

# Enhancing Lecturers' Competencies in the Utilization of Instructional Media Devices in Agricultural Education in Colleges of Education in Benue State

Christopher Mkulega Shishi\*, Deborah Ogbene Onu, Gbeyongu Frederick Terkimbi

*Department of Agricultural Education, Federal University of Agriculture, Makurdi, Nigeria*

*\*Corresponding author*

**Abstract:** This paper focused on enhancing lecturers' competencies in the utilization of instructional media devices in agricultural education in colleges of education in Benue State, Nigeria. Three research questions guided the study and hypotheses were tested at 0.05 level of significance. The study adopted a descriptive survey design, using a sample of 250 respondents for data collection. With the instrument titled: Competencies in the Utilization of Instructional Media Devices Questionnaire (CUIMDQ) was structured by the researchers from the literature review and was face validated by three experts. The internal consistency of the questionnaire was determined using Cronbach alpha ( $\alpha$ ). The Cronbach alpha coefficient of 0.78 was obtained. The data collected were analyzed using means and standard deviation to answer research questions while t-test was used to test the null hypotheses at 0.05 level of significance. It was found that 11 strategies for enhancing lecturers' competencies in the utilization of instructional media devices/materials; 12 importance of effective utilization instructional media devices in agricultural education and 12 problems associated with utilization of instructional media devices by lecturers' are needed to enhance lecturers' competence in the utilization of instructional media devices in agricultural education in colleges of education in Benue state, Nigeria. It was recommended among others that lecturers' needed competence in the utilization of instructional media devices/materials in vocational agriculture and technology education in colleges of education Benue State, Nigeria.

**Keywords:** Agriculture Education, instructional media device, lecturers, competencies, utilization

## I. INTRODUCTION

Agricultural education has been described as the pivot for global development, and many nations of the world have keyed into it (Okonji, 2014). Essentially, technology education is the primary engine of economic growth. It plays a fundamental role in wealth creation, improvement of the quality of life and real economic growth and transformation in any society. It provides the key to unlocking any country's potential in terms of decreasing overhead costs associated with outsourcing and creating employment opportunities (Egbogah, 2016). The impact of technology education is felt in every sphere of human life so much that it is intricately

linked with all aspects of nation's development. Nigeria today as a nation has seen the increasing importance of Agricultural education on as way forward for development and reducing the awkward situation of unemployment. In recent times most of its policies are tilted towards agricultural education as the main driver of economic development (Agbulu & Wever, 2011). Agriculture education as defined by Agbulu (2002), is the art of learning by doing and requires the active involvement of all participants in exhibiting psycho-productive activities in laboratories and demonstration ground.

In recognition of vocational agriculture and technology education as the touchstone of development, Nigeria in its National Education Commission of Colleges of education curriculum included the teaching of vocational agriculture and technology education as a field of specialization at colleges of education level. Courses under this field include Farm Management, tractor operation and maintenance, Computer education, Economic education, Home Management, Foods and Nut, and Clothing and Textile among others (NCCE, 2014). Vocational agriculture and technology education, perhaps more than any other field of technology, has enjoyed an explosive development in this century (Agbulu & Olaitan, 2002). In this fast developing society, vocational agriculture and technology education has come to stay as the most important branch of technical education. Instructional media devices such as iPod, Pam-top, video tapes, Power point, handsets and audio-visual are being used in almost all industries for quality control, workshops, and seminars; for they are fast replacing the present vast army of workers engaged in processing and assembling of communication devices of instructional media (Abulu & Elaigwu, 2014). Development in the field of vocational agriculture and technology education has constituted one of the greatest stories of this century.

The objectives of studying agricultural education in colleges of education in Nigeria as contained in National Commission of Colleges of Education curriculum include among others, to equip candidates with broad understanding of the technology

of creativity, maintenance, production of crops, rearing domestic livestock and educating farmers on how to use modern farm equipment among others. It is also intended to offer candidates sufficient knowledge and skills to form the valuable foundation for related vocational agriculture and pursue further educational qualifications (NCCE, 2014).

