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**MINIMIZING EDUCATIONAL RESOURCE WASTAGE IN PUBLIC SECONDARY SCHOOLS IN  
RIVERS STATE**

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**ABSTRACT**

*This research paper focuses on minimizing educational resource wastage in public secondary schools in Rivers State. The paper discussed the concepts of resource, wastage and waste in education. wastages in education was perceived to occur when resources (human, material and financial) put into the educational system as a whole deteriorates in value overtime as a result of usage, over-usage, misuse or lack of use without proportional result being realized. In this paper, educational wastages includes dropouts, repeaters, unemployed school leavers, school, staffing, brain drain and inadequate utilization of educational resources such as teachers, facilities, materials, students and building among others. some causes of wastages in education where identified to include the nature of educational inputs, the nature of processing, the nature of outputs, economic cause of educational resource wastage, social causes of educational resource wastage, poor administration of education, inadequate facilities and miscellaneous causes of educational resource wastage respectively. The areas in which educational resource wastages can be minimize identified in this paper are managerial resourcefulness, conducive work environment, and material resource utilization, reducing resource depreciation, recognizing relevant resource inputs, human resource utilization and adequate funding of education. The paper also identified some changes of managing education wastages to include lack of political will, religious and cultural beliefs, inadequate record keeping and opportunity cost of education. It was concluded that wastages in education implies the lack of efficiency in the management of educational resources which is largely due to the nature of educational inputs, administration of resources and implementation of policies as well as the nature of output which makes the system less efficient and way off an ideal situation. It was suggested that government should ensure adequate funding and see it as necessary responsibility to reduce resource depreciation and ensures appropriate curriculum implementation and policy implementation.*

*Keywords: Wastage, Resource management, Educational Input, Secondary Education.*

## **Introduction**

All over the world, education is perceived as indispensable tool for economic and social development. So in every organization or institution, optimization of resource utilization is one of the integral reasons for the management of formal organizations. In a school setting, every operation in the system is determined by the resources provided and how they are utilized to achieve organizational goals. Meanwhile, the expectation of all concerned is that students within any school setting should stay for the required minimum number of years expected for that level of education within the school system. Nevertheless, despite the effort of government and the house hood in providing quality education to the masses, very little result has been recorded. The ineffective utilization of teachers and wastages in education has contributed to the falling standard of education especially in public secondary schools. Some scholars in their report on wastage, lamented that the poor conditions of secondary schools, such as poor teaching, poor motivation of teachers, lack of facilities and equipment have culminated into inefficiency in the system with students dropping out and repeating classes. In the light of this, Agabi (2010) stressed that various studies have established that even with shortages in the provision of educational resources, the education system in Nigeria records enormous resource wastage, especially in the areas of human resource and technical science education equipment. Most of these wastages occur as a result of over-utilization while others can be attributed to under-utilization. This consequently contributed to the apparent poor students' academic performance and reduction of graduation rates in public secondary schools in Nigeria. In this same vein, available infrastructures at this level of education are either obsolete or grossly inadequate.

Despite all efforts at making resources available for the administration of education at this level, there seem to be little or no remarkable success. Sometimes, this decline in standard of education has been linked to the over utilization, under-utilization and misplace priority in the use of human and material resources in our school system. Teachers that are to be recruited and selected genuinely to exhibit their professional ethics are sometimes manipulated against the education system which tend to attract unproductiveness in the system. Ill attention given to education by the government is also a serious contributory factor to the fall of the educational system which has led to educational resource wastages. Yusuf and Sofoluwe (2014) in their study on wastage analysis in Ekiti state secondary schools in Nigeria, reported that admittance into senior secondary schools should be modified to enable the school to admit good and intelligent students who can cope with the secondary school activities so as to reduce and minimize repetition and drop-out rates which are indices of high wastage rate in the school system.

## **Conceptual Clarification**

### **Concept of Resource**

Resources are generally referred to those materials that are used for the production of other goods or services. This means that resources can be input or output used in a production process. Adepoju (2000) described the production function in education as the maximum level of outcome, possible from alternative combinations of inputs. He stressed further that

School system consists of four major components: the inputs are pupils, teachers, facilities and funding; the procedure throughput is the processing stage; the student achievement is the output of schooling; the evaluation is the feedback. In this vein, Ebong (2006, p.82) opined that “resources are tools or assets for wealth creation, innovation in the process of change which bring improvement into the system”. This implies that the essence of using resources in an organization is to achieve predefined objectives.

