Academic Leadership: The Online Journal

Volume 8
Issue 4 *Fall 2010*

Article 38

1-1-2010

Influence of Resources Allocation in Education on Secondary School Students' Outcome in Nigeria.

Olabanji Obadara

Abayomi Alaka

Academic Leadership Journal

Influence of Resources Allocation in Education on Secondary School Students' Outcome in Nigeria.

Introduction

School finance is concerned with the mobilization and allocation of resources to schools. School finance issues are of paramount concern to all levels of educational system both at federal, state, and local government level. The child's future as well as the future of a society in general, depends largely on the quality of the educational system. The high expectation of the society for students and teachers to perform at higher levels, and for schools to guarantee the success of all students, the question of how best to support the expectation through effective and efficient allocation resources becomes even more critical.

Finance as a resource has remained a controversial issue at all levels of education. Since the economic downturn in the eighties; the Nigerian education sector has suffered unprecedented setbacks in resource allocation especially in funding. Government realised this with the limited financial resources at its disposal and called for active participation of stakeholders to finance education in order to achieve good educational goals. Okunamiri (2000) noted that educational finance critically examines all the costs and expenditure in the production of educational services which is both labour and capital intensive.

Resources allocation is one of the most challenging tasks that our educational system faces, whether they are in the early stages of reform or years into sustaining improvements. To sustain improvement, schools must devote sufficient resources to fully implement priority goals before moving on to others. Knowing how to allocate resources effectively can lead to long-term accomplishment of goals rather than short-lived success. Facing the challenge of resource allocation begins with knowing the range of resources available. But knowing at one point in time is not enough; schools must periodically take stock of their resources. This means revisiting regularly whether financial, human, and time resources are allocated in the most appropriate ways to achieve school's goals.

Education has been in crisis for many years, much of the difficulty lies in the fact that the sector is poorly funded. This results in shortages of material and human resources experienced in the system: lack of qualified teachers; high turnover rate of teachers; shortage of classrooms, and a host of other problems. These difficulties have been most pronounced at both the primary and secondary schools levels. The system of education at all levels has undergone rapid changes and growth within a context of an unstable economy. The educational sector continued to expand even though there were substantial economic setbacks. The economic crisis has had a negative impact on the educational system and played a major role in the decline of the quality of education offered.

The 1970s were the period of the oil boom in Nigeria. The economy expanded and with it came rapid growth and development of the education sector. By the 1980s, in contrast, major economic problems

were encountered following the decline in revenue from petroleum products. The decline in the real gross domestic product in the 1980s and 1990s was estimated to be 6%. By 1994, the Central Bank of Nigeria reported that the money supply, particularly by way of deficit financing, had increased tremendously in a period of ten years. By 1995 the value of the Naira had fallen from a US$ ratio of 1:1 in 1985 to one of 85:1. For budget purposes the rate used at present is N100: US$1. The rate of inflation remained high and this had a negative impact on the education sector as well. Funding responsibilities during the crisis were transferred from one level of government to another, as well as to families, to help subsidize education through fee payments at secondary school and in higher education (Moja, 2000).

According to CBN (2000), poor financial investment has been the bane of Nigerian education system to the extent to which the budgeting allocation has been very low compared to others. Furthermore, the federal government allocation to education has declined steadily since 1999 and is much lower than the average in the last five years of military rule. This is particularly important in view of huge increase in number of intake at all levels of education – primary, secondary and tertiary.

The secondary level of education has been programmed to achieve the following objectives in Nigeria as stated in the National Policy on Education.

(i) Provide an increasing number of primary school pupils with the opportunity for education of a higher quality, irrespective of sex, social, religious and ethnic background;

(ii) Diversify its curriculum to cater for the differences in talent, opportunities and roles possessed by or open to students after their secondary school course;

(iii) Equip students to live effectively in our modern age of science and technology;

(iv) Develop and protect Nigerian culture, art and languages as well as the world's cultural heritage;

(v) Raise a generation of people who can think for themselves, respect the views of others; and

(vi) Inspire its students with a desire for achievement and self-improvement both at school and in later life (FRN, 2004).

