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# Teachers' Utilization in Ondo State Public Secondary Schools, Nigeria: Some Planning Implications

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**Abstract**
*The study examined teacher's utilization in Ondo State Public Junior Secondary Schools (JSS) in Nigeria with particular reference to Ondo State from 2006/07 to 2009/2010 academic session with a view to appraising whether all these secondary schools teaching personnel were effectively utilized in their respective schools. The research design was a descriptive survey of ex post facto study. From the existing six states in the south western part of Nigeria, Ondo state was purposively sampled while proportional sampling method was used to select 136 public secondary schools. A researcher designed and validated instrument tagged 'Teachers' Utilization Questionnaire in Public Junior Secondary Schools in Ondo State (TUQPJSS) was used to collect relevant data. Test – retest method was used to obtain the reliability of the instrument and the coefficient reliability of 0.81 was obtained. Three research questions and one hypothesis were raised to guide the study. Finding revealed yearly average full time equivalent teacher pupil ratio of 1:72 as well as significant difference in teacher utilization rate in urban centre compared with their counterpart in the rural centres as at the period of study. Based on the finding, it was recommended that more teachers should be employed and evenly distributed to make teachers' utilization more effective in the state public secondary schools. Some planning implications were stressed in the paper.*

**Keywords:** public**,** secondary, school, teachers, utilization

## INTRODUCTION

Teachers determine what ultimately happens to educational policies, to curriculum guidelines, the use to which teaching-learning materials are put, etc and in fact the fate of a nation's huge investments in education. What teachers do, or do not do, are able or not able to do, are willing or not willing to do, what they do properly or do poorly determines, to a great extent, the effective curriculum (what children actually learn).They plays a significant role in the determination of the quality of education. The National Policy on Education (FGN, 2004) succinctly states that no "education system can rise above the quality of its teachers" thus implying the important role played by teachers in facilitating teaching and learning and in determining the quality of education service delivery. They are the supporting pillars for the realization of educational goals and objectives. They are the prime mover in the development of optimum condition for learning. The recommended students' population in a single classroom is a maximum of 40 that is Teacher: student ratio; 1:40 (UNESCO, 2000, FGN, 2004). In view of this principle which is generally affirmed by many people, one might expect that every kind of assistance possible would be made available to enhance the teacher's work.

Unfortunately, reverse is the case in most of our schools. Recent happenings in the education industry in Nigeria depicts the fact that teachers' are being saddled with greater responsibility more than is required of them due to social demand in education which has resulted into increase enrolment in schools. Overpopulated classrooms are considered to be un conducive for both teachers and students alike as the burden on teachers with respect to implementing marking of scripts and other continuous assessment as well as the ability to give individualized attention to students needing extra help. On the part of the students it has resulted into poor learning and high drop out from schools. It is based on this background that this study examined the utilization of public Junior secondary school teachers in Ondo State, Nigeria from 2006/2007 to 2009/2010 so as assess how effective are teachers utilized in the state public Junior secondary schools.

## THEORETICAL FRAMEWORK

The underpinning framework for this study is based on Education Production Function (EPF).The educational production framework includes inputs, the process and the output as discussed in all literatures reviewed. The concept of EPFs rest on the framework of:

INPUT ⇨ THROUGHPUT ⇨ OUTPUT

Teachers are input that goes into production function of an educational transformation. The production function in education is the maximum level of

outcome, possible from alternative combinations of inputs, teachers inclusive.

Effective utilization of teachers will inform effective teaching and learning in the classroom setting which will later result into high academic output in the education sector. Based on this framework, the study examine teacher utilization as an integral input in the education sector in order to ascertain effective utilization in the Education production function.

**REVIEW OF RELATED LITERATURES**

A considerable body of research findings is available to support the contention that in the balance better qualifications of teachers and their appropriate utilization would lead to better performance of students. Consequently, a teacher plays an indispensable role in the process of teaching and learning. In other words, s/he is the change agent that harnesses other resources for production function. In support of this, Nwagwu (1998) emphasized that, "the concept of education by itself implies the existence of teaching and learning, hence the mention of the word school evokes automatically the picture of teachers and students in an interactive environment.

The ESA situation report on teachers' selection of five de- motivators from a list of 25 factors, as regards their profession; among the five picked was coping with large students population and lack of teaching instructional materials to teach (FME,2005). The issue of teachers' utilization rate in schools has being receiving attention globally. Estelle Morris in her social market foundation speech (June,2002) in School Teachers' Review Body (STRB),2002 outlined the government's vision to rescue this transformation, which would involve reconsidering some elements of teachers' existing roles as well as reviewing and expanding the roles of support staff within the schools. Likewise the study of School Teachers' Review Body (STRB)(2008) tackled the issue of teachers' hours of work. Indeed, the STRB had worked urgently to put forward a package to review teacher workload in order to restore morale, improve teacher retention and supply and make possible further improvement in standards'(STRB, 2008:23), citing workload as a central problem in relation to teacher morale.

