



The Effects of Educational inputs on Wastage in Secondary Schools in Meme Division: Appraisal from the Perspective of Infrastructural Resources

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ABSTRACT

This study titled “The Effects of Educational inputs on Wastage in Secondary Schools in Meme Division: Appraisal from the Perspective of Infrastructural Resources” is based on the problem of educational wastage in school establishments. The general objective was to establish the relation between school infrastructure and wastage in secondary schools in Meme Division of the South west Region of Cameroon. One research question was posed to examine the issue under investigation.

Being a quantitative study, the survey research design was used. The target population constituted 362 secondary school principals in the South west Region of Cameroon. A questionnaire on educational infrastructural inputs was used to collect data, and data obtained was analyzed using frequencies, percentages, means and standard deviation. The Chi – square test was used to test hypotheses at 0.5 level of significance

The findings revealed that 5 schools always have school library, 8 schools sometime have school library, 40 schools often have school library and 13 schools never have school library. It was found that a linear and positive relationship exist between schools library and schools repetition as confined by the result of the test hypothesis testing. From the study, it shows that χ^2 calculated (8.11) > χ^2 table value (7.92). This means that when school library available, school wastage reduces. This result agrees with the result of a research done by Ekoka & al, (2011) who demonstrated that library has a positive impact on student's achievement. Students that have access to a

well =supported school library media specialist scored higher in school.

The item testing the relationship between availability of school barrier and school repetition did not show any linear relationship with school repetition. This means that the presence of school barriers does not influence the rate of repetition.

The item testing the availability of school toilet and school repetition revealed that 12 schools always have toilet let 15 schools sometimes have toilet and 38 schools always have toilet. It was also found that there is no positive relationship between the availability of toilet and school repetition.

It was therefore concluded that educational infrastructural inputs have a significant role in wastage and must not be neglected. Based on the outcome of the study, recommendations were made.

Keyword: Wastage, Infrastructure, Resources

INTRODUCTION

Education is an engine of national development, the yard-stick by which society civilization, industrialization and technological development can be measured. The euphoria of independence that greeted Cameroon demanded skill manpower to fill the vacuums created by the outgoing colonial masters. Hence, the nation depended on Education to move the nation forward in the area of national growth and development. However, Education may not be used as an engine to move the vehicle of the nation forward

into development if it is not well planned. For this fact, a lot of policies have been formulated to fully equip the educational system so that it could supply the nation with qualified manpower to improve the economy as well as provide the nation with patriotic leaders.

It is unfortunate that all education planned has failed and the only education planned which has not failed is the one that has not planned. This is the situation in Cameroon, where all education planned shows elements of failure such as school drop-out, fail out, repeaters as well as unemployed graduates. An idle hand is the devil's workshop, this is perhaps major reason why Educational Management Scholars have conducted many researches to find out why Education wastages still in Cameroonian Schools.

The quandary that is increasingly assailing the educational system in the country is the need to expand education and guarantee its quality, we also need to ensure that the large number of non-schooling, school-age population get educated. However, education, unlike commerce and industry has multidimensional inputs and outputs.

In order to measure the efficiency of the educational system, it is necessary to find out what the input-output ratio is? The major output of educational system is the graduate. This graduate are of two types which may either be fail-out or pass-out. The fail-out constituted a waste of human, material and financial resources of both government and the parent sponsoring such a student in school. The production of a single graduate will require such inputs as teachers, textbooks, classroom, furniture and equipment which are quantified, monetarily and cost per student in a year. This cost may be seen as either direct or indirect cost, social or private cost. The social cost comprises of government expenditure on such a waste student, the money should have been used for other area of developmental project has been wasted on such a failed-out graduate.

Also, Unemployed graduate is a waste of education and Social developmental funds. As well, is a psychological problem to the parents who have spent a lot of cash and kind to ensure the graduation of the unemployed graduates in question?

Thus, any educational system must pay attention to the wastage going on.

STATEMENT OF THE PROBLEM

The phenomenon of high repetition is experience in many third world countries.

Repeating a class is an indicator of the inefficiency of the education system (Amin, 1999) as cited in (fongkeng, 2001). In some of these countries pupils are given the opportunity to repeat one or more times at the primary school level (Robison & al, 1992) as cited in (Brimer & Pauli. 1971) compared to other approaches, this is severe measure for selection at the primary school level.

France for example, uses the approach whereby a child may repeat once throughout his school life, while other countries allow a second repeat (fongkeng, 2001). In Cameroon, it is the second option but an option, which depends on the discretion of schools and parents (UNICEF, PROGRAMME D'EDUCATION DE BASE 2001) as cited in (fongkeng, 2001). Whatever be the case, repeating as a policy option is intended to improve individual performance in Cameroon. It is observed that there exist differential repetition and completion rates in the Anglophone and francophone system as well as between rural and urban areas (Amin, 1999) as cited in (fongkeng, 2001). For example, the average repeater rate for terminal examination between 1985 and 1990 was about 37.6% for francophone and 8.5% for Anglophone system during the same period.

