



## Assessment of Availability and Utilization of Equipment for Teaching Agricultural Education Students' Entrepreneurial Skills in Colleges of Education in Northwest Nigeria

<sup>1</sup>Joshua, F. Y., <sup>2</sup>Egunsola, A. O., <sup>3</sup>Audu I., <sup>4</sup>Umar M. A.

<sup>1</sup>Department of Agricultural Education, Federal University of Education Zaria, Kaduna State

<sup>2,3&4</sup>Department of Vocational Education, Modibbo Adama University Yola, Adamawa State

### ABSTRACT

The study assessed the availability and utilization of equipment for teaching agricultural education students' entrepreneurial skills in Colleges of Education in Northwest Nigeria. Two specific purposes, two research questions and one null hypothesis guided the study. Descriptive survey research design was adopted with a population of 276, which comprised of 225 lecturers and 51 technologists of Agricultural Education Department. A sample size of 244, which comprised of 198 lecturers and 46 technologists, was used. Census sampling was employed because the population size is manageable. Structured questionnaire was developed and named: Questionnaire on Availability and Utilization of Equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education (QAUETLESAE). Three experts subjected the instrument to face and content validity. The reliability of the instrument was established using Cronbach Alpha Coefficient reliability tool and the value of 0.94 was obtained. Percentage, weighted mean and standard deviation were used to answer research questions and presented in a pie chart. Analysis of Variance (ANOVA) was used to test null hypothesis at 0.05 level of significance. The result revealed that not all the 94 equipment studied were available and their categorization revealed uneven provision across Colleges of Education in Northwest Nigeria. There was underutilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education, Northwest Nigeria. The study also revealed that, there was no significant difference in the mean responses of lecturers and technologists in Federal and State Colleges of Education on the utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Northwest, Nigeria. The study recommended that, the department in collaboration with the College management should develop and implement a monitoring and evaluation system to ensure optimal utilization of available equipment for teaching and learning entrepreneurial skills in Agricultural Education. The College management should provide lecturers and technologists with training and professional development opportunities to enhance their skills in effectively integrating equipment into entrepreneurial education focusing on innovative teaching strategies.

### ARTICLE INFO

#### Article History

Received: April, 2025

Received in revised form: June, 2025

Accepted: July, 2025

Published online: September, 2025

### KEYWORDS

Availability, Utilization, Materials, Teaching, Entrepreneurial Skills

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



## INTRODUCTION

The availability and utilization of equipment can vary significantly among educational institutions, particularly in resources constrained settings. This can lead to disparity in the quality of education and limit the scope, practical training and development of entrepreneurial skills among students. As inadequate equipment can lead to disconnect between theoretical knowledge and practical application, ultimately affecting employability and entrepreneurial potentials of graduates. Considering the importance of agriculture in Nigeria as it continues to be an important industry that employs a large percentage of the workforce and makes a major contribution to the GDP of the country. With agriculture serving as the main source of income in Northwest Nigeria, developing entrepreneurial skills in this area is essential to encouraging self-employment and lowering unemployment rates. However, the availability and utilization of equipment in our educational institutions for teaching and learning of entrepreneurial skills is crucial to the success of entrepreneurial education in agriculture.

The availability of equipment is another critical factor in the effective teaching and learning of entrepreneurial skills in agricultural education for development of hands-on skills in students. Agricultural education programs require a variety of equipment, such as tractors, disc plough, disc ridger, irrigation systems, greenhouses, and processing machines, to offer students practical exposure to real-world farming operations. Entrepreneurial skills in agriculture often require the use of modern farming equipment and technology driven tools, which enable students to apply theoretical knowledge in real world situations. The effective teaching of entrepreneurial skills in agriculture requires that students have access to modern equipment, which is vital for experiential learning. As noted by Kolb (2018), experiential learning theory emphasizes the importance of practical, hands-on experience in the learning process. In the context of agricultural education, this means that students must be able to interact with and operate agricultural machinery, such as tractors, sprayers,

incubators and hatcher, water pumping machines and irrigation systems among others, to gain the skills required for modern agribusiness.