Vocational/technical education is achieved through a combination of knowledge, methods, tools, and skills. Thus, vocational agriculture and educational technology courses are an activity or practical-oriented and the appropriate methods of teaching it are resource base. This suggests that the mastery of vocational skills cannot be fully achieved without the effective use of practical instructional media materials. Instructional media resources are educational inputs that are vital to the teaching of any subject in the school curriculum. They are media devices which the lecturers use in supplementing his teachings (Adeniyi, 2001). Agbulu and Elaigwu (2014) define instructional media devices as learning materials which aid lecturers in delivering the lessons and communicating to the learners regardless of the location as a hindrance. In the context of this study, instructional media devices are Projectors, handsets, iPad, headphone and portable palmtops among others to aid lecturers in the teaching-learning process. Lecturers are considered as the major implementing factors of effective resource utilizations in any teaching-learning research on the process. The term utilization refers to the level of used a given device in the execution of the assigned task.

Task involves the creation of value in things (Agbulu and Elaigwu, 2014). Asogwa, Onu, and Egbo (2013) posit utilization to a large extent judges the value of instructional devices/materials by the degree in which it singly or collectively satisfy the derived instructional needs.

In the context of this study, utilization refers to the extent to which an instructional media device in vocational agriculture and technology education instruction is put into use by lecturers of vocational agriculture in colleges of education. Instructional media device in this concept referred to as instructional aids that have gone beyond simple aids but also facilitates the communication and learning of vocational agriculture and technology education principles.

According to Olawale (2013), instructional media devices include materials use to facilitate learning for better results. In the same vein, Uzuegbu, Mbadiwe, and Anulobi (2013) refer to instructional materials as any device used to assist the instructor in the preparation of a lesson, delivering of the lesson and facilitate students' learning of the subject matter. Instructional media devices include those objects that are commercially acquired or improvised by the lecturers to make conceptual abstraction more concrete and practical to the learner (Iwu, Ijioma, Onoja & Nzewuibe, 2013). They are relevant devices utilized by the lecturers during instructional

proceeds for the purpose of making the contents of the instructions more practical and less vague. Instructional materials are also described as a concrete or physical object which provides sound, visual or both to the sense organs during teaching and learning (Agbulu & Elaigwu 2014). In the context of this study instructional media devices could be regarded as the information dissemination devices used in the classroom for easy transfer of learning and first-hand experience in the learning environment. There are different instructional materials available to be used in teaching vocational courses effectively, which requires the competencies of lecturers.

According to Orji and Abolarin (2012), competence is the ability to perform the task and roles required to the expected standards. Weinert (2001) competencies are the positive combinations of knowledge, ability, and willingness in the strength of the individual to cope successfully and responsibly with changing situation. Similarly, Orji and Abolarin (2012) refer to competence as the effectiveness or ability of anyone concerned to apply the acquired knowledge and skill to achieve desired results. These definitions express competence as changing over time, experience and setting. Thus, competencies as a concept cannot be communicated but developed. In this regard, Urevbu (2006) asserts that lecturers are tools of teaching and only lecturers who possess all the skills, knowledge and values needed to function effectively in the classroom situation and are competent to disseminate quality information in the learning environment. The researchers perceive lecturers' competencies as knowledge, skills, and values which a lecturer possesses. Therefore teacher competencies in instruction delivery is key, which necessary input in realizing the objectives of instructional media in vocational education.

#### *Statement of Problem*

Instructional media devices are not ends in themselves but means of attaining specific instructional functions. The competencies of the lecturers to effectively utilize the available instructional media devices/materials optimizes the attainments of an instructional situation; this differs with the level of utilization. A situation where a vocational agriculture lecturer pays "lip service" to activity-oriented instructional methods and resources that could enhance creative thinking in the learners negates the objectives of vocational agriculture and technology education at the colleges of education. The need to fashion out ways of enhancing the effective use of instructional media devices by lecturers in order to provide students with practical experiences in vocational agriculture instruction is the thrust of this study. Thus, the researchers identify the methods of enhancing lecturer's competence in the utilization of instructional media in vocational agriculture in colleges of education in Benue state.