The Cameroon system of education is currently in a phase of profound reform at the level of primary education. Among the reform objective is the desire to ameliorate the efficiency of the system through an improvement of internal output. That is increasing the rate of promotion of superior classes, a reduction in repeater rates, the reduction in the gap that exist between the rural and urban schools in the term of performance (fongkeng, 2001). The high rate of repetition and drop out presented by UNESCO statistic 20% repeater rates and 16% dropout rate in Cameroon secondary school constitute wastage and of course problematic to the state, parents and individual students. The psychological impact of repetition on the individual pupil can be destructive as the repeater develops an inferiority complex and unprogressive towards peers and school (EKOKA & AL, 2011). Pupil's who do not progress to the next class struggle with problems of self esteem and then develop highly negative attitude towards school. Students who have to repeat class wasted opportunities to develop the knowledge, skills,

attitude and values helping them to integrate in the society. On the part of parent, repeating of child can lead to a feeling of guilt in non-accomplishment of their duty as primary educator. Wastage reduces the capacity of school system to meet the objective of education for all. Repeating a class increase the per pupil cost of schooling without increasing the produced. Resources devoted to a repeater are resources that would have been used either to permit another child to enter school or to improve the quality of instruction to for students already there. Class repetition leads to larger class with attendant problems of assessment and supervision of children, more facilities are needed for the construction and equipping of new classrooms, training and recruiting teachers as well as providing didactic material (ekoka &al, 2011). Children and adolescents out of school in urban areas are more vulnerable to the attraction of street life and organized gangs of children, which contribute to problems of delinquency and crime. All these are indicators of inefficiency in the school system and their cause on the notation as a hold.

This study therefore seeks to examine what relationship exists between educational infrastructural inputs and wastage in Cameroon secondary schools.

Objective of the Study

The paramount objective of this study is to examine the relationship between infrastructure and wastage in secondary schools in Meme division, south-west region of Cameroon.

Research Question

What is the relationship between infrastructure and wastage in secondary schools in meme division, south-west region of Cameroon?

Hypotheses

Ho: There is no significant relationship between infrastructure and wastages in secondary schools in the Meme Division of the South West Region of Cameroon

Ha: There is a significant relationship between infrastructure and wastages in secondary schools in the Meme Division of the South West Region of Cameroon

CONCEPTUAL AND THEORETICAL FRAMEWORK

Wastage in Education could be used, as an expression of the inefficiency of resource management (Coombs

and Hallak (1972:77). Wastage in Education, according Salami (1993) can be defined as the degree to which human and material resources developed and made available are grossly underutilized or neglected. However, wastage can also be defined in term of the school output (that is number of students graduated successfully among those enrolled initially at the beginning of the program). Bruner and Paul (1971) posit in this regard that wastage in education is the degree to which the actual output fails to correspond with stated goals of education within a given period. According to Oyetakin and Odunayo (2013).

The term “wastage” from the economists’ language is used within the field of Education to describe various aspects of failure of an educational system to achieve its objectives. In the similar regards, Adamu(2000), Samuel(2004) and Oyetakin (2011) view wastage as an unprofitable and uneconomical utilization of time and resources. Looking critically at this definition, one could see that resources here can be categorized into human resources such as teaching and not teaching staff, financial resources as well as the material resources. The inability of a student to obtain school certificate at the normal time, for any reason whatsoever is regarded as wastage. On the other hand, wastage means the input, time, efforts expended in doing things but with no positive outcomes or outputs. Educational wastages mean premature withdrawal of child or students from school at any stage before completion of the prescribed courses.

Generally, Wastage in education can be viewed as under utilization or total neglects of human, financial and/or material resources allocated to Education for the purpose of making the school efficient in the area of producing successful graduate who are almost equal in numbers as at when enrolled within a stipulated time for the program. In summary, “Wastage in education” can be defined as under utilization or total neglect of educational resources and the production of lower output in quantity and quality than stated goals of education within a given period.

The existence of large class sizes can be explained by a higher demand in education due to fast population growth. This increase in population has not meet corresponding adequate school infrastructures in terms of classrooms to harbour the students. (Effah: 2003). Within the framework of this study, school infrastructure is seen in terms of adequacy of

classroom resources, enough sitting places, school libraries, School laboratories, toilets, availability and nature of dispensary. Jagero (2013) opines that the quality and quantity of school input, status and process variables are the major determinants of the quality of output. This implies that the quality of facilities supplied to the school, the efficiency in the utilization of such facilities would certainly influence the quality of the outputs. So the school administration has to consider the management of school infrastructure as a priority and should thus be actively involved in the definition of relevant infrastructure based on school objectives, planning and controlling the utilisation and maintenances processes of facilities. This is because proper teaching learning cannot take place without adequate instruments that are fundamental in fostering conducive environments both for teachers and students in academic settings. It is part of their professional ethics that they should not divert money for procurement to another use. Olagboye (2004) In Abdulkareem & Fasasi(2013) states that educational infrastructure consist of instructional resources such as audio and visual aids, graphics, printed materials, display materials and consumable materials. They also include physical resources such as land, building, furniture, equipment, machinery, vehicles, electricity and water supply infrastructure. In another dimension Ojedele (2004) In Abdulkareem & Fasasi(2013) identified three components of educational infrastructure. These are school infrastructure, such as buildings and playgrounds; instructional facilities. Based on these definitions above, one can conclude that there is a slide difference between school infrastructures and facilities. Considering Ojedele's definition, educational infrastructures constitute part of educational facilities; and this is how these concepts are employed in this study. From the facility management approach developed by Abdulkareem & Fasasi (2013), planning, organizing, staffing, leading and controlling the processes of supply utilization, maintenance and improvement of educational facilities in secondary Schools are important functions of school administration as far as facility management is concerned. He equally highlights that planning of educational facilities involves decision making on future actions. Also, Fielding, (2000) in his study found out that natural lighting, or daylight, has shown to be effective in improving the quality and quantity of lighting in instructional areas. Daylight has been and is still the standard by which artificial light is measured. Fielding (2000) reports that studies by

