

## ***Utilization of Resource Persons for Effective Instructional Delivery in Agricultural Education in Tertiary Institutions in Ebonyi State***

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### **Abstract**

*The study sought to examine the approaches for utilization of resource persons for effective instructional delivery in agricultural education in tertiary institutions in Ebonyi State, using survey research design. The study had 3 purposes, 3 research questions and 3 hypotheses. The population of the study was 25 lecturers of Agricultural Education; the entire population was used. The instrument for data collection was a 47 item structured questionnaire. The instrument was validated by three lecturers of Agricultural Education and Measurement and Evaluation in Michael Okpara University of Agriculture, Umudike. The reliability of the instrument was .79, established using Cronbach alpha technique. All the copies of the questionnaire were retrieved and analysed using mean, standard deviation and t-test. It was found from the study that there are: 13 areas of agricultural education that resource persons are needed, 17 roles of school in utilizing the resource persons and 13 procedures for utilization of resource persons for effective instructional delivery in agricultural education. Among the recommendations made was that the school management and lecturers of agricultural education should regularly seek the utilization of competent resource persons in the areas of need as identified by this study.*

**Keywords:** resource, persons, utilization, instructional, agricultural, education

### **Introduction**

The need for enhancing knowledge and skill in any field of study can never be over emphasized. Knowledge and skills often become obsolete and would therefore require to be upgraded while most times, there may be felt need to inculcate or acquire the knowledge and skills in closely related fields for the purpose of effective service or instructional delivery as the case may be. Notable among the various ways knowledge is enhanced among lecturers is through the utilization of a resource person (R.P.). Resource persons are experts in a particular field, topic, or discipline. A resource person is any one

that can be called upon to solve a problem or answer questions in a given area of interest. Nassira (2016) further extended resource person to include anything or person that is necessary to support and/or fuel the running of a project such as money, machines, materials, methods, men and so on. A resource person is a specialist who supports teachers and students with special aspects of their class or practical works (University of Arkansas Division of Extension Services, 2019). Such persons may include speech and language teachers, early childhood specialists, occupational therapists, school psychologists, guidance and counsellors, farm operation specialists and so on. A resource person in the context of this study are specialists in animal and crop production, soil science, agricultural engineering, fishery and other agricultural occupation areas who possess the special skills in technical areas of agricultural education such as castration, debeaking, dehorning, budding, crafting, layering, artificial insemination, soil test, machine routine maintenance, feed formulation, fertilizer compounding and so on. These are key areas of agricultural business requiring technical skills (Okoye & Eze, 2008).

These areas of agricultural business management usually pose worries to graduates of agricultural education while in the world of work or at their production business. Personal experiences of the researchers coupled with face to face interaction with many graduates across the study area reveals that they face challenges in demonstrating these skills and that they usually resort to hiring the services of their fellow graduates on animal production, horticulture, soil sciences, and agricultural engineering on paid agreement to deliver these services for them. This calls for proactive approaches by training institutions to quickly devise measures to curb this situation by adopting the utilization of resource persons to retrain lecturers in these areas of technical agriculture. Resource persons for utilization in schools could be sourced from animal and crop production departments in institutions, ministry of agriculture, crop and/or animal production companies etc depending on the purpose which they are needed for utilization.

Utilization is the act of making use of person or material for the purpose of achieving set objectives. Utilization is likened to use of a particular resources for the production or delivering of services (Dominic, 2017). According to Aha (2004), utilization is defined as the process of making judicious use of resources, services, opportunities etc without wastage. Utilization is an important concept in every human endeavour including education where teachers, instructional materials, resource persons are utilized for the purpose of effective instructional delivery to students (Patrick & Chinwe, 2011). Utilization in the context of this study is defined as the process of making effective use of resource persons to retrain agricultural education lecturers for more efficient instructional delivery to students. Utilization of resource persons in teaching and learning of agriculture makes learning more attractive, promotes professionalism, enhances purposeful skill acquisition and so on. Resource persons are utilized in agricultural education to equip lecturers with some special technical aspects of general agriculture who will in turn train students to be wholesome in a chosen agricultural enterprise rather than depending on the hired and paid services of the specialists in some aspects of their agriprenuerial business management.

