#### SER, VOLUME 11, NUMBER 2, JULY 2009

# PRINCIPALS' PERCEPTION OF THE APPLICATION OF COST BENEFIT ANALYSIS IN ANAMBRA STATE SECONDARY SCHOOLS

### Dr. NKECHI IKEDIUGWU

Head of Department Educational Management and Policy Nnamdi Azikiwe University, Awka Anambra State – Nigeria GSM: 08033105894 OR 08077860007 E-mail: <u>nkechiikediugwu@yahoo.com</u>

### ABSTRACT

The study investigated the application of Cost Benefit Analysis in Anambra State Secondary Schools. 258 Principals and 258 Bursars formed the population of the study. Three research questions and one hypothesis guided the study. A thirty item questionnaire was used to collect data. Data collected was analysed using mean scores and t-test statistics. It was discovered that the principals and bursars do not apply cost benefit analysis in spending the money approved for them. Secondly the State Education Commission that approved the \$100.00 per child do not supervise how the money is being used. It was recommended among other things that State Education should start organizing seminars/workshops on financial management for principals. State Education Commission should also enadeavour to monitor and supervise the \$100.00 per child approved for principals.

## Introduction

Cost Benefit Analysis (CBA) is not a new technique. It is more than just a sophisticated recently introduced technique in that it inherently incorporates a number of supplicated techniques (IKkediugwu, 2000). Dehurst (1990) has identified CBA as a valuable methodology in which impacts are measured in non-technical terms and estimated principally by scientific methods. Cost benefit analysis is a social/economic techniques that started in America in the early thirties in connection with the large federal scheme of Tennessee valley. Tennessee valley way a hydro electric project. There was a problem of whether Tennessee valley scheme be adopted rather than

some different hydro electric scheme. The investment cost of the various schemes could be arrived fairly accurately but before any comparison could be made, it was necessary for the benefit in terms of reduced unemployment, the provision of electricity and water to the local population and to the industry, the irrigation of farm land and so on be reduced to quantitative terms. That was how CBA came into existence.

In the past few years, CBA has been applied in many areas like in water development and supply, transport, town planning and usage, health, and education (Dehurst, 1990). He explained that previously that projects were not analysed and executed based on cost and benefit. In Nigeria situation, CBA is used for decision making purposes (Babalola, 2006). According to him, CBA tries to add up and compare the costs and benefits of doing particular things in particular ways at particular times and places. For Woodhall (2004) cost benefit analysis is nothing more than the application of rationality to decision making as opposed to relying entirely on intuition and "seat - of - the pants" judgment. Trying to proffer a more universally applicable definition, Allen (1979) defined CBA as a versatile evaluation method which may be used to appraise a project or a programme, to optimize project designed, to assess policies and regulations and indeed to evaluate any decision entailing more or less measurable economic consequences. Williamsn and Gorrdina (1993) pointed out the following as the important features of CBA: problem definition, ascertainment of alternatives, estimation of cost and benefits, appraisal of estimated cost and benefits, forecasting, sensitivity analysis and decision making.

In education sector, CBA has to do with inputs and outputs in education. The educational administrator considers how much he should allocate to education before he embarks on the plan. The educational administrator or planner compares how much he gets of it. Most often it is very difficult if not impossible to quantify in monetary terms the benefits from education because it is only in the education industry that we have human beings as raw materials (inputs) and also as finished products (outputs). These outputs cannot be measured in monetary terms. Nevertheless the educational projects and programmes should be subjected to CBA before they should be embarked upon. The benefit of CBA cannot be overemphasized. Cost benefit analysis as a decision making tool is very important in education in general and in schools in particular. It provided the educational planner/administrator to compare so many alternatives that are identified in the system (Ikediuwu, 2000). CBA helps the educational administrator to avoid wasting

resources and it also provides him with information about the link or relationship between education and the labour market (Ikediuwu, 2000: 25).

In Anambra State, during the reign of Governor Mbadinuji, free, compulsory education was introduced in 1999. One year into the programme there became a lot of problems ranging from dilapidated buildings, to lack of basic teaching materials like chalk, duster, basic infrastructure needed in the schools. The government could not cope with the cost of providing free and qualitative education to the citizenry. In order to tackle the problems of educational cost in Anambra State, school fees was reintroduced in 2001. The students were asked to pay \$1,900.00 per term; \$100.00 Naira per child was approved for principals for equipping and managing the school. How do the principals apply CBA in the use of the money approved for them? This study therefore tries to investigate Principals Perception on the Application of CBA in Anambra State Secondary Schools.

