

Relationship Between Teachers characteristic and Students' Academic Achievements in Agricultural Entrepreneurial Subjects in Senior Secondary in Niger State, Nigeria

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Abstract

The study determined the relationship teachers' characteristic and students' academic achievements in agricultural entrepreneurial subjects in senior secondary in Niger state, Nigeria. The study was guided by two research questions and two null hypotheses. The study adopted a correlational research design and was carried out in Niger State, Nigeria. The sample of the study was all the 151 agricultural entrepreneurial subject teachers in a total of 217 Senior Secondary Schools in Niger State and a proforma of 381 results of students that sat for SSCE examination in agricultural entrepreneurial subjects from 2014 to 2018. The instrument for data collection was a structured questionnaire titled Agricultural Entrepreneurial Subjects Teachers' Characteristics Questionnaire (AESTCQ) developed by the researchers. The reliability of the questionnaire was calculated using Cronbach's Alpha coefficient and the overall reliability index of the instruments was found to be 0.82. The data for the study was analyzed using and Pearson Product Moment Correlation (PPMC) and Regression Analysis. Findings of the study revealed that academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State has a high positive relationship with teachers' age and that the relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State is positive and high. It was therefore recommended that federal and state ministries of education should prioritize teachers' age during recruitment as it is considered an important factor in enhancing the academic achievement of students in agricultural entrepreneurial subjects in schools. It was also recommended that government should introduce and implementation of policies that will give teachers incentives to boost their morale and so, help improve the academic achievement of agricultural entrepreneurial subject students

Keywords: Teachers Characteristic, Academic Achievement, Agriculture, Entrepreneurial Subjects, Relationship

Introduction

Education is an important ingredient for Industrial and Technological development of any nation. It is on this basis that nations of the world design their educational systems to suit the needs of the generality of their citizens. Nigeria, being a developing nation, in order not to be left behind, among the comity of the world, has over the years come up with policies that are capable of moving her to the next level with respect to economic, industrial and technological advancement. Entrepreneurship education is the systematic development of skills, knowledge and attitude necessary for an individual to perform adequately and also to be productive in an occupational oriented opportunity, for improved performance of a country's

economy. Based on its relevance to education, the government of Nigeria took a major step by the introduction of entrepreneurial subjects into senior secondary school curriculum in 2011 (Ementa, 2013). Ementa further revealed that during the period, 34 entrepreneurial subjects were introduced as part of effort to enable youths acquire concrete skills for survival, reduce poverty, create jobs and position them to compete globally as well as for higher education.

Agricultural entrepreneurial subjects are applied science and vocational subjects with emphasis on the acquisition of knowledge and skills to prepare student for higher education as well as laying a solid foundation for sustainable poverty eradication, job creation, wealth generation and value re-orientation, which are the four focal point of National Economic Empowerment and Development Strategy (NEEDS). Animal Husbandry and Fishery are the two agricultural entrepreneurial subjects introduced alongside 32 other entrepreneurial subjects in 2011. Agricultural entrepreneurial subjects are designed to change the orientation and attitude of the recipients and in the process equip them with the skill and knowledge to enable them start and manage a business enterprise (Agu, 2006). The curriculum is also structured to support knowledge and economy as well as create an enabling environment for youth empowerment and acquisition of functional skills.

The aim and objectives of these curriculum are derived from National Policy on Education, Suleiman (2010) opined that entrepreneurial subjects, fishery and animal husbandry inclusive, prepares youth to be responsible members of the society by immersing them in real life learning experiences, to enable them take risks, manage results and learn from the outcome. The objective of entrepreneurial subjects, according to Nigeria Education Research and Development Council (NERDC) (2009), is to stimulate and sustain students' interest and enable them to acquire basic knowledge and practical skills, thus preparing them for further studies and occupation in various entrepreneurial subjects such as Animal Husbandry and Fishery. Akpomi (2009) reported that stimulating students' entrepreneurial abilities and mindset will make them confident about their strengths and weaknesses, and re-awaken student's initiative and ability to turn ideas into actions. Alabi (2014) reported that youthful stage has been noted as the best possible time for training in entrepreneurship, for self-reliance. Alabi (2014) further stressed that entrepreneurship subjects are designed for the students, to be equipped to break the facade of unemployment through the development of self as a precursor to a meaningful contribution to the development of the society. Much as entrepreneurial skills are important to youths for the economic development of the nation, the role of the teacher who imparts the skills cannot be overemphasized.