However, the processes involved in the utilization of resource persons range from identification, attraction and utilization or implementation. It is a multi-process task requiring the involvement of many school personnel and stakeholders (University of Arkansas Division of Extension Services, 2019). This implies that both the lecturers, school management, the resource person and even government and non-governmental organizations may have some roles to play. Notable among the key players in the utilization of resource persons in schools are the school management, the lecturers and the resource person (Okoye, 2010). The school management identifies areas of need such as those mentioned above and search around for competent specialists who will be invited to train the lecturers (Cohen & Hill, 2011). The head of department can take up this responsibility or form a committee who will be charged with the responsibility of planning and implementing this programme. These activities, according to Borko (2004), include sourcing of the rightful person based on the particular areas of need, outlining the objectives to be captured by the resource person, scheduling a date for the training, sourcing for fund, making arrangement for hall or venue, delivering pre-training briefing or orientation to all lecturers involved etc. Indeed the school management or committee in charge has much role to play in ensuring the success of the training from invitation of the resource person till arrival and closure (Borko, 2004).

Moreso, the actual utilization of resource person in a formal institution of learning is not done accidentally or in a rote manner. The procedure for utilizing the resource person cuts across all activities of the training day till the end of the programme. Darling-Hammond et al. (2009) outlined this process to include welcoming the resource persons, rechecking all the arranged facilities or equipment, introduction of the resource person formally to the audience, delivering of the instruction by the resource person. Mcmillan (2007) noted that utilization of resource persons follows procedural steps which involve invitation, acceptance, arrival, instructional delivery, evaluation and decision on the next step to take based on the evaluation result. Indeed, resource persons are very crucial to the development of every organization especially educational organizations. Every institution therefore makes effort to utilize these measures to develop their staff instructional capabilities when need arises.

Instructional delivery is the process of curriculum implementation in schools at all levels. It is a teaching and learning process involving teachers and students (Olaitan & Agusiobo, 1981). It involves the interaction and communication of the instructional objectives or course content to the students for the purpose of affecting desirable change in the student's behaviour. Instructional delivery is the core of all forms of education, be it formal or non-formal (Okoro, 2005). In the formal school setting however, instructional delivery involves the teacher/lecturers and the students who interact with each other on the topic of discuss, guided by the scope and provisions of the course content.

Instructional delivery in the context of this study is the planned and organized process of impacting special practical skills and knowledge on agricultural production business to students in order to make them self-reliant and employable in agriculture. Instructional

delivery in agricultural education are done both in classroom for theoretical knowledge, laboratory for testing of existing knowledge and in the school farm for full practical demonstration of acquired skills. The lecturers are therefore required to competently demonstrate technical agriculture skills for students to acquire for self-reliant on graduation hence the need for due retraining through utilization of resource persons.

### **Statement of the problem**

In agricultural education, there are two components; the technical area and the pedagogical area. In the pedagogical area, teachers are required to competently teach the knowledge and skills they possess to the students. In the technical area, students are required to demonstrate skills in technical areas such as dehorning, castration, transferring of honey bees, artificial insemination, budding, crafting cross breeding etc. Those are areas teachers may not demonstrate because they may not have been trained by instructors who are competent in them and may not have undergone any special training on them. This leads to the graduation of students without competent and wholesome skills to run an agricultural production business independently. This situation has affected not just the school graduates but the entire economy of the country as graduates who are supposed to be self-reliant in a particular agricultural business rather wander in search of jobs even when there are notable opportunities in their area of study. Do we continue to allow this happen? In solving this problem, there is need to identify the approaches to the utilization of resource persons in schools, colleges and universities so that students and teachers can learn and acquire more skills relevant in their area of study.

### **Purpose of the study**

The purpose of the study is to identify the approaches to the utilization of resource persons in tertiary institutions in Ebonyi State. Specifically, the study had the following purposes:

1. To identify the areas of agricultural education that resource persons are needed.
2. To identify the roles of the school/lecturers in utilization of resource persons.
3. To find out the procedures for utilization of resource persons.

### **Research questions**

The following research questions were asked and answered for the study:

1. What are the areas of agricultural education that resource persons are needed?
2. What are the roles of the school/lecturers in utilization of resource persons?
3. What are the procedures for utilization of resource persons?

### **Hypotheses**

The following hypotheses were tested for the study at 0.05 level of significance:

**Ho1:** There is no significant difference between the mean response of male and female lecturers on the areas of agricultural education that resource persons are needed.

**Ho2:** There is no significant difference between the mean response of male and female lecturers on the role of the school/lecturers in utilization of resource persons.

**Ho3:** There is no significant difference between the mean response of male and female lecturers on the procedures for utilization of resource persons.