Equipment refers to the machinery and tools used to support teaching and learning of entrepreneurial skills in agricultural education. Examples of equipment includes; tractor, gari making machine, milling machine, water pumping machine, sprayer, grain drier, seed grader, seed cleaner, cereal thresher, packaging and labelling equipment etc. This equipment enables students to learn about crop production and management. Also, help students to develop skills in value addition and product development. Hence, equipment play a very crucial role in teaching entrepreneurial skills in agricultural education, as it is made to provide students with hand-on experience and practical training in agriculture production, processing and marketing.

Equipment can be seen as portable or heavy mechanical devices for Vocational Technical operation in the laboratory or farm. Equipment in this study refers to machines and tools usually manually or power driven for cutting, ploughing of land, farm operations, harvesting and processing. It also includes tools held in the hand for doing work. These tools and machineries could be locally made or imported that could significantly enhance teaching and learning if intelligently used. These equipment and tools do not only facilitate practical learning but also enable students to gain an understanding of the technical aspects of farming, which are crucial for entrepreneurship in agriculture. They help the teacher to make his lesson much clearer to the learner as concrete or physical object are visible, provides sound or both to the sense organs during teaching.

Despite the acknowledged importance of agricultural equipment, Okafor and Chinedu (2021) observed that many agricultural schools lack the necessary equipment to offer practical training. The authors pointed out that, this is a major limitation to the development of entrepreneurial skills among students, as they are often forced to rely on theoretical knowledge that does not adequately prepare them for the practical demands of the agricultural sector. The findings of

---

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



Mohammed (2023) reported that, survey equipment such as ranging pole, measuring tape, prismatic compass, and Gunter chain, and Simple farm tools such as hoe, cutlass, axes, garden fork, hand trowel, head pan, budding knife were available.

Nevertheless, tractors, machine tools, and other teaching equipment are all lacking in most of the schools. This implies that, the scarcity of equipment and tools in teaching and learning of entrepreneurial skills in agricultural education can hampers on the practical application of knowledge and skills, thereby hindering the fulfilment of entrepreneurial skills potential fully. This can have a negative impact on their ability to develop the practical skills necessary for entrepreneurial success in the agricultural sector.

Ojobor et al. (2020) pointed out that, teaching and learning at all, levels of Nigerian schools are becoming more theoretical and ineffective in most schools because the equipment and tools required to make the process realistic and effective are not available or insufficient. This situation is not only in Nigeria as Rebunalan and Samala (2021) observed that, a significant impediment looms over many public schools in the Philippines with dearth of equipment for conducting science experiments. The availability of equipment and tools in agricultural education is a key component of effective entrepreneurial skills acquisition of students. Schools must be equipped with equipment and tools necessary to provide students with the practical skills they need to succeed as agricultural entrepreneurs.

### STATEMENT OF THE PROBLEM

With the mismatch between educational system and the skills needed in the labour market, there have been complaints by parents and other stakeholders on the negative changes in attitudes in the education industry. The training, which tertiary students received, has not been fully successful in equipping them with the desirable skills and competence required for job creation and self-employment. It has been observed that the entrepreneurship education provided to the students of agricultural education which is supposed to inculcate in them both theoretical

knowledge and practical skills and make them successful owners of business, improve their income level and that of the nation after graduation is grossly deficient. Hence, there is an urgent need to investigate the current state of equipment to fill the gap, provide actionable insights, and make recommendations that will help Colleges of Education in Northwest Nigeria to better prepare their students to acquire entrepreneurial skills for profitable self-employment in the agricultural sector with empirical evidence.

### Purpose of the Study

The main purpose of the study was to determine the availability and utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria. Specifically, the study sought to:

1. determine the availability of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria
2. determine the levels of utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria.

### Research Questions

The following research questions were raised and answered in guiding the study:

1. What are the available equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria?
2. What are the levels of utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria?

### Hypotheses

One null hypothesis was raised and tested at 0.05 level of significant:

---

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



**HO<sub>1</sub>:** There is no significant difference in the mean responses of lecturers and technologist in Federal and State Colleges of Education on the utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Northwest Nigeria.

