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Development of Training Manual in Turkey Production for Lecturers in Colleges of Education in North-East, Nigeria

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Abstract: *The study was on development of Training manual in Turkey Production for Lecturers in Colleges of Education in North-East, Nigeria. Three specific objectives guided the study while three research questions were answered and three corresponding null hypotheses were formulated and tested at 0.05 level of significance. The study adopted instrumentation research design and was conducted in North-East, Nigeria. The population for the study was 454 and the sample size for the study was 213, which was determined using Taro Yamane formula. The instrument for data collection was a structured questionnaire titled: Development of Training Modules in Turkey Production Questionnaire (DTMTPQ) with 45 structured items statement. The instrument was validated by five experts. The validated instrument was trial-tested on 30 respondents in Benue State in North-central, Nigeria. The score obtained was subjected to reliability test using Cronbach Alpha method, which yielded reliability coefficient of 0.93. The researcher administered 213 copies of the questionnaire and retrieved all of them for analysis. Data collected was analyzed using mean and standard deviation to answered research questions and t-test statistics to test the null hypotheses at 0.05 level of significance. The findings of the study revealed that eight instructional methods are suitable, twenty-nine instructional materials/facilities were necessary and all the eight evaluation techniques were appropriate for turkey production manual. The study further revealed that there is no significant difference in the mean ratings of the responses of the respondents on suitability of instructional methods and instructional materials/facilities necessary for turkey production. There was however, statistical significant difference in the mean ratings of the respondents on appropriateness of the evaluation techniques. It was recommended among other that: The developed manual should be made available to Agricultural Education Lecturers by school administrators for utilization in teaching and learning of turkey production.*

Keywords: Training manual, Turkey production, Lecturers, Colleges of Education

Introduction

Turkey production is one of the poultry components of agricultural education programme taught to students in Colleges of Education in North-East, Nigeria. Turkey according to Akinbobola (2021), is one of the large domestic birds and a native to North America. He furthermore defined Turkey production as the process of raising turkey for the purpose of producing meat or eggs for food or money, and stated that turkey production has been in practice for many years, and offers an alternative solution to the increasing demand for turkey and turkey products. Wesley and Peterson (2017), also viewed turkey production as the raising

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of turkey for subsistence or commercial purpose, primarily for meats and eggs. In the context of this study, turkey production is all activities that the turkey farmers (those involved in turkey production) are involved from breeding to marketing of turkey.

Turkey is of value to people of North-East and beyond; it supplies people with food nutrient such as protein; it is of economic importance because it is sold to generate income that is used by the farmers to meet their needs. Turkey could also be used to improve dietary formula of animal feeds. The values associated with the production of turkey can be made possible through the development of training manual for lecturers in turkey production, as they are mainly involved in imparting knowledge to the students, whom will later be the graduates to teach either in primary or secondary schools. This will enable them acquire necessary skills needed for turkey production and provide them with the avenue to be self-employed and self-reliant and even employers of labour.

Production, according to Ewubare (2020), is viewed as all those activities which cover physical and mental efforts that satisfy human need. In relation to this study, turkey production includes all activities from breeding to marketing. Production of turkey is suitable in North- East, Nigeria because of the availability of materials needed for the formulation of feed, construction of house, good health facilities as well as market for the sale of the turkey. In order to accomplish this task, there is need for the development of appropriate training manual. Development according to Osinem (2008), is the articulation of the necessary skills or activities that would assist trainers to teach learners to master the objectives of the training.

Development as it relates to turkey production curriculum, is the act of designing and producing a product, especially training materials using relevant skills of operation (Uduma, 2014). The developed training manual in turkey production will guide the lecturers to teach students on turkey production in order to produce turkey for generation of wealth for economic survival and that of their family and be able to run a farm enterprise. This farm enterprise is a vital resource for students training skills development and skills proficiency testing. A farm enterprise according to Kelechi (2013), is any farm activity (or identifiable sector of the farm business) for which there are specific returns. A turkey enterprise is an occupational area in turkey production comprising many activities that a learner is required to perform before he can be gainfully employed in the turkey enterprise. The several areas of turkey production where learners can seek knowledge and skills to enable him run enterprises include: breeding, housing, feeding, health management and marketing.

