

RELATIONSHIP BETWEEN RESEARCH AND DEVELOPMENT STRATEGY AND EFFECTIVE ADMINISTRATION OF SECONDARY EDUCATION IN NIGERIA

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ABSTRACT

The study examined the relationship between research and development and effective administration of secondary education in Nigeria. Three hundred copies of Questionnaires titled, 'Relationship between Research and Development Strategy and Effective Administration of Secondary Education in Nigeria (RBRDSEASE),' were used to gather information from teachers in the study area. Mean and chi-square statistics were used for data analysis. Finding revealed that funding of secondary education can be sustained through direct allocation of funds from national consolidated funds, imposition of 2% education tax on companies, and balanced cost sharing, and the role of research and development includes building models/theories to solve educational challenges, establishing benchmarks and making future projections for development. Based on the findings, the recommendations proposed are that: Government need to ensure that funding of education is not truncated; teacher development should be seen as a priority, and research and development should be given a top priority so that what obtains in contemporary educational system can have a pride of place in Nigeria.

Key Words: Education funding, teacher development, Research and Development.

Introduction

Secondary education in Nigeria is experiencing various challenges that threaten its standard at that level. Omoregie (2005) laments that the products of today's secondary system can hardly meet the goals of secondary education touching on useful living in the society or progressing into higher institution or meeting with global trend in education at that level. In time past, government modern and grammar schools lived up to expectation of producing quality graduates who made Nigeria proud at various world class universities, but the case is now the reverse. As a matter of fact, it is now a national issue calling for urgent attention at different quarters. For instance, between 1999 and 2014, there were states in Nigeria whose secondary schools were closed down for a full academic session because of non-payment of teachers' salaries as such these challenges often hinder the system from realizing the expected goals.

The Federal Republic of Nigeria (2004) posits that the success of secondary education depends upon a number of factors. One of the factors is in keeping up with global trends in

research and development. This is because research and development is very crucial in helping a system to meet up with contemporary trends in running secondary education.

In connection to this discourse, Nag, Hambrick, and Chen (2007) believe that effective administration involves formulation and implementation of the major goals and initiatives taken by an organization’s top management on behalf of owners, based on consideration of resources and an assessment of the internal and external environments in which the organization competes. In other words, strategic research and development provides overall direction, which involves specifying objectives, developing policies and plans designed to achieve stated objectives, and then allocating resources to implement the plans.

In line with this discussion, it is worthwhile to mention Longe Commission’s Report, 1991, which states that, “Education should be given top most priority in the allocation of national resources. It is the key not only to socio-economic and political stability, but also the instrument to translate Nigeria from the ‘league of low technology countries to that of high technology nations.” The commission recommends funds allocation to education from consolidated funds (otherwise known as the federation account), an Education Tax (2%) on all profits declared by companies operating in Nigeria, recovery of academic costs through fees, contributions and donations from voluntary agencies and philanthropic individuals (Longe Commission, 1991: 117).

Going by the above outlook, the onus now falls on academics and practicing managers to embark on research and development strategy so that findings from the studies could aid the development of numerous models and frameworks that could aid strategic decision making to favour secondary education in the context of Nigeria’s current reality and harsh economic environment.

Concept of Education Funding in Nigeria

Funding of education in Nigeria has been majorly borne by the government in Nigeria for a long period. This explains why Adeyemi (2011) states that education financing in Nigeria right from 1981 was remarkably by the public sector. This simply implies that the government was solely responsible for financing education in Nigeria. This is why London (1993) observes that most of the projects meant to develop the education sector failed because of the pressures from one source, which is the government. Adesola (2002) contributes that drop in foreign exchange earnings due to drop in prices of oil in the international market, has made education to suffer in Nigeria.

Table 1 provides information on budget for primary and secondary sub-sectors of education even after the launch of the UBE programme.

Table 1: Government Expenditure Shares by Level of Education, 2004–2008. (%)

	2004	2005	2006	2007	2008
Secondary	13.6	6.8	13.0	10.4	8.5
Basic/Primary	11.8	21.7	17.2	19.1	20.2

Source: Federal Government Education Budget (various years). Budget Office (2013).

