ANALYSIS OF EDUCATION PRODUCTIVITY OF SECONDARY SCHOOLS IN ONDO STATE, NIGERIA

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ABSTRACT

This study was necessitated by the general perception of a decline in the quality of education in Nigeria especially at the lower levels of the system. It was the aim of this study to find out the trend of educational productivity in Ondo state and whether the teachers are properly managed by the state teaching service commission and Ministry of Education. Two research questions and a hypothesis were formulated to guide the study. The study adopted the descriptive survey design. Secondary school principals drawn randomly across the nine Educational Zones of the state were respondents to the Secondary Education Resources Allocation and Productivity Questionnaire (SERAPQ) which was used to collect relevant data. The money value of all the resource inputs used in each of the sampled schools were computed and deflated by changes in their prices to make comparison in real terms possible. The output were calculated using the objectives of Secondary Education as measuring standard to answer the research question and the chi-square (X^2) on 0.05 level of significance was used to test the formulated hypothesis. The study revealed that Secondary Education in Ondo State was productive with input increase of 30 percent and output increase range between 39 percent and 139 percent. The study further revealed that there is a significant difference in the distribution of teachers by qualification. Based on the findings; it was recommended that more teachers be recruited for some core subjects and that attractive pay structure should be created for the teachers. Suggestion was made for further empirical studies.

Keywords: Educational Productivity, Qualities of Education, Teaching Service Commission, Resource Allocation, Secondary School

INTRODUCTION

The poor recurring performance of senior secondary students in the final Senior School Certificate Examination despite the commitment of government and private resources to Secondary Education calls for investigation. Many concerned citizens have cried out over the low level of student's performance in public examination. Reasons giving for such low performance range from poor quality of teachers, inadequate funding of schools, poor maintenance of school facilities and few secondary schools that have qualified and enough teaching staff has low class utilization rates. Ibunkun (2003) stated that while full- scale education sector analysis has not been carried out. Observable indices point to the declining performance in the state schools. He remarked that there has been persistent higher performance of students from Ogun State secondary schools at the annual NECO/WAEC SSCE compared with those from Ondo state.

The success of any organization is a resultant effect of the quantity and quality of its working force. Ayodele (2000) has argued that no matter how efficient and effective and administration is, he hardly achieves success without the support and co-operation of well- qualified and dedicated staff. Highly qualified teaching staffs are educations best resources and asset. The influence of experience on teachers' performance in schools has been highlighted by many researchers. Akinleye, (2001) Commeyas, (2003) and Ijaiya (2000) have given different opinions about teaching experience. Their arguments center on the fact that experience improves teaching skills while students learn better at the hands of teachers who have taught them continuously over a period of years.

Adeyemi (1998) exclaimed that the more experience teachers in a school system, the higher would be the recurrent cost of education. As such Charles (2000) suggested the need to involve retired teachers because of their long years of experience to teach in Nigerian schools. Nel et al (2004) posited that people are form of capital in business, if astutely managed and developed employees can improve the organizations efficiencies, effectiveness and financial results. If teachers are regarded as a form of capital then schools are bound to improve tremendously. Combs (1968) asserted that teachers are the largest most critical inputs of an educational system. Perhaps that was why Famade (2003) pointed out that the quality of teachers is an essential indicator in the measurement of productivity in the school system and suggested the need to enhance the professional competence of the teachers through seminars and in-service programme. A good numbers of studies have shown that student achievement has a positive relationship with the quality of teachers. Idiaghe (2004) revealed that the training teachers receive have been proved to be important to students academic success.

On the relationship between educational resources and students' academic productivity' Idiaghe (2004) concluded that teachers' qualification and adequate facilities were determinant of students' success in secondary schools. The study revealed that availability or non- availability of facilities influence the academic performance of students in Delta State. This is in consonance with Nwangwu (1997) who believed that education resources facilitate teaching - learning process. Azhievboloria (2005) on staffing ascertained that the school is an essentially human organization because it has human operatives. The need for adequate school's staffing is clearly demonstrated by the way secondary school students continue to move from one school to another in search of schools with better qualified teachers.

