AN INVESTIGATION OF FACTORS THAT INFLUENCES STUDENTS ATTITUDE TO WARDS THE STUDY OF INTRODUCTORY TECHNOLOGY IN EDO STATE

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Abstract
The study is designed to investigate the factors that influence students' attitude towards the study of Introductory Technology in Oredo Local government Areas of Edo State. The survey research method was adopted for the study samples were carefully selected through the use of simple random sampling techniques. The sample for the study consisted of 200 Junior Secondary School Student from 10 schools in Oredo Local Government areas of Edo State. The research instrument is a questionnaire which was used for data collection. Data collected was analyzed using the mean and standard deviation. Findings from the study revealed that students have negative attitude towards introductory technology that there are no enough qualified technical teachers as well as no functional workshops. Based on the finding of the study, it was recommended that more qualified technical teachers be employed and functional workshops provided. Finally, more career guidance counsellors be employed to impact the appropriate attitude on students through lectures, seminar symposia and debates.

Background of the study

The need for Nigeria to be scientifically and technologically developed lead to the new educational curriculum the 6-3-3-4 educational system in which after six years primary education, a pupil many process to the junior secondary school (JSS) and spend three years. After the third year of study, the student may proceed to a purely more academic section in the senior secondary school (SSS) or the technical college to spend another three years, and later the student may proceed to the University or any tertiary institution to spend four years.

The 6-3-3-4 system of education is a very important milestone for the nation Nigeria, in the sense that young boys and girls would be able to undergo a real functional education, thereby making them to appreciate the dignity of labour. It has the added advantage that those students who would have dropped out of schools because they could not cope with the academic rigor only to be trained in one occupational cluster or another. They will not become a liability to their parent and society. Since they will be able to cater for themselves in the future (FRN, 2004). This new educational system is what Nigeria needs for technological awareness, expansion and development. In line with the above, Technical Education is defined by FRN (2004) as that aspect of education that leads to the acquisition of practical and applied skill as well as basic scientific knowledge. Similarly, technical education is also been refered to as the academic and vocation preparation of student for jobs involving applied science and modern technology.

However, prior to independence; Nigeria educational system was developed to suit the needs of the colonial masters. The school curriculum then, centered on the three "RS" ostensibly to produce personnel to beef administrative set up of the colonial government. Consequently Uwameiye (2000) stated that on attaining independent in 1960, it became obvious that Nigerian education system need aggressive changes to meet the pressing social economic and cultural needs. In support of the above

assertion Ajayi and Awoyele (1985) added that it was soon discovered by leader that the national education system, as it was then, could not solve the mounting national problems. Hence the entire educational system needed reform and reorientation. Thus, this dissatisfaction with colonial education and case made for change in the educational systems, led to the first national curriculum conference in September 1969.The 1969 conference was the first national attempt to change the colonial orientation of the Nigeria educational system and promote national consciousness and self- reliance through the education process. The recommendations made at the conference gave birth to the New National Policy on Education with the First blue print in 1977, the 6-3-3-4 systems. In FRN (1981), emphasis was given to vocational and Technical Education. Federal Government in collaboration with state governments in an attempt to meet the new curriculum development, embarked on the procurement of the Junior Secondary School (JSS)- Introductory equipment from overseas for distribution to all secondary schools in Nigeria . These sets of equipment were needed to aid the teaching and learning of skills required for the basic scientific and technological development which the former curriculum failed to meet.

Introductory technology is one of the eight core subjects in the junior secondary school curriculum, it is offered as a compulsory pre-vocational subjects. It is an intra – discipline subject with technical subject such as wood-work, metal work, auto mechanic, building construction, basic electricity and electronics, technical drawing, food and agricultural technology, environmental technology and computer technology; all these subject have forgone their individual autonomy and identity thereby giving way to Introductory Technology. Introductory technology has been changed to Basic Technology which is a compulsory subject in the (Nine) 9 – year Basic Education programme. Its purpose is to contribute to the achievement of the national education goal by:

(i) Inculcation of technological literacy, that is, basic understanding of, and capacity in, technology.
(ii) Exposure of students to the world of work to match their lament and interests for wise vocational choice and
(iii) Inculcation of positive attitudes towards work as a source of human identity, livelihood and power.

In pursuit of its objectives, the revised curriculum covers the following nine (9) Themes:

- You and Technology
- Safety
- Material and processing
- Drawing practice
- Tools and machine
- Applied Electricity and Electronics
- Energy and power
- Maintenance
- Building

It was hoped that the inclusion of introductory technology in the secondary school curriculum will bring about the desirable technological awareness to students at the junior secondary school level.

Statement of the problem

Introductory technology which is taught at the junior Secondary School level is aimed, principally, at equipping the students with the right attitude towards technological innovations and development but still, most students study the subject without having the desired interest as well as not having the right attitudes towards the course. They therefore, study introductory technology without hope of acquiring the common basic technical skills and career awareness as well as choice of a vocation. Similarly, it was also observed that only few students realize that introductory technology is a compulsory subject at the junior secondary school level and also a pre-requisite to the study of technical subjects at the senior secondary school. As a result the number of students who enters for technical subjects at the senior secondary level are few and not encouraging. In the light of the above statement, there is the need to examine those factors that may influence student's attitudes towards the study of introductory technology in junior secondary school in Edo State.

