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# The Availability of Teaching Manpower in Technical Colleges in Ondo and Ekiti States, Nigeria: A Comparative Analysis

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**Abstract:** This paper examined the availability of teaching manpower in technical colleges in Ondo and Ekiti States, Nigeria. As a descriptive survey, the study population comprised all the 5 technical colleges in Ondo State and the 4 technical colleges in Ekiti State. The sample was identical with the population as all the colleges were involved in the study. Two instruments were used to collect data for the study. These were the technical colleges' principals' inventory and the higher institutions teacher supply inventory. The data collected were analyzed using percentages and the t-test statistic. It was found that students' enrolment in technical colleges in Ondo and Ekiti States, Nigeria dwindled considerably throughout the years of study (2002 to 2006). Male students' enrolment was greater than female students' enrolment in the colleges in most of the years of study. The bulk of the teachers in technical colleges in the two States were teachers holding the Nigeria Certificate of Education (technical) Graduate teachers with degrees were short. The average teacher-student ratio in technical colleges in Ondo State was 1:19 while that of Ekiti State was 1:12. It was concluded that the supply of teaching manpower has not matched the demand for them in technical colleges in Ondo and Ekiti States, Nigeria. It was then recommended that there should be more of public enlightenment on the prospects in technical education. The government of the two States should endeavour to organize seminars and workshops on technical education for students in primary and junior secondary schools.

**Key word:** Availability · Teaching · Manpower · Technical · Colleges · Nigeria

## INTRODUCTION

Technical education in Ondo and Ekiti States, Nigeria dated back to the period after Nigeria' independence in 1960. The first technical college was established by the Catholic Mission in 1964. This was the St. Joseph Technical College, Ado-Ekiti... Government's involvement in the establishment of technical colleges started in the 1970s with the establishment of technical colleges at Owo and Okitipupa in Ondo-State and Otun in Ekiti State. Further development witnessed the establishment of more technical colleges at Ijero and Ikole in Ekiti State and Idanre and Oka in Ondo State

As an aspect of vocational education, technical education is that form of education which is obtainable at the technical colleges. It is equivalent to the senior secondary education but designed to prepare individuals to acquire practical skills, basic and scientific knowledge and attitude required as craftsmen and technicians at sub-professional level. The importance of technical education could be seen in the acquisition of practical and applied skills which could lead to the vocational preparation of students for jobs involving applied science and technology [1].

As stipulated in the National Policy on Education, the goals of technical education are to provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels, provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development and to impart the necessary skills to individual in order to make them self-reliant economically [2]. In pursuance of these goals:, the main features of the curricular activities for technical colleges are structured in foundation and trade modules while the curriculum for each trade consists of four components namely general education, theory and related courses, workshop practice and industrial training. As such, the trainees completing

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technical college programmes shall have three options namely to secure employment either at the end of the course or after completing one or more modules of skills, set up their own business and become self-employed; and pursue further education in advance craft/tech programmes in post-secondary institutions such as polytechnics or colleges of education (technical) and universities.

The policy also provided that the minimum entry requirement into the technical college shall be the junior School Certificate (JSC) while entry is based on evidence of aptitude shown in the technical courses and a good performance in mathematics and science. Students who have proved exceptionally able in the artisan training centres shall also be considered for admission while the range of courses in the colleges include agricultural implements and equipment,, mechanics' work, automobile engineering practice, auto-body repair and spray or painting, auto electrical work, part-mechanizing, air conditioning and refrigeration, mechanical engineering craft practice, welding and fabrication, engineering craft practice, foundry craft practice, instrument mechanic's work, electrical installation and maintenance work, radio, television and electrical work, blocklaying, bricklaying and concrete work, painting and decorating, plumbing and pipefitting, carpentry and joinery, furniture making, upholstery. Others include catering craft practice, garment making, dyeing and bleaching, printing craft practice and cosmetology, leather goods manufacture including shoe making and repair, stenography, typewriting, data processing, store- keeping and book –keeping.. Towards this end, the programmes in technical colleges are being supervised by the National Board for Technical Education (NABTEB) which oversees and handles technical and business examinations and awards the National Technical Certificate (NTC), the National Business Certificate (NBC), the advanced National Technical Certificate (ANTC) and advance National Business Certificate (ANBC). The length of course in a technical colleges three years for the craft level, one year for the advanced craft level and one year for the advanced craft level [2].

