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FACTORS AFFECTING POOR PERFORMANCE OF STUDENTS IN INTRODUCTORY TECHNOLOGY IN EDUCATIONAL ZONE B AREA OF NIGER STATE

BY

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PGD/I.T.E/2001/2002/011

DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

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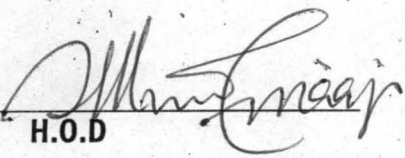### FEDERAL UNIVERSITY OF TECHNOLOGY,
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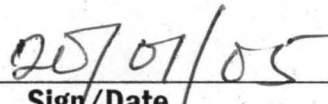
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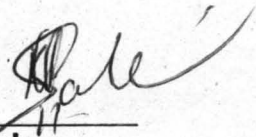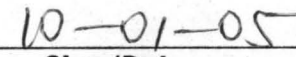
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May God help us Amen.

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ABSTRACT

The main focus of the study is the factors affecting poor performance of students in introductory technology. A focus on Educational zone B area of Schools in Niger State. It aimed at probing and determining the factors responsible to the problems either directly or indirectly for the teaching of introductory technology and to suggest solutions in order to improve the students performance in the subject. The work is divided in to five chapters. Introduction, Review of related literature, Research Methodology, Analysis, and Interpretation of data, and Summary and Recommendations. In addressing the problem, a total of 77 respondents consisting of 68 students and 9 teachers from the zone were used for the study including (2) senior officers in the ministry of education. The major instrument used were questionnaires, oral interview and observations. All questionnaires were based on hypothetical statement put forward in chapter one. Responses were computed into percentages and reported in a tabular form. The findings revealed that majority of the poor performances in introductory technology are: - In adequate teaching materials and facilities for both teachers and students; poor condition of service to teachers; among others. Based on the findings and conclusion, the researcher recommended that Government should encourage and motivate both teachers and students by making the education free and also provide fund to the principal to purchase all materials that will enhance the academic performance.

CHAPTER ONE

1.1 BACKGROUND

Nigeria as a nation inherited a system of education from colonial master. This system of education was neither dynamic nor functional. It was neither meeting the needs of the Society nor individual. Fafunwa (1974) observed that the purpose of that system was to produce catechists, singers, interpreters and so on, for the church and the government.

Recognizing the significant role played by technology in National development, many nations of the world introduced the concept of technology to their citizen at a tender age: for instant, Japan, U.S.S.R then, and Germany to mention a few Introduced rudiment of technology to their young ones as early at the elementary school level by allowing the children to fiddle with models of various gadgets ranging from household electronics equipment to motor vehicles and electrical appliances.

Taking cue of such nation's, the Nigeria Government approved the study of Introductory Technology at Junior Secondary School level in 1976. At this level, Technology is to be studied as an integral discipline. This is to suggest that students at the Junior Secondary School level will be exposed to the study of metal, wood, brickwork. General maintenance of machines, identification of basic tools, general engineering processes in the areas of automotive technology, food processing and health technology N.P.S.T (1985).

The structure of vocational education system favoured academic and practical acquisition of knowledge. It helped students to acquire certificate not just to secure a white collar Jobs but to be self – reliant technologically in order to be functional in their chosen carreer (Bore 1976). Some profession such as painting and decoration, polymer and so on were relegated to the background due to the age-long traditions being that they were considered to be less challenging like other

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profession such as motor vehicle and electronic and electrical that demand a lot of calculation than the former.

Moreover, the technical courses taught were essentially academic and practical, but students mostly practiced using tools by copying the teacher's ideas or instructions. The main focus of Introductory Technology in the nations education system therefore should be to create necessary interest in the use of hands and help Nigeria imbibed the true spirit of dignity of labour at an early ages following this, the technical aspect of our Secondary School Curriculum which is the major innovation of the new National Policy on education in (1976) can be linked to a credible designed to include basic technical literacy in every future Nigerian at the early background becomes further improved and strengthened through Secondary School levels.

Introductory Technology has been defined as a phase of general education designed to introduce the learner to, and acquaint him with local technologies: basic processes materials and product of industry (BAMIRO 1983). Introductory Technology has three main objectives as indicated in the National Curriculum for the Junior Secondary School (F.M.E.S.T 1985).

(a) To provide pre-vocational orientation for further training in technology.
(b) To provide basic technological literacy for everyday living and
(c) To stimulate creativity.

1.2 STATEMENT OF THE PROBLEM

It is obviously clear that, the study of Introductory Technology is important to students at Junior Secondary School level and to the whole development of man and the Nation. Effort will therefore be made to find out the level at which these factor affect the poor performance of the students in Introductory Technology in Secondary Schools by looking into the attitude and responses of the students as well as the School as an organization based on the selected zone area in the State.

1.3 PURPOSE OF THE STUDY

(a) To identify whether lack of workshop facilities affect the students performances.

(b) To determine how social factors influence students academic performance.