## METHODOLOGY

Descriptive survey research design was used in this study. The study was conducted in Northwest Geopolitical Zone of Nigeria. The zone is made up of seven States namely Jigawa, Kaduna, kano, Katsina, Kebbi, Sokoto and Zamfara States. The population of the study was 276, which comprised of 225 lecturers and 51 technologists of Agricultural Education Department in the public Colleges of Education located and studied within the zone. The sample size used for the study was 244, which comprised of 198 lecturers and 46 technologists from the public Colleges of Education within the study zone. This gave rise to 88% and 90% of returns for lecturers and technologists respectively. Census sampling was employed in this study because the population size is manageable, allowing every member of the population to be included.

The researcher developed a questionnaire and the questionnaire was named: Questionnaire on Availability and Utilization of Equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education (QAUTLESAE). Section A focused on the availability of materials with 94 items. Section B covered the utilization of materials with 94 items. The instrument was subjected to face and content validity by three experts, in which two were from the Faculty of Education, Modibbo Adama University, Yola and one from the Department of Vocational Education, Ahmadu Bello University Zaria. Their suggestions was used to improve the instrument. The reliability of the instrument was established through trial testing with 15 lecturers and technologists in Adamawa State College of Education Hong.

Data collected was subjected to analyses using Cronbach Alpha Coefficient reliability tool. The Cronbach alpha coefficient

value of 0.94 was obtained. The researcher with the help of one research assistant from each institution administer the instrument and conducted physical observation. It took the period of three months to distribute and retrieve the instrument from the Colleges of Education studied during 2023/2024 academic session. Percentage and weighted mean were used to answer research question while Analysis of Variance (ANOVA) was used to test null hypotheses at 0.05 level of significance. The Statistical Package for Social Sciences (SPSS) version 20 was used to run the analysis.

Data collected for specific purposes one, was calculated in percentage and any item with a percentage between one percent and 100 percent is considered available while item with a score of zero is regarded as not available and presented in a pie chat (Figure 1). However, the degree of availability varies among items. The items were further interpreted in which, the percentage on availability were categorized into five as follows: 80.01 – 100% = Very Highly Available, 60.01 – 80% = Highly Available, 40.01 – 60% = Moderately Available, 20.01 – 40% = Partially Available and 0.01 – 20% = Scarcely Available and presented in a pie chat (Figure 2).

This categorization allowed for a clear interpretation and enabled the identification of areas that required improvement. The following limit of numbers was used to interpret the mean value on each item on the questionnaire for specific purpose two as 0.00 – 1.49 = Not Utilized, 1.50 – 2.49 = Occasionally Utilizes, 2.50 – 3.49 = Utilized, 3.50 – 4.49 = Highly Utilized and 4.50 – 5.00 = Very Highly Utilized and presented in a pie chat (Figure 3). For ANOVA, where the significant P value is greater than 0.05 level of significant, the null hypotheses was accepted and conclude that there is no significant difference between the mean responses.

## RESULTS

### Research Question One

What are the available equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria?

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved

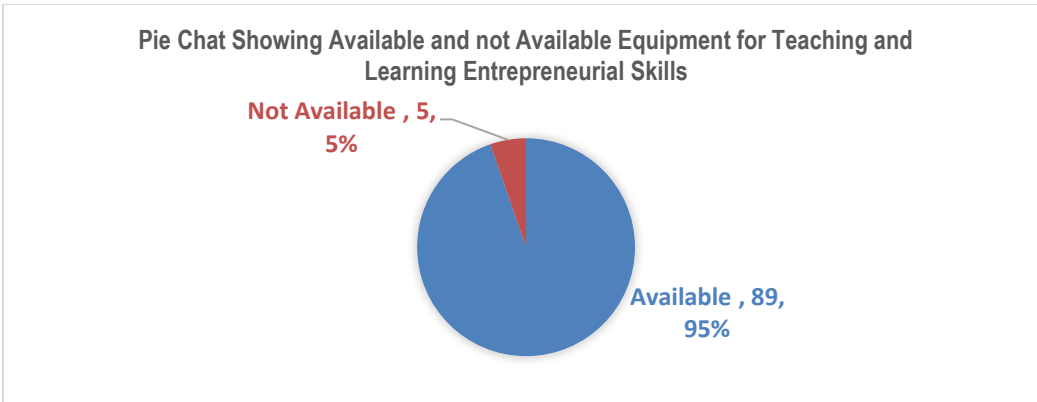


Figure 1. Available and Not Available equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education

Figure 1 revealed that out of 94 equipment studied 89 were available while five were not available for teaching and learning

entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria.