### *Purpose of the Study*

The purpose of the study is enhancing lecturers' competence in the utilization of instructional media in vocational agriculture and technology education in colleges of education in Benue.

1. Strategies for enhancing lecturers' competencies in the utilization of instructional media devices in colleges of education in Benue state
2. Importance of effective utilization of instructional media devices by lecturers' in vocational agriculture in colleges of education Benue state
3. Problems associated with the utilization of instructional media devices by lecturers' of colleges of education in Benue State.

### *Research Questions of the Study*

Three research questions were raised to guide the study:

1. What are the strategies for enhancing lecturers' competence in the utilization of instructional media devices in colleges of education in Benue state?
2. What are the importance of effective utilization of instructional media devices by lecturers' in vocational agriculture in colleges of education Benue state?
3. What are the problems associated with in the utilization of instructional media devices by lecturers' in vocational agriculture in colleges of education in Benue State?

### *Statement of Hypotheses*

Three null hypotheses are formulated and tested at 5% level of significance.

1. There is no significant difference in the mean response of lecturers and students on strategies for enhancing lecturers' competence in the utilization of instructional media devices in colleges of education in Benue state.
2. There is no significant difference in the mean responses of lecturers and students on the importance of effective utilization of instructional media devices in vocational agriculture in colleges of education Benue state
3. There is no significant difference in the mean response of lecturers and students on the problems associated with utilization of instructional media devices by lecturers' of colleges of education in Benue State.

## II. METHODOLOGY

This study adopts survey design technique. The study was carried out in Benue state using lecturers and NCE 2 students in the Department of Vocational Agriculture of the two public colleges of education located at Katsina-ala and Oju Local Government Areas of Benue State. The population of the study was 357 respondents consisted of 57 lecturers and 300 students respectively. This study utilized purposive sampling to select 50 lecturers while random sampling was used to select 100 NCE 2 students' from the two colleges, making a total sample size of 200. The sample size of the study was 250 respondents comprised of 50 lectures and 200 NCE 2 students from the two colleges of education. 35 item statements on Competencies in the Utilization of Instructional Media Devices Questionnaire (CUIMDQ) was the instrument for data collection with four point rating scale with the response options of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) Respectively. The instrument was developed by the researchers through the literature review. The instrument was face validated by three experts; one in Department of Science Education and two in the Department of Agricultural Education, all of the University of Agriculture, Makurdi. 40 copies of the instrument were administered to 10 lecturers and 30 students of NCE 2 of the same traits like population of the study in Department of Agriculture Education in College of Education Akwange Nasarawa State and retrieved.

The collected data was analyzed using the split half technique to determine the stability and internal consistency of the instrument. The coefficient of 0.78 was obtained. This has shown that there is internal consistency of the instrument and valid for use. The collected data were analyzed using weighted means to answer research questions using 2.50 as the bench mark and the item with a mean of 2.50 or above was considered agreed, while item statement with less than 2.50 was considered disagreed. The t-test statistical tool was used in testing null hypotheses at 5% level of significance. The null hypothesis was not rejected when the t-calculated was greater or equal to the P-value at 5% level of significance, while the null hypothesis was rejected when the t-calculated was less than p-value at 5% level of significance.

## III. RESULTS

The results of the study were obtained from the research questions answered and the hypotheses tested through the data collected and analyzed.