(c) To determine to what extents is lack of inadequate and unqualified teachers affects students performance

(d) To determine whether the attitude of students toward learning affects their performance

1.4 SIGNIFICANCE OF THE STUDY

This research study would give an approximate solutions to the problems posed by the factors that affects general academic performance of the students. It is generally believed that change in the aim of education, contents of education, the method of instruction and the learning experience of the students are always in conflict with each other because of factors presence like home environment, parents, social factors in every learning environments. Therefore, it is considered that the result of this study will be of considerate benefit to the School, Students, Teachers, Ministry of Education and the general Public.

5 SCOPE OF STUDY

The study would be limited to Secondary School in Educational Zone B Area in Niger State of Nigeria.

ASSUMPTION OF THE STUDY

(i) The Teachers and Students are competent to validate the instrument used for the research work.

(ii) Responses from the respondents will provide valid information for realistic decision on the needs and challenges in Introductory Technology subject

1.7 RESEARCH QUESTIONS

(i)   In what way has the workshop and machine facilities affect students' performance.

(ii)   To what extent is the lack of inadequate and unqualified teacher's affect student performance.

(iii) To what extents does the attitude of student's forward learning affect their performance.

(iv)   In what way does the over crowding affect the teaching and learning process.

1.8 HYPOTHESIS

Ho^1:   There is no significant difference on the response of teachers and students

Ho^2:   The teachers/principal agreed with the student's responses

Ho^3:   There is little or no significant difference on the teachers and principal responses

Ho^4:   There is no significant difference on the response of the principal/teachers and the students.

1.9 DEFINITION OF TERMS

Due to some unavoidable circumstances the researcher wish to present the following definition as been used in this study.

(1) Introductory Technology: Is defined as a phase of general education designed to introduce the learners and acquaint him or her with local technology, basic processes and products of industry.

(2) Workshop: Is a building in which machine and equipments are arranged, installed and well organized for students to carryout their practical lesson.

(3) Technology: Is defined as cultural tradition developed in human communities for dealing with physical and biological environment.

CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter would be reviewed under the following headings

(1) In-adequate teaching materials

(2) Lack of in-service training for teachers

(3) Lack of library facilities

(4) Interest of students

(5) Rampant changes in educational policies.

(6) Summary of literature review

2.1 IN-ADEQUATE TEACHING MATERIALS

The function of administration is to provide a good setting for learning which will be conducive to achieve desired goals, but the problems facing technical teachers due to lack of materials, to teach the subjects would not have been difficult at all if there are adequate materials and laboratories to accommodate students and teachers.

While these obstacles one natural, some of them are man-made. This could be from resource management and in appropriate governmental policies, if Nigeria would blame the colonial masters who introduced and fostered only liberal education, she might as well blame herself for her inability to perceive where future lies and the role of technology in the future. Schewerin (1979), In his writing on technical education says: -

Constructive planning for technical education in developing countries must begin with a definition of technical education and its objectives.

National Policy on Education (1985) defined Technical Education as that aspect of education, which leads to the acquisition of practical and applied skills as well as basic scientific knowledge.

Some of the aims stated there in are as follows: -

(i)   To provide trained man power in applied science, technology and commerce, particularly at sub – professional grades.

(ii)   To provide the technical knowledge and vocational skills necessary for agricultural industrial, commercial and electronic development.

(iii)   To provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the convenience of man.

(iv)   To give an introduction to professional studies in engineering and other technologies.

It is crystal clear, that one of the major problems of transferring technology by developing nations is that of Direct Copying without modifications to suits, as a result the quality of skill acquired becomes non – functional, for example, most books used in schools in developing nations are written and printed by foreigners, example cited in these books and sometime diagrams and illustrations make little or no meaning because the students have not been exposed to such things. The environment that was considered at the time of writing is often that of a developed people. The materials for simple projects recommended for the developing countries are usually out of the reach of the students and as such they end up learning theory with little or no practical.

In some Schools where training equipments are obtainable, the teacher due to lack of training are afraid to use them for training purpose.

Mclead (1988) in his research finding on the language of technical and further education stated that: -

"Many materials used in technical and further education courses are written in an increasingly abstract and impersonal ways the article make a plea for teacher's to use more direct and personal approach when writing materials for students are using textbooks, teachers should assist them to understand any technical terms, complex prose which are used"

2.1.2 LACK OF IN-SERVICE TRAINING FOR TEACHERS

The essence of technical education is to provide a "Live Wire" in the struggle for national prestige. Truly speaking a death nail is clearly the beginning of strangulation. This is obvious in the sense that meaningful of the citizens, management and application of knowledge. these principles form the bedrock of instructional programmes in technical education.

However, it is one thing to get educated and it is another to able to teach others, what you have learnt. Some teachers appear to be very intelligent, but encountered problems that may be due to their approach in solving problems connected to their teaching. It could be due to lack of proper teaching method.

The need for job satisfaction at any level can not be ignored, consenting to the above fact: National Education Research Council (N.E.R.C) (1989) reports that: The importance of technical profession was down played in the colonial era. The down play was affected by salary fixation by Colonial Civil Service and by exclusion of teacher at the policy making levels.