Teachers play an important roles in the teaching/ learning process in the technical colleges. Teachers are important inputs into the educational system. Hansen [3] described them as key input of a highly-skilled labour resource which combined with the educational plant and its allied services produces the educated or at least schooled individuals while Ukeje [4] regarded them as the hub of the educational system.

Notwithstanding the importance given to teachers in the schools' system, it was noticed that teachers' shortages have been a common feature in many countries [5,6]. The British Department of Education (1986) identified the following three types of teachers' shortages namely the overt shortage, measured by unfilled vacancies in a subject and their relationship to demand for tuition in that subject; the hidden shortage, where tuition in a subject is given by teachers considered to be inadequately qualified in it or to be lacking the personal qualities required for effective teaching; suppressed shortage, where a subject is under-represented in the timetable because of a lack of suitable teachers [7].

In Nigeria, the shortage of qualified teachers has been reported [1, 8]. These shortages have been attributed to the low salaries and social prestige given to teachers [9, 10]. In other countries, almost the same situation was found. In the USA, for instance, Straker [5] reported that salaries in teaching were low in relation to those offered in alternative professions. In Canada, Freeman [11] reported that teachers are feeling the pressure not only to improve results but to do it with less money. Pay freezes have become common place across Canada with teachers in populous Ontario taking several days per term without pay. Thus, of the various inputs into the educational system, teachers' salaries are of vital importance and they are major items in educational expenditure. Research has however shown that poor salaries have constituted the major reasons for the shortages of qualified teaching manpower in many technical colleges (Annual report for Federal Technical Colleges [12]. This findings was supported by the findings of other researchers [13-16].

Notwithstanding, the National Board for Technical Education [17] recommended the following teacher student ratios for its programmes in technical colleges: for practical- oriented trade courses, such as woodwork, metalwork, electronics, the ideal ratio is 1:15 and 1:20 as the upper limit. Practice-oriented core courses in the general science department such as Biology, Chemistry, Physics and the lower limit of teacher: student ratio of 1:18 and upper limit of 1:25.

Notwithstanding the recommended teacher –student ratios, teacher demand seems to be an annual occurrence in many of the colleges. Demand in education has little relationship to the usual economic meaning of demand for goods at various prices. The major determinant of the demand for qualified teaching manpower is enrolment.

Hence, an increase in students' enrolment causes an increase in the demand for qualified teaching manpower [18, 19]. Although supply in Economics is the quantity of a commodity that is called into the market over a particular period of time at specific prices [20], in relating the concept of supply to education, prices such as salaries (the price of labour) are determined in the same way as the prices of goods [8, 21]. However, in view of the fact that the period of training of teachers takes considerable long time, it becomes difficult, therefore, for market forces to provide immediate solution to the supply of teachers [22].

Research findings have shown that teachers are almost always in short supply in schools [9, 23, 24] Dennison [23] for instance, argued that a supply demand balance or even an over-production in the number of teachers does not guarantee sufficiency in every subject area [25]. Woodhall, [22] however remarked that the supply of teachers is determined by the annual additions for each of the succeeding years. The purpose of this study was to examine the staffing situation of teaching manpower in technical colleges in Ondo and Ekiti States, Nigeria in order to determine whether or not the demand for teaching manpower has been met by the supply in technical colleges in the two states in order to correct any erroneous impression.

**Statement of the Problem:** The decay in the Nigerian technical education has been of concern to many educationists [10, 26]. This decay could be seen in the dilapidated buildings of many technical colleges, inadequate and obsolete facilities and equipment, lack of basic infrastructures and serious under funding [1]. The free education policy of the governments of the two States tends to have compounded the problems in the technical colleges perhaps as a result of insufficient funds to run the institutions. The lack of awareness on the part of many students and their parents is another case in point. Although the State government took various measures to supply more teachers, it seems that the supply of teaching manpower has not matched the demand for them in the colleges. In addition, the introduction of new courses in the colleges tends to bring about the demand for specialist teachers. The problem of this study therefore was to determine whether or not the number of teaching manpower has match the demand for them in technical colleges in the two States. In addressing this problem, the following research questions were raised:

**Research Questions:**

- What is the situation of students' enrolment in technical colleges in Ondo and States, Nigeria?
- What is the staff strength of teaching manpower in technical colleges in the two States?
- What is the teacher-student ratio in technical colleges in the two States?
- Does the supply of qualified teachers into technical colleges in Ondo and Ekiti States, Nigeria match the demand for them?
- Why has students' enrolment dwindled considerably in technical colleges in Ondo and Ekiti States, Nigeria?