Table 1. Mean and t-test Analyzes of the Responses of the Lecturers and Students on Strategies for enhancing lecturers’ competence in the utilization of instructional media devices in colleges of education in Benue State (N=250)

| S/N | Item Statement  | $\bar{X}_1$ | SD <sub>1</sub> | $\bar{X}_2$ | SD <sub>2</sub> | t-cal | Remarks | Ho |
|-----|---|-------------|-----------------|-------------|-----------------|-------|---------|----|
| 1   | Instructional devices can be purchased or locally made for effective instructional lesson delivery  | 3.87        | 0.34            | 3.88        | 0.32            | 0.76  | Agreed  | NS |
| 2   | Professional vocational agriculture lecturers need to note that every instructional device has its unique strength in teaching-learning situation | 3.87        | 0.37            | 3.36        | 0.37            | 0.76  | Agree   | NS |
| 3   | Appropriate instructional devices enhance effective delivery of lesson by competent lecturers   | 3.80        | 0.40            | 3.74        | 0.44            | 0.96  | Agree   | NS |
| 4   | Careful selection of instructional media device facilitates skillful utilization for lesson delivery  | 3.74        | 0.44            | 3.73        | 0.45            | 0.95  | Agree   | NS |
| 5   | Utilization of instructional media device is maintained for appropriateness instructional objectives  | 3.73        | 0.45            | 3.79        | 0.41            | 0.95  | Agree   | NS |
| 6   | The instructional media device for learning activities should be taken into consideration objectives and content by lecturers                     | 3.79        | 0.41            | 3.79        | 0.41            | 0.84  | Agree   | NS |
| 7   | Lecturers to develop positive attitude towards use of instructional devices in vocational agriculture lesson delivery in schools                  | 3.74        | 0.53            | 3.74        | 0.56            | 0.84  | Agree   | NS |
| 8   | Lectures should consult where in doubt, the instructional device being selected for delivery of vocational agriculture lessons                    | 3.78        | 0.46            | 3.76        | 0.46            | 0.95  | Agree   | NS |
| 9   | Lecturers should reflect individual differences in learners' traits in the use of instructional devices   | 3.63        | 0.48            | 3.80        | 0.40            | 0.95  | Agree   | NS |
| 10  | The age level and interest often varies learning style of the learner on instructional device selected  | 3.80        | 0.40            | 3.83        | 0.38            | 0.96  | Agree   | NS |
| 11  | Socioeconomic background affects physical skills of individual learner in utilization of instructional media device                               | 3.80        | 0.40            | 3.87        | 0.34            | 0.96  | Agree   | NS |

Key:  $\bar{X}$  Mean, SD=Standard Deviation, t-cal=t-calculated, NS=Not Significant.

Data presented in Table 1 revealed that all the 11 items had their mean values ranged from 3.36 to 3.88 which were above the benchmark of 2.50. This means that the respondents agreed that all the 11 items are strategies for enhancing lecturers’ competencies in the utilization of instructional media devices in colleges of education in Benue State, Nigeria. The standard deviation of the responses of the respondents on the 11 items ranged from 0.34 to 0.48, indicating that respondents were not far in their option of responses from each other. The data on the hypothesis in

Table 1 has shown that all the 11 items had the P-values ranged from 0.76 to 0.96, which was greater than the P-value of 0.05. This indicated that there was no statistically significant difference in the mean ratings of lecturers and NCE 2 students on strategies for enhancing lecturers' competence in the utilization of instructional media devices in colleges of education in Benue State, Nigeria. Therefore, the null hypothesis of no significant difference between two groups was not rejected on the 11 items.

