EDUCATION COST AS A CORRELATE OF ACADEMIC PERFORMANCE IN KWARA STATE PUBLIC SECONDARY SCHOOLS

A. A. Atolagbe, A.Y. Abdulkareem & S. Oyeniran

Abstract

This study examined the cost of delivering public secondary education in Kwara State between 2005-2009; correlate this with learning outcomes attained by students during the period. Descriptive survey design of the relationship type was adopted for the study. Random sampling technique was used to select the sample schools in the selected Local Government Areas, this was to make sample truly representative of the population as every school has equal chances of being selected. A researcher designed instrument entitled "Secondary Education Cost and Academic Performance Checklist" (SECAPC) was used to collect data. Five research questions and two hypotheses were raised. The research questions were answered using percentages while hypotheses were tested at .05 significant level, using Multiple Regression Analysis. The result indicated that average of 13.1% of the state government on education was expended on secondary education. Cost sharing during the time was less than 1%, while students' academic performance increased numerically; it was poor in the context of state and national expectations. The study established that there was no significant relationship between cost and academic performance. The study recommended a greater government financial injection to the subsector and greater parents' involvement in funding secondary education through cost sharing modalities so that significant impact of the fund injected to the sector is witnessed.

Keywords: Public cost, Cost sharing, Academic Performance, Capital cost, Recurrent cost.

Introduction

It is widely believed that education remains the bedrock for the development of any society. It is closely associated with development and it is a driving force behind the socio-economic development of serious nations of the world. Education is the vehicle through which nations of the world attain prominence when they unlock doors of modernization and close behind them, doors of poverty and deprivation. Education is an instrument for effecting national development (Mbipon, 2005). Education is a vehicle for a nation to achieve

greatness (Oyedepo, 2009), a worthwhile investment in education will lay a true foundation for an enduring development (Oyedepo 2009). Atolagbe (2011) was of the opinion that the Nigerian educational enterprise has been growing at a very high rate, schools have witnessed large enrolment and the number of schools has increased in many folds across the country to meet the demand occasioned by large enrolments.

The increase in demand for education implies that government will have to increase her spending on education to meet this demand; this translates to a corresponding increase in the cost of delivering education to her citizens. The Kwara State government has been expending large amount of her resources on education. Despite the lean resources at the disposal of the government, it has affected an increase in the amount of monetary reseources committed to education especially the secondary education. The government committed over 30 billion naira on the secondary education sub-sector between 2005 and 2009, this amounted to an average of 6 billion naira annual expenditure on secondary education over the period and in the year 2010, government expenditure on education stood at 9.08 billion naira. (KMHCD, PRS Division 2010).

The idea behind this huge resource allocation to secondary education in the state was to revamp the glory of the secondary education sub-sector, as it was then plagued by poor academic performance, staff and students' misconduct, cultism, inefficiency and general lack of order and direction. It is with this background knowledge of the state of secondary education in Kwara State public secondary schools that requires an assessment of the influence of government's recent rescuing efforts in the sector. This study is aimed at finding out the relationship that exists (if any) between increased education expenditure and academic performance of students in Kwara State public schools. Hence, this study examines the influence of government increased cost of delivering secondary education on academic performance of public secondary schools.

Review of Related Literature

Education expenditure is an investment that can foster economic growth, hence productivity, contributes to personal and social development and reduces social inequality. Afolabi (2008), remarked that. "For schools to function effectively, they need sufficient money. Akangbou (1985) defined cost of education as the real resources used in the production of all human assets.

Durosaro (2000) stated that educational expenditure represents only the financial resources allocated to the educational sector for the purchase of goods and services during a given year. Educational cost may be either private or social in nature. Oyeniran (2008) observed

that private costs of education are borne by individual students and their families, while social costs of education are borne by the public through the government. The proportion of the total financial resources devoted to education is one of the key choices made by governments, enterprises, students and their families.

Students' academic performance refers to the sum total results of a learner's experiences during and after undergoing some academic activities. Students' academic performance borders on educational output measurement. The output of the educational system like in any input – output process, depends to a large extent on its inputs (Atolagbe 2011). However, educational outputs are intangible, and cannot be measured like industrial output. Akangbou (1985) suggested the use of objectives of education in each country as the basis for measuring output of the education system. For students who continue their education after completing a level, the output measured is referred to as the "length of schooling" index of output. The second index of output tried to assign values to school leavers according to their academic achievement, he called "academic index" of output while the third index attached economic values to school leavers as they prepare to enter the job market, this he called the "economic index" of output. However, the general consensus measuring school output among scholars was the use of academic index using students' final results in external examinations.