## MATERIALS AND METHODS

The study adopted the ex-post facto and descriptive research design of the survey type. A survey is a study being conducted for the purpose of making descriptive assertions about some populations [27]. It is also a study concerned with a form of planned collection of data from a large population for the purpose of analyzing the relationships between variables [28]. An ex-post facto research is an after fact or after event research [29]. The data to be used are already in place in the schools and they do not involve any manipulation of variables.

The population of the study comprised all the 5 technical colleges in Ondo State and the 4 technical colleges in Ekiti State, Nigeria. The sample was identical with the population [30] as all the schools were involved in the study. Out of 112 teachers in technical colleges in Ondo State and the 98 teachers in technical colleges in Ekiti State, 50 teachers were selected for the study from technical colleges in Ondo State while another 40 teachers were selected from technical colleges in Ekiti State. The method of selection was by stratified random sampling technique.

Since teachers for technical colleges are supplied from higher institutions in Nigeria and overseas, the supply of teachers was delimited to higher institutions within Ondo and Ekiti States and higher institutions in 8 neighbouring States having Ondo and Ekiti States as catchment areas in the admission of students namely Osun, Oyo, Ogun, Kwara, Kogi, Edo, Delta and Lagos States. Thus, the 4 higher intuitions in Ondo State made up of 2 universities, 1 polytechnic and 1 college of education were selected for the study. Likewise, the 3 higher institutions in Ekiti State made up of 1 university, 1 polytechnic and 1 college of education were also selected.

Out of the 15 universities in the neighbouring States, 8 universities were selected for the study. Likewise, out of the 8 colleges of education (technical) in the country, 4 colleges of education (technical) were also selected for the study. Thus, the sample on the supply of teaching manpower for Ondo State included 16 higher institutions made up of the 4 higher institutions within the State and 12 higher institutions from outside the State while the sample for Ekiti State included 15 higher institutions made up of the 3 higher institutions within the State and 12 higher institutions from outside the State. The method of selection was by multi-stage, purposeful and stratified random sampling techniques. The principals and teachers of the 9 technical colleges as well as the Heads of the 19 higher institutions selected were the respondents in the study.

Two instruments were used to collect data for the study. These were the technical colleges' principals' inventory and the higher institutions teacher supply inventory. The secondary schools principals' inventory sought information on students' enrolment in the schools, number of classes, staffing situation with regard to the total number of qualified teachers demanded and the total number of teachers in place per course. The higher institutions teacher supply inventory required information on the number of students from Ondo and Ekiti States who graduated from the institutions between yeara 2002 and 2006.

The content validity of the instrument was determined by experts in educational planning and tests and measurement who examined each item of the inventory in order to determine whether the instruments adequately measured what they were supposed to measure. Their comments were used as a guide in reviewing the instruments before they were administered.

The copies of the instruments were administered through the use of research assistants. They were retrieved from the respondents after a period of two weeks. The data collected were analyzed using frequency counts and percentages. The projected number of students and teachers between 2007 and 2016 were determined using appropriate formulas.

## RESULTS

**Question 1: What is the situation of students' enrolment in technical colleges in Ondo and States, Nigeria?:** In determining the situation of students' enrolment in technical colleges in Ondo and Ekiti States, Nigeria, data on the enrolment figures of students and the number of classes in the colleges from year 2002 to 2006 were collected from the respondents using the inventory. The findings were presented in Table 1.1 and 1.2.

In Table 1.1, the students' enrolment in technical colleges in Ondo state, Nigeria dwindled considerably from 2082 in year 2002 to 1878 in year 2006. The same situation was noticed in the enrolment of students into technical colleges in Ekiti State. As indicated in Table 1.2, students' enrolment also dwindled terribly from 1326 in year 2002 to 570 in year 2006. This suggests that there was not enough awareness on the importance of technical education as well as the prospects awaiting students in having a career in technical education. However, male students' enrolment was greater than female students' enrolment in technical colleges in Ondo State except in year 2006 when female students' enrolment was greater than that of male students (52% for females as against 48% for males). In Ekiti State, male students' enrolment was greater than female students' enrolment in all the years. For instance, male students' enrolment took a proportion of 78.5% in year 2002 and 64.4% in year 2006.