For someone to be skilled in an enterprise, he must be trained. James and Robinson (2017), viewed skill training as the exposure given to a learners by lecturer to make him perform more expertly on the Job by using his knowledge effectively and readily in the execution of his performance. A lecturer is someone who teaches at a University or college for the purpose of a study. A lecturer in the opinion of Olafare (2017), is a person who gives lectures, a specialist by profession or connection with teaching duties, sometimes used as academic title for one who teaches at college or university but does not have the rank or tenure of the regular faculty member. A lecturer is an expert in his special area of knowledge and has good foundation in pre-services training and a continuous update of knowledge and skill through relevant improvement programme. Omotayo, Michael and Samuel (2022), stated that a lecturer in College of Education is someone who works in a job that needs special education or training. Lecturers in Colleges of Education in the context of this study are those people that acquired special training in the area of pedagogy and subject matter such as turkey production which enable them impact knowledge and skills in turkey production. This requires continuous update of knowledge to the students of Colleges of Education. It deems necessary because graduates of Colleges of Education either teach in primary or secondary schools where students require

knowledge on turkey production to make them self-employed or gain job in turkey enterprises. A lecturer in the context of this study is an individual with a minimum of Master Degree in Agricultural Education that has been professionally trained in an act of teaching and lecturing in College of Education.

Colleges of Education are tertiary educational institution established to give professional training for the production of highly qualified classroom teachers. Colleges of Education are specially designed to develop, pursue and improve regular and liberal courses of study for the training of various categories of teachers and promote the advancement of learning; and educational research. (Onuma and Ada, 2016). At the end of the study in Colleges of Education, Nigeria Certificate in Education (NCE) or Bachelor's Degree in Education is awarded to the graduates. Graduates are persons who have successfully completed their course of study in a well organize institution and awarded with a certificate (Lawal, 2014). Graduates in the context of this study are unemployed NCE holders who poses rudimentary skills in turkey production, which are grossly inadequate for establishing them successfully in the turkey enterprise. These graduates therefore require professional skills in order to be successful in turkey enterprise, while the lecturers require some skills in developed training manual in turkey production to enable them empower students through instruction which demand driven skills in turkey production.

Training manual is a book or booklet of instructions, used to improve the quality of a performed task. With the manual approach, the total curriculum of a particular field is divided into units known as 'modules' (Lawal, 2014). The author also opined that module is an organized package of information that includes elements such as objectives, contents, assignment or activities and assessment. The typical training module is designed to enable students move through the content linearly. A training module in the view of Lawal (2014), is a unit of curriculum based on the development of entry level competencies of students. The author stated that in a training manual design, the students and their occupational goals forms the bases for programme planning. The modules are of equal length that will take approximately specific hours of instructional time to achieve by the average group of students. A training module in this study is a unit of instruction with a cluster of skills in an aspect of turkey production required by the lecturers to impart turkey production skills to the students in Colleges of Education in North- East, Nigeria.

Statement of the Problem

Despite all efforts in spending huge amount of money by the government in establishing Colleges of Education in the North-East, Nigeria, and as well sponsoring lecturers to acquire necessary skills needed to meet the human resource base for technological advancement, but it seems these lecturers are still not performing well in imparting skills, knowledge and attitudes in turkey production to the students of this institutions. An observation by the researcher revealed that graduates of primary and secondary schools who are taught by Agricultural Education graduates of Colleges of Education are supposed to be self-reliant or be employed in turkey enterprise, but are engaged in some social vices such as terrorism, kidnapping, raping, armed-robbery, prostitution among others for survival. According to Maclean and Lai (2011), the curricular of Technical and Vocational Education (TVE), has not equipped graduates of Colleges of Education with requisite skills needed in turkey production. These triggered the researchers' interest to develop a training manual in turkey production that can be used to upgrade the competency-based of Lecturers in Colleges of Education in North-East, Nigeria.

Objectives of the Study

The purpose of the study was to develop a training manual in turkey production for lecturers in Colleges of Education in North-East, Nigeria.