The results of final year examination conducted by WAEC and NECO, Nigeria's two foremost examining bodies were not cheering. Out of the 1,369,142 candidates who sat for WAEC examination in 2008 only 188,442 (13.7%) obtained five credit passes and above in English, Mathematics and three other subjects (Punch, 2009). NECO registered 307,744 students for its Nov/Dec 2009 Nov/Dec SSCE, only 86,372 (27.7%) candidates secured five credits and above including English and Mathematics.

The blame for poor academic performance cut across the stakeholders in the education landscape. Adetayo (2009) reported laziness on the part of Nigerian pupils. WAEC (2009) insisted that the result was a product of long years of neglect of the education sector while students were blaming their failure on the examining bodies.

Akinrinade (2009) identified under funding, bureaucracy and lack of quality teachers and students as ills militating against the success of public schools. As if to corroborate Akinrinade's assertion, on poor funding, the UNESCO report on government education expenditure of various countries as percentage of GDP between 1980 – 2009, ranked Nigeria 177 with 0.8% out of 194 countries while Sudan ranked 1st with 27.8%.

The Vanguard Newspaper (2012) summarized the ills of the Nigerian education sector succintingly when it said "perhaps the most severe of the problems is poor funding which directly or indirectly leads to other perennial setbacks-shortage of qualified staff, dearth of infrastructure, inadequate classrooms and offices, proliferation, insufficient admission spaces, examination malpractice, cultism, brain drain, inadequate laboratories for teaching and research, shortage of books and journals, indiscipline, low remuneration, inconsistent and ill-conceived policies.

It is very sad that Nigeria ranked low in the education expenditure index as a ratio of Gross Domestic Product (GDP), Nigeria spends less than 9% Swaziland 24.6%, Lesotho 17%, South Africa 25.8%, Cote Dvoire 30%, Burkina Faso 16.8%, China 31%, Kenya 23%, Uganda 27%, Tunisia 17% and Morocco 17.7%. in 2012, N400.15 billion was allocated to education sector, this represents a meager 8.4% of the budget.

Methodology

This study was a descriptive research design of the survey type aimed at collecting existing data for the purpose of describing existing conclusion. The population for this study was 233 public secondary schools spread across the 16 local government areas of Kwara State. Multi-stage random sampling technique was used. Ten local government areas were selected using simple random sampling technique in the first stage. In the second stage 100 schools were selected out of the 189 schools in the sampled local government areas using systematic sampling technique. One hundred (n) sample was selected with a sample size of 1.8. A researcher designed instrument entitled "secondary Education cost and Academic Performance Checklist" (SCAPC) was used to draw relevant information from the respondents. The data collected was analyzed using frequency counts and percentage to answer the research questions while Analysis of Variance and Multiple Regression was used to test the hypotheses formulated at 0.05 level of significance.

Research Questions

The following research questions were raised in order to give a clearer guide to the study.

i. What is the public cost of secondary education in Kwara State?

ii. What is the pattern of secondary education cost in the state?

iii. What proportion of education budget is spent on secondary education in Kwara State.

iv What proportion of the secondary education cost in the State was borne by the parents?

v What was the academic performance of secondary school students in Kwara State between 2005 and 2009?

Hypothesis 1

There is no significant relationship between public cost and academic performance in Kwara State Public Secondary Schools.

Hypothesis 2

There is no significant relationship between shared cost and academic performance in Kwara State Public Secondary schools.

Presentation of Results

Research Question 1:

What is the public cost of secondary education in Kwara State?.

The answer to this question was derived from the recorded actual spending of government on recurrent and capital expenditures. It excluded costs incurred by parents of students.

Table 1: Cost of Secondary Education in Kwara State

Year	Capital cost	Recurrent cost	Total cost
	N	N	N
2005	1,492,930,000	2,164,366.264	3,657,096.264
2006	2,194,593,000	2,699,489,981	4,894,054.981
2007	1,842,567,000	2,858,284.766	4,942,544,461
2008	3,529,872,299	2,883,634,761	6,413,507,040
2009	4,906,872,374	2,979,634,761	8,886,507,140
Total	13,966,834,670	13,585,402,530	27,893,706,890

Source; MOEHCD (PRS Division),Ilorin;(20100

As shown in Table 1, the cost of secondary education in the state was almost evenly distributed between capital and recurrent costs. The total cost of secondary education between 2005 and 2009 stood at N27,893,706,890. Total cost increased by 25.3%

between 2005 and 2006, it dropped by about 1.0% in 2007 while in 2008 it increased by 22.9% over and above 2006 cost

Question 2:

What is the Pattern of Secondary Education Cost in the State?