In order for secondary education to achieve these objectives, the Nigerian government decentralized secondary education. The 1954 Littleton, and 1999 constitutions respectively spelt out the constitutional responsibilities imposed on the three tiers of government. The Federal and State governments have constitutional power to legislate on the secondary education in the concurrent list under second schedule part ll. However, no appreciable development can be carried out and noticed at this level of education without adequate resources allocated to the system in right proportion. Resource allocation is a plan for using available financial, human, and material resources to achieve educational goals. These resources are allocated among competing educational projects. This allocation therefore calls for making choice among the competing items on the plan.

Richard (2007) in his study on assessment, accountability and students' learning outcomes made a distinction between students' outcomes and students' learning outcomes. He reported that students' outcomes are the aggregate statistics on group of students like graduating rates, retention rates, transfer rates and employment rates for graduating class. Generally, students outcomes tends to

measure institutional performance while students' learning outcomes encapsulates wide range of students' attributes and abilities which consists of cognitive and affective skills which are measures of how the experiences students acquired in school have supported their development as individuals. Cognitive outcomes include demonstrable acquisition of specific knowledge and skills. Posneer (1992) refers to cognitive learning as the recall or recognition of knowledge and to the development of intellectual abilities and skills.

This present study has examined the impact of resources allocation in education on secondary school students' outcome.

Purpose of the Study

The purpose of this study was to explore the influence of financial and human resource allocation on the Nigerian secondary school students' performance. It was therefore intended that the results of this study would provide the government and the stakeholders with the information and strategies for improving the allocation of financial and non-fiscal resources to support greater students' performance

Literature Review

Ross and Ward (1999) saw funding formula as referring to the application of an agreed set of explicit rules that are applied systematically and impartially in other to allocate resources among schools with the objective of increasing equity in the allocation of government budget to institutions according to their needs. Hinchliffe (2002) estimates that education expenditure is equal to only 2.4% of GDP and 14.3% of government expenditure. The share of these funds going to primary education has dropped to 35% and secondary education's portion has remained relatively unchanged at 29%, but tertiary education's share has nearly doubled to 35%. This information and the recent allocation shares for education have shown that Nigeria deviates sharply from regional and international norms.

Schools that have authority over their budgets are better able to sustain school improvement efforts because they can direct money to support priority goals and programmes (NCREL, 2000; Odden & Archibald, 2000; Klein, Medrich, & Perez-Ferreiro, 1996). If a school does not have adequate budget authority, it may need to seek funding outside or form partnerships to support its priority reform efforts (Klein, Medrich, & Perez-Ferreiro, 1996). To use financial resources wisely, schools also should understand guidelines for combining various funding streams. In particular, schools should be familiar with federal regulations that allow funds to be combined to support school improvement. Combining funds is a good strategy for sustaining improvement because it allows money marked for special programmes to be redirected to support the school's overall academic priorities. Successful schools also know that they can not do it alone – they need the financial support of the community, which is more likely to be offered when there is a strong relationship between the school and community.

Sustaining teaching and learning improvement is not just about money. It is also about people – especially the adults who directly support student learning. There are many ways that schools can reallocate human resources to better support student learning. For example, to ensure that human resources support academic goals and priorities, schools should consider the ratio of non-instructional staff, such as attendance clerks and crisis counsellors, to the number of full-time teaching staff (Walter, 2001). Although this approach might seem counterproductive, some research indicates that specialized needs can be addressed in regular classrooms with full-time instructional staff (NCREL,

2000; Odden & Archibald, 2000). This means that funds and other resources that would normally support pull-out programmes can be used to reduce adult-student ratios by adding staff to the regular classroom or by hiring more full-time regular classroom teachers (Miles & Darling-Hammond, 1998; NCREL, 2000; Odden & Archibald, 2000). Schools might also consider assigning staff in ways that limit class size in particular focus areas. For example, if literacy is a high priority for school improvement efforts, the number of students per reading group or in other literacy activities could be reduced, while maintaining larger groupings in other subjects, such as art or physical education (Miles & Darling-Hammond, 1998). Larger classes in those areas usually allow one specialist teacher to cover preparation time for several regular teachers (Odden & Archibald, 2000).

