

IMPACT OF INTERACTIVE TEACHING APPROACH ON ACADEMIC PERFORMANCE OF AGRICULTURAL EDUCATION STUDENTS IN ISAAC JASPER BORO COLLEGE OF EDUCATION, BAYELSA STATE.

NGODIGHA, SABINA ALATARI  
Department of Agricultural Education,  
Isaac Jasper Boro College of Education, Sagbama  
**Email:** alatari3004@gmail.com

IWOWARI, ANN  
Department of Educational Foundation, National Open University

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### Abstract

The study was conducted to determine the impact of interactive teaching strategy on the academic performance of Agricultural Education students at Isaac Jasper Boro College of Education in Bayelsa State. A case study approach was used and purposive sampling. Instructors were observed during lectures followed by interviews. The t-test was used to compare the GPAs of students enrolled in agriculture courses in 2014, 2015, and 2016 to evaluate if there is a significant difference between the teaching methods. Results showed that lecturers use both the interactive teaching approach (ITA) and the traditional teaching technique (TTA). The mean academic performance of students taught with ITA and TTA was 55.37 and 53.90, respectively, indicating that ITA had a greater influence on students' academic performance. At the 0.025 significance level, there was a significant difference between the two instructional approaches. It is important for teachers in higher education institutions to create an environment conducive to learning in order to enhance the development of students' learning processes, increase their knowledge of various instructional strategies in order to keep students engaged and motivated throughout the learning process, encourage students in presentation skills and reading of material related to course content besides lecture notes, and motivate students to become involved in academic in-class activities.

**Keywords:** Interactive Teaching, strategy, Academic Performance, Agricultural Education

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### INTRODUCTION

Academic performance can be defined as the capability of students to pass continuous assessment and final examinations. This can be accomplished by stating that academic performance can be defined as students' ability to pass their final exams. The academic achievement of students reflects not just the knowledge acquired, but also the academic performance of those instructors. This is particularly true of intellectual institutions like universities and colleges. Since academic performance is one of the most essential aspects of schooling (Rano, 2013).

Learning is an interactive process in the sense that learner interacts with the problem in order to complete the job with the aim of expanding their knowledge. A method of teaching and communicating where students are active participants in learning, reflect on experiences,

knowledge and concepts acquired. When students participate in this form of learning, they are encouraged to reflect on what they know and what they are thinking. This type of activity also helps to develop a supportive classroom environment that fosters student-teacher interactions.

The learning process involves both the learner and the teacher where interactive training combines traditional presentations with hands-on activities. It does not replace lectures; rather, it contributes to a deeper understanding of the content covered in class and, most importantly, to the formation of opinions, attitudes, and behaviour skills (Kutbiddinova, Eromasova & Romanova). Interactive teaching is exemplified by the utilization of multiple media kinds to stimulate cognitive participation in the classroom (Harsimrat, 2016). The use of interactive teaching methods provides a high

level of motivation, strength, knowledge, team spirit, and freedom of expression; these methods also contribute to the development of future specialists with complex competences; interest in the profession is increased; training materials are acquired more quickly; behavioural patterns are formed; and, most importantly, future specialists' complex competences are developed (Yakovleva & Yakovlev, 2015).

Many factors such as the natural environment, individual traits, social influences, psychological make-up, and the state of the economy have been reported to contribute to the individual's well-being (Ali, Haider, Munir, Khan, & Ahmed., 2013). The aim of this study was to assess the impact of an interactive teaching on the academic performance of agricultural students at Isaac Jasper Boro College of Education in Bayelsa State's Sagbama Local Government Area.

## METHODOLOGY

### Research Design

Case study was utilized to investigate how the usage of an interactive and traditional teaching strategy affected the academic accomplishment of students.

### Population of the study

Teaching staff at the department of Agricultural Education and student population from 2014 to 2016 were used for the study. There were forty-eight people in the population, including thirty-eight students and ten instructors.

### Sample and Sampling Technique

For the purpose of this qualitative research, the sample was comprised of individuals who had signed up for classes at the Department of Agricultural Education in 2014, 2015, and 2016 respectively.

Purposive sampling method, which consisted of interviewing and observing teachers during their lecture periods, was used to determine how teaching method was implemented in the classrooms. Teaching staff consists of individuals who holds at least a master's in their

respective fields of expertise and have taught for a minimum of three years

### Instrument

Interviews with lecturers were conducted using a generic interview guide in conjunction with the semi-structured interview approach. The interpretive nature of the questions that were included in the interview guide came from the fact that they were derived from a review of the relevant research.

