

Challenges and Coping Strategies of Lecturers of Agricultural Education in Utilizing Research Findings for Effective Service Delivery in Higher Institutions in Nigeria

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ABSTRACT

This study identified challenges and coping strategies lecturers of Agriculture Education in utilizing research findings for effective service delivery in higher institutions in Nigeria. Three research questions were developed to get answers together with testing of three hypotheses. Survey research design was used for the study. Entire population of 55 lecturers were used for the study. A 26 items Research Findings Utilization Questionnaire (RFUQ) was used for data collection. The instrument was validated by three experts. Cronbach Alpha Reliability method was used to determine the internal consistency of the instrument and a reliability coefficient of 0.91 was obtained which means that the instrument is highly reliable. 55 copies of the questionnaires were administered but only 53 copies were retrieved and analysed using mean and standard deviation to answer the research questions. It was found that twelve challenges were encountered by lecturers in utilizing research finding, seven strategies were adopted by lecturers in utilizing research findings, and seven ways in which the chances of utilizing research findings by lecturers could be enhanced. It was, therefore, recommended that the strategies adopted by experienced lecturers in utilizing research findings should also be employed by inexperienced lecturers for effective service delivery among others.

Key words: Challenges, Coping strategies, Lecturers, Agricultural education, Research findings and service delivery.

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INTRODUCTION

Research is an important factor for development in all aspects of human endeavors. It is a logical and systematic process of finding out solution to a problem (Uzuagulu, 2011). Agbulu and Aboiyar (2007) defined research as a systematic arrangement of facts, a systematic quest for undiscovered truth. The authors maintained that facts are collected, organized, analyzed and interpreted for the purpose of discovering what the facts mean. Emaikwu (2011) view research as a process of arriving at dependable solution to a problem through planned and systematic collection, classification, analysis and interpretation of data. It is a logical, objective, systematic, planned and controlled way of gathering data,

information and facts for the advancement of knowledge. Most research findings indicate the causes, effects or solutions to a problem. A research finding, in the submission of Ali (2006) is a principal outcome of a study project; what the project discovered, suggested, revealed or indicated. It usually refers to the totality of outcomes and discoveries, rather than the conclusions or recommendations drawn from them. Research findings in this study; refer to outcomes or discoveries made by collecting, organizing, analyzing and interpreting data or information from agriculture or education. Such research findings can be used for development and advancement of knowledge in all educational disciplines such as

Agricultural Education.

Agricultural Education as perceived by Umuh-mac (2006) is a systematic programme of instruction for public school leavers, out-of-school, post-secondary youth, and established farmers, organized for the purpose of improving agricultural methods and rural living. Osinem (2007) maintained that, Agricultural education is a process of imparting knowledge, skills and attitudes in agriculture to the learners at any level. It is the totality of education and training given in agriculture to individuals to prepare and develop their abilities for effective farming. The research findings made in Agricultural Education are usually utilized by lecturers to enhance teaching and learning process in the higher institutions. Lecturer, in the submission of Isiwu and Okonkwo (2013) is an individual who had undergone a teacher preparatory programme in the university and charged with the responsibility of imparting knowledge, skills and attitudes to students in a subject. National Policy on Education in Asogwa et al. (2014) submitted that a lecturer is a person who had undergone approved professional training in education at appropriate levels and is capable of imparting knowledge, skills and attitudes to the learners in a relevant programme. In this study, a lecturer is a person who has acquired training in teaching methodology and technical aspects of a programme in a university and renders services to students in agricultural education for effective learning. Service as contained in Miriam (2012) is work done for somebody as a job or duty. It is an action carried out or delivered as a favour or obligation to somebody. The author continued that delivery is an act of transferring or conveying something to somebody. Therefore, service delivery is an act of transferring knowledge, skills and attitudes from lecturers to students. It is the expectation of the researchers that the lecturers of Agricultural Education should utilize most of the research findings in both agriculture and education to enhance service delivery in their professions to promote effective learning by their students. Utilization, according to Subba (2009) is the transformation of a set of inputs into goods or services. It is an act of making use of or applying something into use. Raghu (2009) views utilization as the primary method by which asset performance is measured and business determined. It is the act of creating value from things through its application in certain areas.