Table 1 shows the unstable trend of allocation to the secondary sub-sector of education. For instance, in 2008, 8.5% was the share of the education budget allocated to secondary education, and 20.2% was that of basic/primary education totaling 28.7% for primary and secondary schools. Enoch and Okpede (2000) argue that statutory allocation has been inadequate to meet the needs of secondary education in Nigeria; as such there is need for intervention. This intervention can be brought about by what Nwagwu (2002) strategically asserts to involve three groups of decision – makers, which he lists as government, private sector and donor agencies. The public sector includes the Federal, State, and Local Governments. Bankole (2006) contributes that funding could be addressed by either free tuition, implying that government fully funds education, full tuition to be borne by parents and balanced cost sharing to be borne by both government and parents. The implication of this is that if secondary education is strategically funded (Nwagwu, 2002; and Bankole, 2006), there will be positive result in terms of effective administration of secondary education in Nigeria.

Concept of Teacher Development

Teacher development has become an issue in contention because of the role they play in advancing education development in a nation. Danielson (2006) explains that teacher development entails developing in the teacher certain leadership skills that will enable them to influence students in the classroom and beyond. According to Institute for Educational leadership (2001), this also involves the mobilization of the available attributes of teachers so as to strengthen student performance level. This could be obtained through participating in workshop training, in-service training and further education.

Such developments aid teachers toward collaboration and shared leadership in the daily activities of schools. Katzenmeyer and Moller (2001) explain that when teachers are involved in professional development, the acquired skills will assist them to lead within and outside of the classroom. The emphasis is that when the teachers who play vital roles in the implementation of secondary education are well developed and conversant with modern teaching techniques, the administration of secondary education in Nigeria will become very effective.

Concept of Educational Research and Development

Research and development is one area government and even education stakeholders hardly spend much on despite its importance in the advancement of frontier of knowledge. According to National Research Council (2002), research and development or scientific inquiry is the same in all fields. This is to say scientific research, whether in education, sciences, or economics is a continual process of rigorous reasoning supported by a dynamic interplay among methods, theories, and findings.

Research and development is never carried out in isolation because it involves following some set of guidelines. To buttress this fact, Alberta Teachers' Association (2015) affirms that research and development strengthens the systematic and continuous planning in education which is critical to educational decision making. It is therefore imperative to note that research and development is a continuous process that follows scientific pattern, which often leads to

discovery of new facts or addition to already existing knowledge (National Research Council, 2002).

Statement of Problem

Research and development provide overall direction to contemporary issues in national development. According to Dawar (2013), research is often affiliated with changes in work, people, workspace and ways of life. On the basis of this, this study examined the relationship between research and development and effective administration of secondary education in Nigeria.

Purpose of this Study

The main purpose of this study is to examine the relationship between research and development and effective administration of secondary education in Nigeria. Specifically, the objectives are to:

- i. assess the funding strategies that could lead to effective administration of secondary education in Nigeria;
- ii. find out teacher development strategies that can bring about effective administration of secondary education in Nigeria;
- iii. examine the role of research and development in the administration of secondary education in Nigeria.

Research Questions

The following research questions served as guide to this study:

1. What are the funding strategies that could lead to effective administration of secondary education in Nigeria?
2. What are the teacher development strategies that can bring about effective administration of secondary education in Nigeria?
3. What is the role of research and development in the administration of secondary education in Nigeria?

Hypothesis

The following research hypothesis served as guide to this study:

H_{01} : There is no significant relationship between the role of research and development and effective administration of secondary education in Nigeria.

Methodology

The research design approach adopted in this study was a descriptive. According to FCT education baseline survey (2016), there were 162 Junior Secondary Schools and 59 Senior Secondary Schools in the FCT. The population of the teachers in JSS was 5212 while the population of teachers in Senior Secondary Schools was 3313. Three hundred (300) teachers were selected by stratified random sampling from all the Junior Secondary Schools and Senior Secondary Schools located in the six area councils in the FCT. The 300 represents the samples the researchers could readily use in terms of time and available resources. The researchers developed a questionnaire called, 'Relationship between Research and Development Strategy and Effective Administration of Secondary Education in Nigeria (RBRDSEASE),' as instrument