**Methodology**

Survey research design was adopted for this study. The area of the study was Ebonyi state with focus on tertiary institutions offering agricultural education. The population of this study was 25 made up of all the lecturers of Agricultural Education in the 3 Tertiary institutions offering the programme. There are 20 male lecturers and 5 female lecturers in the area. There was no sampling as the entire population was manageable and accessible.

The instrument for data collection for this study was a 47 item structured questionnaire titled “Utilization of Resources Persons for Effective Instructional Delivery Questionnaire (URPEIDQ)”. The questionnaire was divided into A, B, C, & D sections. Sections A dealt with information on the relevant personal or socio-economic characteristics of the respondents while section B-D dealt with the actual answers to the research questions. The questionnaire has a 4 point rating scale of Strongly Agreed (S.A) 4 points, Agreed (A) 3 points, Disagreed (D) 2 points and Strongly Disagreed (S.D)1 point, that applies to section B-D of the questionnaire. The draft copy of the instrument was validated by 3 validates who are experts in Agricultural Education and Measurement and Evaluation in the College of Education of Michael Okpara University of Agriculture, Umudike. The reliability of the instrument was established using Cronbach alpha technique and an internal consistency of .79 was obtained which proves that the instrument is reliable for the study.

Data were collected through contact with the lecturers using 3 trained research assistants to distribute and retrieve the questionnaire. All the copies of the questionnaire were retrieved and analysed using mean, standard deviation and t-test for research questions and hypothesis respectively. A cut off mark of 2.50 was established and any item mean below 2.50 was not accepted while any item mean up to 2.50 and above was accepted. Also the null hypotheses was not rejected if the calculated value is less than the table value which is 2.02, but was not accepted if the calculated value is higher than the table value at 0.05 level of significance.

**Presentation of results**

**Research question 1:** What are the areas of agricultural education that resource persons are needed?

**Ho1:** There is no significant difference between the mean response of male and female lecturers on the areas of agricultural education that resource persons are needed.

**Table 1:** Mean ratings and t-test result of male and female lecturers on the areas of agricultural education that resource persons are needed

S/n	Item statement	$\bar{x}_1$	$S_1$	$\bar{x}_2$	$S_2$	$\bar{x}_g$	$S_g$	t-cal	Rmks
1	Animal castration	3.26	.81	3.22	.79	3.24	.80	.45	NS
2	De-beaking	3.45	.86	3.41	.85	3.43	.86	.42	NS

3	Dehorning	3.28	.81	3.25	.80	3.27	.81	.33	NS
4	Artificial insemination	2.98	.73	2.97	.72	2.98	.73	.12	NS
5	Budding	3.49	.87	3.47	.86	3.48	.86	.21	NS
6	Crafting	3.28	.81	3.25	.80	3.27	.81	.33	NS
7	Layering	3.13	.77	3.09	.76	3.11	.77	.47	NS
8	Farm machines/equipment handling	2.99	.73	2.95	.72	2.96	.73	.49	NS
9	Soil test	3.18	.78	3.15	.77	3.17	.78	.35	NS
10	Hatchery	3.13	.82	3.28	.81	3.21	.82	.33	NS
11	Feed formulation for farm animals	3.43	.85	3.45	.83	3.44	.84	.32	NS
12	Fertilizer compounding	3.48	.86	3.44	.85	3.48	.86	.42	NS
13	Honey bee transfer	2.97	.72	2.96	.72	2.97	.72	.13	NS

**Key:**  $\bar{x}_1$  - mean of male lecturers,  $\bar{x}_2$  - mean of female lecturers,  $S_1$  - standard deviation of male lecturers,  $S_2$  - standard deviation of female lecturers, df-23, NS - no significant difference,  $\bar{x}_g$  - grand mean,  $S_g$  - grand standard deviation.

The result of the data in table 1 shows that all the items had their mean ranging from 2.97 to 3.48 which are above the cut off mean of 2.50, proving that all the items are the areas of agricultural education that resource persons are needed. The result shows that all the standard deviations are within a close range; this means that the responses of the respondents are not far from each other. More so, the result shows that all the items had their calculated t-value less than the table t-value, thereby accepting the null hypothesis stated. This means that there is no significant difference between the mean response of male and female lecturers on the areas of agricultural education that resource persons are needed.

