Evaluation of Studio Infrastructure/Facilities for Teaching
of Fine and Applied Arts in Public Colleges of Education
in Southeast Nigeria

Chibuezem C. Chinagorom and Romy O. Okoye

ABSTRACT

This study evaluates studio infrastructure/facilities for teaching and learning of Fine and Applied Arts in public Colleges of Education in Southeastern Nigeria. The evaluation research design was adopted in the study. The design was chosen because of the evaluative nature of the study. The population of this study was made up of all the facilities in FAA departments in all Federal and State-owned Colleges of Education in the Southeast. Through simple random sampling six public colleges of education were obtained from eight colleges of Education in the zone. All the facilities in these six colleges were studied. The instrument used to collect data for the study was an Observation Schedule (OS) for ascertaining availability and adequacy of facilities. This Observation Schedule (OS) was face-validated by two experts, one from Measurement Unit and Evaluation Unit and the other from Fine and Applied Arts Department, both in Alvan Ikoku Federal College of Education Owerri. The reliability of the instrument was established using Cohen's Kappa. Kappa co-efficient of 0.83 was obtained. Data were analyzed using percentages and mean. Findings show that facilities were available in the colleges but not adequate. The study recommends among others that the school managements should make studio facilities adequate for the attainment and achievement of the lofty objectives of fine and applied arts.

Keywords: Colleges of Education, Fine Arts and Infrastructure

I. INTRODUCTION

Education is one of the sure means of national development all over the globe. Nations strive to establish sustainable, viable and quality system of education that is centered on effective teaching and learning (Eleje et al., 2021). Consequently, in recent times there have been reforms among developing nations in particular to meet with challenges of millennium development goals of the United Nations. Such reforms are geared towards vocation and entrepreneurship to arrest the rising rate of unemployment among the member states. Therefore, the Federal Government of Nigeria, knowing the importance of an entrepreneurial/technological-based environment among the Nigerian citizens, designed the national policy on education to ensure that vocational and technical education, at sub-professional level, must include the acquisition of appropriate skills and the development of mental, physical and social abilities. As well as competences as equipment for the individual to live in and contribute to the development of his society (Eleje et al., 2019; Federal Republic of Nigeria (FRN), 2004)

One of the vocation and entrepreneurship studies in Nigerian Colleges of Education is Fine and Applied Arts. Fine and Applied Arts which comprise drawing, sculpture, painting, ceramics, graphics and textile have been long established in tertiary institutions all over Nigeria to provide man-power needs in Vocational/Technical Education sector of the country. But effective and quality learning of entrepreneurship and vocational studies (Fine and Applied Arts) can never be achieved without available and adequate facilities and infrastructures in any given school environment, be it formal or informal school system (Ejinkonye & Okoye, 2021). It is not a hidden fact that Nigerian tertiary institutions are under equipped and with decayed infrastructures. This fact has remained one of the points on the agenda of the Academic Staff Union of Universities (ASUU), College of Education Academic Staff Union (COEASU) and Academic Staff union of Polytechnic (ASUP) in their relentless agitations for a better tertiary education in Nigeria that has spanned so many years. It is good to observe that every year a greater number of students sit for the Unified Tertiary Matriculation Exam (UTME) for admissions into the public tertiary institutions, whereas there are problems of infrastructural decay in schools and neglect of staff welfare in the schools.

Even though the importance of vocational studies has been stressed, the study of Fine and Applied Arts in colleges of education in Nigeria has met with lots of challenges. With
the dwindling economy, tertiary education in general have become stagnant in achieving its lofty ideas as many tertiary institutions especially the colleges of education suffer from lack or poor maintenance of equipment and facilities. Facilities remain the bedrock of vocational and technical education. Where facilities, equipment and tools are not adequate for use by the teeming number of Technical and Vocational Education (TVE) students, acquisition of skills in technical training programs will suffer and will lead to the production of unskilled personnel who are unemployable and unproductive. Therefore, inadequate workshop facilities in TVE institutions deter skill acquisition (Mbarg, Sambo & Tijjani, 2018).