2.1.3 LACK OF LIBRARY FACILITIES

Akinpelu (1989) identified the importance of school library and maintains that the School library is essential and indispensable to the School. The Library is an integral part of the School, which compensate for inherent textbooks and classroom inadequacies. From his studies he concluded that the falling standard of education particularly in the post primary institution has a lot to do with lack of good libraries.

Library is of immense importance to both teachers and students, since it is regarded as repository of knowledge. If Libraries are properly used, it will enhance or promote general academic performance of the students. The Library is an importance department of any institution, which helps to promote the growth of knowledge. Infact a well equipped library is a store house of knowledge and a center of learning activities, if properly organized and used, it encouraged pupils interest in reading and learning, while it helps the teachers in the teaching, research and professional development.

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A good library which aims at improving students performance should be well equipped, well stocked with books and other materials to cater for all interest and subjects taught in the school, the book should reflect the curriculum of the school as well.

2.1.4 INTEREST OF STUDENTS

Utilization of new knowledge aside, technical education is better suited for the production of men of independent ideas and of youthful minds capable of breaking new grounds that will culminate in a progressive change. This system is concerned primarily with teaching and production.

Teaching, as it should be, is sterile if it is not reinforced with new knowledge; Technical Education will cease to exist if they do not advance the community prudently and cultivate the taste for excellence in their activities. 'Fafunwa (1974) Says: Students expressed interest which shows the students likes and dislike; manifest interest which shows the students ability in scoring in a particularly subject or occupation.

PETER's (1979) Says: The School must be concerned with the interest of the Students "for instance the School should not encourage truancy because it will not augur well for the academic performance of the students; parents, schools and teachers should work as a team to help the student develop interest in some subject which are vital to the technological growth of the country such as Introductory Technology.

2.1.5 RAMPANT CHANGES IN EDUCATIONAL POLICIES.

Our educational planners and policy makers as regards education politicize all issue that involve education and make ambiguous statements without weighing the repercussions. They do not normally care whoever is affected by their pronouncement because they feel whatever they say could be altered or subject to change to suit their aims and objectives. They have no clear cut goals to achieve their education expansions programmes, hardly take care of qualitative

aspect of learning rather they contented with quatitative education without facilities for the learners, thereby making their students case worse than ever.

They can not practice what has been learnt and therefore, they are never useful to themselves and the society. Then where is the achievement? Adeloye in "The Sunday Concord of 12/2/86 Says: "Unplanned educational expansion was one of the constraint affecting the successful implementation of the technical education in the last few years and has been expanded to admit children without counting the cost of equipping such schools and insufficient manpower, lack of facilities tends to hinder the effective teaching of technical subjects"

The chairman of the implementation committee of the National Policy on Education pointed out that, the problems with our past educational policies were irrelevance of the curriculum contents to national needs, they also failed to give our children the opportunity of showing other talents outside academics. He maintain that some of the observation made by some researchers could be seen as follows; of the major problems of vocational and technical education in Nigeria is that of obtaining teachers who are occupationally competent and also competent in teaching method.

2.1.6 SUMMARY OF LITERATURE REVIEW

In view of most of this review one will deduce that the role of teaching of introductory technology in the future of Nigeria or indeed in the future of mankind is very profound. Introductory Technology is the basis of Technological development as science, but in Nigeria today there are obstacles that have greatly retarded the countries aspiration to technological development. But with the encouragement of introductory technology form childhood to adulthood, there will be a great improvement in our development from an agrarian society to a highly technologically one.

The education and economic planners were short sighted from seeing where the future of the country lies.

Modern technological invention were not achieved overnight, it took long scientific research and application sometimes followed by failures and successes.

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In terms of economic and technological development, Nigeria needs capable minds and hands to man her industries and exploit her agricultural potential.

All these are to produced by a competent technical teachers training, top priority for the effective and efficient running of the 6:3:3:4 system of education in Nigeria. In deciding a programme for the training of technological teachers all factors that militate against technology should be dominated, if Nigeria wants her children to continue to live independently she has to pave the way for them to self – independence.

Finally, if Nigeria continues to give teachers especially technology teachers pariah status in the society she will be doomed to technological backwardness.

CHAPTER THREE

METHODOLOGY

This chapter deals with the description or method of collecting and analysing the data used for this research. It is to discuss the research design, area of the study, sample techniques, instrument for data collection, validation of the instrument, method of data analysis and decision rules.

RESEARCH DESIGN:

By the nature of the factors being investigated the research design adopted in this study is empirical. Empirical is the process of collecting data, using the data collected, analysis them to arrive at a logical conclusion. In view of this the observation of the population used for the study on matter that could affect the teaching of introductory technology in Secondary Schools in zone B educational area of Niger State collected with the aid of questionnaires.

AREA OF THE STUDY

The area of the study would be two Secondary Schools from each Local Government in the education zone.