Table 2. Mean and t-test Analyzes of the Responses of the Lecturers and Students on the importance of effective utilization of instructional media devices in vocational agriculture in colleges of education in Benue state (N=250)

| S/N | Item Statement   | $\bar{X}_1$ | SD <sub>1</sub> | $\bar{X}_2$ | SD <sub>2</sub> | t-cal | Remarks | Ho |
|-----|--|-------------|-----------------|-------------|-----------------|-------|---------|----|
| 1   | It provides the vocational agriculture lecturers with interesting competing platforms for conveying information that motivates learners to learn more and more | 3.83        | 0.38            | 3.77        | 0.58            | 0.76  | Agreed  | NS |
| 2   | Instructional media devices help the lecturers to overcome physical difficulties that could have hindered his effective presentation of a given topic          | 3.68        | 0.77            | 3.35        | 0.87            | 0.76  | Agree   | NS |
| 3   | The use of instructional media devices help to explain points, create reality and encourage active participation of learners                                   | 3.37        | 0.78            | 3.35        | 0.87            | 0.84  | Agree   | NS |
| 4   | The use of instructional media devices saves the time and ease work for lecturers in lesson delivery   | 3.40        | 0.80            | 3.34        | 0.86            | 0.84  | Agree   | NS |
| 5   | Instructional media devices provide meaningful and useful sources of information to lecturers for lesson delivery  | 3.63        | 1.13            | 2.86        | 1.13            | 0.93  | Agree   | NS |
| 6   | Develop positive attitude and healthy self-concept carrying out the activities that make vocational agriculture students believe they can do it                | 3.68        | 0.47            | 2.86        | 0.48            | 0.93  | Agree   | NS |
| 7   | Instructional media devices make the learners enjoy and appreciate their course of study   | 3.81        | 0.53            | 3.78        | 0.51            | 0.51  | Agree   | NS |
| 8   | Instructional media devices develop understanding and judgment for lecturers and students  | 3.49        | 0.50            | 3.53        | 0.50            | 0.51  | Agree   | NS |
| 9   | Develop functional knowledge and manipulative skill  | 3.81        | 0.53            | 3.79        | 0.50            | 0.31  | Agree   | NS |
| 10  | Facilitate different learning styles by visualizing or experiencing something  | 3.83        | 0.39            | 3.88        | 0.32            | 0.31  | Agree   | NS |
| 11  | Develop continuity of reasoning and coherence of thoughts  | 3.78        | 0.49            | 3.88        | 0.32            | 0.25  | Agree   | NS |
| 12  | Possess opportunities for private study  | 3.49        | 0.73            | 3.84        | 0.37            | 0.24  | Agreed  | NS |

Key:  $\bar{X}$  Mean, SD=Standard Deviation, t-cal=t-calculated, NS=Not Significant.



Data presented in Table 2 revealed that all the 12 items had their mean values ranged from 2.86 to 3.88 which were above the benchmark of 2.50. This means that the respondents agreed that all the 12 items are the importance of effective utilization of instructional media devices in vocational agriculture in colleges of education in Benue state, Nigeria. The standard deviation of the responses of the respondents on the 12 items ranged from 0.32 to 1.13, indicating that responses of respondents were not far-fetched from each other. The data on the hypothesis in Table2 has

shown that all the 12 items had the P-values ranged from 0.24 to 0.93, which was greater than the P-value of 0.05.

This indicated that there was no significant difference in the mean ratings of lecturers and NCE 2 students on the importance of effective utilization of instructional media devices in agricultural education in colleges of education in Benue state, Nigeria. Therefore, the null hypothesis of no significant difference between two groups was not rejected on the 12 items.

Table 3. Mean and t-test Analyzes of the Responses of the Lecturers and Students on Constraints associated with utilization of instructional media devices by lecturers’ of colleges of education in Benue State (N=250)