There has been three generation formula for the allocation of resources. Under first generation formula, allocation was based on pupils/teachers and staff ratio with no increment from year to year. This formula assumes that all at a given grade level in a school have the same educational needs and hence cost per student is the same. Ross and Ward (1999) and Wilawsky (1998) agreed that this method should be referred to as historic or incremental method. Samuel (2002) concluded that historic funding formula is based on what has been happening in the funding agency allocation to education without any regard to the actual educational needs of the students. Basic needs are likely to be eroded because of budget pressures, competing political values and inflationary needs

The second generation formula is developed in order to account for the differences in the needs of the students. This implies that some students cost more to educate than others. A formula such as, Ross index from Australia which indices made up of variables such as lack of fluency in language of instruction among other factors which correlates with students level of education.

Moss and Guither (1976) were of the opinion that modern formula, that is, third generation date back to early 50′s with development of California faculty formula. Rose et al (1999) noted that this formula were developed in the 60′s and 70′s in order to guide resource allocation decision for educational programmes in U.S, France and United Kingdom. Moss and Guither (1976) concluded that as the best practice due to its cost based incentive appropriateness its detailed structure. There has been clear departure from the generational funding to other methods as follows:

1. Bidding Method: The schools presents a business case for the funding based on specific criteria. The schools are funded based on the findings of the funding agency who considered the funding necessary.

2. Discretion Funding Method: The schools are funded according to the opinion and judgement exercise by funding agencies or administrator.

3. Need Based Funding Method: This is a method or an arrangement that seeks to ensure that the resources allocated to each school are derived directly from a systematic analysis of what each school needs in order to provide a specified quality of education to schools.

4. Activity Led Funding Method: This approach is based on the analysis of the actual costs of the activities required to provide and support specified educational programmes in schools.

5. Performance Funding Method: (Klein, Medrich, & Perez-Ferreiro, 1996) were of the opinion that performance funding relates financial allocation to prescribed level of achievement. It ties state funding

to institutional performance thereby encouraging external accountability and instructing performance.

Okebukola (2003) suggested that performance based funding approach model could be a major allocation mechanism used by the National Universities Commission (NUC). This model ranges from a formula approach as research block funding to a construct type where satisfactory performance is made a condition of funding with suitable reward or penalties applied.

School finance analysts point out that there are three commonly used criteria or objectives for informing decisions for raising and allocating school resources: adequacy, equity, and efficiency (Levin 1995; Monk 1990). Adequacy refers to the mobilization of sufficient resources to support a desired level (in terms of both quantity and quality) of educational services. Equity relates to fairness in resource mobilization and allocation so that children with similar characteristics are treated equally (horizontal equity) and that children with different needs receive different treatment (vertical equity). Efficiency in resource allocation in education refers to maximizing the performance of the education system given resources. Thus in assessing the impacts of a school-finance system, one needs to ascertain the defining criteria and examines the extent to which the system meets such criteria. In addition to decision-making criteria, experience has also shown that transparency and accountability are two system features that could enhance the operation of the system with respect to its stated objectives.

Transparency and accountability are also vital in the process of resource allocation. Transparency refers to the nature of decision-making characterized by clearly defined objectives, explicit decision rules, and an open process. Presumably a more transparent school-finance system promotes greater trust in the operation of the system and deters abuses in the allocation of school resources. Accountability refers to the explicit specification of power and responsibility of key stakeholders and holding them to the consequences of their actions; it encourages more effective implementation of school-finance policies. Moreover, while resources for schools can be raised in a variety of ways, the major sources of funding should be based on schemes that generate stable and growing revenue for schools. In other words, schemes that generate small or highly fluctuating revenue are not desirable for supporting the major operational expenses of schools.