POPULATION OF THE STUDY

The population of this research work would constitutes classroom teachers/ instructors and students in the two schools in Local Government Areas that make up the zone.

SAMPLE SIZE AND SAMPLING TECHNIQUES:

Seventy five (75) Students from at least two (2) Schools in each Local Government Area that make up the zone in the area would be used. Nine teachers/principals making a total of Seventy five (75) respondents would be used including at least two (2) Senior official in the ministry of education.

INSTRUMENT FOR DATA COLLECTION

In conducting this study, the major instrument used is the questionnaire. However, the questionnaires were constructed in such a manner that they wouled covered all the hypothesis enumerated.

The teachers/principals questionnaire (appendix I) would covered mainly the school administration and inter personal relationship between the teachers, principal and the students, the problems encountered while teaching Introductory Technology and between the students and teachers.

VALIDATION OF INSTRUMENT:

Before the administration of the questionnaire a draft of the questionnaire was given to the supervisor for corrections, advice and the approval for administration.

ADMINISTRATION OF THE INSTRUMENT:

A letter of introduction was attached to the instrument stating the importance of the study and the need for cooperation of the schools concerned. The questionnaires which consist of two sections A and B, section (A) deals with personal information's, while Section (B) deals with instructions and a total of thirty – four (34) research questions were raised. The questionnaire will be personally distributed and collected immediately after all responses have been completed.

The number will be rated on percentage while calculating the scores as follows.

Strongly Agreed   S.A   = 4

Agreed   A   = 3

Disagreed   D   = 2

Strongly Disagreed S.A   = 1

The percentage rating for judgement will be computed by using the formula below:

$$\% = \frac{x}{\sum w+x+y+z} \times 100$$

Or

$$\% = \frac{S.A}{\sum S.A+A+D+S.D} \times 100$$

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Where   S.A   =   Strongly agree

            A   =   Agree

            D   =   Disagree

            S.D   =   Strongly disagree

The percentage value therefore for strongly agree

$$S.A = \frac{4}{4+3+2+1} \times 100$$

$$= \frac{4}{10} \times 100$$

$$= 40\%$$

DECISION RULE:

To determine the acceptance, a minimum score of 40% will be chosen as decision point between Agreed and Disagreed, in other words any response with 40% and above will be considered, while a total response that falls between 0 and 39% will be regarded as Disagreed.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter is divided into two sections, section one deals with analysis of the result, while section two deals with the discussion based on findings.

4.01 ANALYSIS OF DATA COLLECTED FROM PRINCIPAL AND TEACHERS QUESTIONNAIRES

QUESTION 4:1: Do students have access to the equipment whenever they are needed.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	8	88.9%
Agree	1	11.1%
Strongly disagree	-	-
Disagree	-	-
Total	9	100

From the above table A it is seen that the students always have access to workshop equipment whenever they are needed.

QUESTION 4:2: Are there workshops for each cources that made up introduction technology.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	-	-
Strongly disagree	5	55.6%
Disagree	4	44.4%
Total	9	100

From the above 56% and 44% were of the opinion that there are no workshop for each courses that made up introduction technology, appropriate authority.

QUESTION 4:3: Are students inter-acting with each other.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	6.7%
Agree	3	33.%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

The response in table 4:3 shows that students interact with each other. This promote social and intellectual behaviour among the students.

QUESTION 4:4: Are there School Library in your School.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	6.7%
Agree	3	33%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

Table 4:4 shows the percentage score of 100% those that strongly agreed and agreed.

QUESTION 4:5: The principal always make funds available for the purchase of material for practical.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	1	11.%
Strongly disagree	6	67%
Disagree	2	22%
Total	9	100

The above data shows that 89% were of the opinion that the principal does not always make fund available to purchase materials for equipment, while 11% were of the opinion that funds were always provided.

QUESTION 4:6: The time allocated for practical and theory are adequate

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	3	33%
Agree	2	22%
Strongly disagree	2	22%
Disagree	2	22%
Total	9	100

The above table shows that 55% were of the opinion that time allocated for the teaching of introductory technology is enough there are other subject to be taught, while 45% respondents disagreed.

QUESTION 4:7: Are the students learning from each other academically.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	8	8.9%
Agree	1	11%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

The response of the teacher shows that 89% strongly agreed and 11% agreed that the students learned academically from each other both in and out of the school system.

QUESTION 4:8 Lack of facilities affect students performance in technical subject or technological courses.
Table 8

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	8	89%
Agree	1	11%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

Table 8 shows that the 89% strongly agree and 11% agree that lack of facilities affect student performance therefore adequate facilities should be provided to enhance learning activities.

QUESTION 4:9 introductory technology is more or less a practical subject and should be given enough time of period.
Table 9

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	67%
Agree	2	22%
Strongly disagree	-	-
Disagree	1	11%
Total	9	100%

The teachers were of the opinion that introductory technology is more or less a practical subject and it should be given enough time of period.

QUESTION 4:10: Will separate teachers teaching building and Engineering aspect of introductory technology make the subject more meaningful and understanding to the students.

