



Cost Benefit Analysis and Effective School Administration in Lagos State Nigeria

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ABSTRACT

Effective allocation of educational resources in senior secondary schools is crucial for achieving excellent results, and a key determinant of this is the interplay between cost-benefit analysis and school administration. This study specifically investigates the role of cost-benefit analysis in gauging the effectiveness of school administration within Education District V in the state. Employing a descriptive survey design, the researcher formulated two research hypotheses. The sample comprised 200 secondary school students selected from 5 stratified schools across the district, representing the larger population. Data was collected using a self-structured questionnaire containing 15 items, validated for construct and content by two experts in test and measurement. The instrument demonstrated internal consistency with a split-half reliability index of 0.894. Correlation analysis, conducted at a 0.05 level of significance, revealed a robust positive relationship between cost-benefit analysis and effective school administration in Education District V, Lagos state. Furthermore, the study established a harmonious connection between cost-benefit analysis and the efficient allocation of educational resources in state-owned public senior secondary schools. These findings underscore the importance of strategic resource allocation and cost-effective measures in enhancing the overall effectiveness of school administration.

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INTRODUCTION

The administration of a school bears the responsibility of consolidating various resources and allocating them effectively to achieve the general goals of the institution. The National Teachers Institute (NTI, 2010) stresses that Nigeria, like any other nation worldwide, has an obligation to prepare its citizens for life in a world characterized by rapid social, economic, political, and technological changes. The government, in turn, has substantially invested in establishing educational institutions for this purpose. However, Adekoya and Gbenu's (2008) Cost-Benefit Analysis, a method for evaluating the net economic impact of public projects involving public expenditure, is founded on the concept of rational decision-making. This involves weighing the pros and cons of any chosen option based on the clearly

stated objective and economic value of the project, ranking alternative investments in terms of their objective functions (profits, social benefits, etc.), and considering investments that will yield optimum results.

In addition, Lars (2018) expressed the main objective of Cost-Benefit Analysis in terms of education as determining whether an education project is desirable from the social welfare point of view. This involves assessing the financial feasibility and economic performance of education, serving as the basis for justifying investments in the system. He further stressed that Cost-Benefit Analysis, as an investment appraisal method, is a marginal analysis that provides the conceptual framework for examining the costs and benefits of investment in education in terms of how, when, and where educational activities should

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be carried out. Regarding educational investments, Cost-Benefit Analysis emphasizes the importance of determining the viability of any investment before it is made. It is widely acknowledged that, in the education sector, particularly secondary education, investment decisions regarding the amount and type of education to demand and invest in are made by individuals' parents, the government, or society at large. In addition to helping school administrators make better decisions about resource allocation, CBA can also be used to evaluate the effectiveness of existing secondary school administration and policies. For example, let's say a school is considering implementing a new homework policy. The school administrator could use CBA to compare the costs and benefits of the new policy to the current policy and determine whether it would be worth the effort to make the change. This kind of analysis can be very valuable for improving the efficiency and effectiveness of schools.

Cost-benefit analysis (CBA) is a process of evaluating the costs and benefits of a particular project or decision, involving comparing the total costs of education or decision to its total benefits to determine whether the benefits outweigh the costs. If the benefits outweigh the costs, then education or the decision is considered cost-effective. Cost-benefit analysis is important because it provides decision-makers with a way to compare the costs and benefits of different options and make informed decisions on educational issues. It helps ensure that resources are allocated efficiently and that the benefits of education or the decision outweigh its costs (Fedena, 2019). Cost-benefit analysis can, however, be used in a variety of settings, including public policy, business, healthcare, and environmental programs. For example, cost-benefit analysis may be used to evaluate the cost-effectiveness of a new healthcare intervention or to compare the costs and benefits of different educational policies. Cost-benefit analysis involves several steps, including identifying the costs and benefits of education or the decision, estimating the monetary value of these costs and benefits, and comparing the total costs to the total benefits (Fedena, 2019). The results of cost-benefit analysis can be presented in different

ways, such as a cost-benefit ratio or a net present value.

