

Poultry Production Skill Need of Secondary School Teachers in Demonstration Farm.

Ogba Ernest Ituma Ph.D
Egbe Benjamin Onwe Ph.D
Ebonyi State University, Abakaliki
Department Of Technology and Vocational Education

Abstracts

The main purpose of the study was to evolve poultry production skill need of secondary school teachers in their demonstration farm housing, feed formulation, incubator machine, and brooding. The study covered the following areas of poultry production. The area of the study was in Ebonyi State of Nigeria. The population for the study was sixty agricultural science teachers in thirty secondary schools in Ebonyi State. The instrument for data collection was structured questionnaire with 4 points rating scale. Sixty copies of the questionnaire was administered to the respondents, and sixty copies retrieved was analyzed with mean scores and standard deviation. The result revealed that ten item statement in the housing were identified, ten item statement in feed formulation and feeding were identified, eight (8) items in incubation machine were identified, and twelve (12) item statement in brooding skills were identified as the skills need of secondary school teachers for impacting skills knowledge for poultry production to the students in their demonstration farm. Recommendations were made among them is that Government should construct poultry farm in each school farm for animal husbandry skills development among students.

I. Introduction

Nigeria today, have a serious concern over the population of unemployed people. This requires the attention of creating skills which is sellable in many production ventures that can make the individual stand on his own. However, acquisition of skills according to Egbule (2012) depends on the teachers' level of knowledge or competence and ability to demonstrate specific task that enable the individual to perform many productive ventures.

Ogba (2021) noted that effective and efficient teaching of Agriculture can create many employments and self sustenance. He stressed that teachers must imbibe competence skills to achieve his objective. Egbe (2020) stressed that students should be prepared for the future work while in school of their studies.

Skills in the context of the study is what will make the individual stand on his own due to his hard work, experience, creativity and ability to think well and make use of his knowledge and produce reasonable items that is saleable and can create sources of income. In another development poultry production is the act of raising birds in the farm with the intention of producing meat for human consumption. Poultry production has become popular in this twenty-first century (21st). Poultry production according to Ugwu (2021) who stressed that it is the domestication of birds with scientific tools, feed, drugs for fast growth and reproduction among others. According to Lawal and Onipede (2022) stated that poultry production includes egg production, broiler production which led to income generation.

Poultry production in the context of this study is the raising of birds from day old to maturity may be for meat, eggs and dual purposes. In another development, competencies are the ability to do something perfectly. Eze (2013) see competencies as the situation whereby an individual is able to perform certain task independently which drives economic development. Kayoma (2022) stated that Agriculture create employment when properly taught, demonstrated to the learners (students) for achieving reasonable skill for productivity. However, need is what one requires to meet up certain ability, skills, knowledge for successful development in life. Ndem (2021) see need as the basic assessment required to attain certain height in knowledge/experience in learning process and development in productive venture. Nwaorie and Okwusi (2020) see need as the expected development of moving novice to knowledgeable levels which should be the bench mark for arriving at the point for achieving production purposes.

Need in the context of this study is what the students of agriculture should acquire to meet up in self-sustenance, and ability to perform in production skill. Therefore, secondary school students are those students who have finished primary school education and have moved to another level of education. according to Eze (2022) see secondary school students as those who have graduated from primary education where they undergo many sciences and art courses that make up their programme including agriculture practice in principles of

farming, ranching among others. However, Demonstration farm is the place whereby students are taught practicals on crops and Animals, farming tools, integration farming tools, implements and experiments in soil among others that are done in the demonstration farm. It is also called field laboratory. Agricultures offer many chances for students to obtain skills for self-reliance, such chances in Agricultures are many in Animal Production especially in Poultry production, Rabbitry, Fishery, Piggery, Goat and Sheep farming among others. Yet many students graduate from secondary school without any skill for production of such animals

Who are the teachers? Ogba (2025) sees teachers as the people that impact knowledge to others while Agricultural teachers are those that are trained professionally in the area of Agricultural production. He stresses that emphasis is on skills of Agricultural Science teacher to teach in secondary school level, teaching and demonstrating, to impact the knowledge and practical experience needed to the students. The question is what are the factors responsible? Is it teachers' factors in lacking effective skills for imparting it to the students? Or is it students' factors for not participating in practicals? Or poor learning facilities/environments.

However, the attempt to solve these problems have motivated the researchers to carry out this study in Poultry Skill Competence need of teachers in Secondary Schools in the demonstration farm for imparting the skill knowledge to the students.