Purpose of study

The major purpose of this study was to investigate the factors that influence student's attitude towards the study of introductory technology in junior Secondary Schools in Oredo Local Government Area of Edo State. Specifically, the study intend to:

1. Find out those factors that tends to influence students' attitude towards the learning of introductory technology
2. Find out the general attitude of students toward the learning of introductory technology
3. Ascertain extent to which parents/guardians influences affect their children in the learning of introductory technology.
4. Find strategies of changing the negative attitude of students toward introductory technology

Research Questions

The following research questions were raised to guide the study.

1. What are the factors that tend to influence students attitudes in the learning of introductory technology?
2. What are the attitudes of students towards introductory technology?
3. To what extent do these factors influence the student's attitude in the study of introductory technology?
4. What are the strategies for changing the negative attitudes of student toward introductory technology?

METHODOLOGY

Design of the study

The research design adopted for this study was the descriptive survey, which describes in detail those factors that influence students' attitude towards introductory technology in Oredo Local Government Area of Edo State.

Population of the study

The population of this study consisted of all junior secondary school three (JSS3) students in Oredo Local Government Area of Edo State.

Sample and sampling techniques

A stratified random sampling technique was adopted for the study to select 200 introductory technology students. A total of 20 introductory students were used from each of the ten selected schools.

Instrumentation

A questionnaire titled "An investigation of those factors that affect students' attitude toward introductory technology" was the instrument used for data collection.

The questionnaires for the study contain 200 items structured to elicit information from students on those factors that influence their attitude towards introductory technology. The questionnaire is a 4 point rating scale with response levels of strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1

Validity of the instrument:

The instrument was subjected to both face and content validity through comments, observation, advice and suggestions by two experts, from the department of vocational and technical Education University of Benin, Benin.

Reliability of the instrument

In order to ascertain the extent of the instrument reliability; a pre-test of the questionnaire was carried out using a sample of twenty (20) students who were not part of the actual study. The Pearson product

moment correlation co-efficient "r" was used and yielded a correlation coefficient of 0.89 which was accepted as stable over time.

Method of Data Collection:
The questionnaire was personally administered by the researcher with the assistance of introductory technology teachers in each of the school selected. They were properly briefed on the procedures. A total of 200 copies of questionnaire were administered to the respondents in the ten selected schools out which 198 were found useable representing 99.08%.

Method of Data Analysis
The data collected was computed into tables for meaningful interpretations. The mean and standard deviation were the statistical tools employed for the study. The mean rating of 2.50 was used for decision in all the computations, such that a mean rating on any item by the respondents less than 2.50 was regarded as "Disagreed" while any means equal or above 2.50 was regarded as "Agreed"

PRESENTATION AND ANALSIS OF DATA

Research Question 1
What are the factors that tends to influence students attitude in the learning of introductory technology
Table 1: Mean ratings of the students on the factors that tends to influence students attitude in learning of Introductory Technology.

S/N	STATEMENT	$\overline{X}$	SD	
1.	Lack of qualified introductory technology teacher in my school often discourage me form the study of the subject	3.16	0.96	Agreed
2.	There is a functional well equipped workshop in my school	1.78	0.83	Disagreed
3.	There are no sufficient materials for workshop practice during introductory technology classes	3.11	0.92	Agreed
4.	Most parent do not like their children or wards to study technical education or pre-vocational	3.34	0.82	Agreed
5.	I feel restrained and confused to the study of introductory because the subject is unpopular	3.13	0.90	Agree
6.	Practical activities involved in the study of introductory technology discourage student from it.	1.65	0.68	Disagreed

Table 1 revealed that items 1,3,4 and 5 agreed on those factors as been responsible for students developing negative attitudes towards introductory technology while items 2 and 6 disagreed

Research Question 2
1. What are the attitudes of students to the study of introductory technology?
Table 2: Mean rating of students based on their attitude towards the study of Introductory Technology.

7	I develop an acceptable attitude to the study of introductory technology	2.21	1.08	Disagreed
8	The method of teaching introductory technology is not interesting because it is scientific in nature	3.18	0.91	Agreed
9	Introductory technology is a difficult subject to be taught at the junior secondary	3.00	0.98	Agreed
10.	I dislike introductory technology because of the practical exercises associated with it	2.95	1.02	Agreed
11.	I always feel composed to the study of introductory technology because, it involves the use of hand and brain	1.95	0.98	Disagreed

Table 2: Above reveals that respondents reacted with agree to the state on items 8,9, 10 and disagreed with two items which are 7 and 11. The table shows that the highest means of 3.18 was recorded in item 8 while the lowest mean of 1.95 was on items 11.

Research Question 3
To what extent do these factors influence student's attitude in the study of introductory technology at the Junior Secondary School level?

Table 3: Mean rating of the student on the extent to which these factors influence student's attitude on the study of Introductory Technology.

