

# Effective Internal Control System in the Nasarawa State Tertiary Educational Institutions for Efficiency: A Case of Nasarawa State Polytechnic, Lafia

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**Abstract**—Effective internal control system in the bursary unit of tertiary educational institutions is geared toward achieving quality teaching, learning and research environment and as well assist the management of the institutions, particularly when decisions are to be made. While internal control system exists in all institutions, the outlined objectives above are far from being achieved. The paper therefore assesses the effectiveness of internal control system in tertiary educational institutions in Nasarawa State, Nigeria with specific focus on the Nasarawa State Polytechnic, Lafia. The study is survey, hence a simple closed ended questionnaire was developed and administered to a sample of twenty seven (27) member staff from the Bursary and the Internal audit unit of the Nasarawa State Polytechnic, Lafia so as to obtain data for analysis purposes and to test the study hypothesis. Responses from the questionnaire were analysed using a simple percentage and chi square. Findings shows that the right people are not assigned to the right job in the department, budget, and management accounting were never used in the institution's operations and checking of subordinate by their superior officers is not regular. This renders the current internal control structure of the Polytechnic as ineffective and weak. The paper therefore recommends that: transparency should be seen as significant, as the institution work toward meeting its objectives, it therefore means that the right staff be assigned the right job and regular checking of the subordinates by their superiors be ensued.

**Keywords**—Bursary unit, efficiency, Internal control, tertiary educational institutions.

## I. INTRODUCTION

LIKE other organisations and their various units/departments, tertiary educational institutions strive for efficiency and transparency into their services, operations and finances. There is also growing interest among these institutions to enhance risk management through their processes and procedures so as to promote efficient services among professionals within the institution. The most common measure over these processes and or procedures is the system of Internal Control. The Internal Control System is about such measures put in place by an Organisation in order to ensure the achievement of its objectives. It is a set of policies and procedures adopted by an entity in ensuring that an organization's transactions are processed in the appropriate manner to avoid waste, theft, and misuse of organization resources [12].

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Tertiary Educational Institutions, according to [10], are Institutions of higher learning where knowledge is imparted to its seekers and researches are undertaking in various fields of human endeavor. Reference [10] further asserted that Tertiary Educational Institutions are to provide educational services and counseling to the general public at the right time. To achieve this objective, institutions incurred expenditures both at capital and recurrent nature. The existence of corruption in the Nigerian system generally has been a challenge for achieving the objective. The Internal Control System, like in other organisations, is usually put in place to ensure that this objective is achieved. The effectiveness of internal control is a determinant of the quality, performance, and efficiency of the institutions [14].

Internal Control is a process designed and effected by those charged with governance, management, and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of the financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations [11].

Management and operations of finances in the Nigerian tertiary institution is a sole responsibility of the Bursary department of the institution. The Bursary department is central as far as the coordination of finances for the achievement of the institution's objective is concern. Because the department is considered as most important, the internal control measures in place are to be adhered to, by staff of the unit. Adherence to a good set of control would encourage efficient and effective use of company resources [4]. This implies therefore, that adhering to the internal control process shall be a measure toward achieving efficiency and quality of learning in the institutions. This paper will therefore identify the existence or not of effective internal control system and as well examine the relationship between effective internal control and the provision of efficient and quality educational services in the tertiary educational institutions in Nasarawa State.

### A. The Study Objectives

The paper examines the effectiveness of internal control for efficiency in the Nasarawa State Tertiary Educational Institutions; with specific interest on the Nasarawa State Polytechnic Lafia. This can be achieved through the following specific objectives:

1. To identify the effectiveness of internal control system in Nasarawa State Polytechnic Lafia.

2. To examine the relationship between effective internal control system and the efficiency of educational services in the Nasarawa State Polytechnic Lafia.

#### *B. Hypothesis to the Study*

For the purpose of this study, the following null hypothesis was developed and tested.

H<sub>0</sub>: There is no effective internal control system in Nasarawa State Polytechnic Lafia.