Purpose of the Study

The main purpose of the study is to determine the Poultry production skills need of Secondary School teachers in the Demonstration farm in Ebonyi State. Specifically, the study tends to:

- (1) Ascertain the competence skill need of Secondary School teachers in Housing in the Demonstration farm.
- (2) Determine the skills needs of Secondary school teachers in feed formulation/feeding.
- (3) Determine the skills need of Secondary school teachers in Incubator machine.
- (4) Determine the brooding skills in need of Secondary school teachers.

II. Methodology

Design of the Study: Survey Research method.

Area of the Study: Secondary Schools, Ohaukwu Local Govt Area of Ebonyi State.

Population for the Study was sixty (60) Agricultural Science teachers in thirty (30) Secondary Schools. The population was purposively selected 2 Agricultural Science teachers in each school, given a total of 60 teachers.

Sample for the Study: There was no sampling since the population was manageable for the study.

Instrument for Data Collection: The instrument for data collection was a 4 point questionnaire. The 4-point scale were Strongly Agree (4) point, Agree 3 points, Disagree 2 point and Disagree 1 point. The questionnaire has two section (A) = Data of the respondents and Section B collected information on Housing, Brooding, Incubation and Feed Formulation/Feeding.

The instrument was face validated by 2 Agricultural education teachers (lecturers) and one expert on Measurement and Evaluation. The reliability of the instrument was analysed using Cronbach alpha to analyze the data generated from the pilot test which yielded a coefficient of 0.85.

Data Collection: Sixty copies of questionnaire was distributed to sixty (60) Agricultural Science teachers in the schools. Out of sixty distributed, sixty were retrieved.

Data Analysis Techniques: The Data was Analyzed using Mean and Standard deviation, based on 4 point rating scale of the instrument adopted as the cut off decision, 2.50 as the cut off decision. Any item that had 2.50 score or above is regarded as the factor for skill competence need of Agricultural Science teachers in the demonstration farm for impacting knowledge to the students. Any item that score less is regarded as factors which do not impact skill knowledge to the students.

III. Findings:

Based on the Analysis of the data the following findings are put forward.

1. Ten items on rearing poultry birds in demonstration farm were identified to ensure that teachers with such knowledge can impact the skills to students when the students are interested. (Table 1)
2. Ten items on feed formulation and feeding of birds were identified to ensure that teachers with such skills can impact it to the students when students are ready to learn the skills in the farm. (Table 2)
3. Eight items on incubator machine skills were identified and any teachers with such knowledge are capable of impacting such skills to the students in poultry production. (Table 3)
4. Twelve items on brooding chick skills were identified for teachers' knowledge and experiences to enable them impact such skills to the students in the demonstration farm, when students are ready to learn the skill. (Table 4)

Table 1: Mean with standard deviation of the respondents on housing poultry birds in the Student Demonstration farm.

S/N	Item Statements	X	SD	Remarks
1	Ability to Select Accessible area for Housing Poultry birds	2.85	1.27	Agree
2	Ability to measure the House, size	2.80	0.74	Agree
3	Ability to hire the service of Mason & Carpenter to Dig foundation	2.54	0.45	Agree
4	Ability to mix cement, sand, stone & water	2.54	0.54	Agree
5	Ability to lay blocks	2.79	1.31	Agree
6	Ability to roof the house	2.75	0.76	Agree
7	Ability to cement the floor	2.80	0.83	Agree
8	Ability to fix wire netting to the dwarf wall for proper ventilation	2.76	0.64	Agree
9	Ability to put wire gauze and bulbs to the house	2.85	1.05	Agree
10	Ability to spread shaving dust on floor, before brooding	2.63	0.96	Agree

Table 1 indicate that all the items had their mean scores above the cut off point of 2.50 and their corresponding standard deviation. This shows that the respondent were of the opinion that teachers with Housing skills, can impact such knowledge to the students in Demonstration farm before graduation.

Table 2: Mean with standard deviation of the respondents on Feed Formulation/feeding of Poultry birds for impacting skills in the Demonstration farm.