Specifically, the study sought to:

1. identify the instructional methods suitable for teaching students in turkey production in North-East, Nigeria.
2. identify the instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria.
3. determine the evaluation techniques for assessing students' achievement of the objectives of turkey production in Colleges of Education in North-East, Nigeria.

Research Questions

The following research questions were raised and answered by the study

1. What is the suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria?
2. What are the instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria?
3. What is the appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

1. There is no significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria
2. There is no significant difference between the mean rating of the responses of turkey farmers and agricultural extension agents on the instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria.
3. There is no significant difference between the mean rating of the responses of turkey farmers and agricultural extension agents on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria.

Methodology

Design of the Study

The study adopted instrumentation research design. The design is considered appropriate for this study because its main concern is development of instrument and methods to be used in teaching and learning.

Area of the Study

The study was conducted in North-East, Nigeria, which comprises Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe State. The area was chosen because it is conducive for turkey production and prevalent cases of unemployment.

Population for the Study

The population for this study is 454, comprising 105 Registered Turkey Farmers and 349 Agricultural Extension Agents from all the states in North- East, Nigeria. These states are Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe.

Sample and Sampling Techniques

The sample size for the study is 213, made up of 105 Registered Turkey Farmers and 108 Agricultural Extension Agents in North-East, Nigeria. This was determined using Taro Yamane formula for a finite population.

Instrument for Data Collection

The instrument for data collection is a-45 items structured questionnaire titled: Development of Training module in Turkey Production Questionnaire (DTMTPQ). The questionnaire was developed by the researcher through an extensive literature review based on the research questions. The questionnaire is made up of two parts, part "A" which covered demographic information of the respondents and part "B" collected information to answer the research questions and test the null hypotheses at 0.05 level of significance. However, part "B" is divided into three clusters (1-3). Cluster 1 covered the methods of instruction used for teaching turkey production to students with 8 items. Cluster 2 covered instructional materials/facilities necessary for implementing the contents of turkey production with 29 items and cluster 3 handled evaluation techniques for assessing students' achievement with 8 items. The instrument DTMTPQ requires the respondents to rate each of the items on a four-point rating scale of Highly Suitable (HS=4), Averagely Suitable (AS=3), Slightly Suitable (SS=2) and Not Suitable (NS=1), Highly Necessary (HN=4), Averagely Necessary (AN=3), Slightly Necessary (SN=2) and Not Necessary (NN=1) Highly Appropriate (HA=4), Averagely Appropriate (AA=3), Slightly Appropriate (SA=2) and Not Appropriate (NA=1),

Validation of the Instrument

The instrument for data collection was validated by five experts, two in the Department of Agricultural Education, one in the Department of Animal Health and Production, one in the Department of Educational Foundations and General Studies, Joseph Sarwuan Tarka University, Makurdi, and one in the Department of Animal Production and Health, Federal University Wukari, Taraba State. Their comments and corrections suggested were effected to improve the quality of the questionnaire both in structure and contents.

Reliability of the Instrument

The reliability of the instrument was established using Cronbach Alpha formula to determine the internal consistency of the instrument. The instrument was administered to 30 respondents comprising 15 Registered Turkey Farmers and 15 Agricultural Extension Agents in Benue State in North-Central, Nigeria. Benue State was chosen for the reliability test because of its proximity and similar characteristics with the study area, in terms of agricultural participation, specifically poultry production. This sample size was drawn from the population outside the actual sample selected. The information obtained from the responses to the instruments was analyzed using the Cronbach Alpha coefficient which yielded coefficient of 0.93 an indication of reasonable internal consistency of the instrument.

Method of Data Collection

The research instruments were administered to the respondents by the researcher with the help of six research assistants, whom were given orientation on the method of administration of instrument. The six research assistants worked with the researcher; each one represented a State in the administration. The researcher and research assistants personally administered 213 copies of the questionnaire to the respondents and responded on-the-spot, and retrieved for analysis.

Method of Data Analysis

The data collected was analyzed using mean and standard deviation for answering research questions and t-test for testing the null hypotheses at 0.05 level of significance.