### Validity and Reliability

The validity of this qualitative research stresses on “why” interactive teaching approach has impact on academic performance of students in Isaac Jasper Boro College of Education, Sagbama and “how” does interactive teaching method affects academic performance of students in Isaac Jasper Boro College of Education, Sagbama. Validity of this research depends on the effort of the researcher, since the researcher is the instrument. In addition, the statistical tool used was the quasi design. Reliability of qualitative research focuses on the consistency of the data.

### Method of Data Analysis

Data was analyzed following the steps for Responsive Interviewing analysis techniques:

- 1) **Recognition:** finding the concepts, themes, events, and topical markers in interviews;
- 2) **Clarify and Synthesize:** through systematic examination of the different interviews to begin understanding of the overall narrative;
- 3) **Elaboration:** generating new concepts and ideas after clarification and synthesis;
- 4) **Coding:** systematically labelling concepts, themes, events, and topical markers, giving them a brief label to designate each and then marking in the interview text where they are found;

Following this, the findings were presented in the form of narratives that described the impact of the teaching technique on the academic achievement of the students.

**Table 1:** Academic performance of students using Interactive Teaching Approach in 2014 set

s/n	Course	2014	2015	2016
1	111	55.00	64.00	62.67
2	112	47.79	58.80	43.89
3	117	72.50	60.93	35.67

4	118	55.79	57.30	49.00
5	121	55.15	61.00	52.67
6	124	47.70	42.43	36.22
7	125	58.46	67.21	53.00
8	213	62.00	57.92	45.33
9	215	65.46	62.67	50.67
10	217	68.15	54.50	53.55
11	219	54.49	48.83	51.33
12	221	70.31	63.18	62.00
13	222	76.92	68.18	51.89
14	224	64.46	55.64	48.88
15	229(SIWES)	43.77	48.36	40.56
16	320(Seminar)	57.83	61.50	32.11
	<b>Mean</b>	<b>59.74</b>	<b>58.28</b>	<b>48.09</b>

**Table 2:** Academic performance of students using Traditional Teaching Approach in 2014 set

s/n	Course	2014	2015	2016
1	113	66.79	63.67	56.56
2	114	56.57	61.60	59.89
3	115	43.28	47.27	58.33
4	116	66.07	42.93	58.89
5	119	46.00	41.40	29.11
6	122	52.00	44.79	46.22
7	123	53.30	86.07	62.00
8	126	57.92	58.07	42.44
9	127	60.62	78.29	58.00
10	211	59.46	48.75	50.78
11	212	54.46	63.17	51.33
12	214	58.15	57.00	47.44
13	216	52.31	76.50	60.69
14	218	53.38	64.08	53.77
15	223	61.69	51.00	46.67
16	225	49.31	45.27	48.78
17	226	67.46	65.27	47.44
18	227	67.77	50.64	53.44
19	228	66.23	62.64	72.55
20	321	51.15	53.30	52.00
21	322	62.75	51.90	54.89
22	323	59.50	53.30	40.00
23	324	50.58	59.60	62.22
24	325	57.67	54.60	48.11
25	326	42.42	49.30	39.11
26	327	52.67	48.20	56.22
27	328	63.17	59.50	56.33
28	329	56.33	48.10	47.33
	<b>Mean</b>	<b>52.91</b>	<b>56.65</b>	<b>52.16</b>

## RESULTS AND DISCUSSION

The research as shown in table 1 and table 2 indicates that there are conventional technique

(lecture method) and the interactive method. The finding is in agreement with those by Ganyaupfu (2013) and Atandi *et.al.*, (2019).

Mean score of 53.90 was obtained using the traditional teaching approach (TTA), but a mean score of 55.37 was obtained through the interactive teaching approach (ITA). This study shows that the most frequently used method is the lecture-based approach. These findings are in line with what Atandi and co-authors have uncovered in their research (2019). The type of instruction that has been used for generations is called the teacher-centred approach. In this approach, the instructor is the only person permitted to talk, and they provide all of the content while they are standing in front of the class. This approach exemplifies an authoritarian form of government. It is considered a Teacher-Centred approach, despite the fact that the Interactive Teaching Method is a Student-Centred approach. Students who are calm and collected throughout class are better able to keep up with the rapid pace of the instructor's instruction, which in turn makes it simpler for students who learn more slowly to do so. Students who are actively involved in interactive lessons acquire significant quantity of information, develop attitude of tolerance towards fellow students, and notice changes in their capacity to communicate, amongst other advantages. These findings support the argument by Giorgdze and Dgebuadze (2017) that the use of interactive methods is advantageous to the attainment of the goals of contemporary education. The educational process is carried out in such a way that all of students participate equally in the cognitive process, each individual makes contributions to the method of instruction, and students communicate with one another to share information and ideas. Hence, students are able to obtain knowledge and strengthen their communicative abilities such as ability to listen to people, examine other points of view, participate in dialogues, arrive at shared conclusions, create tolerance, and a variety of other abilities.