Table 2. Cost of Secondary education in Kwara State

Year	Cost of Education	% Change
2005	3,657,094,264	25.3
2006	4,894,054,981	1.0
2007	4,042,541,461	22.9
2008	6,414,507,040	22.9
2009	8,886,507,140	27.8

Source; MOE&H CD, Ilorin (2010)

Table 2 shows a variation in education cost patterns. In 2006 there was 25.3% increase in total cost of secondary education in the state using 2005 as the base year. The cost dropped by 1% in 2007, but increased by 22.9% and 27.8% in 2008 and 2009 respectively.

Research Question 3

What is the proportion of the state's education budget spent on secondary education annually?

Table 3: Kwara State Education Budget

Year	Educationbudget Estimate (N)	Secondary education Budget N	% b/a
2005	33,964,563,837	4,249,914,712	12.5
2006	33,780,690,196	4,857,728,532	12.8
2007	31,749,274,432	7,303,293,342	16.3
2008	55,717,308,559	7,802,699,401	12.5
2009	74,415,669,628	10,293,404,103	12.6
Total	229,627,500,100	34,917,097,904	13.1

Source: Ministry of Education and Human Capital Development Ilorin.(2010)

Table 3 shows that, the ratio of the secondary education budget was constant in the first two years, before rising to 16.3% in 2007. Over the five year period, the government spent about 13.1% of the state education budget on the secondary education sub-sector.

ARTICLE

Research Question 4:

What proportion of the secondary education cost in the state was borne by the home / parents?

To answer this question, the researcher used the figures for levies and fees charged by the school authorities during this period.

Table 4: Proportion of secondary education cost burden borne by parents

Year	Secondary education Cost Actual (N)(a)	Levies/fees paid by parents (N) (b)	% of b/a
2005	3,657,096,264	633,916,600	0.173
2006	4,844,034,981	780,105,000	0.159
2007	4,942,541,461	821,016,000	0.166
2008	6,417,507,040	737,280,000	0.115
2009	8,886,507,140	626,215,000	0.070
Total	27,893,706,890	3,598,532,000	0.129

Source Ministry of education and school principals (2010)

Table 4 shows that, shared cost takes a very small proportion of the total secondary education cost in the state. This was the time the state formerly commenced the full implementation of the universal Basic Education Programme which ensured free tuition for the lower secondary school classes.

Research Question 5

What was the academic performance of students in Kwara State Public Secondary Schools?

Table 5 : Students performance in WASSCE between 2005 and 2009

Year	Number Enroled	5 credits with Eng & Maths	%	5 credit in any dher subjects	%
2005	13,645	2,276	16.7	3,256	24.0
2006	14,050	2,110	15,0	3,240	23.1
2007	13,505	2,217	16.4	3,658	27.1
2008	13,400	2,723	20.3	2,842	28.7
2009	13,820	2,687	19.4	3,789	27.4
Total	68,420	12,013	17.6	17,183	26.0

Source: Ministry of Education and Human Capital Development, WAEC and Field data (2010).

Table 5 shows that 68,420 candidates were enrolled for WASSCE between 2005 and 2009. Out of these 12,013 (12.6%) had five credits English and Mathematics inclusive. 26.0% of these figure scored 5 credits and above in any other subjects. The table portrayed

a poor performance in the examination and there is an urgent need for better performance, but the number of successful candidates in the examination continued to increase every year.

Hypotheses Testing

Figure 1: Coefficient of correlation among public cost, shared cost and academic performance.

Academic performance	**public cost**	**shared cost**
1.00	694	.924
	1.00	.694
		1.00

The regression coefficient of relationship between public costs (.694), shared cost (.924) was positive it shows strong positive relationship with shared cost as shown in figure 1

Analysis of variance (ANOVA) was used to accept or reject the research hypotheses.

Table 6: Multiple regression analysis between public cost, shared cost and academic performance.

Variables Entered	B	Stad Error	Beta	T	R^2
Constant	142,629	11,515		12.301	.010
Public Cost	1.778	.000	0.099	-.165	
Constant	291,361	149,712		1.944	
Shared cost	-9.157	.099	-.093	-921	.009

R^2 = .010, .009 (PS <.05).

R^2.010 means about 1% of the change in academic performance of students was due to the influence of public cost, while R^2 .009 means .9% of the variance in students' academic

performance can be traceable to the influence of shared cost. These show little or no significant influence of the two variables on academic performance of students.

Table 7: Summary of Analysis of variance between public cost, shared cost and academic performance.