The national policy on Education (2004) prescribes a maximum of 40 students in a class but in most secondary schools in the state, the average class exceeds 50. Fabunmi (2000) in his study pointed out the significance of teacher-pupil ratio to cognitive learning in the school. The school climate is determined by the resources especially classroom under which the teachers and the students operate which influence teaching-learning process. Un-conducive classrooms create stress on teachers and students negative attitudes to school and learning. Uwheraka (2005) in his study revealed that facilities below approved standard could also lead to reduction in quality or teaching and learning in school resulting to poor student academic performance. In the same vein Olutola (2000) emphasized those facilities such as desks, seat, chalkboard, teaching aids are ingredient for effective learning.

This study theoretically employs the frame work of the social system theory, centered in the school as a social system made up of human and material resources. The human resources are teachers and the non-teaching staff while material resources include classroom, desk, toilets, offices, book and teachers aids. The idea of a system in this study helps in analyzing the achievement of the objective of Secondary Education in Ondo State.

Statement of the problem

There is a general perception of a decline in the quality of Education in Nigeria especially at the lower levels of our Educational system, secondary schools inclusive. Most of the teachers are not professionally qualified hence the college of education and the state university organized weekend and sandwich programmes to upgrade the professional teachers at deferent level. From the experience of the researcher many of the teachers have benefited from these programmes but it is surprising to observe that most graduate of secondary school cannot be regarded as literate in terms of simple writing and calculating. They can not carry out simple measurement as craft men in training. The products of our secondary school especially rural students are not practically qualified as office assistant and domestic servants even when they are certificated. This unhealthy situation in the state

poses to mind certain questions; what is the trend of productivity of secondary schools in Ondo State? Are the teachers not properly managed by the state teaching service commission and ministry of education?

PURPOSE OF THE STUDY

The need for sound, qualitative secondary education as a foundation for brighter tertiary and higher education as tool for scientific, technological, economic and social political development is well know. Inadequate utilization of available human and material resources by education managers could result to poor academic productivity. Hence it is necessary to investigate the analysis of Secondary Education productivity in Ondo State. This study is geared toward answering the following questions:

1. What is the level of resource availability to schools in Ondo state?

2. What is the trend of educational productivity in Ondo state?

3. Are the teachers not properly managed by the state teaching Service Commission (TESCOM) and Ministry of Education?

Research Hypothesis

Based on the problem defined the hypothesis below was postulated.

Ho1: There is no significant difference in the distribution of teachers by qualification in secondary schools among the Educational Zones in Ondo State.

RESEARCH METHDOLOGY

This research becomes necessary as the outcomes of the study are of importance for educational planners, policy makers. Both Federal and State governments are to allocate resources to education in proportion to students' population.

The study adopted a descriptive survey design. The population of this study comprises of all public secondary schools in Ondo State. A random sample of 54 out 300 Secondary Schools in Ondo State was taken for this study. The 300 Secondary Schools were listed and given a serial numbers. The serial numbers were written on a piece of paper which were later folded and put in nine different small bags on Education Zonal basis government basis. Nine boys were called to pick any of the folded papers from any of the bags through ensuring that no more than six folded papers were picked from any of the bags. The 54 sample schools were distributed as follows: 50 mixed school three female only. 2 are from riverine areas. 23 are from rural areas and 29 are from urban areas. The pupils, teachers and facilities in the 54 schools were the sample used for the study.

Table 1. Study Sample

S. No.	Educational Zone	Number of Sample Schools	Student's Enrolment	Number of Teachers	Teacher-Student Ratio
1	Akure	6	4394	201	1:22
2	Akoko North	6	1803	68	1:27
3	Akoko South	6	1202	47	1:26
4	Owo/Ose	6	2404	99	1:24
5	Ondo	6	3514	156	1:23
6	Idanre/Ifedore	6	2636	87	1:30
7	Ileoluji/Okeigbo	6	1453	67	1:22
8	Okitipupa	6	1458	73	1:20
9	Irele	6	816	43	1:19
	Total	54	19680	841	1:23