for data collection. The RBRDSEASE consisted of two sections A and B. Section A solicited information on the personal data of teachers while section B contains a four point Likert scale fifteen (15) item questionnaire developed by the researchers. The questionnaire items were arranged in three sub-headings to seek information on the variables being studied. The instrument was given to two specialists in Educational Management for validation. Their corrections formed the basis of the final instrument used for the main study. To ensure content validity, a pilot test was carried out by administering the instrument to 20 teachers outside the study area. The test was calculated using the Lawshe Content Validity Index. CRV of 0.71 was obtained, which proves the validity of the instrument. Mean score rating and chi-square statistics was used for the test of hypotheses. The mean rating of each questionnaire item was determined by scoring each response as follows: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1. Mean score of 2.5 and above implies an acceptance or agreement while any mean value less than 2.5 signifies disagreement. The chi-square results was interpreted in such a way that a null hypothesis was rejected when the p-value was less than 0.05 level of significance, and not rejected if the p-value was greater than 0.05 level of significance.

Results

Research Question 1: What are the funding strategies that could lead to effective administration of secondary education in Nigeria?

Table 2 shows the items on strategic funding as generated from the research questionnaire.

Table 2: Ways of funding Secondary Education

	4	3	2	1	\bar{X}	Decision
1. Direct allocation of funds from national consolidated funds.	106	114	45	35	2.97	Agree
2. Education Tax on all operating companies in Nigeria	116	106	37	41	2.99	Agree
3. Feasible school fees to be borne by parents	100	112	46	42	2.90	Agree
4. Donations from organizations, endowments and philanthropics	104	100	57	39	2.90	Agree
Overall					2.94	Accept

Table 2 showing questionnaire items 1, 2, 3 and 4, with mean scores of 2.97, 2.99, 2.90 and 2.90 respectively shows an agreement. In conclusion, the overall mean scores of 2.94 implies that the ways through which secondary education could be funded are through direct allocation of funds from national consolidated funds, imposition of education tax on all operating companies in Nigeria, feasible school fees to be borne by parents, donations from organizations, endowments and philanthropic individuals.

Research Question 2: What are the teacher development strategies that can bring about effective administration of secondary education in Nigeria?

Table 3 shows the items on the extent of teacher development as generated from the research questionnaire.

Table 3: Ways of Developing Teachers

	4	3	2	1	\bar{X}	Decision
5. Participating in workshop training, in-service training and further education.	106	116	41	37	2.97	Agree
6. Empowering teachers to know how to deploy certain leadership skills that can influence students in the classroom and beyond.	112	100	42	46	2.93	Agree
7. Assisting teachers to develop effective communication strategies aimed at reaching students at their own level of understanding.	100	104	39	57	2.82	Agree
8. Employing positive motivation strategy to produces positive learning outcomes especially in students who need extra efforts for their interest to be ignited.	98	96	51	55	2.79	Agree
					2.88	Accept

Table 3 showing questionnaire items 5, 6, 7 and 8, with mean scores of 2.97, 2.93, 2.82 and 2.79 respectively shows an agreement. In conclusion, the overall mean scores of 2.88 implies that teachers can be developed in order to make secondary education in Nigeria to compete in line with global trend by participating in workshop training, in-service training and further education, being empowered to know how to deploy certain leadership skills that can influence students in the classroom and beyond, assisting teachers to develop effective communication strategies aimed at reaching students at their own level of understanding, and empowering them to always employ positive motivation strategy that can produce positive learning outcomes especially in students who need extra efforts for their interest to be ignited.

Research Question 3: What is the role of research and development in the administration of secondary education in Nigeria?

Table 4 shows the items on research and development as generated from the research questionnaire.

Table 4: Role of Research and Development in Secondary Education Administration

	4	3	2	1	\bar{X}	Decision
9. Building models or theories that can be tested and applied to solve everyday challenges confronting education.	114	118	35	33	3.04	Agree
10. Obtaining meaningful findings and actionable results through a more systematic development of knowledge.	103	115	42	40	2.94	Agree
11. Helps to improve planning by establishing benchmarks and making future projections for development.	114	112	39	35	3.02	Agree
12. Aids unhindered application of scientific approach to educational challenges in order to effectively manage the system.	113	107	37	43	2.97	Agree
					2.99	Accept

Table 4 showing questionnaire items 9, 10, 11 and 12, with mean scores of 3.04, 2.94, 3.02 and 2.97 respectively shows an agreement. In conclusion, the overall mean scores of 2.99 implies that the role of research and development in the administration of secondary education in Nigeria includes building models or theories that can be tested and applied to solve everyday challenges confronting education, helping to obtain meaningful findings and actionable results through a more systematic development of knowledge, helping to improve planning by establishing benchmarks and making future projections for development, and aiding unhindered application of scientific approach to educational challenges in order to

Test of Hypothesis

H₀₁: There is no significant relationship between the role of research and development and the administration of secondary education in Nigeria.