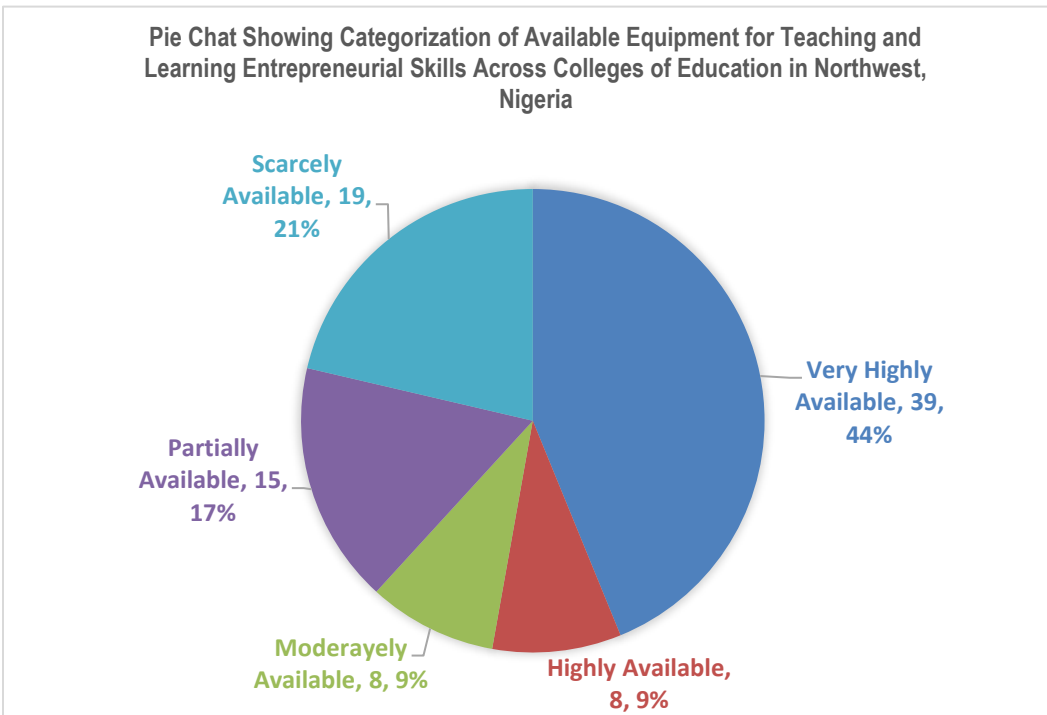


Figure 2: Categorization of Available Equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education.

Figure 2. The categorization of available equipment shows that 39 were very highly

available, eight were highly available, eight were moderately available, 15 were partially available and 19 were scarcely available for teaching and

Corresponding author: Joshua, F. Y.

[jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved

learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria.

**Research Question Two**

What are the levels of utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria?