www.journals.savap.org.pk
288

The researcher developed a questionnaire called Secondary Education Resources Allocation and Productivity Questionnaire **(SERAPQ)** which served as the main instrument for data collection. The SERAPQ consisted of three sections. Section A sought for background information on the secondary school. Section B sought for school enrolment figures, number of teachers by qualifications, and the share of the school approved vote for Education, number of furnished classroom, Resource Capacity of the School, Recurrent expenditure and teachers work load. Section C sought for student's performance in WAEC/SSCE between 1997 and 2007 and that of NECO/SSCE between 2000 and 2007. The instruments were given to two specialists in Educational Management and one Economist with regard to terminology that was used to measure the intent of study. Their corrections were used in the reconstruction of the instrument. To ensure the reliability of the instrument, a test-re-test technique was employed. The questionnaire was administered in a pilot study and the data collected was subjected to correlation analysis using the Spearman Brown Formula. A correlation co-efficient of 0.98 was obtained.

After selecting a school for participation in the study, a letter was sent to the principal through their respective Area Education Officer with explanation on the nature and importance of the research. The SERAPQ was included in a packet that was mailed to the school approximately one month prior to the scheduled on-site visit and collection of the completed questionnaire. The completed questionnaires were collected personally while others were collected through their respective Area Education Officers. 54 respondents comprising all the principals of the sampled schools completed the questionnaire properly. This amount to 100% return rate. The money value of all the resources inputs used in each of the sample school were computed and deflated by changes in their prices to make comparison in real terms possible. The inputs were then aggregated into single input index. The outputs were calculated using the objectives of Secondary Education as a measuring standard. The three output indices calculated are Academic, Length of Schooling and Economic to answer the research question. The chi-square (X^2) test was used to test the research hypothesis. The null hypothesis was rejected or upheld at 0.05 level of significance.

RESULTS

The results of the data analysis are presented according to research question and hypothesis.

Research Question 1: what is the level of resource availability to schools in Ondo State?

Table 2. Measures of educational Inputs (Real Terms) in Ondo State 1997/1998-2006/2007.

School Year	Teachers Time (₦ b)	Student Time (₦ b)	Non-Teaching Staff (₦ b)	Building (₦ b)	Books & Stationary (₦ b)	Furniture & Equipment (₦ b)	Light Fuel & Water Supply (₦ b)	Total	Index
1997-1998	6.15	41.42	0.91	6.0	28.11	14.50	1.25	98.34	100
1998-1999	7.65	60.50	0.95	5.91	30.32	15.10	0.82	121.25	123
1999-2000	7.82	80.60	0.71	6.31	20.81	12.16	0.76	129.17	131
2000-2001	7.25	67.73	0.69	9.65	30.68	17.25	0.95	134.21	137
2001-2002	5.99	68.56	0.85	9.76	29.53	23.91	0.84	139.44	141
2002-2003	5.99	88.41	0.84	11.34	25.82	29.31	0.85	162.56	165
2003-2004	4.96	91.62	0.70	20.56	16.36	4.60	0.78	139.58	142
2004-2005	5.50	53.37	0.63	26.51	16.50	25.31	0.74	125.56	128
2005-2006	6.50	50.33	0.67	25.32	18.30	24.56	0.81	126.49	129
2006-2007	7.50	97.36	0.91	9.20	9.60	10.31	0.64	127.52	130

From table 2, the total Expenditure of the sampled schools in term increased from N98.34 billion in 1997-1998 session to N127.52 billion in 2006-2007 session. The total input index increased by 30 percent during the same period.
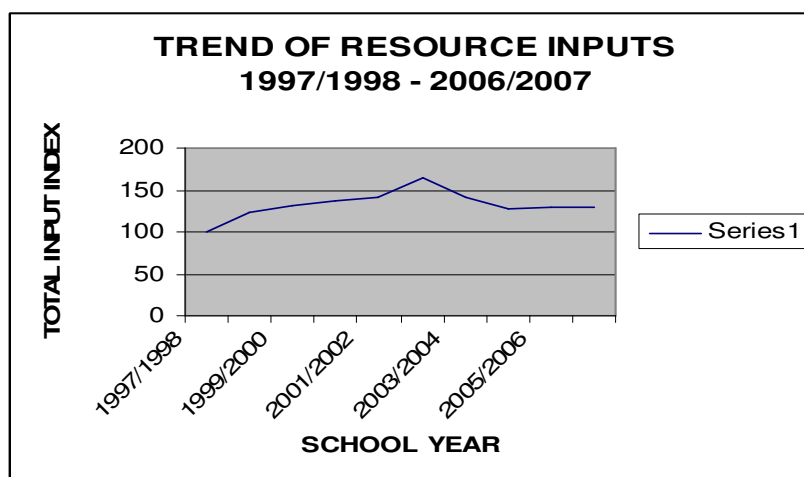
Fig. 1 Trends of Resource Inputs