Research Questions

1. What is the financial resource allocation pattern over time to Secondary Schools in Nigeria?
2. Is there any significant influence of financial resource allocation to secondary schools on students' performance?
3. Is there any significant influence of human resource allocation to secondary schools on students' performance?

Methodology

Descriptive survey design was used for the study. The study drew the sample of 1000 public secondary schools out of 11,000 secondary schools in Nigeria (6,700 public schools and 4,300 private schools). The sample basically covered the south west Nigeria. The proportionate stratified random sampling was used to select the sample in agreement the number of secondary schools and number of local government area in each state.

The study developed and used a checklist tagged “Resources Allocation to Secondary Schools (RASS)” and the results of students in Senior School Certificate Examination conducted by West African Examination Council (WAEC) for the period of 2003-2007, from the sampled secondary schools were used for the study.

Descriptive statistic of percentages as well as inferential statistic of Pearson product moment correlation was used for the data analysis.

Results and Discussion

The data collected were analysed using Pearson product moment correlation co-efficient (r) and simple percentage as appropriate. The results of the study are presented according to the generated research questions.

Table 1: Federal Government Financial Allocation to Education from 1958-2007

S/N	YEAR	TOTAL BUDGET (N)	ALLOC. TO EDU ((N)	% ALLOC. TO EDUCATION
1	1958	38,267,480.00	2,260,760.00	5.91
2	1959	37,647,160.00	2,515,140.00	6.68
3	1960	46,629,930	2,808,040	6.02
4	1961	52,987,260	3,257,570	6.15
5	1962	52,084,700	2,705,250	5.19
6	1963	58,109,680	1,992,590	3.43
7	1964	62,275,980	2,270,360	3.65
8	1965	78,396,370	2,800,950	3.57
9	1966	76,720,040	3,244,020	4.23
10	1967	68,484,070	3,339,120	4.88
11	1968	64,570,800	1,833,400	2.84

12	1969	81,053,740	1,782,410	2.20
13	1970	267,920,814	1,850,540	0.69
14	1971	465,837,661	2,468,520	0.53
15	1972	638,947,649	3,976,650	0.62
16	1973	1,411,420,065	12,378,780	0.88
17	1974	3,128,405,827	92,678,460	2.96
18	1975	5,252,297,373	240,196,680	4.57
19	1976	5,088,159,047	443,058,618	8.71
20	1977	7,652,554,360	238,617,290	3.12
21	1978	6,815,198,810	779,399,610	11.44
22	1979	8,805,262,310	326,076,020	3.70
23	1980	9,041,279,000	447,902,000	4.95
24	1981	8,430,897,670	543,664,300	6.45
25	1982	6,758,123,360	546,698,980	8.09
26	1983	5,560,937,850	224,407,210	4.04
27	1984	6,072,461,420	272,497,470	4.49
28	1985	6,772,342,659	256,856,650	3.79
29	1986	7,780.732,900	208,990,210	2.69
30	1987	17,517,080,030	337,463,940	1.93

31	1988	24,365,232,328	584,130,070	2.40
32	1989	30,107,057,130	1,067.179,030	3.55
33	1990	39,763,988,960	1,126,664,140	2.83
34	1991	38,665,978,779	419,906,180	1.09
35	1992	52,036,021,610	2,008,340,430	3.86
36	1993	114,600,529,300	6,436,080,750	5.62
37	1994	110,500,000,000	7,878,084,920	7.13
38	1995	155,500,000,000	12,728,676,390	8.19
39	1996	188,221,068,083	12,135,951,790	6.45
40	1997	404,000,000,00	16,440,162,815	4.07
41	1998	260,000,000,000	26,721,320,906	10.28
42	1999	419,500,000,000	27,712,000,000	6.61
43	2000	677,511,714,733	56,668,169,766	8.36
44	2001	894,214,805,186	62,567,055,443	7.00
45	2002	1,064,801,253,520	73,435,499,300	6.90
46	2003	765,100,000,000	13,900,000,000	1.82
47	2004	1,849,400,000,000	93,770,000,000	5.07
48	2005	1,846,000,000,000	92,000,000,000	4.98
49	2006	1,900,000,000,000	92,000,000,000	4.84