Table 10

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	5	56%
Agree	4	44%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

From the above table it was 56% strongly agreed and 44% agree by the respondent that separate teacher should be engage for both building and engineering subjects.

QUESTION 4:11: Knowledge of Introductory technology serves as a basic knowledge for engineering courses.

Table 11

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	2	22%
Agree	1	11%
Strongly disagree	5	56%
Disagree	1	11%
Total	9	100%

Table 4:11 shows that 56% strongly disagree while 1 teacher disagree and 22% and 11% strongly agree and Agreed respectfully. Therefore the knowledge of introductory technology can not serve as a basis in chosen engineering courses.

QUESTION 4:12 The use of teaching aid is not necessary in teaching introductory technology.

Table 4:12

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	5	56%
Agree	3	33%
Strongly disagree	0	-
Disagree	1	11%
Total	9	100%

From the above tabulation it is of the opinion that 56% and 33% strongly agree and Agree respectful, therefore teaching aid is very important in teaching introductory technology.

QUESTION 4:13: There is need for seminar/workshop to update the knowledge of introductory technology teacher.

Table 4:13

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	67%
Agree	3	33%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

Table 4:13 shows 100% of teachers and principal agreed that updating the knowledge of introductory teachers is necessary to enhance the teaching activities.

QUESTION 4:14: Introductory technology should be a general subject to all students and should be a criteria for student promotion.

Table 4:14

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	1	11%
Strongly disagree	3	33%
Disagree	5	56%
Total	9	100%

In table 4:14: it is of the opinion of teachers that introductory technology should not forced on the students for promoting them as there are many vocation for students to choose on.

QUESTION 4:15 Absence of electricity affect students academic performance in technical subjects.

Table 4:15

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	2	22%
Agree	6	67%
Strongly disagree	-	-
Disagree	1	11%
Total	9	100%

From the above table, 22% and 67% is of the opinion that absence of electricity affect students learning to operate machine, steady power should be provided for practical activities.

QUESTION 4:16 Are the machine in the school workshop functioning.
Table 4:16

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	1	11%
Strongly disagree	2	22%
Disagree	6	67%
Total	9	100%

The response from the table above shows that 22% and 67% were of the opinion that the installed machine in the school workshop are not function either due to the personel to operate or lack of electricity to power them, therefore trained personnel and electricity should be provided to enhance the teaching and practicing.

QUESTION 4:17: Material supply for teaching introductory are insufficient to improve students ability of performance.
Table 4:17

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	3	33%
Agree	6	67%
Strongly disagree	-	-
Disagree	-	-
Total	9	100%

33% and 67% were of the opinion that the material supply is not sufficient to improve the students performance, adequate materials should therefore be provided to improve learning of the subject.

QUESTION 4:18: The use of teaching aid is not necessary in teaching introductory technology
Table 4:18:

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	-	-
Strongly disagree	6	67%
Disagree	3	33%
Total	9	100%

From the above table it was in the opinion of the teachers that teaching aid is necessary to teach the subject therefore teaching aid should be made available by the authority to make the enhance the learning activities.

QUESTION 4:19: Does the School have adequate classroom for the student population.

Table 4:19

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	2	22%
Agree	6	67%
Strongly disagree	-	-
Disagree	1	11%
Total	9	100%

From the above table 89% were of the opinion that adequate classroom is being provided for the student population in term of workshop block, while only 11 % were disagreed with the above statement.

QUESTION 4:20: opinion of the people is that introductory technology is one of the subjects meant for an average students.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	-	-
Strongly disagree	6	67%
Disagree	3	33%
Total	9	100%

From the above 100% of teachers were of the opinion that the subject of introductory technology is not meant for an average student the subject is equal with any other subject being taught at junior secondary level.

QUESTION 4:21: Do you have adequate facilities and Machine in your school.

Table 21

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	09%
Agree	12	18%
Strongly disagree	20	29%
Disagree	30	44%
Total	68	100%

29% and 44% students says there is no adequate facilities while 9% and 18% were of the opinion that there are enough facilities in their school.

QUESTION 4:22: Students generally are not guided by the school authority.

Table 22

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	30	44%
Agree	26	38%
Strongly disagree	5	07%
Disagree	7	10.3%
Total	68	100%

In table 22 majority of the student can be seen, indicated that they are not properly guided on the importance of each subject in their school, while 82% were of the opinion that they are being guided.

QUESTION 4:23: Teacher's advice to the students do not normally have some effect on the students attitudes.

Table 23

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	54	79
Agree	12	18
Strongly disagree	-	-
Disagree	4	6%
Total	64	100%

As shown the table above majority of students believe that the advice their teacher gives them has some positive effect on their attitudes.

Question 4:24: majority of parents accuse the school Authority of not providing educational facilities.

Table 24

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	3	4%
Strongly disagree	45	66.2%
Disagree	40	58%
Total	68	100%

Majority of the responded strongly disagreed and disagreed that the parent does not accuse the school authority for not providing all facilities need as the authority themselves relied on the facilities given to them by the government or proprietors of these schools.