S/N	Item Statements	X	SD	Remark
1	Ability to select feed stuff for formulating feed	2.83	0.65	Agree
2	Ability to formulate starter mash for chicks	2.78	0.23	Agree
3	Ability to select quality chicks for brooding	2.67	0.70	Agree
4	Ability to feed Ad-Libitum to chicks (day & night)	2.83	0.83	Agree
5	Ability to provide mash chicks in protein, vitamin	2.73	0.81	Agree
6	Ability to feed broiler starter 24% to finisher 23%	2.68	0.63	Agree
7	Ability to sanitize feeders & drinkers	2.97	0.71	Agree
8	Ability to check disease outbreak	2.83	0.73	Agree
9	Ability to provide balanced diet	2.84	0.80	Agree
10	Discard mould feed & change new feed	2.78	1.83	Agree

Table 2 indicate that all the items had their mean scores above the cut off Point of 2.50 with their standard deviation ranging from 0.68 and 1.83. This shows that the respondent were of the opinion that Ability to perform the above skills will enable him to impact production skills to the students in the Demonstration farm. The Standard deviation closeness show the respondents were in close agreement.

Table 3: Mean with Standard deviation of respondents on Incubator machine skills for impacting such knowledge to the students in the Demonstration farm.

S/N	Item statement	X	SD	Remark
1	Ability to Test run incubator before egg setting for hatching	2.93	0.65	Agree
2	Ability to maintain normal temperature in the incubator	2.65	0.87	Agree
3	Maintain relative humidity 60-75%	2.85	0.73	Agree
4	Ensure adequate carbon dioxide removal from incubator	3.31	0.82	Agree
5	Ensure proper egg setting in the tray before incubation	2.73	0.83	Agree
6	Ability to turn the eggs constantly	2.87	0.75	Agree
7	Ability to disinfect the incubator	3.24	0.81	Agree
8	Ability to ensure egg fertility during candling eggs	2.71	0.85	Agree

Table 3 has shown that teachers who have acquired incubator machine skills, enable him to impact production Knowledge to the students in the Demonstration farm.

Table 4: Mean with Standard deviation of respondents on brooding Skills for enabling teachers to develop Knowledge to the students in the Demonstration farm.

S/N	Items Statement	X	SD	Remark
1	Ability to raise a brooding house	3.25	0.75	Agree
2	Ability to heat brooding house to temperature of 32-35°C	2.84	0.69	Agree
3	Ability to protect birds from thieves	2.66	0.50	Agree
4	Ability to provide ventilation in breeding room	3.21	0.64	Agree
5	Ability to provide drugs to birds	2.56	0.56	Agree

S/N	Items Statement	X	SD	Remark
6	Ability to clean the drinkers and feeder every day	2.56	0.67	Agree
7	Ability to provide shaving dust materials once a week	3.05	0.55	Agree
8	Ability to prevent chicks' death	2.68	0.64	Agree
9	Ability to medicate chicks with vitamins & electrolyte in water	3.25	0.56	Agree
10	Ability to provide birds with clean water	2.85	0.83	
11	Ability to provide glucose in water	3.06	0.76	
12	Ability to provide glucose on arrival	2.08	1.03	

Table 4 reveals that all the items had their mean scores above the cut off point, of 2.50 with their standard deviation range from between 0.50 and 1.03. This signifies that the respondents were in close agreement that brooding skills is essential for teachers to enable him impact production Knowledge to the students in brooding chicks, in the demonstration farm.

IV. Discussion of findings

The study has established that teachers with housing skills can impact it to the students in the Demonstration farm where practical are carried out. This study is in line with study of Eze (2023) who is of the opinion that Housing is the first crucial factor in Skill development for students in the demonstration farm for poultry production. He stress that poultry house protect birds from thieves, Snakes, Hawks among other predators. In the Same vein, Ndem (2021) stress that the warmth house provides for chicks is temperature and relative humidity. This study is in line with the study of Ogba (2015) who maintains that students shy away from farm practical, where skills are acquired in demonstration farm. For example Most of the students do not come to school on the days teachers conduct practical, on the demonstration farm.

Students think that Agricultural skills acquisition is punishment, when they are asked to bring materials for building Poultry house, construction of brooding house, because some of the materials are costly. Apart from that, Poultry production requires serious Labour task, which demand hard working students and teachers to encourage them before such skills are acquired for sustenance in Poultry production such as selecting good sites, digging foundation, mixing cements with sand, stone, water, erecting pillars, measuring the size of the room, (House) others bring nails, rafters, polythene, wire net, wire gauze, Zink, among others, requires labours and cost implications. All these can make students to run away from participating from practicals which will give them skill of production. In the farm. Research has shown that provision of food stuff for feed formulation and feeding is a serious negative attitude to students, since they think that teachers are extorting from them and run away from participating in the practical, they ran away from anything laborious and costly which can be used to teach them in the farm. This implies that teachers may have skills but the students may not.