12	Lack of qualified introductory technology teachers in most cases contribute to enrolment in technical subject	3.21	0.88	Disagreed
13	Lack of functional workshop creates lack of interest and negative feeling on the students towards the study introductory	3.11	0.91	Agreed
14	Poor methods of teaching introductory technology make students feel or see it as a difficult subject in the JSS classes	2.98	1.01	Agreed
15.	Introductory technology is in most cases taught theoretically for lack of tools and equipment	3.40	0.72	Agreed
16..	There are enough facilities in my school for effective teaching and learning of introductory technological	1.91	0.97	Disagreed

As shown in table 3 above respondents reacted with agrees to the statement of items 12, 13, 14, 15 while they also reacted with disagreed to item 16 with a mean score of 1.91 while the highest mean score was recoded on item 15 which states that introductory technology is in most cases taught theoretically for lack of tools and equipment.

Research Question 4
What are the strategies for changing the negative attitude of students towards the study of introductory technology?

Table 4: Mean rating on ways of changing students' attitude towards Introductory Technology.

17	Government should recruit or employment qualified introductory technology teachers/technical teachers for schools	2.90	0.94	Agreed
18	Government should introduce scholarship scheme for introductory technology/technical and science students	2.95	1.06	Agreed
19.	Functionally equipped workshops with sufficient materials should be built for school Offering introductory technology	3.20	0.76	Agreed
20.	Introductory technology should be introduced to students early enough from primary school level	2.19	1.04	disagreed

Table 4 above should that students agree with Government to recruit or employ more qualifies introductory technology teachers along side offer scholarship and build functional workshop in school all these are statement on items 18, 19, 20 while item 20 disagree with a mean score of 2.19 that introductory technology should not be introduced at the primary school level at – all!.

Findings/Discussion
Many factors have been identified to be responsible for the negative attitude of students' toward the study of introductory technology, among those factors according to the study is lack of qualified technical teachers to teach the subject; knowing fully well that teacher of a particular subject has a great role or impact on the students academic performance. However, in contribution to the importance of teacher

Olaitan (1984) stated that "the recruitment of professionally and technically qualified teacher is one of the greatest administrative problems of vocational education in Nigeria".

The study revealed that poor method of teaching introductory technology biased the students' attitude, hence according to, Uwameiye (2000) posited that, the act of resorting to theoretical teaching of vocational subjects is a serious deviation from the principles of vocational and technical education which recognizes the importance of workshop and laboratories to the teaching of technical subjects. Technical and vocational subjects are practical orientated and require that students be given adequate and conducive environment to learn and also to practice the skill taught. The workshop is the only environment for such exercise.

This study also revealed that most parents do not encourage their children or wards towards the study of technical and vocational subjects but instead prefer courses in Engineering, Arts, Medicine and Computer Science. In support of the above Olaitan (1986) declared that there is absolute discrimination, negligence and bias against vocational education by the Nigeria society. He summarized societal concept of technical education as education for drop-outs, handicapped, low intelligence and poor people. This negative stigma which the society places on vocational and technical education has contributed, in no small measures, to the low intake of students into the programme

Also the findings revealed that absence of scholarship scheme for technical or introductory technology students also bias their minds against technical and vocational subjects. The study also revealed that lack of facilities was yet another factor that create negative attitude in students' against its or toward introductory technology, hence a critical problem in the implementation of introductory technology is the lack of faculties for good practical training. Writing on lack of facilities Edem (1982) stated that adequate facilities are required to teach the students the appropriates skills.

Similarly, if is also observed that absences of basic text book aptly stated that absence of basic vocational textbooks on vocational programme is a limiting factor to the progremmes , he attributed the lack of facilities as a result of poor financial support.

Conclusion

In conclusion after a careful study and discussion of all the available data and information, the researchers are of the opinion that the attitude of students towards the study of technical subjects have negative influence on the level of technological advancement and future aspiration of the society and that if extra care is not taken, these negative attitude may affect the future steps to develop their potentials and personalities for life. Finally it is my opinion that, since the success or output of technical subjects at the senior secondary classes depends to a great extent upon the attitude of students towards introductory technology at the JSS level, it is therefore, important to influence changes in their attitude towards the study of the subject, in order to promote technological advancement in our country Nigeria.

Recommendations for improvement

Based on the findings of this study, the following recommendations were made.

1. Teacher should conscientiously develop in the students' skills and attitudes involving the use of hand and brains. They should also ensure creative approaches by encouraging activities that involves drawing, writing, practical and technical skills than memorization of facts for students
2. Government should recruit more qualified and competent technical teachers for schools.
3. The government should build workshops and make available consumable materials for workshop practice.
4. Government should provide more funds for technical and vocational institutions.
5. Efforts should be made to carryout sensitization campaign in print and electronic media to parents and members of the public to change their poor or negative perception towards technical and vocational education.
6. Government should provide scholarship, bursaries, to students who enroll in technical skilled areas to make it attractive.
7. Vocational guidance in schools should be strengthen to guide and encourage students' participation in technical skilled acquisition programme

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