A teacher is a person who helps students to acquire some knowledge, skills, attitude and ideas in any field of study. He is someone who has undergone the necessary and recommended training in teaching and is charged with the full responsibility of managing the classroom in such a way that it enhances the learning behavior of the student. Schön (2017) stated that a teacher is ultimately responsible for translating policy on education into action in

the classroom. Teachers play vital role in the lives of the students and are best known for the role of educating the student that is placed in their care. In addition, teachers serve many other roles like setting the tone of the classroom, building a warm relationship, mentoring and nurturing students and being role models to them. Sung, Chang and Liu (2016) reported that teacher have positive effect on students learning, for students to be able to make connection between what is taught in school and its implication in problem solving in real life, the teacher has to be effective in their teaching. Boyd, Landford, Loeb, Rockoff and Wyckoof (2008) reported that teacher is a very important resource in any educational system. Akinsolu (2010) stressed that teachers are vital pre-requisite for a students' attainment of educational goals as well as the students' performance in school subjects. Sabitu and Nuradeen (2010) opined that the success of any teaching and learning process which influences students' academic achievement depends on how effective and efficient the teacher is. One of the key factors that could influence a teacher's success in his job is his qualities, known in academic circles as teacher characteristics.

The importance of teacher characteristics in realizing educational goals and objectives in any educational system cannot be over emphasized. This is because they are important in the recruitment of teachers with a view of enhancing students' academic achievement. Teacher characteristics can be referred to as qualities that can be measured or derived from their academic or professional records. Priestley, Biesta and Robinson (2015) defined teacher characteristics as instructional behaviour exhibited by the teacher towards goal attainment. Fehintola (2014) indicated that teacher characteristics include: teachers' academic qualification, teachers' content knowledge, teachers' instructional quality, teachers' evaluation procedures and teachers' job satisfaction. According to Shumow and Schmidt (2013), teacher characteristics include content knowledge and classroom management. In the same vein, Kurgat and Gordon (2014) noted that over the years emphasis on teacher characteristics has been on age, gender, attitude of teaching and teacher's quality, teachers academic qualification, professional experience and competence. But the teacher characteristics that will be considered in this study include: teaching experience, gender, age, attitude, innovativeness, interpersonal relationship and teacher's qualification.

Attitude is a mindset that affects how a person thinks and acts. Joseph and Orim (2017) defined attitude as mindset that can influence a person's performance positively or negatively. Attitude could also affect how well a teacher plans and prepares for his/her lessons. Teacher's attitude consciously or unconsciously affects student's academic achievement. If a teacher appears not interested in a particular subject or student, he/she will not be able to foster a supportive learning environment and the student will find it difficult to ask questions in the classroom. Tella (2017) reported that teachers' negative attitude towards teaching may affect students' academic achievement negatively. If a teacher develops a positive attitude to teaching, it would make him/her work hard towards the success of the student. When students

noticed that their teacher is hard working and show concern for them, it motivates them and this will result to good academic achievement. Enhancing students' academic achievement often leads many teachers into fashioning innovative ways of approaching the classroom situation.

Teachers' age is referred to how old a teacher is from birth to date. According to Gay (2010), teachers' age is defined as the length of time that a teacher has lived or has existed. The relationship between age of teachers and academic achievement of students has received considerable attention in recent years. Keuchen and Valfort (2012) revealed that old aged teachers were rated lower on teaching skills than young or middle aged teachers. In the same vein, Alufohai and Ibhafidon (2015) reported a significant relationship between the three levels of teacher's age as related to the academic achievement of students. Irrespective of the age of teachers, another important characteristic of teacher that influences their professional conduct is interpersonal relationship with students.