Resources can be tangible or intangible; that is measurable or immeasurable. Resources are however materials that helps to make work or plans easier to achieve. Agabi (2010) sees resources as the basic tools necessary in the effective performance of tasks and for the growth and development of human organizations. The constituent use of a resource is determined by the various uses to which it can be put. Generally, a resource is identified by its ability to solve problems, and yield more wealth when applied to economic situations. Resources are classified as visible when they exist and can be quantified in the form of human beings, land, money, property, books, pictures, and so on. Resources are invisible when they exist in the form of skills and physical dexterity and can only be measured in terms of productivity levels and quality of work.

### **Concept of Wastage**

Wastage as a concept has attracted multifarious clarifications by many scholar. Wastage could be any loss incurred by usage or decay. There are avoidable losses due to wastefulness. It is sometimes perceived from its extent and degree of deterioration due to use, misuse or lack of use which exists in an object or organization. Amodele (2001) also opined that the inappropriate utilization of scarce financial resources for the pursuit and actualization of educational goals amounts to share wastages in education. In this regard, wastage could also mean premature withdrawal of children from schools at any stage before completion of the primary courses. In other words, when resources are expended without a proportionate result realized, wastage has occurred along the line (Ehimatalor, 2011).

### **Resource wastage in Education**

Wastages in education occur when resources (human, material and financial) put into the educational system as a whole deteriorates in value overtime as a result of usage, over-usage, misuse or lack of use without proportional result being realized. Wastage relating to education constitutes to loss, decay and deterioration of the human capital as reflected in the absence of sufficient skilled manpower to saddle the growth and development of the state or the country. Such resource wastages often occurs when invested resources are not optimally utilized. In this light, Deribe, Endale, and Ashebir (2015) perceived wastages in education to include dropouts, repeaters, unemployed school leavers, brain drain and inadequate utilization of educational resources such as teachers, facilities, materials, students and building among others.

Moreover, educational wastage means the inefficient use of educational resources. On this note, Oyetakin (2011) opined that wastage in the education system is improved when more education outputs are produced using given education resources or fewer education resources. He further stressed that wastage or leakage in the system are draining the limited

financial and material resources that go into the system as inputs for transformation process. It is therefore pertinent that resource wastage especially at the public secondary level be brought to the lowest minimal level to ensure efficient achievement of educational goals.

### **Resource Wastage in Secondary Schools**

In this case, Akinsolu (2005) stated that, wastage in secondary school education refers to those avoidable losses that are caused by the poor planning or implementation in the administrative process of the school. He further identified some wastages in secondary schools in the areas of school administration, time management, student care, staff and facilities respectively. Inadequate utilization of educational resources implies that in a school system for example, the teachers posted to the school are not properly utilized. In this situation, it is possible that some teachers do not have classes to teach. It is also possible that some buildings are lying waste. Within the context of this work, Nwagu as cited in Adepaju (2000) sees wastage as inefficient use of educational resources which includes repeaters, dropouts, inadequate use of infrastructural facilities, misguided type of education, and unemployment of school leavers and brain drain.

### **Different Areas of Wastages in Education**

Wastages are no doubt significantly reflect in our educational system in different areas and practices. Oluchukwu (2011) placed wastages in education in the areas such as school facilities, staffing, students' dropouts and class repetition, etc. Therefore, wastage in education would be analyzed in areas such as school facilities, staffing, students' dropouts and class repetition, etc.

#### **1. School Facilities**

School facilities consist of buildings, playground, vehicles, furniture etc. used to provide services geared towards achieving set goals. These facilities are sometimes misused, underused or overused thereby allowing for wastage. Hyderabad as cited in Oluchukwu (2011) considered lack of prudence in administration and lack of proper management of both infrastructural facilities, and human and material resources invested into the educational system as the major causes of wastage in the school. It is lack of proper management and administrative incompetence that will result to neglect in infrastructural facilities in schools. If left unattended to, poor facilities will bring about decay in the system and fall in the standard of education. It is evident that the buildings are not optimally utilized; there is also a shortage in supply of furniture and teaching/learning materials. Many students are forced to drop out of school as a result of frustration owing to the inadequacies in the provision and maintenance of facilities, buildings/school plant and poor learning environment.