| S/N | Item Statement  | $\bar{X}_1$ | SD <sub>1</sub> | $\bar{X}_2$ | SD <sub>2</sub> | t-cal | Remarks | Ho |
|-----|---|-------------|-----------------|-------------|-----------------|-------|---------|----|
| 1   | Instructional media devices for vocational agriculture courses’ instruction at colleges of education are not adequately available   | 3.54        | 0.66            | 3.80        | 0.40            | 0.61  | Agreed  | NS |
| 2   | How to make the best use of instructional media devices available with the modern innovation are grossly inadequate   | 3.59        | 0.67            | 3.73        | 0.45            | 0.61  | Agree   | NS |
| 3   | Inadequate lecturers’ technical know-how to demonstrate practical skill content areas of vocational agriculture   | 2.95        | 1.24            | 3.79        | 0.41            | 0.76  | Agree   | NS |
| 4   | Inadequate lecturers’ professional competence in the area of effective instructional media resource utilization.  | 3.78        | 0.46            | 3.74        | 0.56            | 0.76  | Agree   | NS |
| 5   | Failure to appreciate the importance of using instructional media devices in promoting and understanding of vocational agriculture principles   | 3.74        | 0.56            | 3.76        | 0.46            | 0.44  | Agree   | NS |
| 6   | Insufficient awareness of types of instructional media devices for use in delivery of different vocational agriculture contents   | 3.64        | 0.53            | 3.63        | 0.48            | 0.44  | Agree   | NS |
| 7   | Inadequate time allocation to accommodate effective instructional media device utilization in vocational agriculture instructions   | 3.72        | 0.60            | 3.80        | 0.40            | 0.35  | Agree   | NS |
| 8   | Gross inadequate of finance to acquire or improvise needed instructional media devices/materials  | 3.30        | 1.17            | 3.80        | 0.40            | 0.35  | Agree   | NS |
| 9   | Environmental factors such as little or non-availability of equipped e-library, laboratories, workshops, electricity affect effective utilization of instructional media devices/materials.                         | 3.26        | 1.20            | 3.83        | 0.38            | 0.62  | Agree   | NS |
| 10  | Inadequate professional personnel affects effective utilization of instructional media devices/materials  | 3.20        | 1.19            | 3.68        | 0.77            | 0.62  | Agree   | NS |
| 11  | Poor maintenance culture of existing instructional media devices/materials especially projected and manipulative types  | 2.92        | 1.18            | 3.35        | 0.87            | 0.41  | Agree   | NS |
| 12  | Inadequate opportunities for in-service training/refresher course for serving vocation agriculture lecturers to update their knowledge periodically in the light of new research findings and resource development. | 3.49        | 0.69            | 3.34        | 0.86            | 0.41  | Agreed  | NS |

Key:  $\bar{X}$ : Mean, SD=Standard Deviation, t-cal=t-calculated, NS=Not Significant.

Data presented in Table 3 revealed that all the 12 items had their mean values from 2.92 to 3.80 which were above the benchmark of 2.50. This means that the respondents agreed that all the 12 items are on Constraints associated with utilization of instructional media devices by lecturers’ of colleges of education in Benue state, Nigeria. The standard deviation of the responses of the respondents on the 12 items ranged from 0.40 to 1.24, indicating that responses of respondents were not far-fetched from each other.

The data on the hypothesis in Table3 has shown that all the 12 items had the p-values from 0.35 to 0.76, which was greater than the p-value of 0.05.

This indicated that there was no significant difference in the mean ratings of lecturers and NCE 2 students on constraints associated with utilization of instructional media devices by lecturers’ in the department of vocational agriculture of colleges of education in Benue state, Nigeria. Therefore, the null hypothesis of no significant difference between two groups was not rejected on the 12 items.

#### IV. DISCUSSION OF RESULTS

The result in Table 1 showed that lecturers and students in the study area have agreed that all the 11 items are strategies for enhancing lecturers’ competencies in the utilization of instructional devices in colleges of education in Benue State, Nigeria. Respondents agreed with all items, which indicated that mean values above the benchmark of 2.50. The result also indicated that there was no statistically significant difference between the mean responses, thus, lecturers need the strategies to enhance their competencies in the utilization of instructional mediadevices. These statements are in agreement with views of Iwu, et al. (2011), professional agricultural education lecturers needs to note that every instructional media device has its definite unique strength in teaching-learning situation. Furthermore, better teaching and faster learning of instructional media device principles can be facilitated by careful selection, development and skillful utilisation of appropriate instructional device media by the competent lecturers. Based on the following strategies are suggested to enhance lecturers' competence in the selection,