50	2007	2,300,000,000,000	186,000,000,000	8.09

Sources: Central bank of Nigeria Statistical Bulletin and information available on

www.nigeria.gov.ng

The Table 1 above reveals the financial resource allocation pattern over time to Secondary Schools in Nigeria from 1958 to 2007. Over the years, small proportion of financial resources, are being committed to education by different tiers of government. Figures from the Federal Government budget from 1958 to 2007 revealed fluctuations in the percentage of the total budget to education from a ratio of 5.91% in 1958, 4.88% in 1967, and increased to 8.71% in 1976 and decreased to 3.79% in 1985. Later increased to 7.13% in 1994 and decreased to 1.82% in 2003, 5.6% in 2004, and 8.09 in 2007.

The implication of not substantially funding education and its impact on economic development in developing nations seems to prompt UNESCO recommendation of 25% of the developing nation's annual budget be devoted to education. However, it is evident from the table above that the Federal Government allocation to education from 1958-2006 even in the 2007 appropriation bill has not reached 15% of its total budgeted expenditure.

These figures are far below the UNESCO recommendation of 25% of the country's annual budget. The average expenditure per student in Nigeria from the budget over the years has been N12,000 or 100 dollars whereas the average expenditure per student in South Africa, Ghana, Libya, Algeria, Kenya and Sub-Saharan African countries is N340, 000 or 3000 U.S. dollars (Wildawsky, 1998).

Table 2 above reveals the influence of financial resource allocation to secondary schools on students' performance. The Table reveals a correlation coefficient (r®f .068, which is significant at the 0.05 level. The result indicates that the financial resource allocation to secondary schools significantly influence students' performance.

Table 2: Relationship Between Financial Resource and Students' Performance

Variable	N	$\bar{X}$	SD	r	Sig.	Remark
Financial Resource	1000	15,8149	9.1172			
				.068	.005	NS
Students' Performance	1000	2.6410	2.6217			

Significant at p<0.05

Table 3 above reveals the influence of human resource allocation to secondary schools on students' performance. The Table reveals a correlation coefficient (r®f .043, which is significant at the 0.05 level. The result indicates that the

Table 3: Relationship Between Human Resource and Students' Performance

Variable	N	$\bar{X}$	SD	r	Sig.	Remark
Human Resource	1000	8,3451	2.0034			
				.043	.054	NS
Students' Performance	1000	15,8149	9.1172			

Significant at p<0.05

human resource allocation to
secondary schools significantly influence students' performance.

The findings of this study have revealed that both financial and human resources allotted to secondary school significantly influence student's performance. No wonder the secondary schools students' performance for the period under investigation and even till now is falling. Hinchliffe (2002) was of the opinion that poor funding of secondary education is based on our refusal to evolve educational policy and educational goal as it suits Nigeria as a country because if we have to develop the secondary education that suits Nigeria we would soon or later discovered that it is even where we should lay emphasis on because all over the world, no country joke with its middle level manpower because, not everybody is required to go through university education but everybody is required to have attained a certain level of education that will make them go to anywhere in life.

Conclusion

The resources are vital factors that make a system functions. It is the provision of resources into system and the effective utilization of such resources that determine the success or achievement of the set goals of the system. So, resources are very important in the development of qualitative education. The success of educational system or otherwise depends on the manpower, money, and material available to it. No organization can function effectively without adequate funding. This is because money provides the essential purchasing power with which organization acquires its human and physical inputs.