## II. CONCEPTUAL CLARIFICATION/LITERATURE REVIEW

### *A. Internal Control*

This is a control designed and installed by the management of an organization for the growth and survival of the organization. It is the responsibility of the management to ensure and maintain this system of control to enhance efficiency and performance quality of an Organisation. Internal control has been variously defined by both academicians and practitioner. Internal control as defined by [8], is an integral process that is affected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that, in pursuit of the entity's mission, the general objectives are achieved and executed in an orderly manner ethically, economically, efficiently and effectively, there by fulfilling accountability obligations; complying with applicable laws and regulations; and also help in safeguarding resources against any loss, misuse and damage.

Reference [7] sees internal control system as the integration of the activities, plans, attitudes, policies, and efforts of the people of an organization working together to provide reasonable assurance that the organization would achieve its objectives and mission. Specifically, the role of internal auditor is assessing internal control systems, which consists of rules and standards set up by the management.

From the forgoing, internal auditor could be seen as a measure responsible to provide advices on how to improve the control systems and corrective action if needed. The advices and suggestions given are normally based on the ability of the auditor to foresee the future uncertainty events that may happen due to current weaknesses or loopholes of the control systems. The main objectives of internal control system are to ensure reliability of financial reporting, efficiency and effectiveness of operations and compliance with law and regulations [18].

### *B. Internal Control Effectiveness*

A program is seen to be effective if its outcome goes along with its objective [3]. Effectiveness, according to [4], is the capacity to obtain results that are consistent with target objectives. Internal control can be considered as effective if it achieves its main objectives of reliability of financial reporting, efficiency and effectiveness of operations and compliance with law and regulations. Effective internal control is present when it can safeguard the organisation's asset and reliable financial reporting can be produced. According to [18], authority is every single process and

operations are developed with reasonable control to ensure all resources are use at optimum level, manage to produce high quality product or services and at lower cost. When the authority set out the company's objectives, the next important step is to identify risks that may occur in order to achieve the objectives. Ability to identify this risk according to [5], would assist the authorities to design needed control which could be effectively achieved when it can cater and mitigate the risk. Ability to manage the risk through appropriate control lead organisations to achieved its objective. Effective internal control did not only depend on its design, but also on how the people inside the Organisation implement it.

Reference [2] in its opinion, internal control is said to be effective and efficient if the following basic factors are considered present. They include God factor, time management factor, knowledge factor, ICT factor and competence and integrity factor. This means that employees, whether at the management level or at the non-managerial level, should go about discharging their responsibilities with the fear of God and make best and judicious use of time. They should regularly update their knowledge and exhibit the virtues of integrity and competency at all times. In the same vein, all employees of an Organisation should be seen and considered as important agents for achieving the aim of the Organisation.

Effectiveness of internal control could also be based on the competence and independence of staff and members of the organisations. This therefore means that these staff and members of the organisations will not relent in carrying out their duties as specified by relevant laws and pronouncements as well as the ethics of their profession. For instance, the internal auditor should only be responsible to the Chief Executive Officer and not anyone else. Reference [6] has on the issue of internal auditors independence conducted a study, and found that internal auditors in Nigeria, particularly in the public sector, lack the basic tenets of auditing and this is attributed to the issue of lack of guaranteed independence.

### *C. Components of Effective Internal Control*

Reference [10] has categorized the components of internal control into preventive and detective control. While Preventive Control focus on discouraging and preventing irregularities from occurring through: Separation of duties, proper authorization, adequate documentation and physical control over assets, the detective control focus on detecting errors or irregularities after they have occurred through: reviews, variance analyses, reconciliations in investigation and audit. Reference [7] further expanded the components as follows: (1) Physical Control: Assets of Educational Institutions must be kept physically secured, and this is particularly important in case of valuable items like cash, stocks, cars, etc. (2) Arithmetic Control: The arithmetical side of the control ensures that transactions figures are correctly calculated and recorded from the source documents. (3) Accounting Control: The accounting side of the control on the other hand ensures that, the transactions are being posted into the relevant books of accounts accordingly. (4) Personnel

Control: There is no doubt that human capital is something to be recognised with in every organization. It follows that, right people are assigned to the right jobs and other wise. (5) Authorizations and Approval Control: This type of control requires that all the transactions relating to the Organisation must be appropriately authorized and approved by officers responsible for the authorization and approval. (6) Management Control: This control includes the use of budget or management accounting to plan and control organizational operations and the establishment of functional internal audit unit or department. (7) Organizational Control: This control is saying that, there should be an organizational chart which defines responsibilities as well as identifies lines of reporting; it is important for every employee to know the precise powers he/she has and to whom he/she should report. (8) Supervision Control: This control is to be exercised by higher-level officers in the Organisation in order to put the activities of subordinates under check. At times correction is necessary if subordinates are to perform their duties. (9) Segregation of Duties Control: Segregation of duties control ensures that no person is responsible for all aspects of a transaction. Functions normally segregated are those of authorization, approval, custody and recording.