**Question 2: What is the staff strength of teaching manpower in technical colleges in the two States?:** In determining the staff strength of the teaching manpower in technical colleges in Ondo and Ekiti States, Nigeria, data on the numbers of teachers by qualification were collected from the respondents using the inventory. The data collected were analyzed through the use of frequency counts and percentages. The findings are presented in Table 2.1 and 2.2.

As shown in Table 2.1 and 2.2, the bulk of the teachers in technical colleges in the two States are teachers holding the Nigeria Certificate of Education (NCE technical). These category of teachers accounted for more than 55% of all teachers in the technical colleges in the two States. Graduate teachers with degrees were in small proportion compared to NCE teachers. They accounted for a proportion between 31% and 35% in technical colleges in Ondo State and between a proportion ranging from 38% and 44% in technical colleges in Ekiti State.

**Question 3: What is the teacher-student ratio in technical colleges in the two States?:** In answering this question, data on the total number of students in the technical colleges in Ondo and Ekiti States, Nigeria for years 2002 to 2006 were collected from the principals of the colleges through the inventory. Data on the number of teachers were also collected. The teacher-student ratio

Table 1.1: Students' Enrolment in technical colleges in Ondo State, Nigeria

| | | Students' | Enrolment | | | |
|---|---|---|---|---|---|---|
| Years | Number of classes | Male | % | Female | % | Total |
| 2002 | 174 | 1511 | 72.6 | 571 | 27,4 | 2082 |
| 2003 | 170 | 1280 | 62.7 | 760 | 37.3 | 2040 |
| 2004 | 166 | 1144 | 57.6 | 842 | 42.4 | 1986 |
| 2005 | 162 | 1072 | 55.1 | 872 | 44.9 | 1944 |
| 2006 | 157 | 902 | 48.0 | 976 | 52.0 | 1878 |

Table 1.2: Students' Enrolment in technical colleges in Ekiti State, Nigeria

| Years | | Students' | Enrolment | | | |
|---|---|---|---|---|---|---|
| | Number of classes | Male | % | Female | % | Total |
| 2002 | 110 | 1041 | 78.5 | 285 | 21.5 | 1326 |
| 2003 | 92 | 822 | 74.9 | 276 | 25.1 | 1098 |
| 2004 | 79 | 694 | 73.4 | 251 | 26.6 | 945 |
| 2005 | 73 | 627 | 71.9 | 245 | 28.1 | 872 |
| 2006 | 48 | 367 | 64.4 | 203 | 35.6 | 570 |

Table 2.1: Number of Teachers in technical colleges in Ondo State, Nigeria

| Years | Degree s | % | Nigeria Certificate of Education (NCE technical) | % | Others | % | Total |
|---|---|---|---|---|---|---|---|
| 2002 | 31 | 31.6 | 62 | 63.3 | 5 | 5.1 | 98 |
| 2003 | 36 | 35.3 | 61 | 59.8 | 5 | 4.9 | 102 |
| 2004 | 37 | 34.9 | 64 | 60.4 | 5 | 4.7 | 106 |
| 2005 | 38 | 35.2 | 66 | 61.1 | 4 | 3.7 | 108 |
| 2006 | 40 | 35.7 | 67 | 59.8 | 5 | 4.5 | 112 |

Table 2.2: Number of Teachers in technical colleges in Ekiti State, Nigeria

| Years | Degree s | % | Nigeria Certificate of Education (NCE technical) | % | Others | % | Total |
|---|---|---|---|---|---|---|---|
| 2002 | 32 | 40.5 | 43 | 54.4 | 4 | 5.1 | 79 |
| 2003 | 32 | 43.8 | 38 | 52.1 | 3 | 4.1 | 73 |
| 2004 | 35 | 41.7 | 45 | 53.6 | 4 | 4.7 | 84 |
| 2005 | 35 | 42.2 | 44 | 53.0 | 4 | 4.8 | 83 |
| 2006 | 38 | 38.8 | 56 | 57.1 | 4 | 4.1 | 98 |

was computed by dividing the total number of students in the schools by the total number of teachers using the following formula (World Bank (1995; [31]:

$$Ts = \frac{Ns}{Nt}$$

Where Ts = Teacher–student Ratio; Ns = Total number of students; Nt= Total number of teachers. On the basis of this formula, the teacher –student ratio in the secondary schools in the State in all the years are indicated in Table 3.