Kuller & Lindsten (1992) and the Hescong Mahone Group (1999), indicate a positive correlation between day lighting and academic performance. While the issue of lighting cannot singularly address all academic success variables. It is important to note that quality lighting increases the comfort of students and that comfort often translates into higher scores and increased performance (Rodgers, 1998). Design experts also promote the consideration of the developmental stages of students when establishing lighting systems (Bushweller, 1998). Design factors such as lighting can create an atmosphere where students are physically supported to concentrate on academic endeavours. Recently, the focus on effective learning environments has shone on healthy physical surroundings. (O'Neill, 2000). It could be possible that the school environment impact students' health because the quality of air and light in the classroom can influence students' sight and physical and psychological comfort ability which could in turn affect teaching and learning processes adversely. Proper windows placed on the classroom could be very important as it facilitates the ventilation process especially when the class size is very large. When many individuals are concentrated in a room without proper ventilation system, it leads to a high emission of carbon dioxide by the human beings there in. lack of proper ventilation will lead a rise in classroom temperatures which would certainly worsen breathing conditions, cause dizziness, weakness and tiredness and possible unrest both for teachers and learners; thus, impeding their endeavours in carrying out their responsibilities as required. Mojela (2013) identified several factors that contribute to the deplorable conditions of public schools infrastructure in South Africa. These include inadequate government intervention, no sense of ownership by stakeholders, inadequate funding, and vandalism. Furthermore, lack of maintenance, neglect, deferred maintenance and overcrowding were also identified

Poor and insufficient school infrastructure negatively impact student learning and schooling outcomes. Myriad factors have contributed to an infrastructure gap in the education sector in many countries – rapid increases in enrolments, poor maintenance and aging capital stocks, rural to urban migration, and inefficient government planning and school construction to name a few. By some estimates, as many as 10 million classrooms and \$100 billion in infrastructure investment are needed just to support the achievement of the Millennium Development Goals (MDGs);1

which means, the overall global challenges are far bigger.² Meeting the challenges may require increased funding, but it will also require improved efficiency of infrastructure provision. Various forms of decentralization are likely to be involved both to improve governance and accountability and to foster innovation and cost saving in the school construction industry and investment and project cycle. Over the past three decades plus, a great deal has been written about infrastructure decentralization, and nearly as much about educational decentralization. Very little, however, has been written on decentralization issues pertaining specifically to educational infrastructure and school construction – and even less in developing country contexts. This paper first discusses why the topic is interesting and worth considering; next we lay out the issues and considerations specific to educational infrastructure decentralization; The sparse literature on educational infrastructure decentralization is surprising given the magnitude of the needs, the clearly distinctive issues involved in educational infrastructure compared to other sectors, and the extent of centralization found in many countries. The financial scope is bigger than implied by capital expenditure figures because, like much “point” infrastructure associated with service provision, there is strong interplay between current service provision, on the one hand, and capital investment and school construction, on the other. As but one example, once built, schools must have teachers whose salaries are the most significant recurrent expenditures in many government budgets. In addition, while it may seem obvious, it is worth stating explicitly that there are many reasons why, and modes through which, school infrastructure is related to student outcomes and performance. To highlight just a few: School proximity to home impacts attendance—travel and safety; The quality of infrastructure impacts enrolment and completion rates, learning outcomes as well as teacher absenteeism (This is particularly true for water and sanitation facilities). It is also very important to parental perception and satisfaction with school quality, and therefore is (or should be) an important feature of politicians’ calculus. In addition, while investment expenditures represent a small share of the total (for instance when compared to health sector expenditures), there are several factors that compound the fiscal impact of educational infrastructure investments. Perhaps the most important factor is that infrastructure investments have an impact over teacher and payroll costs, which make up by far the

lion’s share of education expenditures. In addition to the impact on teacher effectiveness mentioned above, every school construction project implies an allocation of teachers to school buildings.

The main task of school is to provide education which involves a series of programmes and activities. The successful conduct of these programmes and activities depends mainly upon the availability of proper infrastructure in the school. The term 'Physical Infrastructure' stands for the physical facilities of the school. It is referred to buildings, grounds, furniture and apparatus along with equipments essential for imparting education.

A school should be set up in a suitable atmosphere. Its location has enormous significance. It must have plenty of space with shady trees around, far away from the noise of the crowded city and polluting atmosphere. There should be a calm and quiet atmosphere which is conducive to teaching and learning. It should have space, utility and attractiveness. The school building should be attractive, have adequate lighting, comfortable seating, useful service facilities such as library, multipurpose rooms, functional playground, classrooms, chalk and bulletin boards, sinks, work areas, filing and storage space and lockers for pupils and teachers etc.

We must have the following physical infrastructure for a good school.

A. School Building:

The school building should be well planned, spaciouly, functionally and with pleasing architectural features. The rooms of the building should be spacious and ventilated with all facilities like fans etc. While constructing a school building we must keep in mind the school buildings should have different facilities such a library, different types of laboratories (Physics. Chemistry Geography Biology Science, Home Sc., Drawing and Painting etc. workshops art and craft rooms, staff room, principal's office, school office, multimedia room, conference room or theatre etc. along with assembly ground, gymnasium etc.

The architectural design of the building is the most important feature. It should allow free movement in and out of classroom for students and teachers while it is often preferred that schools are housed in single storey building in urban areas due to non-availability

of land; multi-storeyed buildings are constructed for schools. There must be a transport facility to be arranged in the building for cycles, scooter etc.

B. Classrooms:

Classroom is the backbone of any school physical infrastructure. Every school should, have adequate number of classrooms and every classroom should have a pleasant look. Walls should be painted by some light colours and rooms should be carefully decorated. New charts. Paintings should be fixed on the walls.