Table 5 shows the items on research and development as generated from the research questionnaire and calculated using SPSS.

Table 5: Relationship between Role of Research and Development and Administration of Secondary Education in Nigeria

X^2	Sig.(2-tailed)	Df	Decision
61.1	.000	9	Reject Ho ₂

***(P <0.05 level of significance)**

Table 5 shows the results of the chi-square test of significant relationship between the role of research and development and the administration of secondary education in Nigeria. The calculated X^2 value was 61.1. The p-value was 0, which is less than 0.05 level of significance, with degree of freedom (d.f) =9. Based on the lower p-value in relation to the significant value, the null hypothesis was rejected. This implies by the finding of the study that there is a significant relationship between the role of research and development and the administration of secondary education in Nigeria.

Discussion

Analysis of finding (Table 2) indicated that the funding pattern that could be sustained for secondary education includes direct allocation of funds from national consolidated funds, imposition of education tax on all operating companies in Nigeria, feasible school fees to be borne by parents, donations from organizations, endowments and philanthropic individuals. This finding agrees with (Longe Commission, 1991) which recommends that funds should be allocated to education from consolidated funds (otherwise known as the federation account), as well as imposition of Education Tax (2%) on all companies operating in Nigeria. This is also in line with Nwagwu (2002) who affirmed that funding should be borne by the government, private sector and donor agencies.

Analysis of finding (Table 3) indicated that development can take place through teachers’ participation in workshop, in-service training and further education, empowerment to deploy certain leadership skills, developing effective communication strategies to reach students at their level of understanding, and empowering them to employ positive motivation strategy. This finding agrees with the finding of Danielson (2006) who explains that teacher development entails developing in the teachers certain leadership skills that will enable them to influence students. Institute for Educational leadership (2001) explains that teacher development entails acquiring skills such as good communication skill, which is a strategy aimed at reaching students at their own level, as well as imbibing positive motivation, which is important in producing positive learning outcomes in students.

Analysis of research question three (Table 4) indicated that the role of research and development includes building models/theories to solve educational challenges, obtaining meaningful findings and actionable results, establishing benchmarks and making future projections for development, and aiding unhindered application of scientific approach to educational challenges. This finding agrees with Alberta Teachers’ Association (2015) that affirms that research and development strengthens the systematic and continuous planning in

education which is critical to educational decision making. Also, National Research Council (2002) affirms that research and development helps to build models or theories that can be tested and then applied to solve everyday challenges.

Also, the test of hypothesis indicated that there is significant relationship between the role of research and development and the administration of secondary education in Nigeria.

Conclusion

The finding of this study revealed that direct allocation from consolidated funds; imposition of 2% education tax on all operating companies, as well as balanced cost sharing by the government and parents, as well as donations from organizations could lead to sustained funding of secondary education. Also, teachers can be developed by participating in workshop, in-service training and further education, so that they can be empowered with certain leadership skills to assist their job performance better. The study also concluded that the role of research and development includes building models/theories to solve educational challenges, obtaining meaningful findings and actionable results, establishing benchmarks and making future projections for development, and aiding unhindered application of scientific approach to educational challenges. This study therefore concluded that it is possible for Nigeria's secondary education to compete with the global trend by making concerted efforts to do the needful, especially by engaging in research and development to discover new knowledge.

Recommendations

Based on the findings and conclusion of this study, the recommendations proposed are that:-

1. Government need to ensure that the funding of education from the consolidated account is not truncated and also parents should be made to pay reasonable fees for their children/wards.
2. Teacher development should be seen as a priority by the government, policy makers, schools management and the teachers as such adequate financial resources should be deployed to ensure that teachers are professionally developed periodically for them to be able to compete in line with the global trend.
3. Research and development should be given a top priority so that what obtains in contemporary educational system can have a pride of place in Nigeria so as to be in line with the global education trend also.

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