Academic achievement is a measure of what student has learned over predetermined period of time. Entwistle and Ramsden (2015) reported that academic achievement has been considered as an important issue in the educational life of student. It encourages the students to work hard and learn more. Sekaran and Bougie (2016) noted that students' academic achievement is dependent on several factors namely; teaching method, guidance, availability of facilities, methods of testing, background, organization, motivation and opportunity. These factors when properly attended to by the stakeholders involved, are capable of enhancing students' academic achievement especially at the secondary school level.

A senior secondary school student is a learner who is enrolled in the upper part of the secondary school level of the Nigerian educational system, who is receiving post basic education in preparation for advanced studies at the tertiary level. The Federal Republic of Nigeria (FRN) (2013), in the National Policy of Education maintained that the broad goal of secondary education shall be to prepare an individual for useful living within the society and for higher education. In order to graduate, a senior secondary school student is expected to spend three years after which he sits for an exit examination known as the Senior Secondary Certificate Examination (SSCE). In Nigeria SSCE is conducted by two main examination bodies they are; National Examinations Council (NECO) and the West African Examination Council (WAEC). These examination bodies examine student in 76 subjects in total. This measure was put in place by the government of Nigeria, in recognition of the facts that education is the key to socio-economic transformation, especially in this era of science and technology, and knowledge driven 21st Century (Alabi, 2014).

In addition, preparing students for further studies, the FRN (2013) stressed that the senior secondary school education curriculum is designed in such way that every graduate should have acquired relevant functional entrepreneurship skills needed for poverty eradication, job creation and wealth generation at the expiration of the course. This came on

the heels of the prevailing state of unemployment challenge currently facing the youths. As noted by Obioma (2012), this is a response by the Federal Government of Nigeria to the wide spread unemployment challenge among the youths by making it a policy that every senior secondary school student should have at least one form of entrepreneurial skills education. No doubt, academic achievement is the way to test if the skills intended for the students in subject like fishery and animal husbandry are being acquired by the students and this depends on the teachers. Therefore, it is important to investigate the relationship between teacher characteristics and students' academic achievement in fishery and animal husbandry subjects.

Statement of the Problem

In a bid to bring about educational development capable of fostering national development, huge resources have been spent on education, agricultural entrepreneurship subjects inclusive. Unfortunately, these efforts are yet to yield the desired outcome. Lawal and Adejuwon (2014) reported that students of agricultural entrepreneurship subjects perform poorly in National Examinations conducted by West African Examinations Council and National Examinations Council. For instance, statistics over the past five years from 2014 - 2018 corroborated this: the results show that students of animal husbandry in Niger State recorded (15.37%) in 2014, (56.92%) in 2015, (42.51%) in 2016, (55.73%) in 2017 and (40.54%) in 2018 pass level (NECO, 2018). In the same vein, students of fishery in Niger state recorded (72.93%) in 2014, (78.97%) in 2015, (64.43%) in 2016, (66.92%) in 2017 and (60.13%) in 2018 pass level (NECO, 2018).

Since teacher is the key implementer of the curriculum and controls what goes on in the classroom, from the result above, it is of concern because good results are expected from students after investing heavily in secondary school education. According to Borgen and Hjordemaal (2017) students' academic achievement in agricultural entrepreneurial subjects is a function of productivity of the teachers handling the subjects. Teacher characteristics such as qualification, teaching experience, age, gender, interpersonal relationship with students, attitude and innovativeness among other things determine his productivity. Bamidele and Adekola (2017) reported that teacher characteristics have been identified to play significant role in students' academic achievement. However, Atherton(2003) noted that student academic achievement is dependent on several factors namely; teaching method, guidance, availability of facilities, method of testing, background, organization, motivation and opportunity. Adu and Olatundun (2007) stressed that teacher characteristics are strong determinants of students' academic achievement in schools. They also reported that teacher characteristics can influence student academic achievement and can make great difference in secondary school education. Ibe, Nworgu and Ayaegbunam (2016) noted that there can be no quality education without equipped, prepared and motivated teachers who possess the pedagogical skills, teaching method, attitude, work ethics, responsibilities and interpersonal relationship. These are some of the teacher characteristics that are capable of setting up a situation in which learners can