Amoo (1982) in his study 'Demand and Supply of teachers in Osogbo Local Government Area of Osun State, Nigeria identified wide gaps between the demand and supply of qualified teachers in the state. Shortage of qualified teachers demand as revealed by the findings of his study was expressed as 44% in the 1979/80 session, 56% in the 1980/81 session and 51% in the 1981/82 session. He argued that the planning for free secondary education in the state was faulty and inadequate. He stressed further that the situation would worsen if efforts were not made to train well qualified teachers to meet up with the consistent increase of students' enrolment in the state secondary schools. Also in Oyeka (2002) study titled "An analysis of resource management in public Secondary Schools in Edo state" revealed that, "teachers in urban secondary schools had an average weekly workload per teacher of 20 periods, while those in rural secondary schools had an average weekly workload of 24 periods."

In a similar studies, Egungun, (1992), Ndiomu, (1999) and Adeboyeje, (2000) stressed the relevance of human resource towards the attainment of corporate objectives of any organization. Likewise Oshodi (1991) investigated resource utilization and students' academic performance in kwara state secondary schools using questionnaire as the major instrument. Spearman rank order correlation method was used to determine the most important influencing factor of academic performance. The study found the quality of teachers as the most determinant of students' academic performance in secondary schools. He further recommended the need for the system to allow effective utilization of teachers in order to enhanced higher productivity in schools.

The study on 'effective allocation, coordination and utilization of human resource through the system approach' by Ojedele (1984) revealed that teachers were not equitable allocated and this result to wastage and negative influence on teaching efficiency. In another development related to the study, Oguntoye (1983) applied the production function framework to secondary education production in Ogun State, Nigeria, while he employed several input variable, the only output variable employed was the performance of the students in West African School Certificate Examination. Effective utilization of teachers was found to be a powerful predictor of examination performance during the period covered. Similarly, Ibadin, (2010) in his study on an analysis of teachers' utilization in urban and rural secondary schools in mid-western states of Nigeria revealed that urban secondary school teachers had an average weekly workload of 16 periods, while their rural counterparts had 26 periods. The rural secondary school teachers were not only adequately utilized but they were more utilized than the urban secondary school teachers.

Goodman (1959) cited by Akinsolu (2005) in his study on teachers' effectiveness established that there are links between pupils' performance and teacher effectiveness and between performance and classroom atmosphere. Teacher experience was measured in terms of the number of teachers in a district with five or more years of employment as a classroom instructor, classroom atmosphere was a measure resulting from an observer's rating of the

degree to which the teacher attempted to relate the subject matter being considered to the interest, class size and ability level of the students. Similarly, SITAN's (2010) report indicated that teachers' quality is a major determinant of scholastic achievement among students and that feasible change in the level of quality of the teachers of Negro students would bring about significant changes in the achievement levels of these students therefore the need for effective utilization of teachers.

In the same vein, Aghenta (1983) reported variations in teachers' workloads in Nigeria schools. According to him "It is true that a few are over worked but when the average is taken we discover that teachers teach 15 periods out of 36-40 periods a week." Furthermore, he pointed out that, "some teachers have no other assignment apart from the few classes they teach, but a few others in addition to heavy teaching loads are charged with games, sports and students personnel administration etc." As at the time of his study, he observed that generally that teachers are underutilized." Nwagwu (1998) study runs contrary to Aghenta (1983). In his study, findings revealed that many states of the country secondary school teachers teach as many as 30 periods a week that is an average of 6 periods a day. In short, they teach from the time they arrive to the time school closes.

The ESA study conducted by the Basic and Secondary Education Department of the FME in 2005, revealed that the country as at the period of study had 575,068 teachers and from the required analysis conducted an additional 297,400 are still required to meet up with the consistent massive enrolment of students for effective transformation process in schools (FME, 2005). All these studies reviewed depict the fact that teachers play a significant role in the production process of the education industry.

**Measurement of Teachers' Utilization**

The rate of utilization of teachers can be measured through the pupil-: teacher ratio. It refers to the number of learners assigned to a teacher at a time to teach. It is simply determined by finding the sum total of all the learners in an institution of learning and dividing by the number of teaching work force, that is:

$$\text{Pupil –teacher ratio} = \frac{\text{Total number of students}}{\text{Total number of teachers}}$$

Assuming that three teachers are assigned to a group of 90 pupils,

$$\text{The pupils: teachers' ratio} = \frac{90}{3} = 30{:}1.$$

The shortcoming of this method lies on the fact that it does not give detail information about the utilization of a teacher. Therefore, in obtaining a more realistic indication of the rate of utilization of teachers, this study will adopt Roach (1995) analytical calculation. He proposed another ratio, which is the Full-time Equivalent Pupil: Teacher Ratio (FEPTR) and this was adopted by International Institute for Educational Planning (IIEP-UNESCO).

Full-time equivalent pupil: teacher ratio:

$$1)\quad \text{FEPTR} = \frac{\text{No of pupils.}}{\dfrac{\text{Total no of period-taught}}{\text{Normal teaching periods of one teacher}}}$$

$$= \frac{\text{No. of pupils}}{\text{Full-time Teacher Equivalent \{F.T.E.)}}$$

The FEPTR is calculated as follows:

Assuming 22 periods is the normal working load for a teacher,

1. English teacher teaches 25 periods
2. French teacher teaches 15 periods
3. Music teacher teaches 10 periods

Total = 50 periods.