In taking decision about a research question$\bar{s}$, any item with a mean rating of 2.50 and above was regarded as either Suitable, Necessary or Appropriate. On the other hand, any item with a mean rating below 2.50 was regarded as either Unsuitable, Unnecessary or Inappropriate. In testing the null hypotheses using t-test, where the t-calculated is less than t-tabulated, the null hypothesis was rejected but when otherwise, the hypothesis was accepted.

Results

The results of the study are presented according to research questions answered and the supporting hypotheses as tested.

Research Question 1

What is the suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria?

Table 1: Mean Ratings of Respondents on Suitability of Instructional Methods Used For Teaching Turkey Production (N=213: 105 Registered Turkey Farmers & 108 Agricultural Extension Agents)

S/N	Suitable Instructional Methods	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_g$	SD_g	Remarks
1.	Lecture Method	3.52	0.61	3.30	0.82	3.41	0.73	Suitable
2.	Discussion Method	3.44	0.65	3.23	0.72	3.33	0.69	Suitable
3.	Brain storming Method	3.50	0.59	3.34	0.61	3.42	0.61	Suitable
4.	Demonstration Method	3.58	0.57	3.43	0.58	3.50	0.58	Suitable
5.	Field Trip Method	3.57	0.55	3.46	0.63	3.52	0.60	Suitable
6.	Problem Solving Method	3.57	0.53	3.46	0.68	3.52	0.61	Suitable
7.	Project Method	3.32	0.67	3.28	0.81	3.30	0.74	Suitable
8.	Laboratory Teaching Method	3.69	0.49	3.54	0.60	3.61	0.55	Suitable
	Cluster Mean and Standard Deviation	**3.52**	**0.58**	**3.38**	**0.68**	**3.45**	**0.64**	**Suitable**

N=Number of Respondents, $\bar{X}_1$= Mean of Registered Turkey Farmers, SD_1= Standard Deviation of Registered Turkey Farmers, $\bar{X}_2$= Mean of Agricultural Extension Agents, SD_2 = Standard Deviation of Agricultural Extension Agents, $\bar{X}_g$= Grand Mean of Respondents SD_g = Grand Standard Deviation of Respondents.

Data in Table 1 reveals that all the 8 items responded by the respondents had their grand mean values ranged from 3.30 to 3.61, which was above the cut-off point of mean 2.50 on a four point scale. This implies that the instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria are suitable. The standard deviation of all the 8 items ranged from 0.58 to 0.74, indicating that there was less disparity in the opinion of the respondents on the suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria.

Hypothesis 1

There is no significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria.

Table 2: T-Test Analysis of Mean Ratings of Respondents on Registered Turkey Farmers and Agricultural Extension Agents on Suitability of Instructional Methods Used For Teaching Turkey Production

Status	N	Mean	Std.	Std. Error Mean	Df	Sig.	t-cal	Alpha Value	Remark
Turkey Farmers	105	3.5269	0.59076	0.0348078					
Agric Extension Agents	108	3.4569	0.64769	0.037136	211	0.129	1.523	0.05	NS, NR

N= Number of respondents, Std = Standard deviation, df = degree of freedom, Sig. = P-value; t-cal = t-calculated value; P >.05, NS = Not significant, NR =Not rejected.

Table 2 presents t-test analysis of the mean ratings of respondents on suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria at p >0.05. The Table shows a p-value of 0.129 which is greater than the alpha value 0.05 at 211 degrees of freedom (0.129 >0.05). This implies that the test is not significant hence, there is no statistical significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on suitability of instructional methods used for teaching turkey production to students in Colleges of Education in North-East, Nigeria. Therefore, the null hypothesis was not rejected.

Research Question 2

What are the instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria?