In this context, utilization is the process by which lecturers of agriculture education apply research findings in their service delivery system to promote effective learning by the students. Effectiveness as described by Eze and Asogwa (2013) is the act of causing a desired or intended result. It entails successfully arriving at or producing an actual result of what is in practice or widely accepted. In the context of this study, it is the ability of lecturers to inculcate in students the desired technical and pedagogical competencies in agricultural education using research findings in spite of the challenges

encountered. In the opinion of Collins (2012), a challenge means a task or situation that tests someone's ability. It also refers to difficulty in a job or career which tests one's ability or resources in a demanding but stimulating undertaking. In this study, challenges are those difficult situations which lecturers of Agricultural Education encounter in the course of utilizing research findings for effective service delivery in universities. However, in spite of the challenges encountered by lecturers, there are still many lecturers of Agricultural Education who adopted effective coping strategies to overcome the challenges encountered in utilizing research findings in agricultural education to enhance service delivery to students in universities. It is advisable that such coping strategies be emulated by the inexperienced lecturers to overcome some of the challenges in discharge of their duties while utilizing research findings in Agricultural Education. Coping, in the statement of Lazarus and Folkman (1984), is an effort to manage and overcome demands and critical events that pose a challenge, threat, harm, loss, or benefit to a person. It includes self-regulated goal attainment strategies and personal growth.

In the same vein, Lazarus (1991) described coping as an expending conscious effort to solve personal and interpersonal problems, and seeking to master, minimize or tolerate stress or conflict. Zeidner and Endler (1996) stressed that coping is the thoughts and actions one uses to deal with stress. Therefore, coping is the conscious reaction and effort needed by lecturers of Agricultural Education to minimize and tolerate challenges encountered in utilizing research findings for effective service delivery. It includes all the self or personal strategies that could be made by lecturers of Agricultural Education towards overcoming the challenges encountered in utilizing research findings for effective service delivery in higher institutions. Strategy, in the statement of Ugwoke et al. (2013) is a carefully devised plan of action to achieve a goal. It is also the art of developing or carrying out that plan to achieve a desired aim or objective. Strategies, in the context of this study, are systematic planned actions needed by lecturers of Agricultural Education to overcome challenges encountered in utilizing research findings for effective service delivery to students in higher institutions. However, the researchers were of the opinion that if the challenges encountered by the lecturers of Agricultural Education in utilizing research findings are identified with coping strategies, the lecturers who have not been able to utilize research findings successfully could use them to make necessary adjustment to ensure effective service delivery. Therefore, the concern of the researchers in this study was to scan the challenges encountered by lecturers of Agricultural Education in utilizing research findings and the coping strategies that could be adopted by Agricultural Education for effective service delivery to their students in tertiary institutions. It was also concerned with identifying the strategies that could be

adopted by the school administration to enhance lecturers' utilization of research findings in Agricultural Education.

STATEMENT OF THE PROBLEM

In Nigeria, researchers and lecturers in Agriculture and Education turn out lots of research findings every year. Some of these findings are presented at conferences and seminars while others are written in journals to make them available for the users such as lecturers of Agricultural Education in higher institutions. In addition, the school administration of these higher institutions through the Department of Agricultural Education procures books and journals to make the research findings available to lecturers of Agricultural Education for utilization to enhance their service delivery to students. Nevertheless, most lecturers of Agricultural Education still make use of the old knowledge and skills in agriculture during discharge of their duties to students inside and outside classrooms. In an interaction of by the researchers with some lecturers of Agricultural Education in a conference held at University of Nigeria Nsukka in October 2013, the lecturers expressed that, they encounter some challenges in utilizing some of the research finding in Agricultural Education. On the other hand, few experience lecturers admitted that they adopt some measures to ensure that they overcome some of the challenges to enable them utilize research findings in Agricultural Education. The researchers are concerned with two issues; the under utilization of research findings and the discrepancy among the lecturers on the utilization of research findings. This is because carrying out research in Agricultural Education will become unnecessary if the findings are not utilized by lecturers to enhance service delivery. It therefore becomes pertinent that the challenges encounter by the lecturers and the coping strategies adopted by some experience lecturers be identified to enhance utilization of research findings by the lecturers during service delivery. It was also deemed necessary to identify strategies for enhancing utilization of research findings in Agricultural Education by the school administration.

PURPOSE OF THE STUDY

The purpose of the study was to identify challenges encountered and coping strategies of lecturers of Agricultural Education in utilizing research findings for effective service delivery in higher institutions Nigeria. Specifically, the sought to identify:

1. Challenges encountered by lecturers of Agricultural Education in utilizing research findings for effective service delivery,
2. Coping strategies adopted by lecturers of Agricultural Education in utilizing research findings for effective service delivery and

3. Strategies for enhancing utilization of research findings in agricultural education by the school administration.

RESEARCH QUESTIONS

1. What are the challenges encountered by lecturers of Agricultural Education in utilizing research findings for effective service delivery?
2. What are the coping strategies adopted by lecturers of Agricultural Education in utilizing research findings for effective service delivery?
3. What are the strategies for enhancing utilization of research findings in agricultural education by the school administration?