development, and utilization of instructional media devices/materials for effective instruction-lesson delivery: Develop a positive attitude towards the development and use of instructional media devices in vocational agriculture instructional-lesson delivery in colleges. The instructional objectives, content learning activities and evaluation instruments should be taken into consideration by the lecturers in the selection, development, utilisation and maintain appropriateness of the media devices to instructional objectives. The content for which the instructional device is being selected, where in doubt, the agriculture education lecturer should consult with experts or professionals and the aphorism that two good heads is better than one good head becomes more relevant in the field of education particularly in teaching among others.

The finding in Table 2 showed that lecturers and students in the study agreed that all the 12 items area importance of effective utilisation of instructional media devices in agricultural education in colleges of education in Benue state. Hence the responses are above the benchmark of 2.50. The results also revealed that there was no significant difference in the mean rating of the responses of the two groups of the 12 items, which p-value is greater than alpha value of 0.05 level of probability.

For that reason, the null hypotheses were not rejected for the 12 items. This indicated that lecturers and students agreed that instructional media devices are important in the lesson delivery in vocational agriculture in colleges of education in Benue State. The statements are in submission of Agbulu and Wever (2011), that instructional devices are important because they are used for the transference of information from one individual to another, help the teacher in extending his learner's horizon of experience, stimulate learners' interest and help both teachers and students to overcome physical limitations during the presentation of subject matter, among others. Bello and Shuaibu [16] assert that most educators generally and equally agree that the creative use of a variety of instructional devices will increase the probability that student would learn more, retain better and bring about the skills they are expected to perform.

Table 3 revealed that there are 12 items on constraints associated with utilization of instructional media devices by lecturers' in Benue state, Nigeria. This means that the lecturers' and NCE 2 students agreed that all the 12 items are constraints associated with utilization of instructional media devices by lecturers' of colleges of education in Benue state, Nigeria. The standard deviation of the responses ranged from 0.40 to 1.24, indicating that responses of respondents were not far-fetched from each other. This statement in agreement with the view of Taale and Mustapha (2014), instructional devices for vocational agriculture courses' instruction in colleges of education are not adequately available; more so, how to make the best use instructional devices available with the modern innovation by agricultural education lecturers. Bello and Shuaibu (2013) highlight some constraints as; poor teachers'

professional knowledge and technical know-how to teach practical skill content areas of vocational agriculture. Low teacher competencies in the area of effective instructional resource utilization. Failure to appreciate the importance of using instructional materials

in promoting and understanding of electronics principles. Insufficient awareness of types of instructional materials for use in teaching different electronics contents. Insufficient time allocation to accommodate effective instructional materials utilization in electronics instruction. Lack of finance to acquire or improvise needed instructional materials.

## V. CONCLUSION AND RECOMMENDATION

The delivery of quality instruction in the lecture room in any education system depends largely on the quality and competencies of the lecturers. This is because the lecturers are expected to perform the important function of guiding, directing, evaluating, imparting, asking and answering questions among others for maximum benefits of the learners. The implication is that the lecturer is the cornerstone on which the business of educators rests upon the whole world. The competent agricultural education lecturer who is curious of effective instructional delivery sees instructional devices not as gadgets like textbooks, chalks, and chalkboard but as necessary resources and object which the lecturer develops and improvises for use. This process of instructional delivery is a medium to concretize his lesson for effective and comprehensiveness by the learner about skills and knowledge of vocational courses using.

Based on the conclusion of the paper, the researchers recommended the followings:

1. Colleges of education administrators should allot enough funds for the instructional devices used in teaching vocational courses and other practical-oriented courses.
2. Workshops and seminars should be organized from time to time for vocational agriculture lecturers where they would be taught not only how to produce instructional media devices/materials but also how to use them effectively for the achievement of educational goals.
3. Resource centers should be established at strategic locations within an educational area and be well equipped with instructional devices from where lecturers could loan from.