learn effectively towards improving their academic achievement in the subject area. Despite efforts made to improve it, poor academic achievement still persists, therefore, the inconsistency in the academic achievement of students of agricultural entrepreneurial subjects in Niger state could have a link to teacher characteristics and so is worth investigating. Hence, the problem of this study is to determine if there is a relationship between teacher characteristics and the student's academic achievement in agricultural entrepreneurial subjects in senior secondary school certificate examination in Niger state

Purpose of the Study

The study determined the relationship between teacher's characteristic and students' academic achievements in agricultural entrepreneurial subjects in senior secondary in Niger state, Nigeria. Specifically, the study determined the: -

1. Age of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE.
2. Attitude of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE.

Research Questions

The study provided answers to the following research questions:

1. What is the relationship between age of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State?
2. What is the relationship between attitude of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State?

Null Hypotheses

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

H₀₁: There is no significant relationship between attitude of teachers and academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

H₀₂: There is no significant relationship between age of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

Methodology

Correlational research design was used for this research. A correlational study shows the extent of relationship between two scores that represent two variables (Uzoagulu, 2011). It involves the determination of the degree to which the two variables under study are related. The study was conducted in Niger State. Niger State is located in the North Central Zone of Nigeria and occupies a land area of 74, 244 square kilometers which is about 10% of the total land area of Nigeria (Ikusemoran, Kolawole & Adegoke 2014). The choice of Niger State as the area for this study is based on the fact that, Niger state is one of the agrarian states with

85% arable land and most secondary schools in the state offer fishery and animal husbandry as a trade subject and also the proximity and convenience for the researcher to collect data.

The target population of the study was all the 151 agricultural entrepreneurial subjects' teachers from a total of 217 Senior Secondary Schools in Niger State. The sample of the study was all the 151 agricultural entrepreneurial subject teachers in a total of 217 Senior Secondary Schools in Niger State and a proforma of 381 results of students that sat for SSCE examination in agricultural entrepreneurial subjects from 2014 to 2018. Purposive Population Sampling Technique was used to select the 151 agricultural entrepreneurial subjects' teachers in Senior Secondary Schools in Niger State.

The instrument for data collection was a structured questionnaire titled: Agricultural Entrepreneurial Subjects Teachers' Characteristics Questionnaire (AESTCQ) developed by the researcher as shown in Appendix VII, page 125. The questionnaire was made up of two parts (1 and 2). Part 1 seeks information on the respondents' personal data which covers teachers' qualification, teaching experience, age and gender. While Part 2 was divided into 3 sections and obtained responses on teachers' interpersonal relationship with 20 items, teachers' attitude with 20 items and teachers' innovativeness with 18 items respectively. Face validity of the instrument was established by experts in agricultural entrepreneurial subjects. The reliability of the questionnaire was calculated using Cronbach's Alpha coefficient and the overall reliability index of the instruments was found to be 0.82.

The data for the study was analyzed using and Pearson Product Moment Correlation (PPMC) and Regression Analysis. PPMC was used to answer all the research questions and Regression analysis was used to test the null hypotheses at 0.05 level of significance. decision regarding the research questions was based on the bench marks proposed by Bowman, Alvarez-Jimenez, Howie, McGorry and Wade (2015) for taking decision on the direction of Pearson (r) for the relationship between two variables. That is: $r = 0.10$ to 0.29 or $r = -0.10$ to -0.29 , connote low correlation; $r = 0.30$ to 0.49 or $r = 0.30$ to -0.49 , connote medium correlation; and $r = 0.50$ to 1.0 or $r = -0.50$ to -1.0 , connote high correlation. Nevertheless, decision regarding the hypotheses was made by comparing the significance value (p-value) with the 0.05 level of significance. P-value below 0.05 indicated significant relationship while p-value above 0.05 indicated no significant relationship (Foster, Lane, Scott, Hebl, Guerra, Osherson, and Zimmer, 2018). In order to enhance speed and accuracy, all statistical calculations were done using the Statistical Package for Social Sciences (SPSS) version 23.