HYPOTHESES

1. There is no significant difference in the mean rating of responses of lecturers of agricultural education in the universities and those in colleges of education on the challenges encountered in utilizing research findings for effective service delivery.
2. There is no significant difference in the mean rating of responses of lecturers of agricultural education in the universities and those in colleges of education on the strategies adopted in coping with challenges encountered in utilizing research findings for effective service delivery.
3. There is no significant difference in the mean rating of responses of lecturers of agricultural education in the universities and those in colleges of education on strategies for enhancing utilization of research findings in agricultural education by the school administration.

METHODOLOGY

Three research questions were developed and answered by the study. Survey research design was adopted for this study. Olaitan et al. (2000) stated that, research design is the investigation to research problems using questionnaire in collecting analyzing and interpreting the data. Nworgu (2006) also reported that survey research design is a design in which a group of people or items are studied by collecting and analyzing data from a few people or items considered to be the representative sample. This design was suitable for the study because a questionnaire was used in collecting data from the respondents. The study was conducted in 5 universities and 8 Colleges of Education offering Agricultural Education in North Central Nigeria. The population of the study was 55 made up of 32 lecturers of Agricultural Education in Colleges of Education and 23 lecturers of agricultural education in universities. The entire population was involved in the study due to its manageable size, hence there was no sampling. An

Table 1. Mean rating and t-test analysis of responses of lecturers on challenges encountered in utilizing research findings for effective service delivery (N=53).

| S/N | Items on challenges faced by lecturers | Mean | SD | t-tab | Remark |
|-----|--|------|------|-------|--------|
| 1 | Lack of competence by the lecturers to utilize research findings | 3.93 | 0.60 | 0.12 | *NS |
| 2 | In adequate funding to utilize research findings in service delivery | 3.40 | 0.39 | 0.29 | *NS |
| 3 | Inadequate motivation by the school authority to the lecturers | 3.87 | 0.42 | 1.13 | *NS |
| 4 | Lack of sponsorship by the government | 3.77 | 0.63 | 0.31 | *NS |
| 5 | Inadequate assistance from the donor agencies | 3.34 | 0.37 | 0.16 | *NS |
| 6 | Lack of interest and commitment by the students to accept new knowledge in service delivery | 3.41 | 0.38 | 0.54 | *NS |
| 7 | Lack of access to research findings by the lecturers of agricultural education | 3.91 | 0.94 | 0.11 | *NS |
| 8 | Ambiguity of most of the research findings | 3.27 | 0.27 | 0.63 | *NS |
| 9 | Lack of clear procedures on how to utilize research findings | 3.51 | 0.56 | 0.50 | *NS |
| 10 | Most of the research findings are not feasible on practice and in employability | 3.63 | 0.29 | 0.47 | *NS |
| 11 | Insufficient time on the school calendar to accommodate the utilization research findings | 2.58 | 1.00 | 0.49 | *NS |
| 12 | Lack of instructional materials that matches the research findings in agricultural education | 3.52 | 0.36 | 0.20 | *NS |

SD= standard deviation, t-table value= 1.67 N= number of respondents (53), df=degree of freedom (51) NS= Not significant, *=accepted.

Table 2. Mean rating and t-test analysis of responses of lecturers on strategies adopted in coping to challenges encountered in utilizing research findings for effective service delivery (N=53).

| S/N | Items on coping strategies by lecturers | Mean | SD | t-cal | Remark |
|-----|---|------|------|-------|--------|
| 1 | Lecturers involve their personal money to utilize some research findings for service delivery | 3.35 | 0.75 | 0.23 | *NS |
| 2 | Lecturers attract the assistance of donor agencies to fund utilization of research findings | 3.29 | 0.44 | 0.12 | *NS |
| 3 | Lecturers seek the assistance of administration to utilize research findings in agriculture for effective service delivery | 3.28 | 0.43 | 0.07 | *NS |
| 4 | Lecturers establish entrepreneurial opportunities to raise funds for utilizing research findings in agriculture | 3.43 | 0.72 | 0.12 | *NS |
| 5 | Students are taken to field trips by lecturers to have access to the research findings | 3.82 | 0.33 | 0.01 | *NS |
| 6 | Some lecturers research more on the research findings to simplify the utilization in service delivery | 3.77 | 0.37 | 0.05 | *NS |
| 7 | Lecturers attend trainings personally on some research findings to acquire the competence for the utilization for service delivery. | 3.29 | 0.44 | 0.12 | *NS |

SD= standard deviation, t-table value= 1.67 N= number of respondents (53), df=degree of freedom (51) NS= Not significant, *=accepted.

instrument tilted: RFUQ was developed from literature reviewed and experience of the researchers and used for data collection.