Models	Sum of sqs	df	Means of sq	F	P	Decision
Regression	5.427	1	5.427	0.004	.948	Ho1
	124639.22	98	12.76			
Accepted						
Total	124644.75	99				
Regression	1069.064	1	1069.064	.846	.339	Ho2
Residual	1235576.69	98	1260.976			
Accepted						
	124644.75	99				

P > .05

Table 7 shows that the two hypotheses were accepted because the significant P3 (.948, .359) are greater than the significance level (.05) at which the models were tested. The null hypotheses were accepted and this implies that, there were no significant relationship between public cost of education and academic performance as well as shared cost and academic performance in Kwara State public secondary schools.

Discussion of Findings

The research finding as shown in Table 1 revealed that the cost of secondary education in Kwara State has increased tremendously over the last five years. The recurrent cost appears constant and marginal in nature. Capital cost increase has been significantly higher every year than the previous years. Table 2 revealed that between 2005-2009, government has continued to spend about 13% of the education budget on secondary education while

spending the remaining 87% on basic and tertiary education. It shows that the secondary education sub-sector was grossly underfunded. The cost sharing pattern revealed that parents have played very little role in funding secondary education in the state. Their portion of the cost burden was less than 1%, therefore, much pressure is on the state government lean resources committed to secondary education. This situation has displayed a negating influence on the abilities of the schools to perform their functions effectively and efficiently. Their inability to perform these roles was well reflected in the performance of students in WASSCE as shown in Table5. About 18% of the number enrolled for the examination over the period of this study had 5 credits in English, Mathematics and three other subjects while a paltry 26% had five credits in any other subjects. This is not too impressive performance though findings revealed that the schools have witnessed a remarkable marginal increase in their performance during the period. but with better funding, the state may witness a better academic accomplishments by the students.

Table 6 revealed a low association between academic performance and cost (public cost .9%.share cost 1%), it shows that, because of low level of funding by both the government and parents cost (public and shared) did not contribute significantly to learning outcome of students. In order words, if more funds have been committed to secondary education by both government and parents, students may likely do well in their studies

Conclusion:

The study found out that, there was a steady increase in government financial commitment to secondary education in the state, this exists with a steady reduction in the proportion of the cost burden borne by the parents as a witnessed by low portion of fees and levies paid by parents. The shared cost borne by pupils and their parents in the overall cost burden was far too small in this era of free universal Basic Education, average of 0.129% over the five year period. The World Bank (1998) urged African countries to consider the idea of cost sharing instead of fully relying on public expenditure in financing education. An increase in parents' participation in the cost of secondary education may help raise the performance level.

Recommendations

Based on the findings of this study, the following recommendations are made:

i. Government at all levels should increase their level of funding of education to at least 35% of the Gross National Product. The current level of 8.43% (in 2010) was far too little to make any significant impact as the UNESCO suggested.

ii. Government should adopt a realistic fees paying system.

iii. Realistic funding methods should be adopted rather than wholesaler fund allocation to schools. Schools with consistent good academic and moral performance should be motivated, with funds that were tied to academic performance.

iv. Finally, corporate organizations, and rich communities should be encouraged to adopt schools. When this is done, more funds will be available to the schools adopted. Neighborhood schools are better funded when communities and rich corporate organizations embrace them as their own.

References

Adetayo T. (2009, March 27). Laziness, poor remuneration responsible for pupils poor performance. The Punch Newspaper P. 39.

Akangbou S. D. (1985). Economic of Educational Planning in Nigeria New Delhia Vikas publishing House.

Akinrinade S. (2009, July 12). VC identifies public schools problems. The punch Newspaper p. 12.

Atolagbe A. A. (2011). Public Cost, internal efficiency and academic Performance of Kwara State Public Secondary Schools (Unpublished doctoral dissertation) University of Ilorin,Ilorin.

Durosaro, D. O. (2000). Resource allocation and utilization for University education in Nigeria: Treads and issues. In E. O. Fagbamiye et al (Eds) Education and productivity in Nigeria National Association for Educational Administration and Planning 51 – 67

Kwara State Budget estimates 2003 – 2009. Ministry of Finance, Ilorin

Kwara State Ministry of Education and Human Capital Development (2010). Analysis of Kwara State budget, 2005-2010, Ilorin.

Mbipon, G (2000). Educational Administration and planning, Calabar, University of Calabar press.

Oyedepo, D. O. (2008 June 22). No nation over rises above her investment in education. A pre-convocation news conference of Covenant University Ota, Punch Newspaper.

Oyeniran, S. (2008). Cost and efficiency of University in Nigeria (Unpublished doctoral dissertation). University of Ilorin, Ilorin.

Vanguard Newspaper (Nov 26, 2012). Vanguard Nigeria Newspaper Editorial, on poor funding of Education in Nigeria.

Ward. L. (2009, September 18). Pupils suffer shocking poverty. The Punch Newspaper, P.38