Results

Research Question 1: What is the relationship between age of teacher and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State?

Table 1: Pearson Product Moment Correlation for the Test of Relationship between Teachers' Age and the Academic Achievement of Students of Agricultural Entrepreneurial Subjects in SSCE in Niger State

Variables		Academic Achievement	Teachers' Age
Teachers' Age	Pearson Correlation	.831**	1
Teachers' Age	N	151	151
Academic Achievement	Pearson Correlation	1	.831**
Academic Achievement	N	381	151

Table 1 shows the Pearson product moment correlation for the test of relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State. The result reveals the correlation coefficient of .831 between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE. This shows that, the relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State is highly positive. The high positive relationship implied that; teachers' age plays an important role in determining the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

Research Question 2: What is the relationship between attitude of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State

Table 2: Pearson Product Moment Correlation for the Test of Relationship between Teachers' Attitude and the Academic Achievement of Students of Agricultural Entrepreneurial Subjects in SSCE in Niger State

Variables		Academic Achievement	Teachers' Attitudes
Teachers' Attitude	Pearson Correlation	.846**	1
Teachers' Attitude	N	151	151
Academic Achievement	Pearson Correlation	1	.846**
Academic Achievement	N	381	151

Table 2 shows the Pearson product moment correlation for the test of relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State. The result shows .846 correlation coefficient between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE. This reveals high positive relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State. The high positive relationship implied that; teachers' attitude positively

affects the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

Null Hypothesis 1: There is no significant relationship between age of teachers and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

Table 3: Regression Analysis for the Test of Significant Relationship between Teachers' Age and Students' Academic Achievement in Agricultural Entrepreneurial Subjects in SSCE in Niger State

Model	Unstandardized coefficient		Standardized coefficient	R square	T	Sig
	B	SE				
Teachers' age	.500	.027	.831	.690*	18.228	.000**
Academic achievement	4.208	.071			59.155	.000

Table 3 holds the regression analysis for the test of significant relationship between teachers' age and students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State. The analysis showed that, the significant criterion (sig.) or p-value was .000 which is less than the confidence level of 0.05. The result highlighted that, there is statistically significant relationship between teachers' age and students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State. Hence, the null hypothesis of no significant relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State was rejected. Furthermore, the result showed that, the coefficient of determination (R square) was .690. This inferred that, (69.0%) of the variation in students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State is connected with teachers' age.

Null Hypothesis 2: There is no significant relationship between attitude of teachers and academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State.

Table 4: Regression Analysis for the Test of Significant Relationship between Teachers' Attitudes and Students' Academic Achievement in Agricultural Entrepreneurial Subjects in SSCE in Niger State

Model	Unstandardized coefficient		Standardized coefficient	R square	T	Sig
	B	SE	Beta			
Teachers' attitude	1.916	.099	.846	.716*	19.403	.000**
Academic achievement	-.768	.319			-2.411	.017

Table 4 shows the regression analysis for the test of significant relationship between teachers' attitude and students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State. The test revealed significant criterion (sig.) or p-value as .000 which is less than confidence level of 0.05. The result indicated that, there is statistically significant relationship between teachers' attitude and students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State. Therefore, the null hypothesis of no significant relationship between teacher's attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE was rejected. Nevertheless, the result also showed that, the coefficient of determination (R square) was .716. This indicated that, 71.6% of the variation in students' academic achievement in agricultural entrepreneurial subjects in SSCE in Niger State was accounted for by the attitude of teachers.