**Research question 2:** What are the roles of the school/lecturers in utilization of resource persons?

**Ho2:** There is no significant difference between the mean response of male and female lecturers on the role of the school/lecturers in utilization of resource persons.

**Table 2:** Mean rating and t-test result of male and female lecturers on the roles of the school/lecturers in the utilization of resource persons

S/n	Item statement	$\bar{x}_1$	$S_1$	$\bar{x}_2$	$S_2$	$\bar{x}_g$	$S_g$	t-cal	Rmks
1	Identifying the areas resource persons are needed	3.28	.81	3.25	.80	3.27	.81	.22	NS
2	Determining where and how the rightful resource persons can be located	3.28	.81	3.25	.80	3.27	.81	.33	NS
3	Seeking permission of the school management to invite the resource person	2.97	.72	2.95	.72	2.96	.72	.25	NS

4	Select the most suitable of all the identified resource persons	3.44	.85	3.40	.84	3.42	.85	.42	NS
5	Meet the resource persons face to face for discussion on the areas to cover	3.15	.77	3.14	.77	3.15	.77	.46	NS
6	Apply officially by mail or letter to the selected resource person specifying all the terms and conditions such as duration, time payment details etc	3.34	.83	3.32	.82	3.33	.83	.22	NS
7	Get feedback from the resource person on whether the invitation is accepted	3.21	.79	3.17	.78	3.19	.79	.42	NS
8	Seek for fund from the relevant bodies such as school management	3.32	.82	3.31	.82	3.32	.82	.11	NS
9	Communicate the school on the date of the training	3.30	.81	3.19	.79	3.25	.80	1.23	NS
10	Make arrangement for the venue or hall prior to the day	3.43	.85	3.32	.82	3.38	.84	1.17	NS
11	Get all necessary facilities, materials, specimen etc ready	3.35	.83	3.20	.79	3.28	.81	1.64	NS
12	Inform all the lecturers and students by writing	3.15	.77	3.10	.76	3.13	.77	.59	NS
13	Confirm the previous arrangements such as date, time duration of event through phone calls days to the event	3.29	.81	3.15	.77	3.22	.79	.58	NS
14	Make arrangement for lodging accommodation, meal, transportation to and fro the lodge etc	3.16	.78	3.13	.77	3.15	.78	.35	NS
15	Get the telephone numbers of the lodge attendants for communication in case of emergency	3.21	.79	3.20	.79	3.20	.79	.11	NS
16	Get the venue and all the necessities set before the arrival of the resource person	3.10	.76	3.06	.75	3.08	.76	.48	NS
17	Organize the committee in collaboration with the management to take charge of the event.	3.16	.78	3.13	.77	3.15	.78	.35	NS

**Key:**  $\bar{x}_1$  - mean of male lecturers,  $\bar{x}_2$  - mean of female lecturers,  $S_1$  - standard deviation of male lecturers,  $S_2$  - standard deviation of female lecturers, df-23, NS - no significant difference,  
 $\bar{x}_g$  - grand mean,  $S_g$  - grand standard deviation.

The result of the data in table 2 shows that all the items had their mean scores ranging from 2.96 to 3.38 which are above the cut off mean of 2.50, proving that all the items are the roles of the school/lecturers in utilization of resource persons. The result also shows that the standard deviations are at close range, meaning that the responses of the respondents are not far from each other. The result also reveals that all the items had their calculated t-value less than the table t-value, thereby accepting the null hypothesis stated. This means that there is no significant difference between the mean response of male and female lecturers on the roles of the school/lecturers in utilization of resource persons.

**Research question 3:** What are the procedures for utilization of resource persons?

**Ho3:** There is no significant difference between the mean response of male and female lecturers on the procedures for utilization of resource persons.

**Table 3:** Mean rating and t-test result of male and female lecturers on the procedure for utilization of resource persons