Cost-benefit analysis focuses on the process used to evaluate the costs and benefits of a particular educational program. In this regard, the goal of CBA is to determine whether the benefits derived from the decision to invest heavily in education can really outweigh the costs and whether it makes sense to move forward with the decision. However, the first step in a CBA is to identify all the costs and benefits associated with the decision to invest more in education. These costs can include financial costs, such as money spent on materials or labor (teachers), as well as non-financial costs, such as time spent or inconvenience caused. Benefits can also be financial or non-financial and can include things like increased revenue or improved quality of life. Once all of the costs and benefits have been identified, they are then quantified or given a monetary value.

The next step is to compare the costs and benefits, and this is done by calculating the Net Present Value (NPV) of the decision to invest more in education. The NPV is a measure of the overall financial value of money expended on education or the decision, taking into account the time value of money. In other words, the NPV tells us whether the costs or benefits of education or decisions will be worth it in the future. Once the NPV has been calculated, the final step is to make a decision based on the results.

Lars (2018) was of the opinion that CBA can be a very useful tool for school administrators when it comes to making decisions about the allocation of resources. For example, let's say a school is considering building a new auditorium or classrooms; a school administrator would first conduct a CBA to determine the costs and benefits of the project. They would then compare the NPV of the project to other potential uses of the school's resources, such as hiring more teachers or improving the school's technology. If the gymnasium has a higher NPV than the other options, then it would likely be a good investment for the school. There are several types of Cost-Benefit Analysis (CBA) that can be used depending on the specific context and objectives of the analysis.

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Cost-benefit analysis (CBA) is considered a valuable tool that provides several benefits; it enables systematic decision-making by allowing decision-makers to compare the costs and benefits of different options in an objective manner (Olaniyonu, Adekoya, and Gbenu, 2008). By identifying the costs and benefits of education or the decision, cost-benefit analysis helps decision-makers allocate resources efficiently and prioritize projects based on their expected benefits. Cost-benefit analysis provides a transparent and evidence-based approach to decision-making, which can help build trust and confidence among stakeholders. It allows decision-makers to justify their decisions based on economic principles and to demonstrate that they are using resources in a responsible and effective manner. Cost-benefit analysis helps decision-makers evaluate the effectiveness of a project or decision by comparing its costs and benefits. This can improve accountability and ensure that projects or educational decisions are achieving their intended outcomes. Additionally, it provides a clear and concise way to communicate the costs and benefits of a decision to stakeholders, which can help build support and consensus around a particular course of action. The cost-benefit analysis involves several steps and requires careful consideration of many factors. Here are some most appropriate methods for cost-benefit analysis:

1. **Establishing problems and objectives:** It is important to clearly define the problem that the cost-benefit analysis is addressing and to identify the objectives of the analysis.
2. **Identify all relevant costs and benefits:** To ensure that the cost-benefit analysis provides a comprehensive and accurate analysis, it is important to identify all relevant costs and benefits associated with the project or decision.
3. **Assign a monetary value to costs and benefits:** In order to compare costs and benefits, it is necessary to assign a monetary value to each cost and benefit. This can be challenging and may require the use of different valuation methods.
4. **Use a consistent time frame:** To ensure that the costs and benefits are

comparable, it is important to use a consistent time frame for the analysis. This allows decision-makers to compare the present value of costs and benefits over time.

5. **Conduct sensitivity analysis:** This involves some degree of uncertainty, and it is important to conduct sensitivity analysis to evaluate how changes in assumptions or input values affect the results of the analysis.

School administration on the other hand is the widespread topic of concern and has been conceptualized in diverse perspectives. School administration is regarded as a social process concerned with identifying, maintaining, stimulating, controlling, and unifying, formally and informally organized human and material energies within an interpreted system while Fessehatson, (2017) viewed School administration as a concept involving all the processes through which resources are mobilized in educational institutions to accomplish the goals of education. He stressed further that it is a process of mobilizing school resources towards the achievement of desirable educational goals. School administration is an activity process that requires expertise and training in educational principles and practices to ensure proper management of schools' general activities for achieving results in education. Fadena, (2019) also sees School administration as the implementation and facilitation of the programmes and management of the school resources for the achievement of school objectives. School administration is the branch of pedagogy that studies the means and methods of administering schools, reveals the distinctive features in the system of school management, and analyzes the specific problems involved in organizing such a system. Summarily, Nwosu, (2008) posits that school administration involves managing, and administering the curriculum and teaching, pastoral care, discipline, assessment, evaluation and examination, resource allocation, costing and forward planning, staff appraisal, relationship with the community, use of the practice necessary for the surviving the policies of the organization such as decision

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making, negotiation, bargaining, communication, conflict handling, running meeting and so on. While Nzezbulem, & Onyeagbako, (2016) stated that the main task of the school administrator is; interpreting policy, executing curriculum programmes, seeing to students' welfare, provision and maintenance of pieces of equipment and facilities, inducting and retraining staff and maintaining an effective school–community relationship.