The front wall should have blackboard at appropriate height. The walls of the back should be having built-in cupboards for keeping books, tools, crafts materials, apparatus for experiments, maps and other teaching aids. In a classroom where there are movable seats and work tables, where varied resources for learning are readily available in storage cabinets. The seating can be changed in a variety of activities simultaneously. The classroom should be well lighted so that students seated at different corners are able to see the teacher and the blackboard. The location of rooms would be airy and lighted naturally on the failure of power (Electricity).

C. Library:

Library is a counterpart of a school physical infrastructure. It plays a vital role in the learning process of the school. The library is an essential component of a good school. The library room should be located in such a place where students are not getting disturbed by noise.

It is a place where a useful means of storing and communicable knowledge and one that teacher body cannot do without. A library is a repository of books and should have textbooks, workbooks, reference books, fiction, non-fiction books at various reading levels, reference books on special topics and interests and related pamphlets, clippings, pictures, maps, charts, periodicals, etc. are placed in proper shelf.

D. Laboratories:

Laboratory is an essential part of a school. This is the place where experiments are performed and hypothesis are tested and verified. At +2 stages a school needs biology, physics, chemistry, a computer laboratory. The physics lab should be equipped by optical, electrical, thermo dynamical, mechanical instruments.

The chemistry lab is equipped with different types of solutions, salts and components. Biology lab has to be equipped by slides, microscopes, skeletons and different specimens. Computer lab is equipped with a series of computers and systems. Mere knowledge would not be sufficient for building the required competence in specific content area. If theory is supported by practices clarity could be maintained as well as psychomotor skills could be developed.

E. The Administrative Block:

In a school infrastructure the administrative block should be well planned. The leadership and service functions are done in administrative block. The school office should be centrally located so as to serve as a good co-ordination centre, easily accessible to visitors, teachers and students. The principal's office should be large enough to accommodate small conference and should open into the general office as well as to the corridor.

F. Staff Room:

In the physical infrastructure there must be a room where the teachers can meet and interact with each other, do corrections of home/school work of students and refer to books etc. This room should have lockers for teachers so that they can safeguard various reference books and instructional materials and answer books and their personal belongings.

G. School Playground:

Sound mind exists in a sound body, so the school should have well maintained playgrounds. Sports and games play so vital roles in education that they cannot be totally dispensed with. Playgrounds not only enable pupils to develop their physical but also help them to grow cognitively, socially and effectively.

Any school that has its eye on the total development of children should have enough facilities for indoor as well as outdoor sports and games. Physical education is a subject to be taught so that it should be taught in playground only.

H. Other Facilities:

Among the above facilities there is another one which is most important for a school. These are, Art and Craft Room, Music Room, Dramatic Room, Dance Room, Sports Room, SUPW Room etc

METHODOLY

The Research Design

The survey research design was consider appropriate For this study. Survey is a process of collecting representative data from a higher population with the intention of generalizing the results to the population of interest (Mbua, 2003).

Survey is a quantitative research design. Quantitative researches designs are plans for carrying out research oriented towards quantification and are applied in order to describe current position conditions or to investigate relations. The main purpose of this study is to investigate what relationship exists between educational infrastructural inputs and wastage. A study like these needs a design with a plan and instrument that inquires the state and usage of infrastructural resources.

Area of the Study

This research was done in the south west region of Cameroon found in West Africa. It is a bilingual country that has ten regions. Southwest region capitals are Buea.

It's one of the two Anglophone (English speaking) regions of Cameroon. It's bordered to the east by the East region, to the North by the Center region to the west by the Gulf of Guinea (Part of the Atlantic Ocean) and to the South by countries of Equatorial Guinea, Gabon, and Congo. The South occupies 47.720 Km² of territory, making it the fourth largest region in the nation .The region is divided into six divisions: Lebialem, Manyu, Meme, Ndian, kupe manugoba, fako division. These are in turn broken down into subdivisions. Presidentially appointed senior divisional officers govern each respectively.

About its geography, the soil is primarily ferrous. The south west is one of Cameroon's most economically areas due to its numerous plantations and the tourism generated by the beach. The area's economic strong hold, however it has a fair amount of industry; commercial agriculture is also important in the South west, the major cash crops being banana cocoa and rubber. Plantain is the major crop grown; maize, groundnuts, cassava, yams and other foodstuffs are raised in more modest quantities. Cattle rearing and

fishing are significant economic components, aswell. Much of the population is made up of subsistence farmers.

Regarding education, the region was notable for having the first English-speaking University in Cameroon (The University of Buea). Other notable universities are catholic and Presbyterian universities. A good number of private higher institutions are found in this region, in addition to the public, lay private and confessional primary and secondary schools.

The south west region is considered as the best touristic region in the country to visit as the highest mountain in West Africa, Mount Cameroon is located in Fako division.

Population of the Study

A population refers to the complete collection of all the elements that are of interest in a particular investigation. It's especially the aggregate or totality of individuals, having one or more characteristics in common that are of interest to the researcher and where inferences are to be made in a particular study (Amin, 2005).

The target population (Which refers to the population in which the researcher ultimately wants to generalize the results, in this study constitute 94secondary school principal in public, lay private and confessional schools in the Meme division. Secondary school principals are at the focal point of management of school inputs because they are head administrators.

There are in the position to manage greater percentage of school inputs in their school, especially those that are confidential use and may require the knowledge of all staff and students. Reduction of school repetition and school dropout in secondary schools also depend on how principals administer their schools principals were therefore chosen to make up the population of this study because they are in a better position to give information on how inputs are manage at all levels in their respective schools based on their position, knowledge and experience.

Table1: Distribution of secondary schools and their principals in the various divisions of the south west region of Cameroon.