As indicated in Table 3.1, the teacher-pupil ratio in technical colleges in Ondo and Ekiti States, Nigeria varied from one year to another. The average teacher-student ratio in technical colleges in Ondo State was 1:19 while the average teacher- student ratio in technical colleges in Ekiti State was 1:12. These small teacher-student ratios were the result of dwindled students' enrolment in technical colleges in the two States.

**Question 4: Does the supply of qualified teachers into technical colleges in Ondo and Ekiti States, Nigeria match the demand for them?:** In determining the demand for teaching manpower in technical colleges in Ondo and Ekiti States, Nigeria, the number of teachers demanded by the college authorities between years 2002 and 2006 was

Table 3.1: Teacher –student Ratio in technical colleges in Ondo State, Nigeria

| Years | Total No. of students enrolled | No.of teachers in post | Teacher-student Ratio |
|---|---|---|---|
| 2002 | 2082 | 98 | 21 |
| 2003 | 2040 | 102 | 20 |
| 2004 | 1986 | 106 | 19 |
| 2005 | 1944 | 108 | 18 |
| 2006 | 1878 | 112 | 17 |
| Average | Teacher-student Ratio | = | 1:19 |

Table 3.2: Teacher –student in technical colleges in Ekiti State, Nigeria

| Years | Total No. of students enrolled | No.of teachers in post | Teacher-student Ratio |
|---|---|---|---|
| 2002 | 1326 | 79 | 17 |
| 2003 | 1098 | 73 | 15 |
| 2004 | 945 | 84 | 11 |
| 2005 | 872 | 83 | 11 |
| 2006 | 570 | 98 | 06 |
| Average | Teacher -student Ratio | = | 1:12 |

Table 4.1: Number of Teachers demanded in technical colleges in Ondo State

| Years | Enrolment | No. of classes | No. of teaching manpower demanded at the rate of $1^1/2$ teachers per class | No. of teachers in post | Shortfall |
|---|---|---|---|---|---|
| 2002 | 2082 | 174 | 261 | 98 | 163 |
| 2003 | 2040 | 170 | 255 | 102 | 153 |
| 2004 | 1986 | 165 | 248 | 106 | 142 |
| 2005 | 1944 | 162 | 243 | 108 | 135 |
| 2006 | 1878 | 157 | 236 | 112 | 124 |

Table 4.2: Number of Teachers demanded in technical colleges in Ekiti State

| Years | Enrolment | No. of classes | No. of teaching manpower demanded at the rate of $1^1/2$ teachers per class | No. of teachers in post | Shortfall |
|---|---|---|---|---|---|
| 2002 | 1326 | 110 | 165 | 79 | 86 |
| 2003 | 1098 | 92 | 138 | 73 | 65 |
| 2004 | 945 | 79 | 119 | 84 | 35 |
| 2005 | 872 | 73 | 110 | 83 | 27 |
| 2006 | 570 | 48 | 72 | 98 | -26 |

derived from the data collected from the respondents. The demand was based on the Government's approved teacher quota of $1^1/2$ teachers per class [32, 33] Table 4.1 and 4.2 show the students' enrolment and the number of qualified teachers demanded during the period.

As shown in Table 4.1, the number of teaching manpower demanded by the technical colleges on the basis of $1^1/2$ teachers per class varied from one year to another in the two States, In Ondo State, for example, the numbers of teachers required technical colleges were 261 in year 2002, 255 in 2003, 248 in 2004, 243 in 2005 and 236 in 2006. This shows that the demand for teaching manpower increased phenomenally between year 2002 and year 2006 in Ondo State Nigeria. However the actual number of teaching manpower in post were 98 in year 2002, 102 in 2003, 106 in 2004, 108 in 2005 and 112 in 2006. This shows a considerable shortfall of 163 teachers in year 2002, 153 teacher in 2003, 142 teachers in 2004, 135 teachers in 2005 and 124 teachers in 2006. This shows that teacher shortages in technical colleges in Ondo State Nigeria.