Due to the nature of Fine and Applied Arts education which involves a lot of practical exercise, the importance of infrastructure/facilities cannot be undermined. Some of these infrastructure/facilities for the teaching and learning of art education include; easel, donkey, writing tables, chairs, studio chest, white board, throne, bath tub, just to mention a few. Accordingly, Akash (2018) believes that infrastructure is the key element of students’ learning experience. He affirms that students in schools with poor infrastructure can have lower scores than those with access to better infrastructure facilities. This makes the school infrastructure a key element in a child’s academic as well as holistic growth. Learning facilities are one of the main factors that contribute to increasing motivation for academic achievement in the school. School facilities mean all physical facilities and equipment in the school and class used by school members...the availability of these resources is important enough to achieve effectiveness in the process of learning and supervision in the school (Prameswari et al., 2020).

The importance of facilities in teaching and learning has been proven to be of great importance (Eleje & Esomou, 2018). It is then necessary for an evaluation of studio facilities for the teaching of Fine and Applied Arts in Colleges of Education in South East Nigeria. Therefore, the purpose of the study is to ascertain how available and adequate are the studio facilities for the teaching of Fine and Applied Arts in colleges of education in Southeast Nigeria?

II. METHOD

The study adopted evaluation research design method because of its evaluative nature. The area of the study was Southeastern Nigeria, one of the six geo-political zones of the Federal Republic of Nigeria. The population of this study was made up of all the facilities in FAA departments in all Federal and State-owned Colleges of Education in the Southeast. The sample for the study was drawn through simple random sampling, where six colleges of education were obtained from the eight public colleges of education in the Southeastern Nigeria.

Observation technique was used for collecting data. This was done through the use of an observation schedule prepared by the researchers. The schedule contained the list of facilities/infrastructure expected in each College of Education offering Fine and Applied Arts, by Nigerian Commission for Colleges of Education (NCCE). While observing, the researcher kept record of the facilities/infrastructures that were available as well as indicating whether the items were adequate or not. In addition, the study adopted a benchmark that stipulates that where any facility that is available in 66.7% (i.e., in four and above of the six colleges) is taken to imply availability in the colleges in general. Similarly, any facility that was adequate in 66.7% of the colleges was taken to imply adequacy in general. This benchmark for adequacy/availability at the college level was simply drawn for the purpose of this study because in the NCCE/Nigeria Commission for Colleges of Education, 2020 minimum standards for Vocational and Technical Education there is no benchmark for adequacy of facilities/ infrastructure.

III. RESULTS

In the sections that follow the findings regarding availability and adequacy of studio facilities in various sections of Fine and Applied Arts department in the six colleges are presented.

| TABLE I: AVAILABILITY AND ADEQUACY OF STUDIO FACILITIES IN TEXTILE SECTION |
|-----------------------------|---------------------|---------------------|
| **S/N** | Items | Availability | Adequacy |
| 1 | Printing table | 6 | 0 | 4(66.7%) | 1(16.65%) | 1(16.65%) |
| 2 | Broadloom | 5 | 1 | 1(16.65%) | 4(66.7%) | 1(16.65%) |
| 3 | Warping drum | 5 | 1 | 3(50%) | 2(33.3%) | 1(16.65%) |
| 4 | Stove/Gas cooker | 3 | 3 | 1(16.65%) | 2(33.3%) | 3(50%) |
| 5 | Metal Pots | 4 | 2 | 2(33.3%) | 2(33.3%) | 2(33.3%) |
| 6 | Table loom | 4 | 2 | 2(33.3%) | 1(16.65%) | 3(50%) |
| 7 | Writing tables | 6 | 0 | 6(100%) | 0(0%) | 0(0%) |
| 8 | Knitting machine | 4 | 2 | 0(0%) | 0(0%) | 0(0%) |
| 9 | Sewing machine | 2 | 4 | 2(33.3%) | 0(0%) | 4(66.7%) |
| 10 | Fly wheel | 3 | 3 | 1(16.65%) | 1(16.65%) | 4(66.7%) |
| 11 | Bath tub | 0 | 6 | 0(0%) | 0(0%) | 0(0%) |
| 12 | Fire extinguisher | 2 | 4 | 2(33%) | 0(0%) | 4(66.7%) |
| 13 | Light board | 6 | 0 | 6(100%) | 0(0%) | 0(0%) |
| 14 | Water tank | 6 | 0 | 6(100%) | 0(0%) | 0(0%) |