Consequently, several principles—some of which are listed below—guide school management:

1. The principal of the school should work to establish a learning environment where students are efficient, responsive, in good physical and mental health, and whose actions are acceptable in the community.
2. The management of the school must be such that staff members who are not instructors collaborate as a team. Every student at the school should actively contribute to the advancement of the institution and aid in the development of his or her own potential.
3. More staff and student involvement in the choices that shape policies, practices, and curricula is necessary for good school management. All staff members should be involved in operating the company through staff meetings, student representative councils, and unions.
4. Decisions and rules pertaining to school management must align with the school's ideology. The school's objectives should always be the focus of these choices.
5. Via scheduled conferences, seminars, and in-service training, school administration should support and encourage teachers' professional growth.

According to these authors, Ackerman, & Heinzerling, (2019) and Chike-Okoli (2002), Cost-benefit analysis tends to focus on certain variables in the education or economy of a country, on the relative costs of different types of education and the relative earnings in different sectors in terms of human power. They stressed further that in education, this type of cost-effectiveness analysis allows various comparisons between different

institutions, types of education, or different teaching methods. If other institutions share the same goals but with different costs, then it is possible to choose the most effective way to achieve these goals. Examples of this type of cost-effectiveness evaluation include comparisons of full-time and part-time or correspondence courses and traditional face-to-face training. However, Adam, (2023) further explained another method for using cost-effectiveness analysis in comparing two or more schools or companies with similar cost levels to find what exactly achieves a high level of productivity or even the results. The company with the best cost is the one that really makes the production for the given price level, this is because of the challenges of identifying and measuring the result or the goals of the education and it is difficult to use cost-effectiveness analysis for education satisfactorily as some other practices, which some analysts argue is impossible, and cost-effectiveness is an inappropriate method for education. Also, apart from the challenges of defining and measuring the educational result, however, it is necessary to find ways to compare the performance of different institutions, choosing between alternative methods to achieve the same or similar objectives, and identifying the most effective ways of using education.

There have been many attempts throughout the world to apply the principles of cost-effectiveness analysis to education, although the measures of productivity or effectiveness are often rather crude. This is because the educational process and individual institutions within the educational system have different objectives; any attempt to apply cost-effectiveness analysis to education will produce different results, depending on the type of measures of production or used targets. So this paper tries to consider the first efforts, but you must remember that these show crude examples of the processes of cost-effectiveness, because of the difficulty of measuring the end results (Chike-Okoli, 2002).

Statement of the Problem

Secondary education in Nigeria is very important because, most times without it, a person cannot progress further in his/her quest

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for education. Both the federal and state governments spend a lot of money on secondary education with the hope that it will benefit the people and economy especially individuals and the government. Surprisingly more than 87.6% of the populace are not enjoying the much-invested form of education, as the existing schools are confronted with myriads of challenges and bottlenecks ranging from dilapidated buildings, obsolete teaching facilities, faulty staff recruitment process, poor working conditions, human and natural resources disparity in input-out dichotomy, overpopulation of learners in classrooms, poor salary structure, demotivation of staff among others. It is therefore necessary to find the expected returns from investing in higher education with minimal resources with the need to correct the anomalies in the system. Hence the study is poised to investigate Cost-benefit analysis and effectiveness of school administration in Education District V, Lagos State.

Objectives of the Study

The purpose of this study is to examine how cost-benefit analysis can really determine the effectiveness of senior secondary schools in education district V in Lagos state. Specifically, the study sought to:

- Examine how cost-benefit analysis determines the effectiveness of school administration in Lagos state.
- Investigate if there exists any relationship between the prompt allocation of educational resources and school administration in Lagos state.

Hypotheses

H0₁: There is no significant relationship between cost-benefit analysis and effectiveness of school administration in Education District V, Lagos state.

H0₂: There is no significant relationship between the Prompt allocation of

educational resources and the effectiveness of school administration in Education District V, Lagos state.