#### **2. Staffing**

The teaching, non-teaching, skilled, semi-skilled and unskilled manpower all constitute the staff mix in a school system. Where this is made available in the right ratio and with the requisite training and know-how, chances would be high for maximum productivity. However, inadequate number of trained and qualified manpower, lack of continuity caused by retirement

of teachers, inefficiency and lack of effectiveness among teachers who are supposed to have mastery of their subject areas and serve as role models were identified by Enaohwo (2017) and in Ebong (2006).

#### **i. Teachers**

In addition to this, the study conducted by Ebong and Agabi (1999) revealed that a gross wastage of teachers existed in public secondary school in the form of over-utilization due to an overall shortage of teachers. This level of teacher wastage was attributed to work overload in the form excess teaching periods, high pupil-teacher ratios and assignment of work not related to areas of professional training or specialization. Therefore, inadequate utilization of educational resources implies that in a school system for example, the teachers posted to the school are not properly utilized. In this situation, it is possible that some teachers do not have classes to teach. It is also possible that some buildings are lying waste.

### **3. Students:**

Various level of wastage can arise from education completion rate, and frequency of class repetition by students as identify by Agabi (2018). These are explained in the following paragraphs.

#### **a. School Completion Rate**

Annually, government expends huge resources to ensure that her students have access to quality education at all levels. These resources are released as budgeted for to make the necessary learning facilities available to schools. Where a student drops out of school, the provisions made for such student becomes a waste. Fawel (2000) in a study carried out on the causes of wastage in education and particularly students dropping out of school or out-of-school students, posited that while enrolment rates have increased globally over the past three decades in the developing world, Nigeria inclusive, more than 273 million children within the ages of 12-17 years of age drop out of school annually. The explanation for this world tragedy on education is that parents cannot buy books, pay the transportation fare of their wards to and from school, provide clothing and afford three-square meals each day. For such families, the cost resorts in withdrawal from school.

#### **b. Class Repetition**

When students repeat classes, additional pressure is placed on existing classroom facilities. Secondly as observed by Onyali and Akinfolarin (2017) in enrolment of students little or no provision is made for possibility of students repeating classes. The outcome is that in most cases, repeat students are not considered in the preparation of classrooms in the new academic session. The level of wastage in the use of classroom facilities, is affected by the number of students who are repeating classes at any point in time. Where a student fails examination, such student is made to repeat the class. Such class repetition amounts to making a surplus provision, that is, providing for what had been provided for previously. This constitutes another form of wastage in the education system. Enaohwo (1990) identified the inadequate number of trained and qualified manpower, inadequate infrastructure and educational facilities, inefficiency and lack of competence among teachers, and poor parental

concern for students' progress in school and low income as some of the reasons for the inability of students to meet necessary school requirements as some of the driving force to wastage in education. This situation is further compounded by the crowded classrooms in Rivers state public secondary schools identified by Agabi (2018) as a major factor in the existence of high drop out rate and class repetition.

#### **4. Time wastage as a resource**

Time is a resource that is always taken for granted, since it cannot be seen or touched or measured on a scale. However education is time based because it operate on a given time frame. A Nigeria child is expected spend a minimum of six years in the secondary school. Any additional time spent in the school by the child who ought to have finished a secondary school after six years amount to additional social cost of education, if such a child is in a public school, or private cost if the child is in a private school. In the definitions of wastage discussed above, Ebong, (2006) sees time as a resource needed for the actualization of educational goals since is an intangible resource which depends on the result from the human and material resources. Therefore, the use of time has brought about success and failure in the achievement of set goals. . It is disturbing that this very important resource is not taking very seriously by the students, parents, society and government. In recent years, consistency in strikes has been added to interruption in management of time for the execution of educational functions and the achievement of its goals. This has crippled teaching and learning at all levels of education in different states of the federation (Ebong and Ezekiel, 2011). These strikes actions have caused a lot of setback in academic calendar as there is backlog of classroom work not properly taught as a result of lack of time. It is therefore, the responsibility of school administrators to actively manage the system effectively to curb this issue of wastages in education.