Research Question 2: what is the trend of Education productivity in Ondo State?

Table 3. Weighted Indices Of Final Year Students Waec/Neco Ssce 1997-1998 to 2006-2007 (1998=100).

School Year	5 credit including Math & Eng	5 credit And above	Less than 5 credit	No credit	Total	Index
1997-1998	1.620	1030	4162	1594	7406	100
1998-1999	733	1560	4326	1662	8287	112
1999-2000	825	1425	4420	1695	8365	113
2000-2001	1841	564	4516	1681	8602	116
2001-2002	1862	636	4683	1784	8965	121
2002-2003	1630	1436	4631	1620	9317	126
2003-2004	1560	1520	4686	1861	9627	130
2004-2005	1460	1681	5321	1868	10330	140
2005-2006	1468	1688	5436	1875	10467	141
2006-2007	1516	1693	5784	1983	10976	148

Table 3 is a qualitative measure of secondary school output. The data on WAEC/NECO SSCE result used in calculating the Academic Index were classified into four groups and each of the groups was attached different weight. The first were those with 5 credits and above including Mathematics and English Language Either WAEC/SSCE or NECO/SSCE and were given index of 2.5.

The second group are those with five credits and above in either WAEC/SSCE or NECO/SSCE and were given a weight of 2;

The third group were those with less than five credits in WAEC/SSCE or NECO/SSCE and were given a weight 1.5 while those with no credit were given a weight of 1.The result showed that Academic Index of output of Secondary Education increased by 48% between the period under investigation. That is between (1997/1998 and 2006/2007 Academic session)
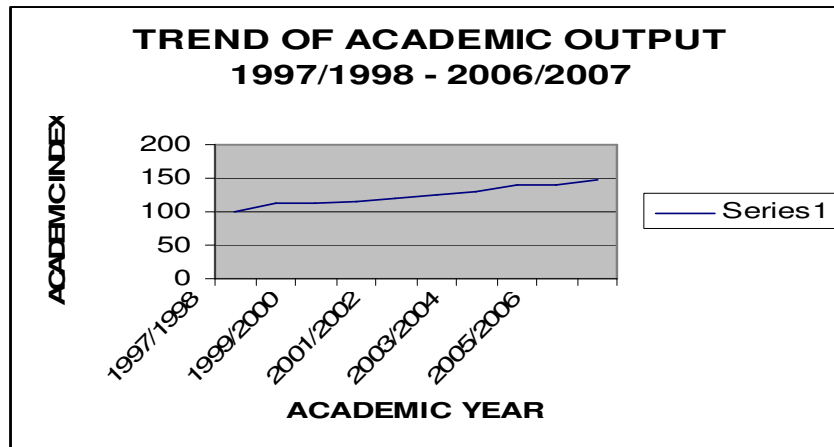
**TREND OF ACADEMIC OUTPUT
1997/1998 – 2006/2007**

Fig. 2 Tends of Academic Output

Table 4. Weighted Indices Of School Leaver Class Attained

School	SS 1	SS 2	SS 3	Total	Index
1997-1998	4623	5635	7364	17622	100
1998-1999	5686	6736	8265	20687	117
1999-2000	6871	7351	9625	23847	135
2000-2001	6962	7632	11,260	25854	147
2001-2002	7636	8663	11650	27949	159
2002-2003	8656	9620	12641	30917	175
2003-2004	9685	11,260	13636	34582	196
2004-2005	10,265	11650	13725	35750	203
2005-2006	11,860	12641	14966	39510	224
2006-2007	12120	13526	16524	42180	239

From table 4 the Index Comprise of student in SS 1, 2 and 3 of the senior Secondary Education System. A simple weighting system was chosen. SS One students were given weight of 1.Those in SS two and three were given a weight of 1.5 and 2 respectively. The increase is 139%. This result indicated the ability of Secondary Schools in Ondo State to retain students till the end of the School Certificate Course.