The questionnaire had a four-point response options of highly accepted (HA), averagely accepted (AA), slightly accepted (SA) and not accepted (NA) with a corresponding value of 4, 3, 2 and 1, respectively. Three experts validated the questionnaire items; two from the Department of Agricultural Education, Federal University of Agriculture, Makurdi and one from the Department of Agricultural Education, College of Education, Kastina-Ala, Benue State. Their corrections and suggestions of the experts were used to produce the final copy of the questionnaire. Cronbach Alpha Reliability method was used to determine the internal consistency of the questionnaire items. A reliability coefficient of 0.91 was obtained meaning that the questionnaire was reliable. The data were collected by the researchers from the respondents with the help of five research assistants who were familiar with the area of the study. A total of 55 copies of the questionnaire were administered but only 53 copies were retrieved within 10 days of administration. Data collected for the study were analyzed using mean

and standard deviation to answer the research questions. A mean of 2.50 was used for decision-making. Any item with a mean rating of 2.50 or above was regarded as accepted. T-test analysis was used to test the null hypothesis at ≤ 0.05 level of significance and at 51 degree of freedom.

RESULTS

The results of research questions are presented in Tables 1 to 3. The data in Table 1 revealed that all the 12 items had their mean values ranged from 2.58 to 3.93 and were above the cutoff point 2.50. This indicated that all the respondents agreed that all the 12 items were challenges encountered by lecturers in utilizing research findings. The Table also showed that the standard deviations (SD) of the items ranged from 0.27 to 1.00 which indicated that the respondents were not very far from the mean and one another in their responses. The Table also showed that all the 12 items had their calculated t-table value range from 0.12 to 0.63 which were less than the t-table value of ± 1.67 (two tailed test)

Table 3. Mean rating and t-test analysis of responses of lecturers on strategies for enhancing utilization of research findings in agricultural education by school administration (N=53).

| S/N | Items on strategies by school administration | Mean | SD | t-cal | Remark |
|-----|--|------|------|-------|--------|
| 1 | Provide the instructional materials that are in line with the research findings by the school administration | 3.97 | 0.00 | 0.00 | *NS |
| 2 | Sponsoring lecturers to attend short or long term training in some research findings in agricultural education | 3.83 | 0.31 | 0.91 | *NS |
| 3 | Making field trips compulsory for students yearly to related industries | 3.04 | 0.46 | 0.00 | *NS |
| 4 | Fund the purchase of recent journals and books to acquit lecturers with research findings in agricultural education. | 3.94 | 0.14 | 0.17 | *NS |
| 5 | Motivating lecturers through financial rewards or accelerated promotions for utilizing research findings in service delivery effectively | 3.33 | 0.85 | 0.11 | *NS |
| 6 | School authority should attract Governmental and non-governmental agencies to help lecturers technically or financially in utilizing research findings | 3.25 | 0.87 | 0.23 | *NS |
| 7 | Provision of computers and internet gadgets for lecturers to have access to latest research findings. | 3.44 | 0.82 | 0.52 | *NS |

SD= Standard deviation, t-table value= 1.67, N= number of respondents (53), df=degree of freedom (51) NS= Not significant, *=accepted.

at $P \leq 0.05$ level of significance and at 51 degree of freedom (df). This indicated that there is no significant difference in the mean rating of the responses of the two groups of respondents (lecturers in the university and those in Colleges of Education) on the challenges encountered in utilizing research findings for effective service delivery. Therefore the null hypothesis of no significant difference on the 12 challenges encountered by lecturers of Agricultural Education in utilizing research findings was upheld. The data in Table 2 shows that all the 7 items had their mean values ranged from 3.28 to 3.82 and were above the cutoff point 2.50. This indicated that all the respondents agreed that the 7 items were the strategies adopted in coping with challenges encountered by lecturers in utilizing research findings.