Major Findings of the Study

From the results of the data analysis, the following findings emerged:

1. The academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State has a high positive relationship with teachers' age.
2. The relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State is positive and high.
3. There is a significant relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE.
4. There is a significant relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE.

Discussion of Findings

Relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE

It was found that the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State has a positive relationship with teachers' age. Additionally, the hypothesis tested on the strength of the relationship between the two variables revealed that there is a significant relationship between teachers' age and the academic achievement of students of agricultural entrepreneurial subjects in SSCE. The meaning of this is that as the age of teachers increased, the academic achievement of the students taught agricultural entrepreneurial subjects in SSCE increased. This position was supported by the findings earlier made by other researchers. For instance, Alufohai and Ibhafidon's (2015) study revealed that students' academic achievement is significantly influenced by teachers' age. Similarly, Albert, Yungungu and Osman (2015) who carried out a study to establish the relationship between teacher characteristics and performance in Kenya Certificate Secondary Examination (KCSE) in Biology in selected secondary schools in Nyakach sub-county, Kisumu county, Kenya, reported that there was positive relationship between teacher characteristics (which included teachers' age) and students' performance in KCSE Biology. Age goes hand in hand with experience, hence, teachers' age and academic achievement correlate strongly. In essence, younger teachers are more likely to have less experience and exposure with respect to the subject matter to bring to bear as they perform their teaching duties, which is why the academic achievement of the students they taught were not symmetrically matched with those of their older counterparts.

Relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE

The findings of the study revealed that the relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE in Niger State is positive. Likewise, the hypothesis that was tested on the variables revealed that there is a significant relationship between teachers' attitude and the academic achievement of students of agricultural entrepreneurial subjects in SSCE. From these findings, student academic achievement improves when they are taught by teachers who have a positive attitude. This means that the higher a teacher is on the positive attitude scale, the better his productivity and so the higher the achievement of his students in agricultural entrepreneurial subjects in SSCE. Hence, teachers' attitude is key in the academic achievement of the students they teach. This is corroborated by Vasudevan (2013) and Ekperi, Ude and Wike (2019) who found out that attitude of teachers correlated positively and significantly with students' academic performance. Attitude is everything. One of the ways of helping a person achieve success is to help him develop the right attitude towards success. Most of the poor results recorded by students in Nigeria could be attributed to the demoralized state of the mind of the teacher. The poor treatment he gets in the society make him feel underappreciated. This has often times made

many teachers to develop a negative attitude towards their work. Therefore, if the issues of poor government attention to teachers, lack of job satisfaction, poor remuneration and delayed salary, and absence of teaching/instructional materials are addressed, the attitude of teachers towards their work will improve and this will impact positively on the academic achievement of their students.

Conclusion

The academic achievement of students in agricultural entrepreneurial subjects in senior secondary schools across the country is an important aspect of the economic development of the nation. This is because it is one of the means of appropriately reporting whether or not the classroom instructional activities are being effectively carried out. Some of the factors that affect the output, as found by this study, are teacher characteristics such as qualification, age, teaching experience, innovativeness, attitude and interpersonal relationship. This study found a positive and significant relationship between the variables and the academic achievement of agricultural entrepreneurial subjects' students in secondary school certificate examination in Niger State. In essence, the academic achievement of agricultural entrepreneurial subjects' students in secondary school certificate examination in Niger State is enhanced when the teachers that are teaching the subjects are properly matured in terms of age and have a good attitude towards their job.

Recommendations

Based on the findings of the research the following recommendations were made:

1. The federal and state ministries of education should prioritize teachers' age during recruitment as it is considered an important factor in enhancing the academic achievement of students in agricultural entrepreneurial subjects in schools.
2. The Niger state government should introduce and implementation of policies that will give teachers incentives to boost their morale and so, help improve the academic achievement of agricultural entrepreneurial subject students.

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