The above indicates that some teachers are not fully engaged, the Full-time Teacher Equivalent will now be calculated thus:

$$\text{F.T.E} = \frac{50}{22} = 2.27$$

To calculate FEPTR, the number of pupils must be known, and assuming the number is still 90. Instead of the initial pupil- teacher ratio, which is 90/3 or 30:1, for the FEPTR, we divide the no of pupils by the calculated F.T.E and in this case by 2.27. The full-time equivalent pupil: teacher ratio is given by:

$$\text{FEPTR} = \frac{\text{No of pupils}}{\text{F.T.E.}} = \frac{90}{2.27} = 39.6{:}1 \approx 40{:}1$$

This method provides in-depth information on the over and under utilization of teachers within the school system. This study adopted this FEPTR approach in measuring teacher utilization in all the sampled public secondary schools. The benchmark for decision on rate of utilization is the Federal Government of Nigeria (FGN) national stipulated of TPR of 1:40. Any value that exceeds this depicts overutilization while a lesser value implies underutilization.

From the foregoing review of literatures, it could be seen that the crucial role of teacher effectiveness in the attainment of educational goals and objectives is one of the topics in the field of education which have generated heated argument. All the studies reviewed served as the major spring board upon which this study took off. The study analyzed the teaching staff utilization rate in the Ondo state public secondary school in the year 2006/07 to 2009/2010 academic session with a view to appraise the effective usage of teachers in the state secondary schools towards

system efficiency for effective production process of educational outcomes in the state

## SIGNIFICANCE OF THE STUDY

It is customary to analyze teacher availability in terms of (a) how many teachers are there in the system, (b) teacher-pupil ratio –TPR, (c) pupil-teacher ratio, (d) qualified teacher-pupil ratio (QTPR), and (e) – in conditions of specialized subject teaching – teacher-subject ratio (TSR). The outcome of the study would contribute to further understanding of teachers' management in Ondo state public secondary schools. Also, the study would acquaint educational planners and decision makers with necessary information on improvement of standards in secondary education in Ondo state vis a viz teachers' utilization and this will further enhance the degree of efficiency of Ondo state public secondary schools.

## METHODOLOGY

### Design

The design adapted for this study is a descriptive-survey research. It was primarily concerned with collection of data for purposes of describing and interpreting existing conditions of the population under study. The study was cross-sectional, in that data were gathered at one point in time from the existing senatorial districts in the state.

### Instrumentation

The instrument for this study was a researcher designed questionnaire tagged" Teachers' Utilization Questionnaire in Public Junior Secondary schools in Ondo State Nigeria". The instrument consists of three sections. The first section centre mainly on the bio-data of the teachers while the second section consists of a six structured question about the teaching period of the teacher in respective of their teaching classes in their respective schools, the third section was on student enrolment in the school.

### Validity and Reliability of the Instrument

The validity of the instrument was done in terms of contents and face validity. Expert in test construction and colleagues in Educational Management field assisted in doing this. For the reliability test- retest method was used on some group of teachers in five schools that were not part of the sampled schools within an interval of one month. The reliability coefficient obtained was 0.81. This was found highly reliable.

### Study Population

There were three hundred and forty two (342) secondary schools in Ondo state, Nigeria as at the time of this study (Education Digest, 2010). All these secondary schools are within the existing 18Local Government Areas (LGAs) in the state.

### Sample And Sampling Technique

Stratified random sampling technique was used based on the existing 3 senatorial district in the state and using 65%. From this underlying principle, 15 Local Government Areas was picked out of the existing 18, representing a sample percentage of 83%. In the 15 Local Government Areas sampled, there were two hundred and twenty three (223) public secondary schools. Sample proportion to size method (SPS) was used to select the sampled schools. With SPS, one hundred and thirty six (136) public secondary schools were picked out of the 223 representing 61%. From the 136 schools, 400 teachers were sampled based on stratified random sampling of rural/urban dichotomy.300 teachers from the urban schools and 100 teachers from the rural schools representing 50% of the teaching staff in each location.

### Research Questions

The following questions were raised to guide the study:

1. What is the total population of teaching staff in the Ondo state JSS as at the time of study?
2. What is students Enrolment in Ondo State JSS as at the time of study
3. What is the pattern of subject allocation to teachers in the sampled states' public Junior Secondary Schools (JSS) as at the time of study?
4. What was the Full-time Teacher Equivalent (FTE) in the sampled states Junior Secondary Schools?
5. What was the Full Time Equivalent Teacher- Pupil Ratio (FTETPR) in all the sampled public secondary schools from 2006/07 to 2009/2010?
6. What is the yearly and overall average Full Time Equivalent Pupil- Teachers ratio in Ondo State public Junior Secondary Schools as at 2006/07 to 2009/2010 academic sessions?
7. What were the average weekly numbers of periods assigned to teachers in urban and rural Junior secondary schools in Ondo State?
8. Were the urban junior secondary school teachers more utilized in respect of weekly numbers of teaching periods than the rural secondary school teachers?