Table 5: Economic Index Of Educational Output 1997-1998 to 2006/2007 (1998=100)

School Year	Final Year	Estimated	Index
1997-1998	5646	37984	100
1998-1999	5865	39458	104
1999-2000	6268	42169	111
2000-2001	8265	55604	146
2001-2002	8675	58363	154
2002-2003	9326	62742	165
2003-2004	9656	64962	171
2004-2005	10,626	71488	188
2005-2006	10,925	73500	194
2006-2007	11,216	75458	199

The data collected on the expected earnings of the final year students were used to calculate the economic index. The result showed an increase of 99%. From table 2, 3, 4 and 5. The input increased by 30% while total output increase ranged between 48% and 139%. This revealed that Secondary Education in Ondo State was productive between 1997/1998 and 2006/2007 Academic Session.
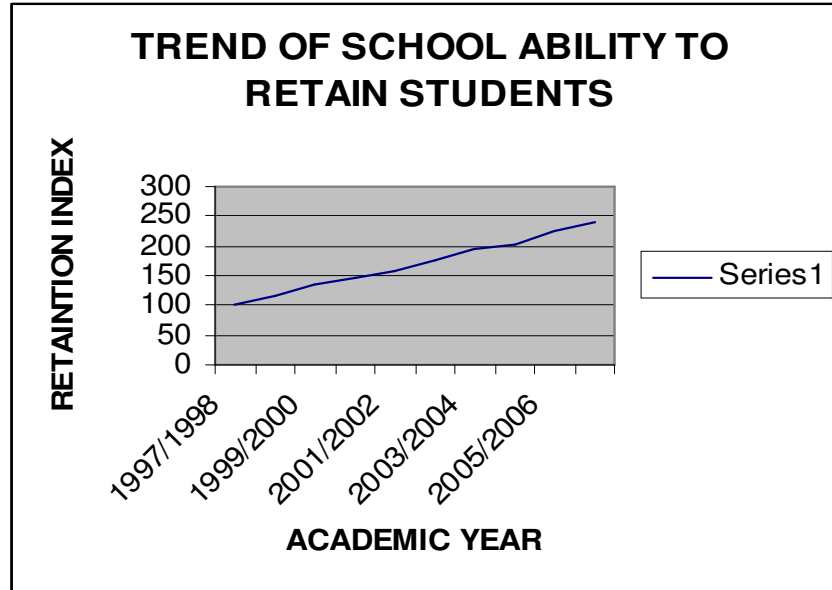
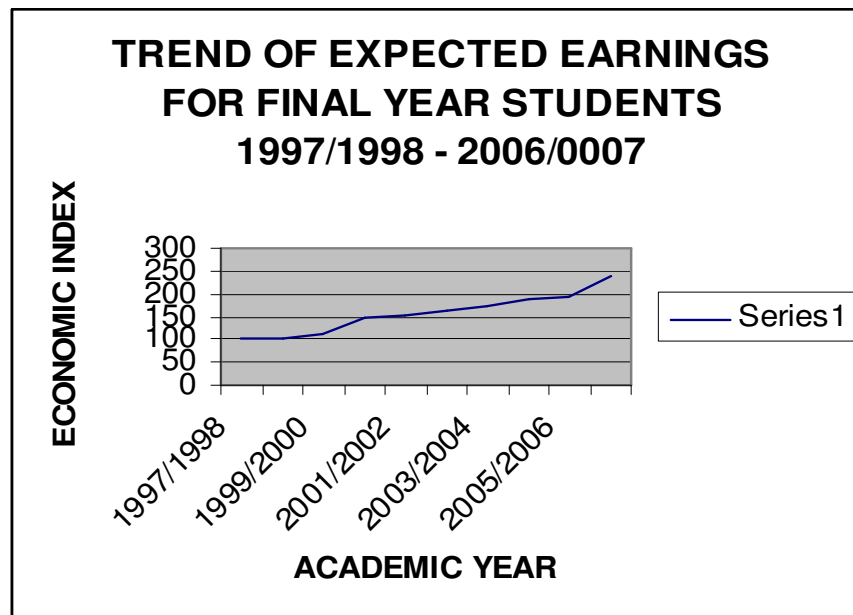