Division	Type of school			Total	Total of principal
	Public	Lay private	Confessional		
Fako	39	43	18	100	100
Manyu	56	4	5	65	65
Kupe Mwanenguba	28	3	1	32	32
Ndian	31	2	1	34	34
Lebialem	32	3	2	37	37
Meme	56	6	32	94	94
Total	242	61	59	362	362

Source: Regional delegation of secondary education (2014/2015).List of secondary schools operating in the South west region

The accessible population or the population from which the researcher drew her sample consisted of one division in the south west region.

Table 2: Accessible Population

Types of school	Number of schools	Total	Total number principal
Public	46	46	46
Lay private	22	22	22
Confessional	6	6	6
Total	74	74	74

The instrument use to collect data in this study was a questionnaire on educational infrastructural inputs and wastage.

FINDINGS

This section of the study presents results based on the research question and hypotheses posed to address the infrastructural wastages in secondary schools in the Meme division of the South West Region of Cameroon.

Sample and Sampling Technique

In this study, Meme division was chosen by purposive sampling because repetition and drop out were more evident to the researcher in this division. 74 public, lay private and confessional schools and their respective principals in Meme were chosen using convenience sampling. This technique was chosen in other to select schools that are convenient close at hand, and easy to reach by the researcher within a short time frame.

Infrastructure and Wastage in Secondary School Hypotheses

Ho: There is no significant relationship between infrastructure and wastages in secondary schools in the Meme Division of the South West Region of Cameroon

Ha: There is a significant relationship between infrastructure and wastages in secondary schools in the Meme Division of the South West Region of Cameroon

Instrumentation

To carry out a quantitative study like this one, the researcher had to choose the most appropriate tool for data collection for effective measurement.

The score from the response of the 8 items that measured infrastructure were computed using using the Chi-square test to test the hypothesis. The result of the analysis is presented as follow

Table 3: Relationship between School Library and School Repetition

School library	Always		Sometime		Often		Never		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
less than 20% Repetition rate	5	100	5	62.5	30	75	5	38.46	49	75.58
more than 20% repetition rate	00	00	3	37.5	5	25	8	61.54	16	24.62
Total	5	100	5	100	40	100	13	100	65	100

Table4. Table Permitting To Calculate

Fo	Fe	/fo-fe/	/fo-fe/-0.5	(/fo-fe/-,5) ²	$\frac{(f_0 - f_e - 0.5)^2}{f_e}$
5	3.77	1.23	0.73	0.53	0.14
00	1.23	1.23	0.73	0.59	0.43
5	6.03	1.03	0.53	0.28	0.4
3	1.97	1.03	0.53	0.28	0.14
30	3-.15	0.15	-0.35	0.12	0.004
5	9.85	4.85	4.35	18.92	1.92
5	9.8	4.8	4.3	18.49	1.88
8	3.2	4.8	4.3	18.49	3.2

Total=8.11

 X^2 calculated = 8.11 $\alpha = 0.05$ d ll =3 X^2 critical value =7.92 X^2 calculated (8.11) > X^2 critical value (7.92)**Inference**

This result of the analysis reveals that the calculated value (8.11) is greater than the critical value (7.92) at 0.5 level of significance with 3 degree of freedom. This led to the rejection of the null hypothesis, meaning that there is a significant relationship between teaching aids and school repetition

Table 5: Relationship between School Barrier and School Repetition

School library	Always		Sometime		Often		Never		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
less than 20% Repetition rate	5		5		20		15		49	75.58
more than 20% repetition rate	00		4		4		8		16	24.62
Total	5		13		24		23		65	100

Table 6: Table Permitting to Calculate X^2

F0	Fe	lfe-fel	lf0-fel-0.5	(/f0-fe/-0.5) ²	(/f0-fe/-0.5) ²
5	3.77	1.23	0.73	0.53	0.14
00	1.23	1.23	0.73	0.53	0.43
9	9.8	0.8	0.3	0.09	0.09
4	3.2	0.8	0.3	0.09	0.02
20	18.09	1.91	1.41	1.99	0.01
4	5.91	1.91	1.41	1.99	0.33
15	17.33	2.33	1.83	3.35	0.19
8	5.66	2.34	1.84	3.38	0.59
Total	64.99	12.55	11.87	16.95	1.8

 X^2 calculated =1.8 $\alpha = 0.05$ d ll =3 X^2 critical value =7.92 X^2 calculated (1.8) > x^2 critical value (7.92)**Inference**

This result of the analysis reveals that the calculated value (1.8) is less than the critical value (7.92) at 0.5 level of significance with 3 degree of freedom. This led to the rejection of the alternative hypothesis, meaning that there is no significant relationship between barrier and school repetition

Table 7: Relationship between School Toilet and School Repetition

School library	Always		Sometime		Often		Never		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
less than 20% Repetition rate	9	75	10	66.67	30	78.98	00	00	49	
more than 20% repetition rate	3	25	5	33.33	8	21.05	00	00	16	
Total	12	100	15	100	38	100	00	00	65	

Table 8: Table Permitting to Calculate X^2

F0	Fe	lfe-fe/0.5	lf0-fe/0.5	(/f0-fe/-0.5) ²	(/f0-fe/-0.5) ²
9	9.04	0.04	-0.46	0.31	0.02
3	2.95	0.05	-0.46	0.20	0.06
10	11.30	1.3	0.8	0.64	0.05
3	3.09	1.31	0.81	0.66	0.17
10	28.64	1.36	0.86	0.74	0.02
8	5.91	1.91	0.85	0.72	0.07
00	00	00	00	00	00
00	00	00	00	00	00
Total	64.97	15.41	2.41	3.17	0.39

X^2 calculated = 0.39

$\infty = 0.05$ d11 = 3

X^2 critical value = 7.92

X^2 calculated (0.39) < X^2 critical value (7.92)

Inference

This result of the analysis reveals that the calculated value (0.39) is less than the critical value (7.92) at 0.5 level of significance with 3 degree of freedom. This led to the rejection of the alternative hypothesis, meaning that there is no significant relationship between toilet and school repetition.