Recommendations

From the above findings and conclusion, it is therefore recommended that a decentralized school-finance system should be adopted at Nigerian secondary level of education in which lower levels of government and key school personnel (such as the principals and school board) have major decision-making power and responsibility regarding resource mobilization and allocation for schools. In a decentralized system of school finance, the importance of the role of a given level of government is often assessed in terms of its share in total revenue for school.

More investment has to be made on education to produce skills that are required by the economy. Therefore, education should not be made the second fiddle in our national budget; rather it should be given topmost priority.

There should be periodic reports of misuse of education funds by government officials or secondary school principals and diversion of education funds for non-education uses.

Since the improvement in educational accountability and efficiency cannot be achieved by interventions within the education sector alone but strongly influenced by political, labor-market, legal, and other conditions outside the sector, funding of education should not be government affair alone.

References

CBN (2000). *Central Bank of Nigeria, Annual Report and Statement of Account.* Abuja: Government Press.

Federal Republic of Nigeria (2004). *National Policy on Education.* Federal Government of Nigeria.

Federal Republic of Nigeria (1999). *The Nigerian Constitution.* Lagos: Government Printer.

Hinchcliffe, K. (2002). *Public Expenditure on Education in Nigeria: Issues, Estimates and Some Implications.* Abuja: World Bank.

Klein, S., Medrich, E., & Perez-Ferreiro, V. (1996). *Fitting the pieces: Education reform that works.* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Retrieved from www.ed.gov/pubs/SER/FTP/

Levin, H. (1995). School finance. In M. Carnoy (ed.) *The international encyclopedia of economics 22 of education.* Pergamon Press.

Miles, K., & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis, 20*(1), 9-29.

Moja, T. (2000). *Nigeria Education Sector Analysis: An Analytical Synthesis of Performance and Main Issues.* Abuja: World Bank.

Monk, D. (1990). *Educational finance.* New York: McGraw Hill Publishing Company.

Monk, D.H. (1994). Subjects areas preparation of secondary mathematics and science teachers and student achievement. Economics of education review, *13*(7), 145-154.
Moss, C.E. & Guither, G.H. (1976). Formula funding; requiem or renaissance. *Journal of higher education, 67*(1), 99-125.

North Central Regional Educational Laboratory (NCREL). (2000). *A better return on investment: Reallocating resources to improve student achievement.* Oak Brook, IL: Author. Retrieved from www.ncrel.org/policy/pubs/pdfs/booklet.pdf

Odden, A., & Archibald, S. (2000). Reallocating resources to support higher student achievement: An empirical look at five sites. *Journal of Education Finance, 25*, 545-564.

Okebukola, P. (2003). Funding University education in Nigeria. *Education Today,* June. pp. 76-82.

Okunamiri, P.O.(2000). *Resources and guidelines for educational financing in tertiary institutions.* Owerri : Fasmen Educational and Research Publication.

Posner, G.I. (1992). *Analysis of the Curriculum.* New York: McGraw-Hill.

Richard, F. (2007). *Assessment, Accountability and Students learning outcomes.* Paris: UNESCO.

Ross, L. and Ward, A. (1999). Naive realism in everyday life implication for social conflict and understanding in T. Brown and E. Reed and E. Turiel (eds.) *Values and Knowledge,* Mahwah, NJ.: L. Erlbaum Associates.

Samuel, T. (2002). *Strategies for raising additional resources for education.* A paper delivered at the forum on costing and financing of education in Nigeria. Abuja, September.

Walter, F. (2001). *District leaders' guide to reallocating resources.* Portland, OR: Northwest Regional

Educational Laboratory. Retrieved from www.nwrel.org/csrdp/reallocating. html

Wildawsky, A. (1998). Budget for all seasons: why the traditional budgets last. *Public Administration Review, 38*(1), 129-139.

VN:R_U [1.9.11_1134]