Table I, reflects the availability of studio facilities in the Textile section of Fine and Applied Arts departments in the Colleges of Education. The table further shows that using the 66.7% (4 colleges) criterion, ten (10) out of fifteen (15) facilities were available. One would therefore say that the facilities in the Textile Section could generally be said to be...
available in the Colleges. The available facilities were; Printing table, Broad loom, Warping drum, Metal pots, Table loom, Writing tables, Knitting machine, Light board, Water tank and White board. As regards adequacy, it is observed that out of the ten (10) items that were available, only five (5) met the criterion of adequacy (66.7%). Thus, out of the fifteen (15) items, ten (10) were not adequate. It would therefore be said generally that facilities in the Textile studio were not adequate.

**TABLE II: availability and adequacy of studio facilities in graphic section**

| S / N | Items               | Availability | Adequacy  |
|------|---------------------|--------------|-----------|
|      |                     | Available    | Not Available | Adequate | Fairly Adequate | Inadequate |
| 1.   | Lockers             | 6            | 0          | 0(0%)    | 2(33.3%)     | 4(66.7%)   |
| 2.   | Printing table      | 6            | 0          | 0(0%)    | 2(33.3%)     | 4(66.7%)   |
| 3.   | White board         | 6            | 0          | 0(0%)    | 2(33.3%)     | 4(66.7%)   |
| 4.   | Light board         | 6            | 0          | 6(100%) | 0(0%)        | 0(0%)      |
| 5.   | Ceiling fan         | 6            | 0          | 2(33.3%) | 0(0%)        | 4(66.7%)   |
| 6.   | Projector           | 4            | 2          | 2(33.3%) | 0(0%)        | 4(66.7%)   |
| 7.   | Still photo camera  | 5            | 1          | 1(16.65%)| 1(16.65%)    | 3(50%)     |
| 8.   | Fire extinguisher   | 2            | 4          | 0(0%)    | 0(0%)        | 6(100%)    |
| 9.   | Printing ink        | 4            | 2          | 4(66.7%) | 0(0%)        | 2(33.3%)   |
| 10.  | Enlarger            | 3            | 3          | 3(50%)   | 0(0%)        | 3(50%)     |
| 11.  | Still photo dryer   | 3            | 3          | 3(50%)   | 0(0%)        | 3(50%)     |
| 12.  | Computer lab        | 2            | 4          | 2(33.3%) | 0(0%)        | 4(66.7%)   |

Table II presents the level of availability and adequacy of studio facilities in Graphics section of F.A.A in the Colleges. This table indicates that eight (8) out of twelve (12) facilities were available which means that there were available studio facilities in Graphics section. The facilities that were available are as follows: Lockers, Printing table, White board, Light board, Ceiling fan, Projector, Still photo camera and Printing ink. In this section, out of the (8) items that were available only (2) met the adequacy criterion of 66.7%. These are Light board and Printing ink. The result implies that facilities in Graphics studio were in general not adequate.

Table III reveals the extent of availability and adequacy of studio facilities in Sculpture/Ceramics sections. It indicates that sixteen (16) out of twenty three (23) facilities (69.57%) were found to be available in the Colleges. They are; Kiln, Kick wheel, Wall shelves, Concrete table, Clay buckets, Metal shelves, Writing tables, Chair, Clay pot, White board, Water tank, Bust pegs, Wall shelves, Clay dump, Lamp cupboard and Turning tools. This shows that generally, studio facilities in Sculpture/Ceramics section of the Fine and Applied Arts departments in the Colleges are available. On the contrary, it is observed that, out of the 16 available items, only (3) Clay pot, White board and Water tank are adequate in general, implying that facilities in Sculpture/Ceramics studios are not adequate in the colleges.