## METHOD OF DATA ANALYSIS

Data collected were analyzed using descriptive statistics in analyzing data collated. The Full-time Equivalent Pupils/Teachers ratio of Roach (1995), was used in measuring the utilization rate of teachers because it was found to be more realistic indicator of the rate of utilization of teachers,. For this study, the minimum workload of a teaching staff in Ondo State Junior secondary schools range between 20 and 24

periods per week (SMOE, 2010). The UNESCO standard was 22 periods per week (Roach, 1995). For this study, the average state minimum workload of 22 periods per week was used. This is to establish a consensus with the national government as the average workload of Federal Government Colleges teaching staff also ranges between 19 and 22 periods per week (Federal Inspectorate Service, 2009). Similar to this, the policy guide lines for the implementation of Nigeria Education System likewise recommend a minimum of 18 periods per teacher per week and a maximum of 24 periods per teacher per week

A teacher's average workload of 22 periods per week was used in conjunction with the computed 265 weekly periods in Ondo state secondary schools timetable to calculate Full-time Teacher Equivalent (FTE) and the result were 12.05. This FTE of 12.05 was used to divide each of the sampled schools enrolment to give Full-time Equivalent Teacher-Pupil Ratio (FEPTR) for each of the sampled secondary schools for each of the year considered for this study. The average FEPTR for each of the schools sampled was computed and this was used in calculating the Overall Full-time Equivalent Teacher-Pupil Ratio (FEPTR) for Ondo State public secondary schools.

FINDINGS AND DISCUSSION

**Research Question 1 and 2**

What is the number of teaching staff in sampled state public junior secondary schools vis a viz students' enrolment from 2006/07 to 2009/2010 academic session

Table1. Analysis of Total Numbers of Teachers and Students' Enrolment in the in Ondo State Public Junior Secondary Schools from 2006/07 to 2009/2010 academic session

| **Year** | **Students' Enrolment** | **No of Teachers** | **STR** |
|---|---|---|---|
| 2006/07 | 108,882 | 4281 | 25:1 |
| 2007/08 | 102,172 | 4135 | 25:1 |
| 2008/09 | 138,397 | 4164 | 33:1 |
| 2009/10 | 131,588 | 4262 | 31:1 |

Source: Author's Computation from Education Digest, 2010

Key: SPR- Student Teacher Ratio

From Table 1, there was an appreciable increase in Public Junior secondary school enrolment in the year 2008/2009 while there was a slight decrease in the number of teachers from 4,281 in 2006/07 to 4262 in 2009/2010. The Table further revealed that STR ranges from 25:1 to 33:1 during the period examined in the state.

**Research Question 3**

What is the pattern of subject allocation to teachers in the sampled states' public Junior Secondary Schools (JSS) as at the time of study?

Table2: Pattern of subject allocation to teachers in Ondo state public Junior Secondary schools from 2006/07 to 2009/2010 academic session

| S/N | Subjects | No of Periods | Weekly |
|---|---|---|---|
| 1 | English Language | 25 Periods | ,, |
| 2 | Mathematics | 25 Periods | ,, |
| 3 | Social Studies | 15 periods | ,, |
| 4 | Integrated Science | 15 periods | ,, |
| 5 | Yoruba | 15 periods | ,, |
| 6 | Business studies | 15 periods | ,, |
| 7 | Introductory Technology | 15 periods | ,, |
| 8 | French | 10 periods | ,, |
| 9 | Music | 10 periods | ,, |
| 10 | Agricultural Science | 15 periods | ,, |
| 11 | C.R.S/I R S | 15 periods | ,, |
| 12 | Govt/ Typing & Shorthand | 15 periods | ,, |
| 13 | Account | 15 periods | ,, |
| 14 | Eng. Literature | 15 periods | ,, |
| 15 | Physics | 15 periods | ,, |
| 16 | Chemistry | 15 periods | ,, |
| 17 | Biology | 15 periods | ,, |
| | **Total Periods** | **265 periods** | |

Source: Smoe, Akure

Finding from Table 2 revealed that subject allocation period's ranges from 25 to 10 with English Language and Mathematics having the highest number of periods while teachers teaching other subjects have lesser periods to teach.

**Research Question 4**

What was the Full-time Teacher Equivalent (FTE) in the sampled states Junior Secondary Schools?

Table 3: Full-time Teacher Equivalent in Ondo state

| Total Periods In Schools | National Minimum Teacher Workload |
|---|---|
| 265 | 22 |
| Calculated FTE- 265/22 = | 12.05 |

sampled public junior secondary schools

**Research Question 5**

What was the Full Time Equivalent Teacher- Pupil Ratio (FTETPR) in all the sampled public secondary schools from 2006/07 to 2009/2010?