In Ekiti State, the numbers of teachers required technical colleges were 165 in year 2002, 138 in 2003, 119 in 2004, 110 in 2005 and 72 in 2006. This also shows a high demand for teaching manpower in technical colleges throughout the period of study. However the actual number of teaching manpower in post were 79 in year 2002, 73 in 2003, 84 in 2004, 83 in 2005 and 98 in 2006. This shows a shortfall of 86 teachers in year 2002, 65 teachers in 2003, 35 teachers in 2004, 27 teachers in 2005 and

Table 4.3: Number of Teachers supplied to technical colleges in Ondo State

| Years | N | Total No. of teachers supplied | No. of teaching manpower supplied by higher institution within the State | % | No. of teaching manpower supplied by neighbouring higher institution outside the State. | % |
|---|---|---|---|---|---|---|
| 2002 | 16 | 450 | 210 | 46.7 | 240 | 53.3 |
| 2003 | 16 | 586 | 254 | 43.3 | 332 | 56.7 |
| 2004 | 16 | 672 | 320 | 47.6 | 352 | 52.4 |
| 2005 | 16 | 684 | 306 | 44.7 | 378 | 55.3 |
| 2006 | 16 | 821 | 387 | 47.1 | 434 | 52.9 |

Table 4.4: Number of Teachers supplied to technical colleges in Ekiti State

| Years | N | Total No. of | No. of teaching manpower supplied by higher institution | % | No. of teaching manpower supplied by neighbouring higher | % |
|---|---|---|---|---|---|---|
| 2002 | 15 | 390 | 232 | 59.5 | 158 | 40.5 |
| 2003 | 15 | 412 | 256 | 62.1 | 156 | 37.9 |
| 2004 | 15 | 546 | 301 | 55.1 | 245 | 44.9 |
| 2005 | 15 | 702 | 362 | 51.6 | 340 | 48.4 |
| 2006 | 15 | 884 | 472 | 53.4 | 412 | 46.6 |

Table 4.5: Number of teaching manpower demanded and the number supplied to technical colleges in Ondo State, Nigeria

| Years | N | No. of qualified teachers demanded at the rate of $1^1/2$ teachers per class. | Total No. of teachers supplied by higher institutions within the State and from neighbouring States | Differences |
|---|---|---|---|---|
| 2002 | 14 | 261 | 450 | -189 |
| 2003 | 14 | 255 | 586 | -331 |
| 2004 | 14 | 248 | 672 | -424 |
| 2005 | 14 | 243 | 684 | -441 |
| 2006 | 14 | 236 | 821 | -585 |

Table 4.6: Number of teaching manpower demanded and the number supplied to technical colleges in Ekiti State, Nigeria

| Years | N | No. of qualified teachers demanded at the rate of $1^1/2$ teachers per class. | Total No. of teachers supplied by higher institutions within the State and from neighbouring States | Differences |
|---|---|---|---|---|
| 2002 | 14 | 165 | 390 | -225 |
| 2003 | 14 | 138 | 412 | -274 |
| 2004 | 14 | 119 | 546 | -427 |
| 2005 | 14 | 110 | 702 | -592 |
| 2006 | 14 | 72 | 390 | -812 |

a surplus of 26 teachers in 2006. These findings reveal that teacher shortages were more in technical colleges in Ondo State than in technical colleges in Ekiti State, Nigeria.

In determining the supply of teaching manpower to technical colleges in Ondo and Ekiti States for the period 2002 to 2006, data were obtained from two sources, which were the major sources of supply of teaching manpower to technical colleges in the two States, These were sources within the States and sources from neighbouring higher.institutions outside the two States having Ondo and Ekiti States as catchment areas in the admission of would –be technical teachers. The data collected were analyzed using percentages while findings are presented in Table 4.3 and 4.4.

Table 4.3 shows that In Ondo State, the number of teaching manpower supplied to technical colleges by higher institutions within the State was in smaller

Table 5.1: Responses on dwindled students' enrolment in technical colleges in Ondo State

| Items | N | Agree | % | Disagree | % |
|---|---|---|---|---|---|
| Rush into academic programmes in the universities and polytechnics | 50 | 45 | 90.0 | 05 | 10.0 |
| Lack of awareness of students and parents of the prospects in technical education | 50 | 43 | 86.0 | 07 | 14.0 |
| Lack of enlightenment on the prospects in technological education | 50 | 42 | 84.0 | 08 | 16.0 |
| Inadequate facilities in the colleges | 50 | 42 | 84.0 | 08 | 16.0 |
| Obsolete equipment in workshops | 50 | 40 | 80.0 | 10 | 20.0 |
| Poor funding | 50 | 41 | 82.0 | 09 | 18.0 |
| Average Total | 50 | 42 | 84.0 | 08 | 16.0 |