**TABLE III: availability and adequacy of studio facilities in sculpture/ceramics sections**

| S / N | Items               | Availability | Adequacy  |
|------|---------------------|--------------|-----------|
|      |                     | Available    | Not Available | Adequate | Fairly Adequate | Inadequate |
| 1.   | Kiln                | 4            | 2          | 4(67.7%) | 0(0%)        | 2(33.3%)   |
| 2.   | Bathub              | 0            | 6          | 0(0%)   | 0(0%)        | 6(100%)    |
| 3.   | Kick wheel          | 4            | 2          | 2(33.3%)| 1(16.65%)    | 3(50%)     |
| 4.   | Bust stands         | 3            | 3          | 2(33.3%)| 1(16.65%)    | 3(50%)     |
| 5.   | Wall shelves        | 4            | 2          | 2(33.3%)| 2(33.3%)     | 2(33.3%)   |
| 6.   | Concrete table      | 4            | 2          | 2(33.3%)| 2(33.3%)     | 2(33.3%)   |
| 7.   | Clay buckets        | 5            | 1          | 3(33.3%)| 3(33.3%)     | 2(33.3%)   |
| 8.   | Metal shelves       | 4            | 2          | 2(33.3%)| 2(33.3%)     | 2(33.3%)   |
| 9.   | Writing tables      | 6            | 0          | 2(33.3%)| 0(0%)        | 4(66.7%)   |
| 10.  | Modelng stools      | 0            | 6          | 0(0%)   | 0(0%)        | 0(0%)      |
| 11.  | Welding machine     | 2            | 4          | 1(16.65%)| 1(16.65%)    | 4(66.7%)   |
| 12.  | Chairs              | 6            | 0          | 2(33.3%)| 0(0%)        | 4(66.7%)   |
| 13.  | Fire extinguisher   | 2            | 4          | 1(16.65%)| 1(16.65%)    | 4(66.7%)   |
| 14.  | Clay pot            | 5            | 1          | 4(66.7%)| 1(16.65%)    | 1(16.65%)  |
| 15.  | White board         | 6            | 0          | 1(16.65%)| 1(16.65%)    | 4(66.7%)   |
| 16.  | Water tank          | 6            | 0          | 6(100%) | 0(0%)        | 0(0%)      |
| 17.  | Bust pegs           | 5            | 1          | 3(50%)  | 2(33.3%)     | 1(16.65%)  |
| 18.  | Wall shelves        | 5            | 1          | 3(50%)  | 2(33.3%)     | 1(16.65%)  |
| 19.  | Metal backs         | 3            | 3          | 2(33.3%)| 1(16.65%)    | 3(50%)     |
| 20.  | Vice                | 2            | 4          | 2(33.3%)| 0(0%)        | 4(66.7%)   |
| 21.  | Clay dump           | 4            | 2          | 1(16.65%)| 1(16.65%)    | 4(66.7%)   |
| 22.  | Lamp cupboard       | 4            | 2          | 1(16.65%)| 1(16.65%)    | 3(50%)     |
| 23.  | Turning tools       | 5            | 1          | 1(16.65%)| 2(33.3%)     | 3(50%)     |

Table III reveals the extent of availability and adequacy of studio facilities in Sculpture/Ceramics sections. It indicates that sixteen (16) out of twenty three (23) facilities (69.57%) were found to be available in the Colleges. They are; Kiln, Kick wheel, Wall shelves, Concrete table, Clay buckets, Metal shelves, Writing tables, Chair, Clay pot, White board, Water tank, Bust pegs, Wall shelves, Clay dump, Lamp cupboard and Turning tools. This shows that generally, studio facilities in Sculpture/Ceramics section of the Fine and Applied Arts departments in the Colleges are available. On the contrary, it is observed that, out of the 16 available items, only (3) Clay pot, White board and Water tank are adequate in general, implying that facilities in Sculpture/Ceramics studios are not adequate in the colleges.