Table 4: Analysis of Full Time Equivalent Teacher- Pupil Ratio in all the sampled public secondary schools from 2006/07 to 2009/2010

| S/N of Sampled Schools | 2006/07 | 2007/08 | 2008/09 | 2009/10 | Means |
|---|---|---|---|---|---|
| 1 | 160:1 | 164:1 | 165:1 | 166:1 | 163:1 |
| 2 | 179:1 | 180:1 | 182:1 | 183:1 | 181:1 |
| *3 | 18:1 | 18:1 | 21:1 | 23:1 | 20:1 |
| 4 | 156:1 | 167:1 | 162:1 | 167:1 | 163:1 |
| 5 | 266:1 | 270:1 | 271:1 | 273:1 | 270:1 |
| 6 | 151:1 | 155:1 | 159:1 | 167:1 | 158:1 |
| 7 | 176:1 | 179:1 | 180:1 | 180:1 | 178:1 |
| 8 | 183:1 | 182:1 | 181:1 | 182:1 | 182:1 |
| 9 | 65:1 | 65:1 | 66:1 | 68:1 | 66:1 |
| 10 | 64:1 | 64:1 | 66:1 | 69:1 | 66:1 |
| *11 | 14:1 | 15:1 | 15:1 | 15:1 | 15:1 |
| *12 | 26:1 | 26:1 | 25:1 | 28:1 | 26:1 |
| 13 | 108:1 | 107:1 | 108:1 | 110:1 | 108:1 |
| *14 | 36:1 | 38:1 | 38:1 | 38:1 | 37:1 |
| 15 | 60:1 | 58:1 | 60:1 | 58:1 | 59:1 |
| 16 | 43:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| 17 | 45:1 | 45:1 | 46:1 | 46:1 | 46:1 |
| 18 | 237:1 | 241:1 | 238:1 | 238:1 | 239:1 |
| 19 | 116:1 | 116:1 | 117:1 | 116:1 | 116:1 |
| 20 | 183:1 | 183:1 | 183:1 | 183:1 | 183:1 |
| 21 | 61:1 | 61:1 | 61:1 | 61:1 | 61:1 |
| 22 | 82:1 | 83:1 | 84:1 | 85:1 | 84:1 |
| 23 | 85:1 | 85:1 | 85:1 | 85:1 | 85:1 |
| 24 | 108:1 | 108:1 | 108:1 | 108:1 | 108:1 |
| 25 | 184:1 | 186:1 | 186:1 | 185:1 | 185:1 |
| 26 | 85:1 | 86:1 | 87:1 | 87:1 | 86:1 |
| 27 | 58:1 | 63:1 | 63:1 | 63:1 | 62:1 |
| 28 | 111:1 | 111:1 | 110:1 | 112:1 | 111:1 |
| 29 | 81:1 | 82:1 | 83:1 | 82:1 | 82:1 |
| 30 | 184:1 | 184:1 | 185:1 | 184:1 | 184:1 |
| 31 | 116:1 | 117:1 | 118:1 | 117:1 | 117:1 |
| 32 | 126:1 | 127:1 | 129:1 | 130:1 | 128:1 |
| 33 | 183:1 | 183:1 | 184:1 | 183:1 | 183:1 |
| 34 | 114:1 | 114:1 | 114:1 | 114:1 | 114:1 |
| 35 | 53:1 | 53:1 | 53:1 | 53:1 | 53:1 |
| *36 | 13:1 | 13:1 | 13:1 | 13:1 | 13:1 |
| 37 | 69:1 | 71:1 | 72:1 | 72:1 | 71:1 |
| 38 | 92:1 | 93:1 | 93:1 | 93:1 | 93:1 |
| 39 | 170:1 | 170:1 | 170:1 | 171:1 | 170:1 |
| 40 | 43:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| 41 | 142:1 | 141:1 | 142:1 | 142:1 | 142:1 |
| 42 | 92:1 | 92:1 | 93:1 | 93:1 | 93:1 |
| 43 | 60:1 | 60:1 | 61:1 | 61:1 | 61:1 |
| 44 | 78:1 | 79:1 | 79:1 | 80:1 | 79:1 |
| 45 | 55:1 | 55:1 | 55:1 | 55:1 | 55:1 |
| 46 | 196:1 | 198:1 | 197:1 | 197:1 | 197:1 |
| 47 | 110:1 | 111:1 | 112:1 | 112:1 | 111:1 |
| *48 | 24:1 | 24:1 | 24:1 | 24:1 | 24:1 |
| *49 | 28:1 | 28:1 | 28:1 | 29:1 | 28:1 |
| *50 | 18:1 | 19:1 | 19:1 | 20:1 | 19:1 |
| *51 | 37:1 | 37:1 | 37:1 | 38:1 | 37:1 |
| 52 | 83:1 | 84:1 | 84:1 | 85:1 | 84:1 |
| *53 | 22:1 | 22:1 | 22:1 | 23:1 | 22:1 |
| 54 | 27:1 | 27:1 | 28:1 | 28:1 | 28:1 |
| *55 | 8:1 | 8:1 | 8:1 | 8:1 | 8:1 |
| 56 | 81:1 | 81:1 | 82:1 | 83:1 | 82:1 |
| 57 | 98:1 | 98:1 | 99:1 | 99:1 | 99:1 |
| 58 | 102:1 | 102:1 | 102:1 | 102:1 | 102:1 |
| 59 | 132:1 | 132:1 | 132:1 | 132:1 | 132:1 |
| 60 | 57:1 | 58:1 | 58:1 | 58:1 | 58:1 |
| 61 | 82:1 | 82:1 | 83:1 | 83:1 | 82:1 |
| 62 | 163:1 | 163:1 | 163:1 | 163:1 | 163:1 |
| *63 | 23:1 | 23:1 | 24:1 | 24:1 | 24:1 |
| 64 | 119:1 | 120:1 | 120:1 | 120:1 | 120:1 |
| *65 | 34:1 | 34:1 | 34:1 | 34:1 | 34:1 |
| 66 | 39:1 | 39:1 | 39:1 | 39:1 | 39:1 |
| 67 | 84:1 | 84:1 | 84:1 | 84:1 | 84:1 |
| 68 | 103:1 | 103:1 | 103:1 | 103:1 | 103:1 |

