities in promoting the quality of graduates, positive interaction effective participation, positive response, and dissemination of information by graduates, through teachers' effectiveness in the use of teaching and learning facilities. In the qualities of graduates 62 percent of the respondents agreed that teachers' effectiveness in the use of promote quality of achievement among the graduates. Also, teacher's effectiveness in the use of instructional facilities during teaching and learning promotes positive interaction among graduates during and after teaching and learning experience, 55 percent of the responded affirmed to this development. Again, during and post teaching and learning experiences graduates participates actively in the learning process, through effective application of learning facilities in teaching by the teacher. About 61 percent of the respondent consented to the influence of the effective use of instructional facilities on graduate participation in learning experiences.

Accordingly, positive response among the graduates during and post teaching and learning experience is influence greatly by teachers' effectiveness in the use of instructional facilities, 62 percent of the respondent's concord the concept. Dissemination of information as a skill among the graduates is highly promoted by teachers effectiveness in the use of instructional facilities, 70 percent of the respondent consented to the experience as found among the graduates.

### TESTING THE HYPOTHESES

**Ho<sub>1</sub>:** Instructional facilities in colleges of education have no significant effects on the academic performance of Nigeria Certificate of Education graduate

**Ha<sub>1</sub>:** Instructional facilities in colleges of education have significant effects on the academic performance of Nigeria Certificate of Education graduate

**Table 2: Effects of instructional Facilities on the performance of NCE graduates**

Sources	D.F	Sum of Square	Mean Square	F. Statistics	P. value	Decision
Between Group	2	25603.9935	1280.9967			
Within Group	6	99810.5066	16635.0844	0.7696	0.5041	Rejected
Total	14	2580/2972	184/3069			

F-Ratio Statistics on the effects of instructional Facilities on NCE graduates

Table 2 shows the effects of instructional facilities have significant influence on the performance of NCE graduates in Federal College of Education, Yola. The result obtained from the analysis shows that the value of F-statistics (0.7696) is greater than the P. value of 0.5041 at 0.05 level of significance. This mean that the null hypothesis two is rejected why the alternative hypothesis 2 is accepted. This suggests that instructional facilities

have significant influence on the performance of NCE graduates in Federal College of Education, Yola.

**Ho<sub>2</sub>:** Instructional facilities have no significant influence on the effectiveness of NCE graduates in skills development

**Ha<sub>2</sub>:** Instructional facilities have significant influence on the effectiveness of NCE graduates in skills development





**Table 3: educational facilities has influence on the effectiveness of NCE graduates in skills development**

Sources	D.F	Sum of Square	Mean Square	F. Statistics	P. value	Decision
Between Group	2	25589.357	12794.6785			
Within Group	6	99873.9756	16645.6626	0.7686	0.5044	Rejected
<b>Total</b>	14	2576.1391	184.0099			

F-Ratio Statistics on the Influence of educational Facilities on the effectiveness of NCE graduates in skills development

Table 3 shows the influence of educational facilities on the effectiveness of NCE graduates in skills development. The result obtained from the analysis shows that the value of F-statistics (0.7686) is less than the P. value of 0.5044 at 0.05 level of significance. This mean that the null hypothesis 3 is rejected while the alternative hypothesis 3 is accepted. This suggests that instructional facilities have significant influence on the performance of NCE graduates in Federal College of Education, Yola.

### DISCUSSION OF THE FINDING

The study found that the academic performance of the NCE graduates is the production of the teaching and learning facilities. In some of the departments of the various schools in the college students taught by teaching and learning facilities are more effective and efficiency in the display of their potentials than those that are not far from the work of Anwo (2021) and Benedicto (2019) that there is a great correlation in the performance of student-teachers ability as guided by teaching and learning facilities.

The study found out that most of the NCE graduates that were exposed to in appropriate teaching and learning materials could not perform greatly because, as Osuji (2016) and Useni (2021) rightly points that inappropriate teaching and learning facilities is just like there is none. Such conditions or characteristics of instructional facilities do not encourages skills acquisition in the proper concept.

### CONCLUSION AND RECOMMENDATIONS

From the findings of the study, it is apparent that the instructional facilities have an influence on the academic performance of the NCE graduates.