## REFERENCES

- [1]. Adeniyi, A. A. (2001). *Methodology and instructional materials: A new approach to teaching religions in tertiary institutions in Nigeria*. Ibadan: Relinks Konsults.
- [2]. Agbulu, O. N. & Wever, D. G. (2011). *Introduction to vocational agricultural education*. Makurdi, Benue State: Selfers Academic Press Ltd.
- [3]. Agbulu, O.N. & Elaigwu, O.A. (2014). *Environmental Education and Management for Students in Tertiary Institution in Nigeria*. Makurdi. SAP Publishing House. Benue State.

- [4]. Agbulu, O.N. & Olaitan, S.O. (2002). *Comparative Vocational Technical Education System in U.S.A. Great Britain and Japan: Lesson for Nigeria*; Aboki Publishers; 1<sup>st</sup> edition. Benue state.
- [5]. Agbulu, O.N. (2002). *Methodology of Vocational Agriculture and Guidance*. Makurdi; Aboki publishers: 1<sup>st</sup> edition. Benue state.
- [6]. Asogwa, V. C., Onu, D. O. & Egbo, B. N. (2013). Availability and utilization of instructional materials for effective teaching of fish production to students in senior secondary schools in Benue State, Nigeria. *African Journal of Agricultural Research*, 8(49), 6601-6607.
- [7]. Bello, H. & Shuaibu, B. (2013). State of facilities for teaching electrical installation and maintenance work trade in technical colleges in Bauchi State, Nigeria. *International Journal of Vocational and Technical Education*, 5(5), 82-91.
- [8]. Egbogah, E. O. (2012). The role of science and technology in national development: The miracle of Malaysia and the future for Nigeria. *Petroleum Technology Development Journal*, 1(4) 1-12.
- [9]. Iwu, R. U. Ijioma B. C., Onoja, A. I. & Nzewuihe, G. U. (2011). Teaching aids. A panacea for effective instructional delivery in biology. *Researcher*, 3(2), 62-65.
- [10]. NECCE (2014). Latest Curriculum for all vocational courses (NECCE)-2015. Retrieved on September 1st, 2017 from <http://www.myschoolgist.com/ng/waec-syllabus-by-subject-2013>.
- [11]. Okonji, E. (2014, March 21). The need to up technology development in Nigeria. Retrieved September 1st, 2017 from <http://www.thisdaylive.com/articles/the-need-to-up-technology-development-in-Nigeria/173579>.
- [12]. Olawale, S. K. (2013). The use of instructional materials for effective learning of Islamic studies. *Jihad-al-Islam*, 6(20), 29-40.
- [13]. Orji, U. E., & Abolarin, E. (2012). Strategies for enhancing teacher competence and quality of classroom instruction. *Global Voice of Educators*, 1(1), 1-6. Retrieved on June 25th, 2017 from <http://www.globaleducators.org>.
- [14]. Taale, K. D. & Mustapha, B. (2014). Effects of teacher – constructed electrical models on students’ academic achievement in basic electricity in technical colleges of Borno state, Nigeria.
- [15]. Urevbvu, A. O. (2006). Research on teaching as a basis for teaching practice: Problems and Possibilities for teacher education in Nigeria. The 3<sup>rd</sup> Faculty of Education Distinguished Lecture Series, University of Benin, Benin City, Nigeria.
- [16]. Uzuegbu, C.P., Mbadiwe, H. C., & Anulobi, J. C. (2013). Availability and utilization of instructional materials in teaching and learning of library education in tertiary institutions in Abia state. *Wudpecker Journal of Educational Research*, 2(8), 111-120.
- [17]. Weinert, F. E. (2001). *The concept of competence: A conceptual clarification*, in D.S. Rychen & L. H. Salganik (Eds) *Defining and selecting key competencies* (Gottingen, Hogrefe).