#### Statement of the Problem

Free and compulsory education was introduced in Anambra State by Governor Chinwoke Mbadinuju in 1999. A lot of problems emerged after one year of the free and compulsory education. Teachers' salaries could not be paid and teachers went on strike for one year. Principals were not given any money to run the schools and this led to gross dilapidation of buildings, lack of chairs, chalk, dusters, library facilities and other learning materials. Due to these problems, in 2001, the Mbadinuju administration re-introduced payment of schools fees. The students were asked to ₩1,900.00 and the money was shared as follows. The principal has to keep onehundred Naira per child to run the schools. Two hundred naira per child was to be kept by State Education Commission while №1,700.00 goes to government coffers. There is not need to investigate how the principals used the H100.00 per child approved for them. This is the problem of the study. This study therefore tries to investigate Principals Perception on the application of cost benefit. Analysis by principals in the use of the ¥100.00 per child. The study also investigated what projects the principals used the money for and whether the State Education Commission that approved the money supervises the use of that money.

### **Purpose of the study**

The purpose of the study are:

- 1. to find out if principals apply CBA in spending the ¥100.00 per child approved for them by Anambra State Education Commission;
- 2. to find out the projects principals embark with that money; and
- 3. to find out if State Education Commission supervises how the money is being used.

# **Research Questions**

Three research questions guided the study:

- 1. what are the principals and bursars perceptions on the application of CBA in Anambra State Secondary School?
- 2. what are the projects embarked upon with the ¥100.00 per child approved for principals?
- 3. do the State Education Commission supervise the use of the approved money?

# Hypothesis

One null hypothesis guided the study. It was tested at 0.05 level of significance.

HO<sub>1</sub>: There is no significance difference between the mean rating principals and bursars' perception on the application of CBA in Anambra State Secondary Schools.

### Methodology

The survey research design was used and the area of study was Anambra State.

## **Population/sample of the study**

Two hundred and fifty eight (258) principals and Two hundred and fifty eight (258) bursars constituted the population for this study. There was no sampling for the study. Since the population of the study was small, the entire two hundred and sixteen principals and bursars from two hundred and fifty eight (258) government own secondary schools were involved in the study.

#### **Instrument for Data Collection**

A self structured questionnaire titled Application of CBA was used to collect data. It has two sections, section A and section B. Section A was on personal data of the respondents while section B contained items that solicited for the needed information on application of Cost Benefit Analysis ..... The items were structured on a 4 point scale rated as follows:

Highly important	-	4 points
Moderately important	-	3 points
Strongly important	8.171-12	2 points
Not important	-	1 point

### Validity of the Instrument

To determine the validity of the instrument, copies of the questionnaire were given to the researcher's colleagues. Two from the Department of Educational Management and Policy and two from Department of Accountancy, Nnamdi Azikiwe University, Awka. Their corrections and inputs helped to put the instrument in its final stage.

### **Reliability of the Instrument**

The Cronbach Alpha formula was used to estimate the reliability of the instrument. Ten copies of the questionnaire were administered to 10 principals from secondary schools in Enugu State. Their scores were subjected to statistical analysis and coefficient value of 0.78 was obtained. The value was considered adequate for the study.

## Method of Data Distribution/Collection

The researcher used research assistant to distribute and collect the questionnaire. These research assistants are teachers in various secondary schools in Anambra State. The distribution and collection lasted for 3 weeks at the end of which the 504 copies were collected.

#### Method of Data Analysis

Mean and standard deviation were used in answering the research questions while the t-test was used in testing the null hypothesis at the 0.05 level of significance. The

mean scores equal to or above 2.5 were considered satisfactory whereas those below 2.5 were regarded as not being satisfactory.

### Results

## **Research Question 1**

What are the Principals and Bursars Perception on the Application of CBA in Anambra State Schools?

Table 1:	Mean Ratings of Principals/Bursars Perception on the Application
	of CBA in Anambra State Secondary Schools

S/No.	Item	TR	AMR	SD	
1.	I compare so many alternatives before embarking on any project	1,548	3.00	2.15	
2.	I seek information on economic consequences before spending the money	1,625	3.15	1.40	
3.	The future is appraised before embarking on any project	1,780	3.45	2.00	
4.	Market surveys are conducted before spending any money	1,883	3.65	2.45	
5.	Goods are prioritized before spending	1,658	3.02	1.11	
6.	Cost benefits derivable from the projects are weighed first before embarking on it	1,574	3.05	2.25	
7.	Projects that have greater benefits than cost are embarked upon	1,620	3.14	1.75	
8.	Projects are embarked upon based on popular demand	1,269	2.46	2.94	
9.	Political interest is the only consideration in embarking on any project	1,574	3.05	3.46	
10.	Projects are embarked upon based on the money available	1,718	3.33	3.45	

Key:

S/N-Serial Number of item in the questionnaireTR-Total Rating

AMR - Arithmetic Mean Rating

# SD - Standard Deviation

From table one above, it is observed that items on S/No. -1, 2, 3, 4, 5, 6 and 7 have SD of less than 2.50. The items are those items that describe/portray the use of Cost Benefit Analysis in spending money. This shows that the principals and bursars do not apply CBA in spending \$100.00 per child approved for them by State Education Commission. On the other hand, items on S/No. 8, 9 and 10 have SD values of 2.50 and above. This indicates that the spending of the \$100.00 per child by principals are influenced by political interest, money available and on popular demand.