#### **Causes of Educational Resource Wastages**

There are different kinds of wastage in education. Adepaju (2000) described the production function in education as the maximum level of outcome, possible from alternative combinations of inputs; and went further to describe school system as consisting of four major components: the inputs are pupils, teachers, facilities and funding; the procedure throughput is the processing stage; the student achievement is the output of schooling; the evaluation is the feedback. However, we shall consider the classification that grouped the causes of resource wastages in education into three, namely: the nature of educational inputs, processing and outputs respectively; Okojie (2008). These will be explained in the context of this paper.

**1. The nature of educational inputs:** This input includes the nature and ability of students, the nature and types of educational resources, the goals of the educational system and the nature of the content of the curriculum etc. One aspect of manifestation is dropouts from the educational system. We found cases of dropouts in primary schools, secondary school and tertiary institutions. The main reasons for dropouts are ill health, death, truancy, financial difficulty or poverty, learning difficulties among students, and at times, parents' wish among others. Some pupils or students fell sick during their academic

career, and the ill-health is so serious that they cannot continue with their education, some even die in the process Adepoju (2000). In other cases, some students may enroll into a programme but habitually absent themselves from lessons or lectures. Sometimes, they abandon the programme. Other students may face familial problems due to the socio-economic background of their parents or guardians.

**2. The nature of processing:** The administration of resources and implementation of policies to achieve set goals could cause wastage in education. In other words, misplaced priorities could lead to resources wastage in education. Where the goals of the educational system are practical-oriented, then the products could stand a chance of gainful employment at graduation Ebong (2006, p.82). But where the education lays emphasize on literacy and general education, the products would likely be unemployable. The content of the curriculum could also be a cause of wastage. There could be a *laisse-faire* administrator who allows everyone to have their way without making effort to put things right.

**3. The nature of outputs.** It could be that graduates of the educational system do not possess the qualities outlined in the set goals. On the other hand, the graduates may find it difficult to properly fit into the labour market due to mismatch of skills. In this era where learning is Information Communication and Technology (ICT) driven, students of a non-ICT driven learning system may not fit well into this computer-literate society, this could be another form of wastage in education.

Besides the three classification of resources wastage in education, others may include-

**4. Economic cause of resource wastage:** This is especially true of students, who have to assist their over-aged, sick or over-worked (tired) parents at home. As a result, the child is withdrawn from school. Other times, parents mostly involve their children in domestic work, leaving no time for the child to study. Also, poverty makes some parents to utilize the time of their children in rendering certain services to earn more money for the family (Amodele & Sanni, 2001). All of these scenarios accounts for economic causes of wastage in education.

**5. Social causes of resource wastage:** This has to do with the class difference between the rich and the poor. The peculiarities that exit between rural and urban dwellers have contributed in no small measure to wastage in education. People in the rural areas do not see themselves fit enough to attend school; to them their place is at the informal sector as an apprentice without any form of formal education.

**6. Poor administration of educational causes of wastage:** Where the educational institutions are ill-equipped, poorly housed and with dull and depressing environment unfortunately could not exercise effective counter-acting influence. Lack of adequate accommodation, too much of over-crowded schools with high pupil-teacher ratio, inefficient and poor quality of teachers, defective examinations, uninteresting curricula, lack of proper parental attitude, absence of school health services and immodest curriculum and textbooks are responsible for much of wastages and stagnation in schools (Onojighofia, 2003).

**7. Inadequate facilities as a resource wastage:** Lack of facilities or poor maintenance of existing facilities often reduces the interest of children from going to school. Under such circumstance,

it becomes difficult for the school to attract students to stay in school due to uncomfortable and unattractive learning environment thereby leading to absenteeism and subsequent wastage in education.