Table IV showed that, twelve (12) out of the fifteen (15) facilities were seen to be available in the Colleges. These are Easels, Donkeys, Writing tables, Chairs, Painting brushes, Oil colours, Canvas, Boards, Stretchers, Ceiling fans, White board and Throne. This shows that studio facilities in the Painting studio are available. In addition, the facilities were not adequate in the colleges because only two (2) out of the fifteen (15) facilities were adequate in the colleges.
Availability and Adequacy of Studio Facilities in Painting Section

| S/ N | Item                  | Availability | Adequate | Fairly Adequate | Inadequate |
|------|-----------------------|--------------|----------|-----------------|------------|
| 1    | Easels                | 5            | 1(16.65%) | 2(33.3%)        | 3(50%)     |
| 2    | Donkeys               | 5            | 1(16.65%) | 4(66.7%)        | 1(16.65%)  |
| 3    | Writing Tables        | 6            | 0(0%)    | 15(83.3%)       | 1(16.65%)  |
| 4    | Chairs                | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 5    | Painting brushes      | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 6    | Oil Colors            | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 7    | Canvas                | 5            | 1(16.65%)| 4(66.7%)        | 1(16.65%)  |
| 8    | Boards                | 6            | 0(0%)    | 4(66.7%)        | 2(33.3%)   |
| 9    | Stretchers            | 5            | 1(0%)    | 3(50%)          | 2(33.3%)   |
| 10   | Ceiling fans          | 6            | 0(0%)    | 3(50%)          | 3(50%)     |
| 11   | Extinguisher Studio   | 2            | 4(33.3%) | 0(0%)           | 4(66.7%)   |
| 12   | Chests White Board    | 3            | 3(50%)   | 0(0%)           | 3(50%)     |
| 13   | Throne                | 5            | 1(83.3%) | 0(0%)           | 1(16.65%)  |
| 15   | Bathtub               | 0            | 6(0%)    | 0(0%)           | 0(100%)    |

Table V shows that seven (7) out of ten (10) facilities were available in the colleges. Based on the above, one could say that facilities in the Drawing studio were adequate. These facilities are; Easels, Donkeys, Writing tables, Chairs, Ceiling fans, White board and Throne. The section lacked adequate facilities in the Colleges since it was only two (2) out of the ten (10) facilities that were found to be adequate. They are White board and Throne.

Availability and Adequacy of Studio Facilities in Drawing Section

| S/ N | Item                  | Availability | Adequate | Fairly Adequate | Inadequate |
|------|-----------------------|--------------|----------|-----------------|------------|
| 1    | Easels                | 5            | 1(16.65%) | 2(33.3%)        | 3(50%)     |
| 2    | Donkeys               | 5            | 1(23.3%)  | 3(50%)          | 1(16.65%)  |
| 3    | Writing Tables        | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 4    | Chairs                | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 5    | Ceiling fans          | 6            | 0(0%)    | 5(83.3%)        | 1(16.65%)  |
| 6    | Extinguisher Studio   | 2            | 4(33.3%) | 0(0%)           | 4(66.7%)   |
| 7    | Chests White Board    | 3            | 3(50%)   | 0(0%)           | 3(50%)     |
| 8    | Throne                | 5            | 1(83.3%) | 0(0%)           | 1(16.65%)  |
| 10   | Bathtub               | 0            | 6(0%)    | 0(0%)           | 0(100%)    |

IV. Discussion of Result

On availability, finding of the study indicates to some extent a high-level availability of studio facilities in the various areas of Fine and Applied Arts, considering what was on ground. The various sections; drawing, painting, sculpture, ceramics, textile and graphics have available studio facilities using the 66.7% (4 colleges) criterion. Therefore, the study postulates that the studio infrastructures and facilities are available in the public colleges of education in Southeast Nigeria.

For adequacy, finding of the study indicates that while the facilities were available, they were not adequate. This could be because of the high cost of these materials and also these colleges, just like various tertiary educational institutions are starved of funds by their owners. this is in agreement with Aina (2000) who affirms that the performance of students at National Technical Certificate (art inclusive) examinations revealed very disturbing statistics attributable to; utter neglect, poor funding, inadequate resources and poor management of infrastructure and facilities. Also, Ishiaka (1997) laments that the problem faced by vocational and technical education, which art is part, includes inadequate funding leading to inadequacy of human and material resources. It has been revealed that studio facilities are available in the colleges of education; however, from observation, it is affirmed that the studio facilities were not adequate. In spite of the conditions of these findings, these colleges pass during accreditations by Nigeria Commission for Colleges of Education (NCCE) and this is rather a surprise how it is so.