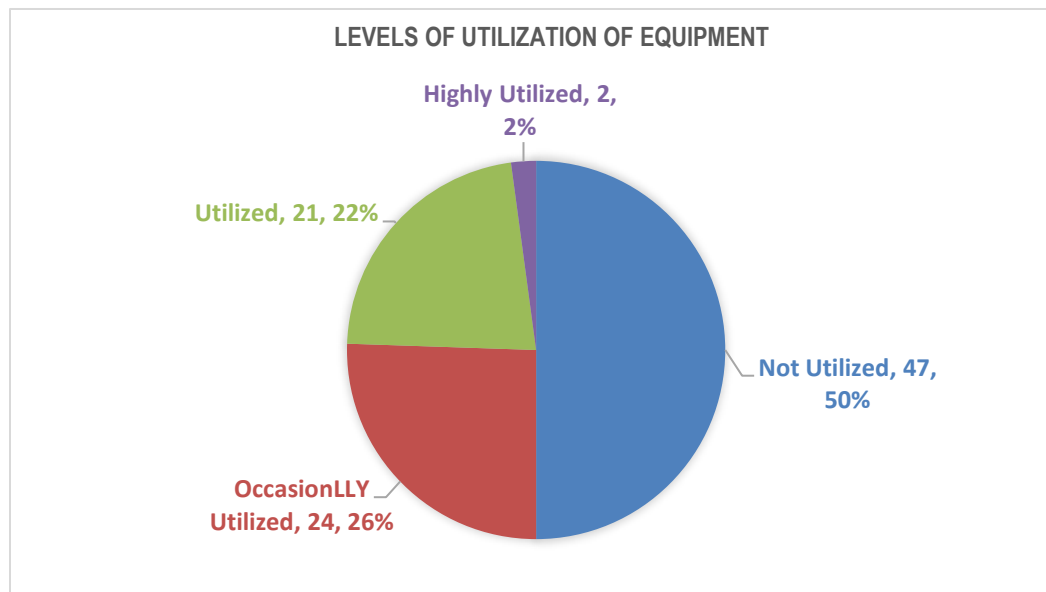


Figure 3: Levels of Utilization of Equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education

Figure 3 revealed that out of the 89-equipment available only two were highly utilized, 21 were utilized, 24 were occasionally utilized and 47 were not utilized.

**Null Hypothesis**

**HO<sub>1</sub>:** There is no significant difference in the mean responses of lecturers and technologist in Federal and State Colleges of Education on the utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Northwest Nigeria.

Table 1: ANOVA on Utilization of Equipment for Teaching and Learning Entrepreneurial Skills in Agricultural Education

Source of Variance	Sum of Squares	Df	Mean Square	F ratio	Sig.
Between Groups	5.184	3	1.728	2.417	0.066
Within Groups	265.945	372	0.715		
Total	271.129	375			

Table 1 shows an F ratio of 2.417 with a P value of 0.066, degree of freedom 3,372 on means of the items. That is  $F(3,372) = 2.417$ ,  $P(0.066) > 0.05$ . This revealed that, there is no substantial statistical evidence to reject the null hypothesis. Therefore, the null hypothesis was

upheld. Hence, there is no significant difference in the mean responses of lecturers and technologist in Federal and State Colleges of Education on the utilization of equipment for teaching and learning entrepreneurial skills in agricultural education in Northwest Nigeria.

Corresponding author: Joshua, F. Y.

[jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved





## DISCUSSION OF FINDINGS

Result in Figure 1 revealed that out of 94 equipment studied 89 were available while five were not available for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria. The categorization of the available equipment shows that 39 were very highly available, eight were highly available, eight were moderately available, 15 were partially available and 19 were scarcely available for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education in Northwest Nigeria. Figure 2.

The findings of Mohammed (2023) reported that, survey equipment such as ranging poles, measuring tape, prismatic compass, Gunter chain and simple farm tools such as hoe, cutlass, axes, garden fork, hand trowel, head pan, budding knife were available. Nevertheless, tractors, machine tools, and other teaching equipment are all lacking in most of the schools. Shedrack and Omeodu (2022) reported that laboratory equipment were at low extent. However, Manabete and Makinde (2016) reported that, equipment and tools were moderately available in many schools in the North-East Geo-political Zone of Nigeria.

Yet, Kennedy (2019) revealed that there is an inadequate amount of equipment in the teaching of Basic Electricity in urban and rural Delta State. The development of entrepreneurial skills in agricultural education will effectively be achieved if adequate access to specialized equipment such as tractors, sprayers, irrigation systems, processing tools, incubator and hatcher among others are made available. This equipment helps students to bridge the gap between theoretical concepts and practical application. Thereby, increasing their confidence to venture into agribusiness practice after graduation.