## **Research Question II**

What are he projects embarked upon with the  $\ge 100.00$  per child?

S/No.	Item	TR	AMR	SD
11.	Maintenance of school buildings	2,059	3.99	2.00
.12.	Sponsorship of semesters and enlightenment programmes	1,545	3.00	1.95
13.	Equipping of libraries with books	1,249	2.42	1.65
14.	Provisions of office equipment and stationeries	1,677	3.25	3.00
15.	Construction of toilets	1,662	3.22	2.25
16.	Provisions of sports facilities	1,548	3.00	2.15
17.	Maintenance of toilets	1,053	2.04	2.56
18.	Buying of books for students	1,987	3.85	1.49
19.	Buying learning materials e.g. chalk, magazines	1,625	3.15	1.14
20.	Organizing end of year parties	1,574	3.05	3.15
21.	Granting loans to staff	1,935	3.75	4.35
22.	Using the money for their personal needs	1,625	3.15	3.00
23.	Saving the money in the bank	1,238	2.49	4.45

Table I1:	Mean Ratings of Principals/Bursars Perception of the Projects	
	embarked upon with approved ¥100.00 per child	

From table II above, it is observed that items on S/No. 11, 12, 13, 15, 16, 18, and 19 had SD of less than 2.50. This indicates that the  $\aleph$ 100.00 per child is not being used for maintenance of school buildings, sponsorship of seminars and enlightenment programmes, equipping of libraries, construction of toilets. Provision of sporting facilities, maintenance of toilets, buying textbooks for students and buying learning materials. On the other hand, items on S/No. 14, 20, 21, 22 and 23 had SD of 2.50

and above. This indicated that the N100.00 per child is being used for provisions of office equipment and stationary, organizing end of year parties, granting loan sot staff, using the money for their personal needs and saving the money in the bank.

## **Research Question III**

Does the State Education Commission supervise the use of the ¥100.00 per child?

Table II1:	Mean Rati	ngs of	Princ	ipals/Bursa	rs Perce	eptio	n of th	ne Projects
	embarked	upon	with	approved	money	by	State	Education
	Commission	n						1.1

S/No.	Item	TR	AMR	SD
24.	Guidelines for spending the ¥100.00 per child was given to us by State Education Commission	1,987	3.85	1.49
25.	Officials from State Education Commission supervise the use of the money	1,514	3.05	2.25
26.	Officials from State Education Commission check all the projects we want to embark upon	1,548	3.00	2.15
27.	Auditors from State Education Commission Audit school account per month	1,780	3.45	2.00
28.	State Education Commission organizes workshops, seminars on financial management periodically	1,280	2.48	1.85
29.	State Education Commission appraise all the projects done at the end of the year	1,280	2.48	1.85
30.	Prudent principals receive awards from State Education Commission	2,059	3.99	2.00

It is observed that all the items in table III had SD below 2.50. This indicates that the State Education Commission that approved \$100.00 per child for principals' use does not supervise the use of \$100.00 per child.

# Table IV H<sub>0</sub>: There is no significant difference between the mean ratings and bursars perception on the application of CBA in Anambra State School

The t-test summary of examining difference in Application of Cost Benefit Analysis in the Secondary Schools.

Status	No. of Cases	Mean of Rating	Standard Deviation	t-cal	t-cal	Р	Df	Decision
Principals	258	2.95	1.78	0.64	1.96	0.05	514	Accepted
Bursars	258	2.81	1.82	0.64	1.96	0.05	514	Accepted

P > 0.05, t-calculated (0.64) < t - critical 1.96. From table 4, it is observed that the probability (P) of difference being due to error is greater than 0.05. At 0.05 level of significance calculated t-value is 0.64 which is less than the critical t-value which is 1.96.

Following the above, therefore, no significance difference exists in the mean perception of the Principals and Bursars. Accordingly Principals and Bursars do not significantly differ in their perception of the application of Cost Benefit Analysis in Anambra State Secondary Schools.

Research questions one sought to find out the application of Cost Benefit Analysis by the principals and bursars in the secondary schools system. The findings revealed the Cost Benefit Analysis was not being used by principals in spending the \$100.00 per child approved for them by the State Education Commission, instead they spend the money based on other factors like political interest, popular demand and on money available. This explains why most of the secondary schools in the state are still dilapidated.