Research has shown that brooding of birds requires warming up house temperature to 35-39% before birds arrival on the house to ensure normal condition of the chicks. It has been observed that Students asked to provide Electric bulbs, lantern, stove, or charcoal pot will think that teachers hate them and want to punish them and will not like to attend the practicals exercises. While birds not properly taken care of will all die at this age; Erebor (2024) Stress that chicks need warmth when they have not developed wings to help them maintain their temperature. He Stress that students in ability to acquire production is due to negative attitude toward their practicals and teachers. He maintains that teachers can have the skills while students will not pay attention to their teachers.

Eze (2021) states that student do not like any practical in Agricultural education in the demonstration farm showing that motivation is the only alternative to encourage student to take any practical serious since it is the only way to get skills of production. Research have shown that student complain that things which makes life uncomfortable is work while they have been running away at home to come to school face them again and still lose skills which they need to acquire in the demonstration farm. One of the result of the study reveals that students should be encouraged to participate in practical farm work done in the demonstration farm for production purposes and skill development. Nwoke expressed that Agricultural Students should be given free education, until they graduate in their studies.

V. Conclusion:

Based on the facts that Agricultural production is expensive, serious labour intensive, task driven both to students, farmers, Agricultural teachers, the farm work do not give much money to the farmers. After several suffering many family do not have enough to meet their family need and save money for school fees. Therefore, many incentive should be given to the participant in Agricultural direction, Student free education, farmers free medical treatment because hardly you see many farmers riding good cars.

VI. Recommendation:

The researchers recommended that:

1. Agricultural students should be provided work inputs, consumables required for practicals in the demonstration farm to enable them not to run away from practical skills acquired.
2. Agricultural students should be given annual events for celebrating the acquired skills in production of different items in areas of Agriculture.
3. Government should ensure that good market opportunities be given to the farmers, to make money like other business venture to attract students in acquiring skills.

References

- [1]. Egbule, P.E (2002) Fundamental and Practice of Agricultural education. Owerri: TOTAN Publishers Ltd.
- [2]. Ogba, E.I. (2021) New generation Agricultural science for Secondary Schools. Enugu: Immaculate Publishers.
- [3]. Egbe, B.O AN Assessment of Skill Acquisition in training Youth [illegible] Occupation in Ebonyi State. Journal of Ebonyi Technology and Voc. Education 1(3) 15–25.
- [4]. Ugwu, S.O. (2021) Impact of Animal production on human health, and its relevance. Journal Education and Humanities 5(3) 143–158.
- [5]. Onipede, R.N. (2022) Animal Disease Control System in the tropics: Assessment Appraisal. International Journal of Agriculture 5(2) 205–256.
- [6]. Eze, R.O. (2018) Impediment in task performance in Economic Development. Handbook of Agriculture. Owerri: Global Publisher.
- [7]. Kayoma, K.S. (2022) Agriculture as the driver economy. Handbook of Agriculture and natural resources. Ando: Lawal publisher.
- [8]. Ndem, T.U. (2016) Management of School farm and garden Techniques, Principle and practice. Cheston agency press, Enugu.
- [9]. Okwusi, M.N. (2020) Unpublished Project, EBSU.
- [10]. Eze, R.N. (2022) Principle and practice of Agriculture in the tropics. Enugu: Tesco publisher.
- [11]. Ogba, E.I. (2025) Strategies for Enhancing fish production using tadpoles at the backyard. Ebonyi Technology and Voc. Education Journal 5(12) 120–132.
- [12]. Eje, A.A. (2022) Animal Production techniques in Secondary Schools. Enugu: Nelson publisher.
- [13]. Ndem, [illegible] Management of School farm and garden [illegible] Enugu: Cheston publisher.
- [14]. Ogba, E.I. (2015) Training Need of Secondary School graduates in fish farming. Ebonyi Tech. And Voc. Edu. Journal 2(3) 15–20.
- [15]. Ereboo, D.S. (2022) Merck Veterinary manual, Issue of poultry, 11th edition.
- [16]. Eje, S.N. (2021) Budding and Grafting in Citrus, the preventive method for reducing Gummosis, and attack in the garden. Ebonyi Technology and Voc. Edu. Journal