V. Conclusion and Suggestions

Thus, the adequacy of these facilities that are available is not guaranteed as it was observed that in most cases, the facilities may pass for availability but not for adequacy. Availability and adequacy of facilities are vital for competent training of students in a skill acquisition subject such as Fine and Applied Arts. Students’ progress of practical knowledge is daunted when these materials are not available.

The study therefore makes the following suggestions:

1. There is need for the college management to make studio facilities adequate for the attainment and achievement of the lofty objectives of Fine and Applied Arts.

2. Parents should also provide materials for the students to enable them meet up with their training in the programme since these materials are basic need, because the colleges cannot provide all for the students.

3. The Government at state and federal levels must wake up to their responsibilities by equipping the colleges with all facilities if they must achieve the United Nation's Millennium Development Goal of reducing unemployment to the barest minimum.
ACKNOWLEDGMENT

C.C. Chinagorom wishes to acknowledge and express his profound gratitude to Dr. C.A. Egornu and Eleje L. I. for making intellectual inputs that gave a useful insight in the course of writing this Article. May God in His infinite mercy grant them good health and bless them more now and onwards.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

Aina, O (2000). Technical and vocational education: Vision and action. Blue print and Master Plan-Federal Ministry of Education 2001-2010.

Akash. (2018). Schools' infrastructure: A key element of students' learning experience. Retrieved from www-digitallearning.eletsonline.com on 31 March 2021 at 12:37 pm

Ejinkonye, F. O., & Okoye, R. O. (2021). Setback to and encouragement of feedback: Teacher and student perspectives. European Journal of Education and Pedagogy, 2(3), 113-177. https://doi.org/10.24018/ejedu.2021.2.2.118

Eleje, L.I., &Esomonu, N.P.M. (2018). Test of achievement in quantitative economics for secondary schools: Construction and validation using item response theory. Asian Journal of Education and Training, 4(8), 18-22. Doi:10.20448/journal.522.2018.41.18.28

Eleje, L.I., Abanobi, C.C., Anyanwu, A.N., Ufearo, F.N., Akinfe, G., &Mbachu, U.C. (2021). The impact of school-gender on students' learning outcome: A secondary schooling setting. International Journal of Education and Social Science Research, 4(1), 118-126. DOI: http://dx.doi.org/10.37500/IJESSR.2021.4113

Eleje, L.I., Esomonu, N.P.M., &Ufearo, F.N. (2019). Trends in information and communication technology and learning assessment: The application and implication. International Educational Applied Research Journal, 3(11), 1-6.

Ishiaka K. (1997).Technology education and vision: A Keynote Address Delivered at 2nd National Conference of Technology Education FCE Gusau.

Mayor, M. (Ed.).(2009). Longman dictionary of contemporary English. England. Pearson education limited.

Mbang, E. V, Sambo, M. M, Tijjani, A. (2018). Adequacy of workshop facilities in colleges of education (technical) for training of trade teachers of technical colleges in North Eastern States of Nigeria. International Journal of Vocational and Technical Education Research, 4(1), pp.42-49. UK: European Centre for Research Training and Development (www.eajournals.org)

NCCE (2020). Nigerian certificate in education minimum standards for vocational and technical education Abuja. National Commission for Colleges of Education.

Oga, G. E. & Okpaga, A. (N.D). The role of colleges of education in national development: an appraisal of the Nigerian experience. Retrieve from www.globalacademicgroup.com on 29 March 2021.

Prameswari, N. S., Muhammed, S., Amboro, J. L. &Wahyuningsih, T.V. (2020). The motivation of learning art and culture among students in Indonesia. InVaughan, T. (Ed.), Congenent education, 7(1). Retrieve from www.tanfonline.com on 31 March 2021