| | | | | | |
|---|---|---|---|---|---|
| 69 | 41:1 | 41:1 | 41:1 | 41:1 | 41:1 |
| 70 | 67:1 | 67:1 | 67:1 | 67:1 | 67:1 |
| 71 | 42:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| 72 | 70:1 | 70:1 | 70:1 | 70:1 | 70:1 |
| 73 | 35:1 | 35:1 | 36:1 | 36:1 | 36:1 |
| 74 | 43:1 | 44:1 | 44:1 | 44:1 | 44:1 |
| *75 | 28:1 | 28:1 | 28:1 | 28:1 | 28:1 |
| 76 | 44:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| *77 | 28:1 | 28:1 | 28:1 | 28:1 | 28:1 |
| *78 | 30:1 | 30:1 | 31:1 | 31:1 | 31:1 |
| 79 | 52:1 | 52:1 | 52:1 | 52:1 | 52:1 |
| 80 | 44:1 | 44:1 | 44:1 | 44:1 | 44:1 |
| 81 | 116:1 | 116:1 | 116:1 | 117:1 | 116:1 |
| 82 | 68:1 | 79:1 | 83:1 | 92:1 | 81:1 |
| 83 | 55:1 | 55:1 | 55:1 | 55:1 | 55:1 |
| 84 | 43:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| *85 | 38:1 | 38:1 | 38:1 | 38:1 | 38:1 |
| 86 | 61:1 | 61:1 | 61:1 | 61:1 | 61:1 |
| 87 | 46:1 | 46:1 | 46:1 | 46:1 | 46:1 |
| 88 | 66:1 | 66:1 | 66:1 | 66:1 | 66:1 |
| 89 | 44:1 | 44:1 | 44:1 | 44:1 | 44:1 |
| *90 | 26:1 | 26:1 | 26:1 | 26:1 | 26:1 |
| 91 | 83:1 | 83:1 | 83:1 | 83:1 | 83:1 |
| *92 | 34:1 | 34:1 | 34:1 | 34:1 | 34:1 |
| *93 | 34:1 | 35:1 | 35:1 | 35:1 | 35:1 |
| 94 | 49:1 | 49:1 | 49:1 | 49:1 | 49:1 |
| 95 | 39:1 | 39:1 | 39:1 | 39:1 | 39:1 |
| 96 | 43:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| 97 | 42:1 | 42:1 | 42:1 | 42:1 | 42:1 |
| *98 | 34:1 | 35:1 | 35:1 | 35:1 | 35:1 |
| 99 | 50:1 | 50:1 | 50:1 | 50:1 | 50:1 |
| 100 | 43:1 | 43:1 | 43:1 | 43:1 | 43:1 |
| *101 | 33:1 | 33:1 | 34:1 | 33:1 | 33:1 |
| *102 | 32:1 | 32:1 | 32:1 | 32:1 | 32:1 |
| *103 | 33:1 | 33:1 | 33:1 | 33:1 | 33:1 |
| *104 | 30:1 | 30:1 | 30:1 | 30:1 | 30:1 |
| *105 | 27:1 | 28:1 | 27:1 | 28:1 | 28:1 |
| 106 | 42:1 | 42:1 | 42:1 | 42:1 | 42:1 |
| 107 | 51:1 | 52:1 | 51:1 | 52:1 | 52:1 |
| *108 | 33:1 | 33:1 | 35:1 | 35:1 | 34:1 |
| 109 | 50:1 | 50:1 | 50:1 | 50:1 | 50:1 |
| *110 | 24:1 | 24:1 | 24:1 | 25:1 | 24:1 |
| 111 | 50:1 | 50:1 | 50:1 | 50:1 | 50:1 |
| 112 | 41:1 | 41:1 | 42:1 | 42:1 | 41:1 |
| *113 | 27:1 | 28:1 | 27:1 | 28:1 | 27:1 |
| *114 | 9:1 | 8:1 | 8:1 | 9:1 | 8:1 |
| 115 | 42:1 | 42:1 | 42:1 | 43:1 | 42:1 |
| 116 | 41:1 | 42:1 | 44:1 | 45:1 | 43:1 |
| *117 | 22:1 | 23:1 | 25:1 | 25:1 | 24:1 |
| *118 | 21:1 | 21:1 | 21:1 | 23:1 | 21:1 |
| 119 | 132:1 | 132:1 | 125:1 | 125:1 | 129:1 |
| 120 | 80:1 | 76 | 76 | 76 | 77:1 |
| 121 | 49:1 | 47:1 | 49:1 | 48:1 | 48:1 |
| 122 | 183:1 | 184:1 | 185:1 | 184:1 | 184:1 |
| 123 | 39:1 | 39:1 | 39:1 | 39:1 | 39:1 |
| 124 | 44:1 | 43:1 | 44:1 | 44:1 | 44:1 |
| 125 | 56:1 | 56:1 | 57:1 | 57:1 | 57:1 |
| 126 | 74:1 | 73:1 | 74:1 | 74:1 | 74:1 |
| 127 | 45:1 | 44:1 | 44:1 | 45:1 | 45:1 |
| 128 | 154:1 | 153:1 | 153:1 | 149:1 | 152:1 |
| *129 | 18:1 | 17:1 | 19:1 | 16:1 | 18:1 |
| *130 | 20:1 | 21:1 | 20:1 | 21:1 | 21:1 |
| *131 | 20:1 | 19:1 | 20:1 | 20:1 | 20:1 |
| 132 | 123:1 | 123:1 | 123:1 | 122:1 | 123:1 |
| *133 | 38:1 | 38:1 | 38:1 | 38:1 | 38:1 |
| 134 | 55:1 | 54:1 | 55:1 | 55:1 | 55:1 |
| *135 | 28:1 | 29:1 | 29:1 | 29:1 | 29:1 |
| *136 | 32:1 | 32:1 | 32:1 | 33:1 | 32:1 |
| **Yearly FEPTR** | 9,520/136 = 70:1 | 9792/136 = 72:1 | 9786/136 =72:1 | 9928/136=73:1 | |