Table 5.2: Responses on dwindled students' enrolment in technical colleges in Ekiti State

| Items | N | Agree | % | Disagree | % |
|---|---|---|---|---|---|
| Rush into academic programmes in the universities and polytechnics | 40 | 30 | 75.0 | 10 | 25,0 |
| Lack of awareness of students and parents of the prospects in technical education | 40 | 32 | 80.0 | 08 | 20.0 |
| Lack of enlightenment on the prospects in technological education | 40 | 31 | 77.5 | 09 | 22.5 |
| Inadequate facilities in the colleges | 40 | 29 | 72.5 | 11 | 27.5 |
| Obsolete equipment in workshops | 40 | 28 | 70.0 | 12 | 30.0 |
| Poor funding | 40 | 32 | 80.0 | 08 | 20.0 |
| Average Total | 40 | 30 | 75.0 | 19 | 25.0 |

proportion in each of the years than those supplied from outside the State by neighbouring higher institutions. In Ekiti State the number of teaching manpower supplied to technical colleges by higher institutions within the State was greeter in each of the years than those supplied from outside the State by neighbouring higher institutions. The greater proportion in the supply of teaching manpower to technical colleges in Ekiti State implies that perhaps greater emphasis might have been placed on the production of teaching manpower in Ekiti State than in Ondo State. A comparison between the supply of teaching manpower and the demand for them in technical colleges in Ondo and Ekiti States shows considerable differences. The findings are presented in Table 4.5 and 4.6.

In Table 4.5, the findings show that the supply of teaching manpower from the higher institutions to technical colleges in Ondo State, Nigeria did not match the demand for them in each of the years 2002 to 2006. The out-surpassed the demand for them in each of the years. In Ekiti State. The same situation occurred. The supply of teaching manpower from the higher institutions to technical colleges did not also match the demand for them in each of the years. The supply of teaching manpower from the higher institutions was much greater than the demand for them in each of the years. This shows that there was surplus supply of teaching manpower to the colleges and it suggests that perhaps, the government of the two States had not been recruiting sufficient teaching manpower into the technical colleges more that the findings of this study indicated in Table 4.1 and 4.2 revealed shortages of teaching manpower in all the technical colleges.

**Question 5: Why has students' enrolment dwindled considerably in technical colleges in Ondo and Ekiti States, Nigeria?:** In examining this question, data on the responses given to why students' enrolment dwindled considerably in technical colleges in Ondo and Ekiti States, Nigeria were collected using the questionnaire. The responses were coded and analyzed using frequency counts and percentages. The findings are presented in Table 5.

In Table 5.1 and 5.2, the responses given to why students' enrolment dwindled terribly in technical colleges in Ondo and Ekiti states, Nigeria show much similarity. One of the most important reasons given by the respondents as been the major causes of the dwindled students' enrolment is the rush by many students to acquire university and polytechnic education. As many as 45 (90.0%) of the respondents in Ondo State and 30 (75.0%) of the respondents in Ekiti State gave this response. Other reasons given included the lack of awareness of prospects in technical education, the lack of enlightenment on the prospects in technological education, inadequate facilities in the colleges, obsolete equipment in workshops and poor funding. Their responses on these reasons were in varying proportions. On the average, 42 (84.0%) of the respondents in Ondo State and 30 (75.0%) of the respondents in Ekiti State claimed that the indicated reasons are important causes of dwindled students' enrolment in technical colleges in Ondo and Ekiti States, Nigeria.

## DISCUSSION

The foregoing has shown the analysis of data for this study. It was found that students' enrolment in technical

colleges in Ondo and Ekiti States, Nigeria dwindled considerably throughout the years of study (2002 to 2006). The finding was consistent with the findings made by previous researchers [1, 34] and it suggests that there was not enough awareness on the importance of technical education as well as the prospects awaiting students in having a career in technical education. The findings indicating that male students' enrolment was greater than female students' enrolment in technical colleges in most of the years of study tends to agree with the findings made by other researchers [35- 37].