Table 3: Mean Ratings of Respondents on Instructional Material's/Facilities used in Implementing the Content of Turkey Production (N=213: 105 Registered Turkey Farmers & 108 Agricultural Extension Agents)

S/N	Instructional Material's/Facilities used in Breeding	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_g$	SD_g	Remarks
1.	Breeding stock.	3.40	0.75	3.63	0.65	3.52	0.71	Necessary
2.	Nest	3.48	0.62	3.53	0.55	3.50	0.59	Necessary
3.	Incubators	3.51	0.54	3.57	0.57	3.54	0.55	Necessary
4.	Light Source	3.59	0.53	3.50	0.63	3.54	0.59	Necessary
5.	Fertilization kits (insemination kits)	3.56	0.54	3.62	0.57	3.59	0.56	Necessary
6.	Power generating set	3.55	0.55	3.45	0.62	3.50	0.59	Necessary
7.	Note book for record	3.53	0.57	3.43	0.71	3.48	0.65	Necessary
	Instructional Materials/Facilities for House Construction							Necessary
8.	Hoe	3.52	0.57	3.39	0.76	3.46	0.68	Necessary
9.	Rake	3.60	0.51	3.48	0.59	3.54	0.55	Necessary
	Instructional Materials/Facilities for House Management							Necessary
10.	Sprayer	3.50	0.52	3.52	0.55	3.51	0.54	Necessary
11.	Broom	3.56	0.57	3.57	0.51	3.57	0.54	Necessary
	Instructional Materials/Facilities for Feeding							
12.	Feeding trough	3.47	0.65	3.44	0.63	3.45	0.64	Necessary
13.	Watering trough	3.30	0.83	3.35	0.73	3.33	0.78	Necessary
14.	Maize	3.46	0.62	3.53	0.68	3.49	0.65	Necessary
15.	Wheat offal	3.50	0.54	3.53	0.62	3.51	0.58	Necessary
16.	Soya bean meal	3.42	0.63	3.48	0.60	3.45	0.62	Necessary
17.	Bone meal	3.53	0.57	3.51	0.65	3.52	0.61	Necessary
18.	Salt	3.75	0.50	3.62	0.61	3.69	0.56	Necessary
19.	Water	3.31	0.70	3.49	0.74	3.40	0.72	Necessary
	Instructional Materials/Facilities for Health Management							
20.	Syringe with needle	3.53	0.54	3.45	0.50	3.49	0.52	Necessary
21.	Vaccines	3.59	0.53	3.32	0.65	3.46	0.61	Necessary
22.	Sprayers	3.57	0.63	3.36	0.63	3.46	0.64	Necessary
23.	Medicated feeds	3.56	0.58	3.42	0.68	3.49	0.64	Necessary
24.	Drugs	3.42	0.70	3.38	0.62	3.40	0.66	Necessary
	Instructional Materials/Facilities for Marketing Poults							
25.	Nests	3.49	0.57	3.23	0.73	3.36	0.67	Necessary
26.	Cartons	3.48	0.61	3.04	0.85	3.25	0.77	Necessary
	Instructional Materials/Facilities for Marketing Turkey							
27.	Delivery Van	3.56	0.55	3.42	0.71	3.49	0.64	Necessary
28.	Advertisement Posters	3.58	0.60	3.35	0.65	3.46	0.63	Necessary
29.	Notebook for record	3.59	0.60	3.47	0.62	3.53	0.61	Necessary
	Cluster Mean and Standard Deviation	**3.39**	**0.59**	**3.45**	**0.64**	**3.48**	**0.62**	**Necessary**

N=Number of Respondents, $\bar{X}_1$= Mean of Registered Turkey Farmers, SD_1= Standard Deviation of Registered Turkey Farmers, $\bar{X}_2$= Mean of Agricultural Extension Agents, SD_2 = Standard Deviation of Agricultural Extension Agents, $\bar{X}_g$= Grand Mean of Respondents SD_g = Grand Standard Deviation of Respondents.

Data in Table 3 shows that all the 29 items on Instructional Materials/Facilities had grand mean values ranged from 3.25 to 3.69, which was above the cut-off point of mean 2.50 on a four point scale. This implies that the instructional materials/facilities for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria were necessary. The standard deviation of all the 29 items ranged from 0.52 to 0.78, indicating that there was less disparity in the opinion of the respondents on instructional materials/facilities necessary

for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria.

Hypothesis 2

There is no significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria.