**(**The values in the Table was computed by dividing each school enrolment with the calculated FTE)

Overall Mean: Total of 136 FEPTR mean = 136 schools

9,894/36 = 72.75 = 72.75

***---Schools in Rural areas**

**Research Question 6**

What is the yearly and overall average of full time equivalent pupil- teacher ratio in Ondo state sampled public junior secondary schools from 2006/2007 to 2009/2010.

Table 5: Yearly average of Full-time Equivalent Pupil: Teacher Ratio in Ondo state public secondary schools

| Year | Total Computed Yearly average FEPTR | Overall Yearly FEPTR Average |
|---|---|---|
| 2006/07 | 70:1 | |
| 2007/08 | 72:1 | 72:1 |
| 2008/09 | 72:1 | |
| 2009/10 | 73:1 | |

**Source:** Author Computation from Table 4.

Table 4 shows the utilization of teachers in Ondo state public junior secondary schools from *2006/2007 to 2009/2010* sessions using the Full-time Equivalent Pupil: Teacher Ratio (FEPTR). For each of the session considered in the study, FEPTR was computed for the whole sampled schools (136) and the overall average for each session stood at 70:1 for 2006/07, 72:1 for 2007/08,72:1 for 2008/09 and 2009/10 value was 73:1. To obtain the overall FEPTR for state, the yearly average FEPTRs, the whole value for all the sessions were added together and the result divided by four (4), the number of years used for the study. This gives a value of 72:1 as an average of full time equivalent pupil-teacher ratio in Ondo state public junior secondary as at the time of study.

This finding depicts that a single teacher in the state secondary school had 72 students to cater for while teaching. This implies over utilization on the part of teachers in the sampled junior secondary schools as at the time of study. The finding runs contrary to the researcher's computation of 25:1 and 31:1 in Table 1 of state data analysis in respect of students' enrolment and numbers of teachers computed from the Nigeria: Digest of Education Statistics of 2010. This confirm that there is a wide gap between document appraisal and the actual situation in schools hence it should not be a yardstick for a clear picture of system efficiency in schools.

The study further revealed that inadequate facilities in schools have made many school managers to merged different arms of classes into single class for teachers to handle. The above result confirms Adeboyeje (2000) opinion on the massive enrolment in Nigeria public secondary schools in which all input resources battled to cope. This result further reveals that the teachers' utilization in Ondo state public secondary schools run contrary to UNESCO standard and that of National Policy on Education specifying a maximum of 40 students per teacher respectively, NPE (2004) & UNESCO (2000).

**Research Question 7**

What were the average weekly numbers of periods assigned to teachers in urban and rural junior secondary schools in Ondo State as at 2009/2010?

Table 6: Teachers weekly periods in Urban and Rural state public junior secondary schools as at 2009/2010

| School Location | 2009/2010 session | | |
|---|---|---|---|
| | No of School | No of sampled Teachers | Average weekly periods of Teachers |
| Urban | **99** | **300** | **15** |
| Rural | **37** | **100** | **35** |

**Research Question 8**

Were the urban junior secondary school teachers more utilized in respect of weekly numbers of teaching periods than the rural secondary school teachers?