The findings reveal that 5 schools always have school library, 8 schools sometime have school library, 40 schools often have school library and 13 schools never have school library. It was found that a linear and positive relationship exist between schools library and schools repetition as confined by the result of the test hypothesis testing. From the study, it shows that x^2 calculated (8.11) > X^2 table value (7.92). This means that when school library available, school wastage reduces. This result agrees with the result of a research done by Ekoka & al, (2011) who demonstrated that library has a positive impact on student's achievement. Students that have access to a well =supported school library media specialist scored higher in school.

The item testing the relationship between availability of school barrier and school repetition did not show any linear relationship with school repetition. This

means that the presence of school barriers does not influence the rate of repetition.

The item testing the availability of school toilet and school repetition revealed that 12 schools always have toilet let 15 schools sometimes have toilet and 38 schools always have toilet. It was also found that there is no positive relationship between the availability of toilet and school repetition as confined by the result of table above

It shows that X^2 calculated (0.39) < X^2 critical (7.92). This means that the present of school toilet does not influence the rate of wastage.

CONCLUSION

it should be noted that lack of school infrastructural inputs is a reality that crosses all educational systems in the world, especially developing countries. The availability of adequate school inputs can initiate productive change in school systems by increasing student achievement. The resultant consequence of lack of this school inputs will inevitably increase the rate of school wastage. It has been demonstrated in this study and other related studies that availability of computers, teaching aids, text books for teachers and

students, supply for teachers, library in school can contribute to reduce the rate of educational wastages. It was also demonstrated that schools with high rate of repetition had high rate of drop out. It is important to emphasize the cleaver word of Bonseroning (2013) as cited in Bombey (2014): "Education production involves teachers, students and a number of other actors. The effects of these actors and their implicated interaction are the determinant of the student achievement".

It should be understood that the supply of adequate educational input in schools is successfully in resolving the problem of school wastage. Mbua (2003) pointed that a close analysis of the survival rate shows that boys persist in school is slightly higher than girls. However, the more important disparity between boys and girls is evidence in the overall enrollment figure for the less developed region, three quarters of 8 million school entrance age children who did not enter school in 1994 -1995 were students from rural areas (Mbua,2003). He demonstrated that rural schools often have higher dropout rate than urban schools.

In order to manage this problem of schools wastage, school inputs should be equally distributed to all the schools.

RECOMMENDATION

Base on the finding of this study, the following are recommendations that will improve on the reduction of educational wastage and eventually improve educational achievement.

- Policy makers should ensure that decision about whether a child repeat is based on objective, national criteria that are applied equitably across schools and regions.
- A clear communication strategy needs to be developed so that all stakeholders are aware of the new policy, understand why promotion is replacing repetition as the first choice solution to children who are struggling, and are supported in the "how to"of implementing it at school and community level.
- The state should ensure the quality and relevance of education and teaching
- The state should make the transition from repetition to automatic promotion The teacher should provide out of class and non mainstreamed support through special need provision and home work

- Formal identification of an individual special learning needs and the allocation of resources for that individual need from government in addition to the school normal funding.
- The state should provide schools with satisfactory facilities and conditions for students and teachers.
- The government should give annual subvention or grant to enable private schools subsidies the payment of teachers salaries and other related course.
- The teacher should provide out of school non mainstream support through special need provision and homework.

Suggestion for Further Research

This same study can be carried out in other regions of Cameroon on the management of educational input by school authorities in Cameroon secondary schools.

Others relevant studies can be conducted on:

- The effect of school location on wastage in secondary schools in all the regions.
- The relationship between type of schools and wastage 111 secondary school.
- The relationship between gender education and wastage in secondary school.

Limitation of the Study

The result of this study may have been affected negatively because of the following constraints:

- All the questionnaires administered were not returned. The information on the questionnaire that was not return would have added more value to this, study
- .On the returned questionnaires, there were certain items that were not answered, resulting to missing values for that items. This factor is also a limiting factor.It result in a minus of some information that would have added value to this study.
- .A few principals especially in Mbonge sub division did not responds correctly to the questionnaires. They assigned another school administrator to respond on their behalf. This action may have biased the data obtained.

REFERENCES

1. Adamu, B. (2000). Financial Implication of Educational Wastage in Secondary Schools in Ondo State. *Journal of Professional Educators* 1(1a) pp 9-15.
2. Adesina, S. (1980a). The Wastage in Education: A case study of Lagos State Principal School. *West*