According to Akinsolu (2005), Matage, Kyalo and Shandrack (2015), the following are identified as major causes of resource wastage in education system which are related to school factors, economic factors, cultural factors and social factors respectively;

1. The nature, ability and capability of students
2. The nature of the schools
3. The nature of the educational systems
4. The socio-economic status of parents
5. The resources available to education (merely teachers, equipment, etc.)
6. The socio-physical environment

**8. Miscellaneous causes of wastage:** Miscellaneous causes of wastage in education includes sickness and diseases suffered by students over a long period of time, death of either one or both parents of a student and laxity towards learning among others could lead to wastages in education.

### **Challenges in Minimizing Educational Resource Wastage**

There are diverse challenges that have hindered the reduction of the level of educational resource wastage in public secondary schools in Rivers State. These challenges include the Following:

#### **1. Lack of Political Will**

There is need for the government to show high level of commitment to the various policies and programmes formulated for managing the secondary level of education. Similarly, continuity in the policies made by various transition governments is important for the education system to succeed. However, when there is a drop in the level of political will by the government in dealing with the case of educational wastage in secondary schools, very little result can be achieved. It is therefore important that the government should show political commitment to stamping out the case of educational wastage in secondary schools within the state. However, in a situation where the political will is absent as it is, controlling the level of educational wastage in secondary schools within the state will remain elusive.

#### **2. Religious and Cultural Beliefs**

Cultural beliefs such as the need to train male children and keep female children out of school since they will be married out has hindered the ability of the government and other educational stakeholders to control the problem of educational wastage in secondary schools in Rivers State. Similarly, religious beliefs that considered education of little or no value discourages students from furthering their education. Culture and religion have also been a bane to the willingness of students to start and complete their educational programmes in some cases. This situation has hindered the effort of various educational stakeholders to control the issue of educational wastage in secondary schools in Rivers State.



### **3. Inadequate Record Keeping**

It is impossible to make adequate and accurate plan without proper record keeping. The availability of accurate record is needed for evaluating the usage of educational resources in the school system. In this vein, Nwagwu (2000) opined that record keeping is very important activity in the management and administration of any school system. Similarly, available records are important in studying the trend of admission and graduation of students in the school system. However, the poor attitude to record keeping has limited the ability of the government and other educational administrators and managers to study the wastage rate in secondary schools within the state. This has made it difficult for educational stakeholders to control the level of educational wastage at this level of educational.

### **4. Opportunity cost of education**

In response to this, Matthew (2013) suggested that the level of poverty among parents and guardians is one of the factors responsible for the withdrawal of students from school. Similarly, there are students who wish to discontinue their education for other personal reasons such as learning a trade, travelling abroad, relaxation etc., Parents, guardians and students can pursue other social and economic needs while the school becomes an opportunity cost. The inability of the government and immediate community to satisfy these opportunity costs for education therefore makes it difficult for the high cases of educational wastage in secondary schools in Rivers State to be controlled. Students and parents are therefore ready to leave school to meet other personal needs that they considered more important since the government and society have been unable to satisfy these needs.

### **5. Administrative Constraints**

There are absence of clear administrative policies as to the quality and quantity of staff, staff welfare and system of promotion, the administrative structure and schedule of duties. Ebong (2006, p.85) points out that "the adequacy of school facility is measured by the extent to which it satisfies the requirements of the school programme. For instance, most often staffing and promotion are not based on civil service procedures as the managers have other instructions outside the civil service procedures on who to employ or promote as the case may be which tend to affect the psychological state of some personnel thereby making them to utilize less of their best in the school.

### **6. Disbursement of funds**

Disbursements of funds have to do with the distribution or allocation of funds in a system. According to Egbule and Igbogi in Ezeugwa (2006) disbursement of funds is a task through which the financial resources of a school are distributed to various areas of educational programme. Again it is the responsibility of the principal to ensure that budgeted funds are appropriately allocated to the relevant areas of needs in a manner that will enhance the achievement of school objectives. Ndu in Ezeugwa (2006) stressed that favoritism, embezzlement of funds provided for some projects and relationship have brought about under-utilization of human resources in the educational system, reasons being that some principals or administrators divert funds to areas that were not originally budgeted for just to make personal gains.

### **Strategies for Minimising Resource Wastages**

Having discussed the various areas of educational resource wastages, the following measures could be adopted to eliminate or drastically reduce wastages in the educational system.