METHODOLOGY

This study employed a descriptive survey research design, allowing data collection from a small group within a large population and enabling generalization. The study population consisted of all public senior secondary school students in Education District V in Lagos State, with the target population specifically focusing on SSS 2 students in District V. To manage the diverse distribution of schools in the district, a stratified method was utilized, leading to the selection of 5 public senior secondary schools. Subsequently, a simple random sampling technique was employed to select 40 students from each of the 5 sampled schools, resulting in a total sample size of 200 students. For data collection, a self-structured instrument titled "Questionnaire on Cost Benefit Analysis and Effective School Administration in Education District V" was utilized. The questionnaire comprised 15 items on a 4-Likert scale. To ensure the validity of the instrument, a validation exercise was conducted, involving construct and content validation by two experts in Educational Measurement and Evaluation. The reliability of the instrument was assessed using the split-half method, revealing a high index value of 0.894, indicating strong internal consistency. The collected data were subjected to correlation analysis (r) and tested at a significance level of 0.05. This rigorous methodology enhances the credibility and reliability of the study's findings.

Testing of Hypotheses and Interpretation

H0₁: There is no significant relationship between cost-benefit analysis and effectiveness of school administration in Education District V, Lagos state.

Table 1: Correlation summary on Cost-benefit analysis and effective school administration in education district V, Lagos state

	Mean	Df	Sign.	P	(r)Cal. V.	(r)Tab. V.	Decision
X	105	10.5					
Y	95	9.5	198	0.05	0.67	0.010	Rejected

Source: Fieldwork, 2023

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From Table 1 above, the (r) calculated value is 0.67 while the (r) critical value is 0.010, since the (r) calculated value is far greater than the (r) critical value, the null hypothesis is rejected, and the alternative hypothesis which states that Cost-benefit analysis has a significant relationship with effective school administration is retained. By implication, it implies that cost-effectiveness analysis is a powerful tool as determined by Ackerman and Heinzerling (2001) who supported that "Once the cost-benefit analysis is determined, the

bottom line becomes necessary to sink more rational decision." It is, therefore, very important that cost-benefit analysis is used only under appropriate circumstances, especially in effective school administration.

H0₂: There is no significant relationship between the Prompt allocation of educational resources and the effectiveness of school administration in Education District V, Lagos state.

Table 2: Correlation summary on prompt allocation of scarce resources and effectiveness of school administration in Education District V, Lagos state

	Mean	Df	Sign.	P	(r)Cal. V.	(r)Tab.V.	Decision
X	101	10.3					
Y	99	9.7	198	0.05	0.78	0.010	Rejected

Source: Fieldwork, 2023

From Table 2 above, the (r) calculated value is 0.78 while the (r) critical value is 0.010, since the (r) calculated value is far greater than the (r) critical value, the study, therefore, rejected the null hypothesis and the alternative which states that there is a significant relationship between the prompt allocation of educational resources and effectiveness of school administration in Education District V, Lagos state.

This implies that prompt allocation of education resources to respective education districts helps educational planners and policymakers to provide necessary infrastructures and facilities that will aid effective school administration. Heinzerling (2001) backed this argument, stating that given the required educational resources are available, quick intervention in the form of quick distribution of educational resources will undoubtedly result in successful school monitoring and management.

CONCLUSION

The study investigated cost-benefit analysis and effectiveness of school administration in Education District V, Lagos State. From the findings revealed, the researcher concluded the following:

1. Cost-benefit analysis remains a visible tool used in determining how effective school administration can be undertaken.
2. Through cost-benefit analysis, stakeholders and policymakers can effectively determine the extent of infrastructural deficit, poor working conditions, and ineptitude of input-output analysis often undertaken in a school environment.
3. Prompt allocation of education resources goes a long way to determine the effectiveness of school administration in Lagos state.
4. Through cost-benefit analysis, it guides decision-makers and policy formulators to make more rational decisions within the limited space of both human and natural resources.

RECOMMENDATIONS

Among others, the study recommended the following:

1. Cost-benefit analysis should not be seen as a decisive guide to educational policymaking as its results must be balanced against other important considerations related to distribution, rights, and educational adequacy.



2. Cost-benefit analysis should be fully incorporated into educational policy-making only under special circumstances.
3. Cost-benefit analysis should therefore be used to inform policy decisions only in a limited number of cases in which the desired outcomes are highly measurable but confronted with limited resources.

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