Question 4:25: Time allocated for learning introductory technology is not enough.
Table 25

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	7	10.3
Strongly disagree	40	59%
Disagree	21	31%
Total	68	100%

Majority of the respondents say 90% disagreed that the time allocated to introductory technology are not enough they believed, other subject needs priority and should be treated equally.

Question 4:26: The School has a standard drawing room with drawing materials
Table 26

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	11	16%
Strongly disagree	19	28%
Disagree	38	56%
Total	68	100%

From the table 26 it can be seen from the respondents answer that there is no standard drawing studio in the school, this hamper the learning of the subject since the drawing is the basis of any technical courses.

Question 4:27: Supply of technical instruments and materials will improve students performance.
Table 27

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	40	59%
Agree	28	42%
Strongly disagree	-	-
Disagree	-	-
Total	68	100%

As shown in the table 27 all the respondents strongly agreed and agreed that supply of technical materials to the school will greatly improve the learning of the introductory technology.

Question 4:28: Students offering the subject at a time are too many for teacher to monitor.

Table 28

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	30	44%
Agree	25	37%
Strongly disagree	3	4
Disagree	10	15
Total	68	100%

We can see from this table that about 44% of respondents strongly agree and 37% agree that there are no enough room to accommodate the population of student and the teachers find it so difficult to monitor their progress.

Question 4:29: All aspects in intro-technology are easy to understand

Table 29

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	0%
Agree	5	7%
Strongly disagree	33	49%
Disagree	30	44%
Total	68	100%

From the table above majority of the students say 93% strongly disagreed and disagreed that it is not all aspects of introductory technology are easy to understand.

Question 4:30: The Teacher give adequate opportunity to converse with him on his activities.

Table 30

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	26	38%
Agree	40	59%
Strongly disagree	-	-
Disagree	2	3%
Total	68	100%

The percentage of respondents that are of the opinion that the teacher gives room for participating in class activities is 97% while negligeable are of the opinion that they were not.

Question 4:31: The teacher made appropriate use of language to ensure explanation instructions are comprehended.

Table 31

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	11	16%
Agree	22	33%
Strongly disagree	10	15%
Disagree	25	37%
Total	68	100%

From the above table it can be seen that 51% of respondents were of the opinion that the language used are too complex for their level, hence, the teacher should use simple language and come down to the level of the students. While 49% of students agreed and strongly agreed that the language used is appropriate.

Question 4:32: The time permits or gives adequate opportunity to students to ask question of what teachers over per period.

Table 32

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	10	15%
Agree	30	44%
Strongly disagree	8	12%
Disagree	20	29%
Total	68	100%

This table shows that 15% and 44% were of the opinion that adequate room were permited for student to ask question when in difficulties while 41% strongly disagreed and disagreed.

Question 4:33: Parents have refuse to encourage their children to study technical subjects.

Table 33

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	-	-
Agree	5	7%
Strongly disagree	41	60%
Disagree	22	32%
Total	68	100%

In this table it can be clearly seen that parent do encourage their children to study technical subject while regligle numbers of parent does not.

Question 4:34: Are the school library in your school functioning

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	00	-
Agree	08	12%
Strongly disagree	26	38%
Disagree	33	49%
Total	68	100%

In table 34 majority of the students were of the opinion that the school library is not functioning as expected while 87% of the respondent strongly agreed and disagreed that the library is functioning, the authority should as a matter provide a functioning in school to enhance learning activities.

Question 4:4: Are there school library in your school.

RESPONSES	FREQUENCY	PERCENTAGES
Strongly agree	6	67%
Agree	3	33%
Strongly disagree	-	-
Disagree	-	-
Total	9	-

Table 4.4 shows the percentage score of 100% those that strongly agreed and agreed this means there is Library facilities to enhance the learning activities.

QUESTION 4:5: The principal always make funds available for the purchase of materials for practical.

RESPONSE	FREQUENCY	PERCENTAGE
Strongly agree	-	-
Agree	1	11%
Strongly disagree	6	67%
Disagree	2	22%
Total	9	100%

The above data shows that 89% were of the opinion that the principal does not always make fund available to purchase materials for equipment, this attitude has to be change if positive result is required.

4:2 DISCUSSION OF FINDINGS

The discussion for this study would be based on the proceeding results obtained in teacher/principal response.

From the results of the study it has been revealed that the students always have access to workshop equipment whenever they are needed.

However, the result of the study indicates that there are no separate workshop for both building and mechanical practice. The study also indicated that students are interacting with each other, this is as a result of gaining some academic influence with each other. This is as in collaborating with the research carried out Ansu Datta (1988).

The study also revealed that purchase of materials for practical was not by the 'principal and the materials are always purchased by the state ministry of education.

The study also revealed that time allocated to both practical and theory were adequate. This is almost in line with some statement of the following people: Spea, Zonman, Aushell (1989).

The study also shows that there is adequate classroom for the population of the students. The study shows that lack of workshop facilities and machines can affect student academic performances in zone under research study.