The Table also showed that the SD of the items ranged from 0.33 to 0.75 which indicated that the respondents were not very far from the mean and one another in their responses. The Table also showed that all the 7 items had their calculated t-table value range from 0.01 to 0.23 which were less than the t-table value of ± 1.67 (two tailed test) at $P \leq 0.05$ level of significance and at 51 df. This indicated that there is no significant difference in the mean rating of the responses of the two groups of respondents (lecturers in the universities and those in Colleges of Education) on the strategies adopted in coping with challenges encountered in utilizing research findings for effective service delivery. Therefore the null hypothesis of no significant difference on the 7 strategies adopted by lecturers of agricultural Education in coping with challenges encountered in utilizing research findings was upheld. The data in Table 3 revealed that all the 7 items had their mean values ranged from 3.04 to 3.97 and were above the cutoff point 2.50. This indicated that all the respondents agreed that 7 items were the strategies for enhancing utilization of research findings in agricultural education by the school administration.

The Table also showed that the SD of the items ranged from 0.00 to 0.87 which indicated that the respondents

were not very far from the mean and one another in their responses. The Table also showed that all the 7 items had their calculated t-table value range from 0.00 to 0.91 which were less than the t-table value of ± 1.67 (two tailed test) at $P \leq 0.05$ level of significance and at 51 df. This indicated that there is no significant difference in the mean rating of the responses of the two groups of respondents (lecturers of Agricultural Education in universities and in Colleges of Education) on how the chances of utilizing research findings by lecturers of agricultural education will be enhanced. Therefore the null hypothesis of no significant difference on the 7 items on strategies for enhancing utilization of research findings in agricultural education by the school administration was upheld.

DISCUSSION

The results of the study in Table 1 revealed that twelve challenges were faced by lecturers in utilizing research findings, seven strategies were adopted by lecturers in coping with challenges encountered in utilizing research findings, and seven strategies for enhancing utilization of research findings in agricultural education by the school administration were identified. The findings of the study were in agreement the findings of Uwaifo (2011) that the 21st century challenges of technical education in Nigeria include inadequate funding, inadequate facilities, brain drain, insufficient staff training and retraining among others. The findings of the study were also in consonance with the findings of Asakpa (2012) who stated that challenges of sharing resources in the cloud include security, privacy, sustainability and open standard. Maiangwa et al. (2010) who opined that challenges of decentralized, famer-led and free-for-service extension among others were great potential for political interference and the use of extension staff for other activities, economies of scale in updating staff skills can

be lost and more extension-research can be more difficult to organize.

On the strategies adopted by farmers in utilization of research findings, the findings were in conformity with Fadiji and Omokore (2010) that the strategies for solving food crises include lessons, constraints and opportunities for Nigeria which were importation, donations, green revolution, national programme on food security and millennium development goals. Sangotegbe et al. (2012) carried out a study on adaptation strategies to climate change by food crop farmers in Oke- Ogun area of South West Nigeria where it was found out that shifting cultivation, crop rotation, planting different crops, and mixed farming among others were adaptation strategies to climate change by food crop farmers. The findings of this study in Table 3 is in consonance with the view of Odufowokan (2011) who submitted that alternative financing policy methods include a cost-sharing and funding partnership arrangement between government, parents, communities, students and private sector, improved school efficiency profile by reducing wastage through mass failure, drop-out and repeater rates and low teacher productivity among others. The findings of the authors cited above helped to add validity to the findings of this study.

Conclusion

Lots of research findings are rolled into the field of Agricultural Education annually without effective utilization by the lecturers of Agricultural Education in discharging their duties. A preliminary study revealed that the lecturers are encounter some difficulty in utilizing the research findings while some, especially the experience ones adopt different coping strategies in order to overcome challenges in utilizing some of research findings during their service delivery to students inside and outside classrooms. Based on this, the study was conducted to identify the challenges encountered and coping strategies adopted by lecturers of agricultural education in utilizing research findings for effective service delivery in higher institutions in Nigeria.

RECOMMENDATIONS

Based on the findings of this study, therefore, it is recommended that:

1. The strategies adopted by experienced lecturers in utilizing research findings should also be employed by inexperienced lecturers for effective service delivery.
2. The school authorities should provide recent journals, computers and internet gadgets for lecturers to have access to latest research findings.
3. School authorities should attract Governmental and non-governmental agencies to help lecturers technically or financially in utilizing research findings.

4. School authorities should motivate lecturers through financial rewards or accelerated promotions for utilizing research findings in service delivery effectively.

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