- African Journal of Education* (Benin City), (1) Pp 11-12.
3. Adesina, S., (1980b). Education for Development: The challenges of the 1980s" in Adesina, S Afriat, S.N. (1972). Efficiency Estimation of Production Functions, *International Economic Review*, 13(3)
 4. Aina, S, Oyetakin, A. I. and Oshun, G. O (2010), Impact of Economic Depression on the Education of Male and Female Undergraduates in Nigeria, *the Social Sciences Medwell Journal: Pakistan*, 4(6), Pp 610-613.
 5. Akangbou, S. D. (1985), *The Economics of education planning in Nigeria*. New Delhi: Vika Publishing House PT. Limited.
 6. Akindele, J. B. (2005). *Efficiency of Human Capital in Education*, Kogi: Track Times Press.
 7. Akinyemi K. and K. Ajayi (1983), *Nigerian Education: Trends and Issues*, Ile-Ife, University of Ife Press.
 8. Nwankwo, J. I. (1981). *Educational Planning: Theory and Practice*, Lahore: Izharsons Ltd.
 9. Babalola, J. B. (2001). *Global Transformation in Today's World: Implication for Financing Higher Education in Developing Economies*, Ibadan: His Lineage Publishing House.
 10. Battese, G. E. (1992). Frontier Production Functions and Technical Efficiency: A Survey of Empirical Applications in Agricultural Economics, *Agricultural Economics*, (7), 185-208
 11. Bedi, A. S. & Garg A. (2000). The effectiveness of private versus public schools: The case of Indonesia. *Journal of Department of economics*, 69(2), Pp 463-494.
 12. Bradbury, et al. (1984). State Aid to Offset Fiscal Disparities across Communities, *National Tax Journal*, Vol. 37, (June).
 13. Brimer, M. A., Pauli, L. (1971). *Wastage in Education: A World Problem* Paris: UNESCO.
 14. Callaway, A. C. (1981). Dropout from Nigerian schools 1961-1971. *Institute of Social and Economic Research*, Ibadan: Nigerian. No. 8
 15. Coombs, P. H. and J. Hallak, (1966) (Eds.), *Educational cost analysis in action: case studies for Planners*, Paris: UNESCO - IIEF.
 16. Downes, T. A. and T. F. Pogue. (1994). Adjusting School-Aid Formulas for the Higher Cost of Educating Disadvantaged Students, *National Tax Journal*, Vol. 47,
 17. Durosaro, D. O., (1989). Auditing the Production of Secondary Education Through The Measurement Op Wastage In Nigerian Schools, *International Journal of Educational Management*, Vol. 1, No.1
 18. Durosaro, D. O, (1985). Resource Allocation and internal Efficiency of Secondary education in Bendel State, Nigeria. Unpublished Ph.D. thesis, Ibadan, University of Ibadan
 19. Ekwunyenga, E. J., Nwadiani, O. (2004). An analysis of dropout rate among secondary school students in Abia State 1995 – 2000. *Journal of Educational Research and Development Abraka, Nigeria*, 3(1) Pp 23-26.
 20. Fajemidagba, O. (1984) "An empirical approach to sequencing mathematics curriculum items", in *Nigeria Journal of Curriculum Studies*, 2(1),
 21. Famade, O. A. (2003). Measuring Productivity of Secondary Education in Ogun State, Nigeria, *Journal of Education Thought*. 3(1) Pp 399-407.
 22. Federal Republic of Nigeria (2004) *National Policy on Education*, 4th edition, Lagos: NERDC Press
 23. Fred, C. L. Allan, C. O. (2008). *Educational Administration Concepts & Practices*, New-York: Thomson Learning inc.
 24. Gaustad, J. (1991). *Identifying Potential Dropouts*, ERIC Clearinghouse on Educational Management, University of Oregon Eugene Oregon
 25. Igbineweka, V. O., (2000). *An Analysis of Students Wastage in Secondary Schools in Edo State, 1995-1999*. Ph. D Proposal, Unpublished. University of Benin
 26. Nakpodia, E. D., (2010.). An Analysis of Dropout Rate among Secondary School Student in Delta State, Nigeria (1999-2005), *Journal of Social Sciences*, 23(2): Pp 99-103
 27. Nwakobi, N. D. (1990). *An Analysis of the Trend and Causes of Dropout among Secondary School Students in Onitsha Local Government Area of Anambra State and the Environ*. M.Ed. Thesis, Unpublished. University of Benin