The study also indicated that students are not generally guided by the school authority.

The study also revealed that majority of the parents have refused to encourage their children to study technical subjects.

However, it should be realized that all the factors influencing students performances realized by these study are not exhaustive.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The rationale behind the study was to investigate the poor performance of students in introductory technology in secondary schools zone B area of Niger State. In order to facilitate the use of this research, a summary of the data analysis, the problems areas in the teaching of introductory technology in junior secondary schools were identified.

At this juncture the researcher made appropriate recommendations as to the necessary actions to be taken by the government, teachers and students to arrest this situation.

5.2 SUMMARY

This study covers secondary schools in educationally zone B area of the Niger State with a total number of nine (9) teachers that responded and returned their questionnaires, sixty-eight (68) of selected students from J.S.S II and III, responded and their questionnaires prepared together with the teachers which was also given to the principal of the schools, in addition they were also verbally interviewed on some areas/issues concerning the history of the school that was not covered in the questionnaires.

In analysing the data, problems such as: - Lack of adequate teaching aids, Lack of adequate workshop materials for practical, Drawing instruments e.t.c were identified.

Most of the teachers have minimum academic qualification that will enable them to teach in the school, from the data collected so far only few teachers stay to teach, most of them find their way into the industries for better condition of service, leaving those not qualified in this subject to handle the course. With the introduction of 6:3:3:4, system of education in Nigeria school system, the teaching of the introductory technology can not be successful without the qualified teachers to teach the subject.

5.3 IMPLICATION OF THE STUDY

One obvious implication of this study was lack of sources of power to their workshops.

That sources of power need to provide for the effective influence of practical skills to be gained by the students. This can also improve students perceptions, interest and understanding of technical education. This implies the need for training students to gain some technical skills from teachers and co-students in the workshops in order to facilitate their influence of learning and also their academic performance.

5.4 CONCLUSION

The researcher having carefully administered the questionnaires, collect and analyse them, the following were the findings.

(i) The teacher are not motivated enough to improve their efficiency by attending refresher courses and in-service training.

(ii) Teacher do not use adequate instructional aids training materials, where available the workshops are not adequately equipped, hence making it very difficult for the students to learn the desired skills,

(iii) Qualified technical teachers are not willing to take up appointment with the school board, but preferred to be employed in the industry.

(iv) Religions and the community at large are still yet to pave way for technological advancement.

5.5 RECOMMENDATIONS

After a careful study or investigation in the poor performance of students in introductory technology in educationally zone B area of the Niger State. The researcher wish to present the following recommendation to at least minimize if not completely eradicate the itches with the way to improve performance of the subject.

The school board should construct workshops with all the necessary materials and equipment for easier acquisition of skill. The state government should encourage both the local government, private sector and community at large for more participation in the planning and administration of education as well as bear part of the financial burden.

There is the need to improve salary of teachers for efficiency Allowance should be paid to technical teachers such as responsibility, hazard allowance and so on to boost their morale, regular workshop/seminars on materials and equipments handling be held to equipped the teachers with the necessary knowledge for producing and using them interm of improvisation.

Finally, an awareness on the importance of technical education to both the students and parents a like by the teachers and school management board need not be over emphasized.

5.6 SUGGESTION FOR FURTHER RESEARCH

Based on the findings, the author is satisfied with the outcome of this research work, therefore the researcher view was based on the findings outlined and requires that further studies should be carried out on the following

(1) Problems concerning the method of instruction and the use of teaching aids.

(2) The impact of social amenities on the academic performances of the students in technical subjects.

(3) The importance of training more technical teachers in the state.

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AUTO TECHNOLOGY
BUILDING TECHNOLOGY
ELECT/ELECT TECHNOLOGY
METAL TECHNOLOGY
WOOD TECHNOLOGY

YOUR REF: _____

OUR REF: ITE/P(G)/011/2003.

DATE: 4TH DEC. 2003

LETTER OF INTRODUCTION FOR CANDIDATE CARRYING OUT RESEARCH WORK

OLAWALE, S. G. ---------------------------- is a postgraduate student of the Department of Industrial and Technology Education of the Federal University of Technology, Minna. He/She is currently under taking a research work on.

Factors affecting poor performance of Students in Introductory Technology in Educational zone B Areas of Niger State.

It would be highly appreciated if you could supply him/her with the information he/she may require from you. All information from you will be treated confidentially.

Thank you so much for your cooperation.