The study of Uwameiye (2016) pointed out that, tools for teaching and learning of garment making were grossly inadequate in senior secondary schools in Edo State. This makes teaching and learning becoming more theoretical and ineffective in most schools because the equipment and tools required making the process realistic and effective are not available or

insufficient. This situation is not only in Nigeria as Rebulan and Samala (2021) observed that, a significant impediment looms over many public schools in the Philippines with dearth of equipment for conducting science experiments. The availability of equipment and tools in agricultural education is a key component of effective entrepreneurial skills acquisition of students. Schools must be equipped with equipment and tools necessary to provide students with the practical skills they need to succeed as agricultural entrepreneurs.

Results in Figure 3 revealed that, half of the equipment for teaching and learning entrepreneurial skills in agricultural education in Colleges of Education, Northwest Nigeria were not utilized. This implies that the equipment were underutilized. The findings corroborate with that of Edalin (2024) who pointed out underutilization of laboratory equipment by science teachers in Malapatan Municipal, Philippines. In the same vein Shadrack and Omeodu (2022) reported underutilization of equipment for teaching and learning of Physics in Port Harcourt, Nigeria. Also, Kennedy (2019) pointed out that teachers in Technical Colleges often fail to properly use the equipment and tools needed for teaching and learning.

Similarly, Umoren (2023) found that equipment and tools for school farm in Akwa Ibom State were inconsistently utilized for agricultural science. His study attributed the findings to poor planning, insufficient supervision and lack of integration between theoretical and practical component in the curriculum. The study of Ekele et al. (2020) revealed similar trend regarding underutilization and reported that lecturers often lack the skills or motivation to utilize tools effectively, leading to infrequent usage. The occasional utilization of teaching and learning equipment could significantly undermine the acquisition of entrepreneurial skills. Thereby posing a setback in teaching and learning of entrepreneurial skills in agricultural education. Entrepreneurial success in agricultural education demands hand-on experience with equipment and tools for relevant practices on modern farming and agribusiness. The occasional utilization of

---

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved



equipment could be attributed to inadequate maintenance, insufficient funding, lecturer's competence and policy implementation gaps.

Table 1 revealed the utilization of equipment by lecturers and technologists in Federal and State Colleges of Education for teaching and learning entrepreneurial skills in agricultural education in Northwest Nigeria. It shows that there was no significant difference between the mean responses of the four groups. This finding is similar to that of Uwameiye (2016) who reported that there is no significant difference between the mean ratings of garment making teachers and students on the rate of utilization of equipment for teaching and learning of garment making in senior secondary schools in Edo State. This implies that both Federal and State Colleges undergo similar accreditation process that ensures uniform standard in the provision and utilization of equipment.

In addition, these Colleges are faced with similar constraints on utilization of equipment for teaching and learning of entrepreneurial skills in Agricultural Education. Of which the effective utilization of equipment in agricultural education is influence by several factors, including the availability of skilled operators and instructors (Kulo et al. 2017). This can lead to underutilization of available equipment, as students may not have the opportunity to gain hands-on experience with these tools. Another factor influencing equipment utilization is the maintenance and upkeep of machinery. Many agricultural education institutions lack the financial resources necessary to properly maintain their equipment, which can result in frequent breakdowns and reduced availability for student use (Amesi and Giami 2018).

Additionally, the high cost of replacing worn-out parts and repairs can further limit the utilization of equipment. This finding could also be attributed to similar professional development of lecturers and technologists in Federal and State Colleges of Education. Where they received similar training on equipment utilization in their various institutions of learning across Nigeria. On the other hand, Kennedy (2019) reported that there is a significant difference between Urban

and Rural Technical Colleges on utilization of equipment for teaching Basic Electricity in Delta State, Nigeria.

## CONCLUSION

The study concluded based on the findings and implication of the study, which revealed that not all the 94-equipment studied were available and there was underutilization of equipment across Colleges of Education in Northwest Nigeria for teaching and learning entrepreneurial skills in agricultural education. These could hinder students from acquiring essential entrepreneurial skills, thereby, increasing the risk of unemployment and limiting their ability to engage in agribusiness.

