STUDENTS ATITUDE TOWARDS LEARNING SCIENCE

A CASE STUDY OF KANO MUNICIPAL AREA OF KANO STATE NIGERIA S.B SADAU^{*} U.F ALKASSIM^{*} M. Muhammad^{*}

KEYWOARDS: Attitude, higher education, learning, science study, teacher's experience.

ABSTRACT

This research is carried to investigate student attitude towards the learning of science in Kano Municipal Local Government Area of Kano State. The studies cover the responses of students and teachers in selected secondary schools. The responses were obtained through questionnaires. Based on the data comprehensive analysis has been carried out and the results are reported. Suggestion and recommendations were also outlined for effective science learning in the study area.



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INTRODUCTION

Nigeria as a developing country needs man power in the field of science and technology for effective development of the nation. Science education primarily aims at understanding the nature of science for enhancing scientific manpower.[1]

The obvious misconception which students have toward learning science has brought about negative effect in the students toward learning science. Many of the students feel that learning science is not well recognized at secondary school level. Most of the teachers working in educational institution are constantly trying to explore ways and means of making learning processes richer for students. The primary factor identified in this attempt is the behavior of the students.[2]

Banke (2000) stated that teachers should be model personalities for students. This includes that teachers are expected to live an exemplary life because students can easily imitate them and copy both their good attitude/behavior. A great number of teachers lack initiative, creativity and consequent the students gain little from them.[3]

Acho (2004) carried out a research on the attitude of some students towards learning science and out of which three problems were identified by the students and these problems are:

- Misunderstanding of the subject.
- The lack of opportunity in science for self-exploration.
- The teacher attitude is in low level.

The attitude of science teachers to the students is no doubt a contributing factor in how much a student can learn any science subject.[2]

In Nigeria today, most student feel that science education is difficult and often tedious. They view that the learning of science in schools has a limited effect in their everyday life .They are on the opinion effectivemethods of teaching which improve their learning process. [4]

Touse (2003), states that chalk and talk method has become the most widely used method of teaching science; teachers normally talk to their students about science using the traditional (feelings)method instead of engaging them in self-activities that would allow them to experience and learn science.[3]



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OBJECTTIVES OF THE STUDY

- To study the effect of teachers experience toward student attitude in learning of science subject in some selected secondary schools in Kano Municipal Local Government Area of Kano State.
- To study the effect of student interest in sciencestudy.
- To suggest ways and means for effective science learning.

RESEARCH QUESTION

Is there any association between willingness and desirability to higher education in science study?

METHODOLOGY

Research design:

A research design was formulated for carrying this study. A detailed questionnaire was prepared incorporating the objectives of the study. The study aimed at collecting essential information through questionnaires one for students and one for the teachers in the study area. The researcher developed two questionnaires viz; one type for collecting information from teachers and the other from students.

Initially the research constructed the sampling frame of the list of secondary schools in the study area and number of students studying in the schools. Based on the availability of the resources sample size was determined for the study

Population of the study:

In order for the researchers to collect information they must specify the entire groups that could be the source of the information. The target population of this study comprised of all the secondary schools in Kano municipal Local Government Area. All teachers in these schools teaching sciences are involved, and in addition students were also involved in order to address those questions relating to their own contributing factors in teaching sciences at their levels. To ensure an easy and effective result, avoid delay and ensure maximum efficiency, the researchers decided to randomly sample five (5) secondary schools out of the twenty (20) in Kano Municipal.



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Sample size and sampling method for the study

As mentioned earlier the sample size is as follows	
Number of secondary schools	5
Number of teachers	30
Number of students	150

The researcher adopted simple random sampling method in selecting the sample and same are noted below

- (1) 5 secondary schools were selected randomly from the sample size of twenty (20) secondary schools in Kano Municipal area.
- (2) From each selected school the researcher selected 6 teachers randomly and number of teachers selected for the study was 30
- (3) From each selected school we have selected 30 students randomly and the number of student selected for the study was 150.

RESULTS AND DISCUSSIONS

As mentioned earlier the data was collected through the use of questionnaire. The students and the teachers selected filled the questionnaires. The filed questionnaires were scrutinized thoroughly and the data obtained were checked for its constancy.

The following tables were prepared based on the data collected from the teachers and students. The tables are presented below

TABLE 1: teaching experience and student's reaction conveyed by teachers is presented in the table below

TEACHIN <mark>G</mark> EXEPERIENCE	STUDENT'S REACTION				
	VERY ACTIVE	ACTIVE	PASSIVE	TOTAL	
1 YEAR	2	2	1	5	
1-3 YEARS	4	2	3	9	
MORE THAN 3	3	10	3	16	
TOTAL	9	14	7	30	

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Maito 2013 reports same in his research which argued to some extent that the characteristics of the teachers and their experiences and behaviors in the classrooms, contribute to the learning environment of their students, which in turn will have an effect on student outcomes. It is also important that we do not undermine the role of the parents in affecting student learning.

TABLE 2: Is there anyassociation between willingness and desirability to higher education in science study?

WILLINGNESS	DESIRABILITY	TO HIGHER	TOTAL
	EDUCATION		
	YES	NO	
COMPULSO RY	50	6	56
VOLUNTRY	68	26	94
TOTAL	118	32	150

By using chi-square (x^2) method we computed

Chi square observed $(Xo^2) = 6.11$

Chi square expected $(X_e^{2)} = 3.84$

Since chi square observed is greater than chi square expected we infer that there is association between willingness and desirability to higher education in science study.

This is in line with Mathew research findings (2003) which opined "cognitive domain of learning involves knowledge and the development of intellectual skills. It includes the recognition of specific facts, procedural patterns and concepts that serve in the development of abilities and skills."[2]

SUGGESTION

Further research should be conducted in these areas in other to find almost a lasting solution to the problems facing the teaching and learning of science in the secondary schools, since no nations could attain a high development without science and technology.

There curriculum of science subjects have to advance beyond thematic structures to which provides a real context for the study of science.[4]

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The study of science should always havewillingness; science should not be made as a compulsory on the students either by their parents or their teachers.

RECOMMENDATIONS;

- Teachers should try and relate the teaching and learning of science to the real life context by using enquiry method, project method, learning and field trip approach.
- Proper and modern laboratories should be provided by the government and the stakeholders.
- More qualified and experience teachers should be employ and should be encourage to attend seminars in other to be familiar with the new teaching methods.
- Assistance should be given to Nigerian authors and publishers so as to enable them produce science textbooks that are suitable for the secondary schools.
- Business organizations and philanthropists should assist in building and equipped science laboratories for effective teaching and learning of science subjects in the secondary schools.

CONCLUSIONS

The ultimate success of any lesson depends on the student's interest and teachers being effective in the subjects matter and their ability to motivate their students to learn the task at hand. It is very clear that good teaching and learning process affects the student's attitude can affect the students' performance in science.



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