Bale

DR. K. A. SALAMI

Project Coordinator

APPENDIX I

NAME OF SCHOOL: --

CLASS: ---

SEX: --

SECTION "B"

Please complete this questionnaire as faithfully as possible and tick the appropriate answers for the following statement from letters A to D

SA Stands for Strongly Agree
A Stands for Agree
D Stands for Disagree
SD Stands for Strongly Disagree

STATEMENT

		SA	A	D	SD
1.	Do you have adequate workshop/facilities and Machine in your workshop				
2.	Students generally are not guided by the School Authority				
3.	Teachers advice to the Students do normaly have some effect on the students attitudes				
4.	Majority of parents accuse the Schools Authority of not providing educational facilities				
5.	Time allocated for learning introductory technology is not enough				
6.	The school has a standard drawing room with drawing materials				
7.	Supply of technical instruments and materials will				

improve students performance

8. Students offering the subject at a time are too much for teacher to monitor

9. All aspects in Intro – technology are easy to understand

10. The Teacher gives adequate opportunity to students to converse with him on his activity

11. The teacher made appropriate use of language to ensure explanations/instructions are comprehended.

12. The time permits or gives adequate opportunity to students to ask question of what teachers cover per period.

13. Parents have refuse to encourage their children to study technical subjects

14. Are the school library in your school functioning

APPENDIX II

Questionnaire for Principal/Teachers

SECTION "A"

NAME OF SCHOOL---

Please complete this questionnaire as faithfully as possible by filling the blank spaces.

(1) Name Of School --

(2) Sex---------------------------(3) Qualification--

(4) What is your field of specialization --

(5) For how long have you been a Principal/Teacher -----------------------------

SECTION "B"

Tick the appropriate answers for the following statements from letter A to D

S.A   Stands for Strongly Agree

A   Stands for Agree

D   Stands for Disagree

SD   Stands for Strongly Disagree

STATEMENT	SA	A	D	SD
1. Do Students have access to the available equipment whenever they are needed.				
2. Are there workshops for each course that made up Intro-technology				
3. Are Students interacting with each other				
4. Are there School Library in your School				
5. The principal always make funds available for the purpose of materials for practical				

6. The time allocated for practical and theory are adequate

7. Are the students learning from each other academically

8. Lack of facilities affect students performance in technical subject or technology courses

9. Introductory Technology is more or less a practical subject and should be given enough time of period

10. Will separate teachers teaching building and engineering aspect of introductory-technology make the subject more meaningful and understanding to the students

11. Knowledge of introductory technology serves as a basic knowledge for Engineering subjects

12. The use of teaching aid is not necessary in teaching into-technology

13. There is need for Seminar/workshop to update the knowledge of introductory technology teachers

14. Introductory technology should be a general subject to all students and should be a criteria for student promotion – It would improve Students performance.

15. Absence of electricity affect students academic performance in technical subject.

16. Are the machine in the School workshop functioning

17. Materials supply for teaching introductory technology are insufficient to improve students ability of performance

18. The use of teaching aids is not necessary in teaching introductory technology.

19. Does the school have adequate classroom for students population

20. Opinion of the people is that introductory technology is one of the subjects meant for an average students.

LIST OF SCHOOLS IN ZONE B IN ALPHABETICAL ORDER OF LOCAL GOVERNMENT AREAS IN NIGER STATE

S/NO	NAME OF SCHOOL	LOCATION/ADDRESS
1.	**BOSSO LGA**	
	Day Secondary School	Maikunkele
	Bosso Secondary School	Minna
	Junior Secondary School	Beji
2.	**GURARA LGA**	
	Day Secondary School	Gawu Babangida
	Day Secondary School	Diko
	Junior Secondary School	Kabo
3.	**KAFFI LGA**	
	Day Secondary School	Kaffin Koro
	Govt. Girl's Secondary School	Kaffin Koro
	Day Secondary School	Adunu
	Day Secondary School	Ishau
	Junior Secondary School	kwakuti
4.	**LAKPMA LGA**	
	Government Secondary School	Allawa
	Day Secondary School	Erena
	Junior Secondary School	Gurmana
5.	**MINNA EAST LGA**	
	Ahmadu Bahago Secondary School	Minna
	Day Secondary School	Minna
	Day Secondary School	Maitumbi – Minna
6.	**MINNA WEST LGA**	
	Women Day College	Minna
	Government Secondary School	Minna
	Day Secondary School	Tunga – Minna
	Junior Secondary School	Chanchaga
	Government Girls' Sec. School	Minna
	Army Day Secondary School	Minna

7. **MUNYA LGA**
   Junoor Secondary School   Sarkin Pawa
   Junior Secondary School   Guni

8. **PAIKORO LGA**
   Abubakar Dada Secondary School   Paiko

9. **RAFI LGA**
   Government Secondary School   Tegina
   Ahmadu Attahiru secondary School Kagara

10. **SHIRORO LGA**
    Government Secondary School   Kuta
    Day Secondary School   Shiroro (NEPA)
    Day Secondary School   Tum-Tum
    Day Secondary School   Gwada
    Girls' Day secondary School   Kuta
    Junior Secondary School   Shakwatu

11. **SULEJA LGA**
    Day Secondary School   Suleja
    Government Secondary School   Suleja
    Girls' Day Secondary School   Suleja

12. **TAFA LGA**
    Govt. Girls' Secondary School   Sabon-Wuse
    Junior Secondary School   Garam
    Junior Secondary School   Ija-Gwari

13 KUSHERIKI LGA
   Junior Secondary School   Tunga-Bako

14 ABUKWAKA L.G.A.
   Nil