Based on the above conclusions the following were recommended;

1. Communities need to embark on initiatives to tap funds to ensure that the school facilities are replenished.
2. Government should provide facilities like modern laboratories, functional libraries, and comfortable classrooms for better academic performance;
3. School authorities should provide adequate funding for school facilities. This would ensure their effectiveness in terms of teachers' output.
4. The government should strive and set aside a reasonable amount of education budget which will be directed to improve and construct libraries in schools like what it did to promote laboratories in schools.

5. There is the need for effective maintenance or renovation of old buildings, chairs, desks, recreational equipment among others should be part and parcel of the school system.

### ACKNOWLEDGEMENTS

We would like to express our deepest gratitude to **TETFund** Abuja for their generous support and funding of the research project titled **“Teaching / Learning Facilities and Academic Performance of Nigeria Certificate of Education Graduates Federal College of Education Yola, Adamawa State, Nigeria”** with Project No: **TETF/DR&D/CE/YOLA/IBR/2022/VOL.1 BATCH 4** from where this paper was extracted. Their financial assistance has been instrumental in enabling the successful execution of this study.

### REFERENCES

1. Adeogum, A. A. (2001). *The principal and the financial management of public secondary schools in Osu State. Journal of Educational System and Development.* 5(1): 1 – 10.
2. Akinfolarin, C. A. (2008). *Resource utilization in vocational and technical education in colleges of education in South-West Nigeria. Unpublished Ph.D. Thesis. University of AdoEkiti, Ado-Ekiti*
3. Akinyemi, I. A. (2020). *Student enrolment, global utilization rate and academic performance in public tertiary institutions in Lagos State, Nigeria. (Doctoral Thesis, Lagos State University, Ojo, Lagos, Nigeria).*
4. Anwo A. O (2021) *Teaching Facilities, Teachers’ Quality And Students’ Academic Performance In Physics In Ilorin Metropolis’ Secondary Schools, Kwara State International Journal of Contemporary Education Research Published by Cambridge Research and Publications* 20 (8) 139-153
5. Bandele, S. O. (2013). *Administration of continuous assessment in tertiary institutions in Nigeria. Journal of Educational Foundations and Management,* 1(1), 289-296.
6. Ihuoma, P.A. (2008). *The need for effective facility management in schools in Nigeria. New York Science Journal* 1(2), 10-21 Issue 1554-0200.
7. Lawanson, O. A. & Gede, N. T. (2011). *Provision and management of school facilities for the implementation of UBE programme. Proceedings of the 2011 International Conference on Teaching, Learning and Change. Retrieved November 20th, 2015 from http://www.hrmars . Com/admin/pics/157.pdf.*
8. Mushtaq, I. & Khan, S. N. (2012). *Factors affecting students’ academic performance. Global Journal of Management and Business Research,* 12(9). 17-22.
9. Okokoyo, I. E., Nwajah, C. O. & Ikpaba, V. A. (2004). *Principles and practice of school organization and classroom management. Agbor: Kerisbee Publications.*
10. Osuji, J.N. (2016). *Impact of School Facilities on Students’ Academic Performances in Public 16. Secondary Schools in*



- Giwa and Zaria Education Zones, Kaduna State, Nigeria. Unpublished Master dissertation from Ahmadu Bello University, Zaria, Nigeria
11. Sigilai, R. M. (2013). A review of curriculum-related factors influencing academic achievements among students in public secondary schools in Kenya. *International Journal of Advanced Research*, 1(30); 219-230.
  12. Steinmayr, R., Meibner, A., Weidinger, F. A., & Wirthwein, L. (2017). *Academic achievement*. Oxford Bibliography. <https://doi.org/10.1093/OBO/9780199756810-0108>
  13. UNESCO, (2002). *Using ICT for quality teaching, learning and effective management: report of the seventh UNESCO/ACEID International Conference on Education*, Bangkok, Thailand, 11-14 December 2001
  14. Usen, O. M (2016) *Teachers' Utilization of School Facilities and Academic Achievement of Student Nurses in Human Biology in Schools of Nursing in Akwa Ibom State, Nigeria* *Journal of Education and Practice* Vol.7, No.16