#### **1. Material Resource Utilization**

The education manager's role includes the provision of appropriate guidance in resource acquisition and distribution in line with educational policies and programmes for subordinates in the structural levels. This is to say the pursuance of the accomplishment of the goals of education, the school principal who plans the affairs of the school should be prudent by allocating available resources in such a way that will lead to the realization of much of the set objectives of the school in a concise time frame.

#### **2. Conducive Work Environment**

Environment has been variously conceptualized to include all the natural resources of air, land, and water, visible and invisible elements that affect the development of an organization for its lifetime (Obong, 2007). The government should ensure that, the basic infrastructures like, power, school buildings, and security are put in place for teaching and learning to be effective in the school system. In view of the poor statutory financial allocations available to school managers and the vast area of curricula coverage expected of them, the establishment of an environment that fosters positive interaction between the school and the host community is very important.

#### **3. Reducing Resource Depreciation**

The value of most school resources depreciates with age and regular usage while others depreciate from poor management and non-utilization. Resource maintenance should be directed at keeping school materials in the proper places prepared for them.

#### **4. Recognizing Relevant Resource Inputs**

The school head should be able to identify relevant resource inputs for the attainment of education goals. Human and material resources must be present in the proper proportions to facilitate the achievement of optimal efficiency in school management. This will help to minimize wastages from under-utilization of resources and also eliminate the problem of over-utilization.

#### **5. Human Resource Utilization**

The quality of teaching manpower suffers depreciation in the school system, when teachers are given too many lessons to teach, or teach a subject outside their area of specialization, or teach in an overcrowded classroom. The over-utilized teacher suffer duress or breakdown in health. With this teaching and learning effectiveness will not be achieved. Appropriate training and retraining programmes, appropriate job placement as well as regular supervision and plan should be put in place for members of staff (both teaching and non-teaching). Therefore, a school principal should be able to tell when an employee needs to be retired, retrained, promoted or laid-off. Regular supervision and evaluation of students, school personnel will enable the education manager to utilize the manpower effectively.

## 6. Adequate Funding of Education

Where adequate funds are made available for education management, scholarship facilities could be provided to cater for fees, books, uniforms, and feeding for indigent students. Such provisions could reduce if not eliminate the problems of school dropouts directly attributed to poverty. Ogbonanya (2012) stressed government agencies, charity and/or donor organizations, corporate organizations and/or wealthy citizens could provide funds in form of bursary, scholarship or education grant to curb the problem of dropouts. For those who drop out of school for reasons of ill-health, school management should provide functional medical care services to monitor students' health condition.

## 7. Resource Relocation

This involves the movement of resources from an institution where they are not needed to an institution where they are most needed. Consequently, the irregular inspection of schools may result in a general distribution of resources in a way that renders some resources redundant in some schools and inadequate in other schools. In this case, the school manager with the redundant facilities should facilitate the relocation of such facilities to institutions where they are needed by reporting to the appropriate quarters (Agabi, 2010).

## Conclusion

Wastages in education imply the lack of efficiency in the management of educational resources. The causes of educational waste are largely due to the nature of educational inputs, administration of resources and implementation of policies (nature of processing) as well as the nature of output. Wastage in the use of educational resources can also arise from the condition of teachers or learners. Efficiency in the management of public secondary education in Rivers State is far below the expected in terms of output quality. The system is characterized with wastages which makes it less efficient and way off an ideal situation. The expectations of the stakeholders are quite high, that students should be trained to be useful components of society with minimum wastage in their education. A situation in which students repeat classes or dropout of school constitutes a huge wastage that should be guarded against. Efforts should therefore be made to guard against all forms of wastage in resource utilization in public secondary schools.

## Suggestions

In view of the above discussion, the following suggestions are deemed necessary:

1. School Administrators should be exposed to the rudiments of resource management through regular training and workshops. This will help minimize resource wastage in schools
2. There should be regular Supervision of resource utilization procedures.
3. Government should ensure adequate funding and see it as necessary responsibility to reduce resource depreciation and ensures appropriate curriculum development and policy implementation.
4. Building maintenance culture.

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