Statistical examination of the impact of the various teaching approaches on the academic performance of Agricultural Education students at Isaac Jasper Boro College of Education in Bayelsa State, indicates there was substantial difference between the various teaching approaches. The finding corroborates those of Ganyaupfu (2013), that the strategy that centred on the interaction between the teacher and the

student produced the highest mean score, then approach that centred on the student, and then approach that centred on the instructor produced the lowest mean score.

Trust is very important between the instructor and the students and the classroom environment should allow students learn what is expected of them rather than having rules imposed on them. When there is mutual respect between the teacher and the students, the students feel more comfortable. Teachers who employ the interactive method of instruction cultivate a more welcoming atmosphere in their classrooms by leading students from the familiar to the unfamiliar, which facilitates an open exchange of information.

The teacher can assist the student in acquiring the ability to fend for themselves, become motivated to learn, and be willing to take chances if they use teaching tactics that are emotionally supportive and risk-free. Learners require access to a wide range of distinct avenues, via which they can be trained on the same subject matter, and the major purpose of instructional materials is to offer them with these chances (Abubakar, 2015). The act of teaching is a process that continues, and it entails bringing about the kind of change that is intended in students through the application of tactics that are appropriate (Ayeni, 2011). Students who graduated in 2014, 2015, and 2016 achieved an average academic studies of 56.33, 57.45, and 50.13, respectively, as compared to the previous classes. This suggests that students who enrolled during this period were students who were performed averagely.

The aim of education is not to produce students with high grades rather, to shape young people into responsible adults who have fully developed minds and good character. Hence, academic performance as measured by GPA of students in higher institutions cannot be used to assess students' intelligence. This is due to the fact that majority of students memorize material and cheat on exams in order to have good grades, which cannot be reproduced after exams. Students who enrol in higher-level educational programs can anticipate receiving instruction that helps them develop the skills necessary to become experts in the various fields in which they intend to pursue careers after graduation. Therefore, it is very vital that there is interaction between the teacher and the

students when the teacher is teaching and while the students are learning

Student academic performance in the Student Industrial Work Experience Scheme (SIWES), in which students participated in practically work experience at farms outside the school, submitted a logbook and report for evaluation, were generally poor throughout the entirety of the study time. The fact that students were unable to articulate the work experience that they had obtained suggests that they were not serious about their academic aspirations. Because the students were unable to provide evidence that the information they obtained through interactions with other people at their place of employment was processed, as well as evidence that mental processes are an essential component in comprehending how we learn through the utilization of our memories, the cognitive learning theory was not presented.

During the student's seminar presentations, which were observed by all of the instructors in the department, the students were able to display a change in conduct. The lecturers evaluated the students' performance while they were delivering presentations on any subject that was either educational or linked to agricultural science.

The fact that there was a change in behaviour, which occurs predominantly as a function of the environment, served as evidence for the behavioural hypothesis. Additionally, a reaction to a stimulus becomes more robust via exercise and repetition (Classical conditioning).

Student-Centred Method and Teacher-Student Method are recommended to improve students' academic performance and study habits, which support those of Isa, et al (2020) and Ganyaupfu (2013), who found that combining both methods is the most successful approach that generates the best results for students.

## CONCLUSION

The findings reveal that Traditional Approach (TTA), an active and student-centred approach of education, is less effective at enhancing students' academic performance than the Interactive Teaching Approach (ITA), which centres on both the teacher and the student. Communicating more information with students can help students to have a deeper understanding of the subject matter, and

teachers may gain wider knowledge of teaching.

## RECOMMENDATIONS

Teaching and learning effectiveness depends largely on the choice of the teacher's teaching approach therefore, Lecturers should create environment suitable for learning to enhance the development of students' learning processes Teachers should encourage students to develop their presentation abilities and read information that is relevant to the subject matter of the class in addition to the lecture notes. Instructors should encourage students to be involved in academic activities with other students and teachers.

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