Fig. 3 Tends of School Ability to Retain Students

Fig. 4 Tends of Expected Earnings for Final Year Students

Research Hypothesis

H_{O1}: There is no significant difference in the distribution of teachers by qualifications in schools among the Educational Zones of the state.

Table 6. Chi-Square Bivariate Table of The Distribution of Teachers by Qualification in Schools among the Educational Zone of Ondo State

Educational Zone	With Teaching Qualification		Without Teaching Qualification B.Sc/B.A/HND	Total
	Graduate	NCE		
Akure	22 (32.03)	105 (104.92)	74 (64.05)	201
Akoko North	15 (10.83)	38 (35.50)	15 (21.67)	68
Akoko South	13 (7.49)	24 (24.53)	10 (14.98)	47
Owo/Ose	19 (15.77)	58 (51.68)	22 (31.55)	99
Ondo	16 (24.86)	72 (81.43)	68 (49.71)	156
Idanre/ Ifedore	13 (13.86)	50 (45.41)	24 (27.72)	87
Ileoluji/ Okeigbo	15 (10.68)	30 (34.97)	22 (21.35)	67
Okitipupa	11 (11.63)	39 (38.11)	23 (23.26)	73
ele	10 (6.85)	23 (22.45)	10 (13.70)	43
TOTAL	134	439	268	841

From Table 6: Chi-Square calculated value (98.26) is greater than critical value (26.296) at 16 degree of freedom on 0.05 level of significance. This showed that there is a significant difference in the distribution of teachers by qualification in Secondary Schools in Ondo State, Nigeria.

DISCUSSION

The result of this study revealed that the secondary school system was productive during the period under investigation. The study also revealed a significant difference in the distribution of teachers by qualifications in secondary schools among the senatorial districts of Ondo State X cal 98.26> critical value 26.296 at 16 degree of freedom in 0.05 level of significance. It was further revealed that there are 268 (32%) teachers without teaching qualification. These findings are consistence with Ayodele (2000) Idiaghe (2004) Nwangwu (1997). Also the existence of teachers without teaching qualification and majority of those with teaching qualifications are NCE holders; which are mainly meant to teach in the junior secondary schools could affect students academic achievement and this is consistence with Famade (2003) and Uwheraka (2005).

It was discovered that none of the sampled Principals (even the female principals) expresses satisfaction and it is a known fact that it is when the teachers need (principals inclusive) are fulfilled that they can fulfill the needs of the organization. This is in consonance with Ibukun (2003) who affirmed that there is no amount of capital injection into Education system without a change of attitude, better skill acquisition and overt commitment on the part of the teaching force that can produce the much-desired change in school performance. In addition, secondary school teachers do not enjoy such benefits such as car loans, housing loans, Christmas bonus to mention but a few.

CONCLUSION AND RECOMMENDATIONS

The major objective of this study was to investigate the analysis of productivity of secondary education in Ondo state with a view to suggest measures that could further increase the level of productivity of secondary schools in the state. The study revealed that the secondary school system was productive during the period under investigation. The study further revealed that there is a significant difference in the distribution of teachers by qualification in secondary schools in Ondo State.

It is recommended that efforts should be made to recruit more teachers of some core subjects like Mathematics and English Language for the rural areas where they inadequate. The teachers have been adequately sent to seminars, workshops. However it is recommended that the teachers should be encouraged to pursue in service training in other to enhance their professional competence and an attractive pay structure should be created for teachers as none of the sample principals expresses satisfaction with their joy especially in this period of economic meltdown. Finally it is recommended that this type of investigation be carried out in others levels of the educational system.

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