28. Ojo, F., (1980). *Student Wastage in Nigeria Universities*, Human Resource Research Unit, University of Lagos
29. Okedara, J. T. (1981a). *A Comparative, study of formal and non formal educational wastage in Ibadan*, Institute of Education, University of Ibadan
30. Okedara, J. T. (1981b). *A Preliminary Study of Primary School Withdrawals in the Wastage State of Nigeria (1955-1974)*. Ibadan: Nigerian Institute of Social and Economic Research Monograph Series, No. 9, United National Economic Commission
31. Oyetakin, A. I. & Odunayo, M. O. (2013). *An Analysis of the cost of educational Wastages in Nigerian public universities: Efficiency in view*, *Journal of Educational and Social Research* 3(7) Pp 683-689
32. Oyetakin, A. I. (2007). *Financial Implication of the Universal Basic Education Policy in Lagos: Economic Feasibility of the Scheme*, *Journal of Research in Educational Management* Lagos State University, 1(3), Pp 112- 122
33. Oyetakin (2010). *Cost of Education: Determinant of Free Education and Human Infrastructure In Nigeria*, *Education Thought*, Faculty of Education, Adekunle Ajasin University, Akungba Ondo State, Nigeria.
34. Oyetakin, A. I. (2011). *Cost of Education: Determinant of Free Education and Human Infrastructure in Nigeria*, *Educational Thought*, Faculty of Education, Adekunle Ajasin University, 8 (1) Pp 171-185.
35. Psacharopoulos, G. (1994). *Returns to Investment in Education: A Global Update*. *World Development* (22) Pp 1325–1343.
36. Rao, G. M. & Tikkiwals, B. D., (1966). "An integrated approach to the study of wastage in a given course of education", *Sankhya Series B.*,(28) pp. 229-236
37. Salami, A. (1993). *Concept of wastage in Relation to human Resources*, An unpublished PhD Thesis in Vocational Technical Education, University of Nigeria, Nsukka
38. Samuel, T. (2004). *Repositioning Education in Lagos State for Improved Service Delivery: A Synopsis of Contending Issue and Policy Imperatives*, *TESCOM NEWS*, 9(2)
39. UNESCO, (1970). *The statistical measurement of Educational Wastage: Drop-Out, repetition, And school retardation*, Paris: IIEP.
40. Alemnge, F., Ekema, E., Tande, K., Lahloh, I., Teku, T. (2008). *General pedagogy*. Buea: University Press.
41. Amin, M., E. (2005). *Social sciences research: conception, methodology and analysis*. Kampula University: Makerere University Printery
42. Biene, I., Nauro, F. (2006). *Education inputs and outcomes*. New York: Harper & Row Publishers.
43. Bipoupout, N., M., Sondyia. M., T.(2011). *The competence based approach training modules*. Yaounde: Press Universitaire d' Afrique.
44. Bombey, L. (2014). *Principal managerial skills and effectiveness 111 conflit resolution*. Unpublished project.
45. Bray, M.(1981). *Universal primary education*. London: Europe publication
46. Brimer, M., Pauli, P. (1971). *wastage in education, a world problem*. switzerland : university of press. British English Dictionary (2005). England: Longman
47. Buddin, R., Zamaro, G. (2009). *Teacher's qualification and student's achievement in urban element schools*. New Jessey: printice hall, Inc. Collins dictionary (2004). England: Longman.
48. David, M. (2003). *Acquired needs theory*. New York: Haper & Row publisher.
49. Ekoka, M., Zinkeng, M., Shafack, R., Nkengla, J., Ekema, E., Luma, A.,
50. Tazifor, J.(20 11) *Designe of effective learning environments*. Buea: university press.
51. Fazally, R. Jaddy, K. Naby, B., J., Mahammad, A. (2011) *impact of discussion method on student's performance*. *Special issues*, 2(7), 25.
52. Eurostat, P. (1997). *Education across the European statistic and indicators*. Luxembourg: Offices des publications officielles.
53. Fonkeng, E., G. (2001). *Strategies to reduce repetition 111 Cameroon pnmry schools*. Yaounde I: presse Universitaire d'Afrique.
54. Fonyuy, S., P., Fontem, N., Agborbechem, P., Zinkeng, M.(2010) *Educational psychology*. Buea: University press.

55. Gayla, S. (2014) Direct Instructional approach. New York: haper & Row publisher.
56. GCE Board (2014).GCE results analysis. Buea: GCE Board publisher.
57. Glewwe, P., Kremer, L., Mailing, M.(2009). Textbooks and text scores in Kenya. American Economic review, 1 (I), 112.
58. Gordon, B., & Locher, L. (2012). Education 111 America. Academic of management journal, 33, 209-211.
59. Harbison, P., H. (1973). Human resources as the wealth of nation. London: Oxford University press.
60. Hoxby, M. (2000).Economic theory. American Economic review. 1 (3).57
61. Janet, Q., S., Akey, T., M., Shelley, R., Willnen, .1. (2007). Instructional leadership teaching: quality and student achievement. New York: Association press.
62. Janie, M., Dotsong, A. (2011) cooperative learning structure and student achievement. New York: Association press
63. Magnet, T. (2007). Teacher quality and student achievement. South Africa: University press.
64. Maphono, L., S., Mabolo, D.(2015). Teacher's qualification and pupil's academic achievement. South Africa: University of Limpopo press.
65. Mbua, F., N. (2003). Educational administration. Buea: pressprint Limbe. Miedler (2008). Development education and research.: Global education. champaign, I L: research press company.
66. MINEDUC (2001).Education projet II: compensatory teaching method. Yaounde: presse Universitaire.
67. Miriam Dictionary (2015). England: longman
68. Mtinkheni, G. (2010).Education development in Africa. International development cooperative. Orchanps: Edisphere printers
69. Ndyonyi, p., Tayifor, J., Kamga, L., Weledji, p. (201 O).Introduction to educational planning and administration .Buea: University press.
70. Nwaruhutse, S. (2007). Grade repetition in pnmry schools In Sub-saharien African: an evidence of change. Kenya: university press.
71. Oladayo, o. T., Oladayo, L., E. (2012) effect of direct and indirect instructional strategies on student's achievement. Vo1.2(18) 120
72. Olaniyaniyan, A., Okemakinde, B.,(2008). An input-output analysis of public and private secondary schools. Education journal, Vol 3 (30) 145
73. Oxford (2015). Oxford dictionary. England: Oxford publisher
74. Rama, Rondapalli (1986). Quality school education. Buckinjhnan: open University press.
75. Ronald, G., Echrenberg, D., S., Brewer, D., W. (2001). class size and student achievement. New York: Corneik University.
76. Sabates, R., Kwame, A., Westbrook, J. Hunt, F. (2010). School dropout: pattern, causes, changes and policies. Sussex: university press.
77. Tabah. B., M., Embe. C., K.(2010). A modern general knowledge for senior primary pupils. Yaounde Cameroon: Mama Press.
78. Tabot. T, M, (2008). Philosophical and historical foundations 1844-1960. University of Buea: Design house, Limbe .
79. zrn1 0. L. 1. (2003). Cameroon National Education policy since the 1995 forum. B ea: design house Limbe.
80. Tan, L., (2007). Using multimedia tool to help students learn SCIences. New- York.: academic press
81. Webinar (2005). Statistic solution. England: Longman
82. Webster, M. (2015) Spanish-English dictionary. New York: Association press.
83. Wikipedia (2014). Education economy. New York: Association press.
84. World Bank (2005). African human development. New York: Association press.