S/n	Item statement	$\bar{x}_1$	$S_1$	$\bar{x}_2$	$S_2$	$\bar{x}_g$	$S_g$	t-cal	Rmks
1	Meet the resource person and give him/her a warm welcome	3.43	.85	3.35	.83	3.39	.84	.85	NS
2	Recheck on needed equipment, facilities, specimens and other arrangements	3.25	.80	3.11	.76	3.18	.78	1.59	NS
3	Introduce the resource person to the committee involved in organizing the event	3.38	.84	3.30	.82	3.34	.83	.86	NS
4	Make formal introduction of the resource persons to the audience	3.29	.81	3.25	.80	3.32	.81	.45	NS
5	The audience interacts and welcomes the resource person	3.41	.85	3.29	.81	3.40	.83	1.28	NS
6	The training or programmes begins	3.26	.81	3.21	.79	3.24	.80	.56	NS
7	Give the audience chance to ask questions in a guided and logical manner	3.05	.75	2.92	.71	2.99	.73	1.58	NS
8	Allow the audience to express their appreciation openly at the end of the event	3.34	.83	3.29	.81	3.32	.82	.55	NS
9	Closing remarks by the head of the organizing committee	2.97	.72	2.95	.72	2.96	.72	.25	NS
10	Expression of the committee appreciation privately	3.15	.77	3.10	.76	3.13	.77	.59	NS
11	Evaluation study	3.31	.82	3.23	.81	3.27	.82	.33	NS
12	Record of evaluation result based on the contribution of the resource person to the teachers skill demonstration	3.43	.85	3.40	.84	3.42	.85	.32	NS
13	Suggest ways for improvement	3.35	.83	3.20	.79	3.28	.81	1.64	NS

**Key:**  $\bar{x}_1$  - mean of male lecturers,  $\bar{x}_2$  - mean of female lecturers,  $S_1$  - standard deviation of male lecturers,  $S_2$  - standard deviation of female lecturers, df-23, NS - no significant difference,  $\bar{x}_g$  - grand mean,  $S_g$  - grand standard deviation.

The result of the data in table 3 shows that all the items had their mean scores ranging from 2.96 to 3.42 which are above the cut off mean of 2.50, proving that all the items are the procedures for utilizing resource persons. The result shows that all the standard deviations are within a close range; this means that the responses of the respondents are not far from each other. The result also shows that all the items had their calculated t-value less than the table t-value, thereby accepting the null hypothesis stated. This means that there is no significant difference between the mean response of male and female lecturers on the procedure for utilization of resource persons.

### **Discussion of the findings**

The result of the study on the areas of agricultural education that resource persons are needed is in keeping with Okoye and Eze (2008) who found that the lecturers are required to competently demonstrate technical agriculture skills across every aspect of crop and animal production, soil conservation practices and handling/routine maintenance of farm machines utilized in modern farming practices that are within the provisions of agricultural education curriculum for students to acquire for self-reliant on graduation. The result of the study is also in line with University of Arkansas Division of Extension Service (2019) who identified animal castration, de-beaking, artificial insemination, dehorning as some of the areas of agricultural education that resource persons are needed.

The result of the study on the roles of school management/lecturers on the utilization of resource persons is in line with Borko (2004) who found that the roles of lecturers in utilizing resource persons include sourcing of the rightful person based on the particular areas of need, outlining the objectives to be captured by the resource person, scheduling a date for the training, sourcing for fund, making arrangement for hall or venue, delivering pre-training briefing or orientation to all lecturers involved etc. Borko (2004) noted that indeed the school management or committee in charge has much role to play in ensuring the success of the training from invitation of the resource person till arrival and closure.

The findings of the study on the procedures for utilizing resource persons is in keeping with Okoye (2010) who noted that the procedure for utilizing the resource person cuts across all activities of the training day till the end of the programme. In line with the study also, Darling-Hammond et al. (2009) outlined this process to include welcoming the resource persons, rechecking all the arranged facilities or equipment, introduction of the resource person formally to the audience, delivering of the instruction by the resource person. Mcmillan (2007) also noted that utilization of resource persons follows procedural steps which involve invitation, acceptance, arrival, instructional delivery, evaluation and decision on the next step to take based on the evaluation result.

### **Conclusion**

Based on the result of the study, it was concluded that there are: 13 areas of agricultural education that resource persons are needed, 17 roles of school management/lecturers in utilizing the resource persons, and that there are 13 procedures for utilization of resource

persons for effective instructional delivery in agricultural education in tertiary institutions in Ebonyi State.

### **Recommendations**

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

1. The school management and lecturers of agricultural education should regularly seek the utilization of competent resource persons in the areas of need as identified by this study.
2. The lecturers should adopt the procedures identified by this study to utilize the resource person for effective instructional delivery.
3. The government through her Ministry of Education and non-governmental organizations should strive to sponsor the utilization of resource persons in vocational education programmes so that lecturers can be regularly updated on the required skills
4. All stakeholders in education sector such as school management, lecturers, ministry of education etc should adopt the strategies identified by this study to enhance the utilization of resource persons.

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