Principals instead of applying CBA in spending money so that projects that are more beneficial to the students will be embarked upon they use it to fulfill their political interest. This is in line with Obi (2007) who opined that most of the principals have turned into politicians thereby abandoning their respective duties just to satisfy their political colleagues.

Research question II sought to find out the projects the principals embarked upon with the N100.00 per child approved for them. The findings revealed that the money was not for maintenance of school buildings, sponsorship of seminars, equipping libraries, construction and maintenance of toilets, buying of textbooks and learning materials. Rather the money was used for end of year parties, granting loans to staff, principals using the money for their personal needs and also saving part of them in the bank. This ought not to be so since this money was approved for maintenance of secondary school system.

These findings support Okeke (2003) who lamented the state of school libraries in the secondary schools system. Using the money approved for parties, and personal needs is wrong and fraudulent.

Research question III sought to find out whether the State Education Commission that approved the ¥100.00 per child supervise the use of that money. The findings revealed that no guideline were given to the principals on ho to spend the money. Officials from State Education Commission neither supervises the use of money not the projects the money is being used for. State Education Commission neither organizes workshops on financial management nor reward prudent principals. The hypothesis tested shows that the bursars and the principals perception did nor differ. Both agreed that cost benefit analysis are not applied in the usage of the approved ¥100.00 per child by the principals. This is very discouraging. No wonder principals and bursars now use the money for parties and their personal needs. Horne (2002) warned that proper financial management must be embarked upon by every manager in order to achieve the organizational goals. There was no significant difference between principals and bursars in the applicability of Cost Benefit Analysis in the Secondary Schools in Anambra State.

#### Recommendations

Based on the above findings, the following recommendations were made:

- 1. The Anambra State Education Commission that managers secondary schools should as a matter of urgency mount workshops on the use of Cost Benefit Analysis, and financial management for principals.
- 2. They should provide a guideline on how to spend the \$100.00 per child approved for principals.
- 3. Anambra State Education Commission should endeavour to monitor and supervise the use of that money.
- 4. Principals who misuse the money should be made to refund it and such a principal should be demoted.
- 5. Regular sensitization on the maintenance culture should be mounted.

### Conclusion

Cost and Benefits cannot and will not be divorced from our educational programmes and activities. In as much as the outputs cannot be qualified in monetary terms, the inputs can. Consequently, the amount of the inputs guides us in assessing or

estimating or possibly evaluating the worth and degree of the benefits accruable from educational enterprise. The principals should therefore endeavour to apply Cost Benefit Analysis in carrying out projects in Anambra State Secondary Schools.

#### References

Allen, G. U. (1979): Cost Benefit and Cost Effectiveness. Great Britain: Alden Press.

- Babalala, J. B. (2006): Basic text in Educational Planning. Ibadan: Awe Mark Industrial Printer.
- Dehurst, R. J. (1990): Business Cost Benefit Analysis. United Kingdom: Megrims Hill. George Allen and Unwin.

Horne, J. C. (2002): Financial Management Policy. New Delhi: Prentice Hill.

Ikediugwu, N. P. (2000): Cost Benefit Analysis in Education. Enugu: Rambow Press.

Obi, A. U. (2007): Financing Teacher Education Alternative Options. Paper presented at follow up of Education, Onitsha No. 8<sup>th</sup> - 10<sup>th</sup>.

Okeke, B. O. (2003): "The State of Libraries in Onitsha Urban". An M. Ed. Thesis, University of Nigeria, Nsukka.

William, T. & Gardina, P. (1993): Cost Benefit Analysis and Environment Problems. Saton: Tealified Ltd.

Wood Hall, E. J. (2004): Cost Benefit Analysis: An Internal Introduction. London.

providential in the ampired ones for knowing when a material is controls is meretanely were the ampired ones for knowing when a tangla is extracts is only a model were (Antono, 1969) Most of the educatoral reforms in the court of a model were (Antono, 1969) Most of the educatoral reforms in the court of a model are an element to a proving the inditive and quality of elementar in the area of a model attemption of the educatoral reforms in the court of a model area of transfer quality. This study extracted the formation in the alternation of transfer quality. This study extracted by a court of the educator of the ended with the study extra study of the mean of the alternation of the ended of the stratege data being the restored direct function and stratege in terms of the restored with the mean of the alternation of the director of the study events and the stratege of the statege data the stratege in the study extrated by the state of the stratege in the stratege in the stratege and the stratege of the state of the stratege in the stratege and the stratege stratege one of the stratege in theme are been as the stratege provide the stratege of the stratege in these with the mean at the stratege one of the stratege in theme with the stratege in the stratege stratege one of the stratege in theme with the stratege in the stratege provide stratege of the stratege in the stratege in the stratege in the stratege one of the stratege in the stratege of the stratege in the stratege of the stratege in the s