Table 6 and 7 findings revealed that teachers in rural schools are being over utilized than their counter pact in the urban schools. The presence of many teachers in the urban schools may have contributed to this under utilization of teachers in the urban schools because availability of many teachers in urban school gives room for fewer periods of teaching and thus makes teaching less stressful for teachers. In the rural schools, teachers are to contend with many teaching periods as a result of teachers' shortfall. This findings confirm Amoo (1982), Egungun (1992),FME, (2005) , Akinsolu (2005), Ibadin, (2010) that shortage of teachers in schools affects teachers' productivity as a result of excess workload.

**CONCLUSION AND RECOMMENDATIONS**

Based on the data collected and analysed, the following conclusion can be drawn:

The utilization of teachers' in Ondo state public Junior secondary schools in Nigeria run contrary to UNESCO standard and that of the National Policy on Education specifying a maximum 40 students per teacher respectively. As the situation is right now, it pose a great challenge to the effective implementation of Universal Basic Education in the state, therefore state government need to address this for better service delivery on the part of these teachers. On the basis of the findings, the following recommendations are hereby made;

- Government should ensure evenly distribution of teachers. The even spread of teachers will

reduce the average high pupil teacher ratio of 72:1 in order to have effective teaching and learning in schools.
- Provision of adequate infrastructure to cater for massive enrolment in schools
- State should develop a yardstick for teachers' transfer so as to checkmate massive transfer of teachers from rural schools to urban schools.

**Implication for Planning Purposes**

With the situation on ground in Ondo state, educational planners in the state should use this study as a baseline for projections for the state teachers' supply and demand. This will assist greatly in addressing any shortfall and any arising logistics in respect of teachers' utilization in the state public secondary schools. An Action Plan for rotational teaching can be incorporated into the school operation system; this will assist greatly in reducing the workloads of some teachers that contend with many periods to teach in schools.

**REFERENCES**

Adeboyeje, R.A (2000) A practical approach to effective utilization and maintenance of physical facilities in secondary schools. In Fadipe, J.O. and Oluchukwu E.E. (Eds) Educational planning and administration in Nigeria in the 21st century, Ondo: NIEPA (pp88-103)

Aghenta, J.A. (1998) Teacher Recruitment and Retention: Issues and Problems in Teachers and Teaching in Nigeria: Issues, Challenges and Prospects N.A. Nwagwu (Ed.), The Nigerian Academy of Education Yearbook, No. 2, 44.

Akinsolu, A. O (2005) Resource Utilization and Internal Efficiency of Public Secondary schools in Nigeria. Unpublished PhD Dissertation, University of Ilorin.

Amoo, A. O (1982) The demand and supply of teachers of secondary schools. A case study of Osogbo LGA 1970/80- 1981/82. Unpublished M.ED Dissertation, University of Ibadan.

Egungun, N.V. (1992) Human resource development and utilization in Nigerian private enterprises. In A.D. Yahaya & A. Akinyele (Eds) Human resource development and utilization, policies and issues. Badagry: Administration staff College of Nigeria.

Federal Government of Nigeria (2004): National Policy on Education. , Lagos: NERDC Press.

Federal Ministry of Education (2005) Education Sector Analysis Report. FME, Abuja.

Federal Ministry of Education (2010) Nigeria: Digest of Education statistics Digest. FME, Abuja.

Federal Inspectorate Service (2009) The State of Education in Nigeria. FME, Abuja.

Ibadin, V.O (2010) An analysis of teachers' utilization in urban and rural secondary schools in the mid- western states of Nigeria: In European journal of Education Studies 2(2) Ozean Publishers

Ndiomu, C.B. (1992): Human resource development and utilization in the Nigerian armed forces. In A.D. Yahaya and A. Akinyely (Eds) Human resource development and utilization: policies and issues. Badagry: ASCON.

Nwagwu, N.A. (1998) "Teachers' Militancy, Productivity and Standards in Education Today and in the Future" in Prospects N.A. Nwagwu (Ed.) The Nigerian Academy of Education Yearbook No. 2. 182.

Oguntoye, A.O (1983): Input – output analysis in Nigeria Secondary school system. Lagos educational review- A journal studies in Education, 2 (1), 99-107.

Ojedele, P.K. (1986): Effective allocation co-ordination and utilization of human resources through the system approach.: A case study of college of education, Ila – Orangun. An unpublished M.ED thesis, University of Ibadan.

Oshodi A.O. (1991): Resource utilization and students academic performance in kwara.State secondary schools. Unpublished M.ED Thesis, University of Ilorin.

Oyeka, C.F. (2002), An Analysis of Resource Management in Public Secondary Schools in Edo State, Unpublished Doctoral Thesis, University of Benin, Benin City; Nigeria.

Roach, K.A (1995): A draft report on time tabling and scheduling in secondary schools. St kitts and Nevis. Basic Education Project. http:// www mcye. Gov. ar/oea/experiencious/skits/ing/info.html.

State, Ministry of Education, (2010): 'Report', Department of Planning, Research and Statistics, Alagbaka, Akure.

STRB (2008) School Teachers Review Body Seventeenth Report. Accessed on http://www.media.education.gov.uk on 8th July 2010

UNESCO, (2000). The state of education in Nigeria. Lagos. UNESCO

NICEF, (2010). Situation Analysis (SITAN) of Basic Education in Nigeria. Abuja UNICEF Country Report.