## RECOMMENDATIONS

Based on the findings and implication of the study, the following recommendations were made:

1. The management of the Colleges of Education should advocate for support from Tertiary Education Trust Fund (TETFUND) to provide facilities across all Colleges of Education within the Northwest zone for teaching and learning of entrepreneurial skills in Agricultural Education.
2. The department in collaboration with the College management should develop and implement a monitoring and evaluation system to ensure optimal utilization of available materials for teaching and learning entrepreneurial skills in Agricultural Education.
3. The College management should provide lecturers and technologists with training and professional development opportunities to enhance their skills in effectively integrating equipment into entrepreneurial education focusing on innovative teaching strategies.

## REFERENCES

- Amesi, J. & Giami, D. K. (2018). Challenges hindering the availability of instructional resources for entrepreneurial skills acquisition among business education students in tertiary institutions, River

---

Corresponding author: Joshua, F. Y.

[jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved





- State. *International Journal of Education and Evaluation* 4 (1), 78 – 86.
- Edalin B. T. N. (2024). Adequacy, Utilization of Laboratory Equipment and Performance of Junior High School Science Teachers. *International Journal for Multidisciplinary Research* 6 (3), 1 – 32.
- Ekele, G. E., Odus, A. A., & Essien, E. N. (2020). Analysis of utilization of practical agricultural equipment and tools in colleges of education in Enugu State, Nigeria. *Puissant*, 1, 19-26. <https://puissant.stepacademic.net>. Retrieved on 25/10/2024.
- Kennedy, E. U. (2019). Teacher utilization of instructional equipment and materials in teaching Basic electricity in Urban and Rural Technical Colleges. *International Journal of Scientific Research in Education*, 2 (2), 88-95.
- Kolb, D. A. (2018). *Experiential learning: Experience as the source of learning and development* (2<sup>nd</sup> ed). New Jersey, Pearson Education.
- Kulo, V. A., Agbogo, R. A., & Okudarc, U. (2017). Challenges of entrepreneurship education in Nigeria. *Nigerian Journal of Business Education*, 4(1), 50-57.
- Manabete, S. S. & Makinde, A. A. (2016). Availability and utilization of facilities of electrical installation and maintenance works programme of technical Colleges in North East geo-political zone of Nigeria. *International Journal of Vocational and Technical Education Research* 2 (1), 11-31.
- Mohammed, B. A. (2023). Availability and utilization of facilities and equipment for teaching and learning of agricultural science in senior secondary schools In Nangere Local Government Area Yobe State. *International Journal of Innovative Social & Science Education Research* 11(3):113-123
- Ojabor, R. C., Babarinde, E. T. & Fagbemi, V. O. (2020). Audio-visual resources in library: An enhancing tool for effective teaching and learning in primary schools in Nsukka L.G.A. *Library Philosophy and Practice (e-journal)* 4361. Retrieved from <https://digitalcommons.unl.edu/libphilprac/4361>. On 23/9/2024.
- Okafor, L. I., Onifade, T. A. & Ogbedu, A. I. (2018). Analytical review of small and medium scale enterprises in Nigeria. *International Journal of Small Business and Entrepreneurship Research* 6 (2), 32 – 46.
- Rebunalan, M. & Samala, H. (2021). Learning Science: Factors and its Relation to Academic Performance. *European Online Journal of Natural and Social Sciences*, 10 (4), 629 -637.
- Shedrack T. & Omeodu, M. D (2022). Extent of availability and usage of various laboratory equipment among physics students' in Port-Harcourt, Nigeria. *World Journal of Advanced Research and Reviews*, 13 (3), 113–122.
- Umoren, N. J. (2023). Availability and utilization of school farms for effective teaching and learning of agricultural science in Akwa Ibom State, Nigeria. Michael Okpara University of Agriculture, Umudike Institutional Repository. Retrieved from <http://reposition.mouau.edu.ng/work/view>. On 10/12/2024.
- Uwameiye, B. E. (2016). Availability and utilization of tools and equipment for teaching and learning garment making trade in the senior secondary schools in Edo State. *International Journal of Humanities Social Sciences and Education* 3 (3) 12-18.

---

Corresponding author: Joshua, F. Y.

✉ [jofachano@gmail.com](mailto:jofachano@gmail.com)

Department of Agricultural Education, Federal University of Education Zaria, Kaduna State.

© 2025. Faculty of Technology Education. ATBU Bauchi. All rights reserved