The findings also showed that the bulk of the teachers in technical colleges in the two States are teachers holding the Nigeria Certificate of Education (NCE technical) who accounted for more than 55% of all teachers in the technical colleges in the two States. Graduate teachers with degrees were short supply to the colleges. This finding agreed with the findings of other researchers [5, 9]. This implies that teacher training at higher levels has not been vigorously pursued in the two States. The situation is unbecoming of a country like Nigeria where the policy is being oriented towards science and technology. The average teacher-student ratio in technical colleges in Ondo State was found to be 1:19 while that of technical colleges in Ekiti State was 1:12. These small teacher-student ratios might perhaps be the result of dwindled students' enrolment in the colleges. Although small teacher-student ratios have been found to be significant related to students' academic performance [8, 38-40], a situation whereby students' enrolment continues to dwindle in technical colleges in the two States leaves more to be desired. The ratios were however in agreement with the National Board for Technical Education [17] recommended teacher student ratios of between 1: 15 to 1:20 ratio for practical- oriented trade courses, such as woodwork, metalwork, electronics which and between 1; 18 and 1: 25 for practice-oriented core courses in the general science department such as Biology, Chemistry, Physics thereby giving a 1:12 average ratio [41].

The findings of the study also shows that the number of teaching manpower demanded did not match the supply in technical colleges in the two States. The supply of teaching manpower was greater than the demand for them. The finding was consistent with those of previous researchers [24, 42]. This suggests that perhaps the government of the two States might not have employed many of the teaching manpower produced in the higher institutions into the colleges. It was however found that the number of teaching manpower supplied to technical colleges by higher institutions within Ondo State was in smaller proportion in each of the years than those supplied from outside the State by neighbouring higher institutions. In Ekiti State the number of teaching manpower supplied to technical colleges by higher institutions within the State was greeter in each of the years than those supplied from outside the State by neighbouring higher institutions. The greater proportion in the supply of teaching manpower to technical colleges in Ekiti State implies that perhaps more emphasis have been placed on the production of teaching manpower in Ekiti State than in Ondo State. This finding agreed with those of other researchers [43, 44].

The findings indicating that one of the causes for dwindled students' enrolment in technical colleges in the two States the rush by many students to acquire university and polytechnic education. Other reasons given included the lack of awareness of prospects in technical education, the lack of enlightenment on the prospects in technological education, inadequate facilities in the colleges, obsolete equipment in workshops and poor funding.

The finding indicating that there was no significant difference in the availability of teaching manpower in technical colleges between Ondo and Ekiti States, Nigeria was in consonance with the findings made in other studies [45, 25]. The findings however was in contrary with the findings made by other researchers [15, 24, 46]. The finding indicating that there was no significant difference in the availability of teaching manpower in technical colleges between Ondo and Ekiti States, Nigeria was also consistent with the findings of previous researchers [26, 47]. This shows that the views of the respondents were the same in the two States.

## CONCLUSION

Considering the findings of this study, it was concluded that the supply of teaching manpower has not matched the demand for them in technical colleges in Ondo and Ekiti States, Nigeria. Evidences form the study have led the researcher to conclude that the supply of teaching manpower to technical colleges was greater for technical colleges in Ekiti state than for technical colleges in Ondo State.

**Implications for Planning:** The considerable shortfall in students' enrolment implies that the two states have not been prepared for the take-off of science and technology. In the same vein, the shortage of teaching manpower as

revealed in this study implies that effective teaching might not have taken place in most of the colleges. This situation could jeopardize the intentions of federal government in its bid to develop science technological education.

**Recommendations:** On the bases of the findings, it was recommended that there should be more of public enlightenment on the prospects in technical education. The government of the two States should endeavour to organize seminars and workshops on technical education for students in primary and junior secondary schools. Government should also endeavour to give scholarship and other incentives to students in junior secondary schools to offer courses of interest in technical colleges. There should also be a complete over-hauling of technical education in the country,

The conditions of service of teachers in technical colleges in the two States should be reviewed by the governments of the respective states and made more attractive and lucrative. This is necessary in order to make teachers stay on the job. Fringe benefits and allowances such as car loan, housing loan and leave transport allowance and rural allowance should always be provided for of teachers in technical colleges. Government should also endeavour to recruit more teachers into the colleges to meet up with the demand for them. This recruitment should however be along the lines of the various courses offered in the colleges..

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