Table 4: t-test Analysis of Mean Ratings of Respondents on Registered Turkey Farmers and Agricultural Extension Agents on Instructional Material's/Facilities Necessary for Implementing the Content of Turkey Production

Status	N	Mean	Std.	Std. Error Mean	Df	Sig.	t-cal	Alpha Value	Remark
Turkey Farmers	105	3.4980	0.59444	0.050657					
Agric Extension Agents	108	3.4697	0.64088	0.034823	211	0.530	0.629	0.05	NS, NR

N= Number of respondents, Std = Standard deviation, df = degree of freedom, Sig. = P-value; t-cal = t-calculated value; P >.05, NS = Not significant, NR =Not rejected.

Table 4 presents t-test analysis of the mean ratings of respondents on instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria at p >0.05. The Table shows a p-value of 0.530 which is greater than the alpha value 0.05 at 211 degrees of freedom (0.530 >0.05). This implies that the test is not significant hence, there is no statistical significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on instructional materials/facilities necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria. Therefore, the null hypothesis was not rejected.

Research Question 3

What is the appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria?

Table 5: Mean Ratings of Respondents on Appropriateness of Evaluation Techniques for Assessing Students' Achievement of Objectives of Turkey Production Module (N=213: 105 Registered Turkey Farmers & 108 Agricultural Extension Agents)

S/N	Evaluation Techniques used in Turkey Production	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_g$	SD_g	Remarks
1.	Questionnaire	3.71	0.58	2.56	0.91	3.13	0.96	Appropriate
2.	Interview	3.66	0.62	3.06	0.68	3.35	0.72	Appropriate
3.	Observation	3.65	0.63	3.06	0.70	3.35	0.73	Appropriate
4.	Test	3.69	0.61	3.08	0.71	3.38	0.73	Appropriate
5.	Oral questioning	3.65	0.65	3.05	0.71	3.34	0.75	Appropriate
6.	Project Method	3.66	0.65	2.54	0.92	3.09	0.97	Appropriate
7.	Assignment	3.65	0.65	3.07	0.72	3.36	0.74	Appropriate
8.	Practical Work	3.66	0.63	2.58	0.96	3.11	0.79	Appropriate
	Cluster Mean and Standard Deviation	**3.67**	**0.63**	**2.88**	**0.79**	**3.26**	**0.80**	**Appropriate**

N=Number of Respondents, $\bar{X}_1$= Mean of Registered Turkey Farmers, SD_1= Standard Deviation of Registered Turkey Farmers, $\bar{X}_2$= Mean of Agricultural Extension Agents, SD_2 = Standard Deviation of Agricultural Extension Agents, $\bar{X}_g$= Grand Mean of Respondents SD_g = Grand Standard Deviation of Respondents.

Data in Table 5 shows that all the 8 items on evaluation techniques used for assessing student's achievement had their grand mean values ranged from 3.09 to 3.38, which was above the cut-off point of mean 2.50 on a four point scale. The above results imply that the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria were appropriate. The standard deviation of all the 8 items ranged from 0.72 to 0.97, indicating that there was less variability in the opinion of the respondents on appropriateness of the evaluation techniques for assessing students'

achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria.

Hypothesis 3

There is no significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria.

Table 6: t-test Analysis of Mean Ratings of Respondents on Registered Turkey Farmers and Agricultural Extension Agents on Appropriateness of Evaluation Techniques for Assessing Students' Achievement of Objectives of Turkey Production Module

Status	N	Mean	Std.	Std. Error Mean	Df	Sig.	t-cal	Alpha Value	Remark
Turkey Farmers	105	3.6550	0.64214	0.077287					
Agric Extension	108				211	0.000	8.346	0.05	S, R
Agents		2.9178	0.79785	0.095860					

N= Number of respondents, Std = Standard deviation, df = degree of freedom, Sig. = P-value; t-cal = t-calculated value; P >.05, S = significant, R = rejected.

Table 6 presents t-test analysis of the mean ratings of respondents on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria at $p < 0.05$. The Table shows a p-value of 0.000 which is less than the alpha value 0.05 at 211 degrees of freedom ($0.000 < 0.05$). This implies that the test is significant hence, there is statistical significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria. Therefore, the null hypothesis was rejected.

Discussion

The findings of the study revealed that the thirteen instructional methods used for teaching Turkey production to students in Colleges of Education in North-East, Nigeria were suitable. The methods of instruction found suitable were: Lecture Method, Discussion Method, and Brain storming Method, Demonstration Method, Field Trip Method, Problem Solving Method, Project Method and Laboratory Teaching Method. More so, there was no statistical significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on suitability of instructional methods used for teaching Turkey production to students in Colleges of Education in North-East, Nigeria. Kong, Yu and Chen (2015) who found that each teaching method has its unique characteristics and its effects on students depends on age and the course content that such method was employed in teaching.

Findings of the study indicated that all the twenty-nine instructional materials/facilities were necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria. The Instructional Material's/Facilities used in Implementing the Content of Turkey Production were: Instructional Material's/Facilities used in breeding (Breeding stock, Nest, Incubators, Light source, Fertilization kits (insemination kits), Power generating set and Note book for record), Instructional Material's/Facilities used for house construction(Hoe and Rake), Instructional Material's/Facilities used for house management, (Sprayer and Broom), Instructional Material's/Facilities used for feeding(Feeding trough, Watering trough, Maize, Wheat offal, Soya bean meal, Bone meal, Salt and water), Instructional Material's/Facilities used for health management(Syringe with needle, Vaccines, Sprayers, Medicated feeds and Drugs) ,Instructional Material's/Facilities used for Marketing Poults (Nest and Cartons) and Instructional Material's/Facilities used for Marketing Turkey (Delivery Van, Advertisement Posters and Notebook for records).

The results of the corresponding hypothesis in table 4 further confirmed the above findings that all the instructional materials/facilities were necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria. This is because there was parity in the opinion of both registered Turkey farmers and Agricultural extension agents on the above subject. Asogwa, Onu, and Egbo (2013), who revealed that instructional facilities make learning more practical, concrete, realistic and interesting. Similarly, Ogbu (2016) averred that utilization of instructional facilities is the process of using procured and accessible instructional facilities to make teaching and learning process easier, interesting and rewarding.
The above suggest that the use of necessary instructional facilities in Turkey production will enable both teachers and students to participate actively and effectively in instructional process as it gives room for acquisition of skills and knowledge and development of self-confidence and self-actualization.

This study showed that all fourteen evaluation techniques were appropriate for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria. The evaluation techniques were: Questionnaire, Interview, Observation, Test, and Oral questioning, Project Method, Assignment and Practical Work. The findings on the corresponding hypothesis on Table 6 however shows that there was statistical significant difference in the mean ratings of the responses of Registered Turkey farmer and Agricultural Extension Agents on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria. The disparity was because registered Turkey farmers rated the cluster higher than their counterpart (Agricultural extension agents). The above finding on appropriateness of the evaluation techniques for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria is in line with the finding of Musa in Odeh and Aboho (2014), that summative evaluation technique can be done to determine student's achievement in turkey production implementation; it can be for promotion, certification among others.

Conclusion

Based on the results of this study, conclusions were that the, instructional methods, Instructional facilities/equipment and evaluation techniques used by agricultural education lecturers is very crucial for holistic development of the learners in the three domains. This is why this study was carried out to develop a training manual in Turkey production for lecturers in Colleges of Education in North-East, Nigeria. The development process revealed that eight instructional methods used for teaching Turkey production to students in Colleges of Education in North-East, Nigeria were suitable, twenty-nine instructional materials/facilities were necessary for implementing the contents of turkey production in Colleges of Education in North-East, Nigeria and all the eight evaluation techniques were appropriate for assessing students' achievement of the objectives of turkey production module in Colleges of Education in North-East, Nigeria. Based on the findings of this study, it is clear that the implementation of enriched curriculum by lecturers in Nigeria is indispensable if the needed human resources to put Nigeria in the world map for social, scientific, cultural and technological advancement are to be evolved and sustained.

Recommendations

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

1. The developed module should be made available to Agricultural education lecturers by school administrators for utilization in teaching and learning of Turkey production.
2. Agricultural education lecturers should be encouraged to use the suitable instructional methods, Necessary facilities and appropriate evaluation techniques in the module as a guide for effective instructional delivery.

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