#### *D. Tertiary Educational Institution*

The word tertiary institutions referred to institutions of higher learning where both undergraduates and post graduates students pursue a degree of study with the aim of getting a certificate at the completion of their studies [15]. In tertiary educational institutions, Two (2) categories of staff (Academic and Non-academic) are employed for the purpose of keeping the institutions going. The academic staffs are engaged in teaching and research with other oversight functions which sometimes are required to be performed by the management.

#### *E. Internal Control System in Tertiary Educational Institutions*

For an educational institution to achieve its objective of providing quality teaching, learning and research environment, it must establish an effective internal control system to immensely assist the management of the institutions, particularly when decisions are to be made. Reference [10] asserts that, internal control is a measure which keeps an organization on course towards its objectives and the achievement of its mission and that; it minimizes wastages along the way, it ensures reliability in financial information and predicts the future with relative precision. The quality of any decision making is entirely dependent on the nature of the information made available [17].

Timely and reliable financial information guides management in the formulation of appropriate policies in a given Organisation. [1], [2], [16], [19], viewed Internal Control System as the most effective aid to financial management by ensuring accurate and complete data processing, ensuring profit maximization and provision of reasonable assurance regarding the prevention of or prompt detection of unauthorized acquisition, use, or disposition of

the institution's assets. Adopting the views of the studies above, [10], added that, collusion among employees and fraud perpetration by the staff is as a result of weak internal control system.

Internal control system said to be weak if organisations could not effectively meet up its objective through inefficiency and or improper record keeping and accounting, reluctance of staff in performing their assigned duties. [10] has identify the following reasons as the causes of weak internal control: management attempt at overriding the established internal controls, reluctance of senior staff to accept independent oversight, lack of good and round audit coverage, understaff, abnormal separation of duties, and improper and untimely reconciliation of major assets and liabilities. Reference [9] has identified the following as effect of weak internal control in an Organisation: that, it distorts the plan of the institutions, paves way to financial indiscipline, fraud, errors, irregularities, and misallocation of resources. Lawal further contends that some tertiary educational institutions management use resources meant for developing the institutions into personal gains and this trend is not possible where the control system is effective.

### III. METHODOLOGY

The study is survey, by design; a simple closed ended questionnaire was developed and administered to a sample of twenty seven (27) member staff from the Bursary and the Internal audit departments of the of the Nasarawa State Polytechnic, Lafia. The bursary and the internal audit unit were targeted because of the fact that they are responsible to the institution's operations as regard budget, cost and revenue. Responses obtained from the respondents through the administered questionnaire shall be used for data analysis purposes and to test the study hypotheses. The sampling procedure used for the study was judgmental; all staff under level 7 are not included in the sample, as a study [13] has confirmed to the fact that all the staff under level 7 in the two departments may not understand the concept of internal control; hence responses from them shall be out of place. Data collected were synthesized and analyzed to give meaning to the specific objective of the study. The data were tabulated and presented using such statistical tools like simple percentages and chi square. Narrative analysis was used to explain the qualitative results of the survey.

### VI. DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS

#### *A. Presentation of Data*

From analysis of question one in Table I, 3 and 6 respondents representing 11.11% and 22.22% respectively were of the opinion that there is good internal control system in the polytechnic while 1 and 8 representing 37.04% and 29.63% are not in acceptance with the view. It can therefore be deduced that there is no good internal control system in the Polytechnic.

TABLE I  
RESPONSE ON THE EFFECTIVENESS OF INTERNAL CONTROL SYSTEM IN THE NASARAWA STATE POLYTECHNIC, LAFIA

Q/NO	QUESTIONS/RESPONSES	RESPONDENTS	%
1	There is good internal control system in the polytechnic	3	
	a) Strongly Agreed	6	11.11
	b) Agreed	10	22.22
	c) Disagree	8	37.04
	d) Strongly Disagree		29.63
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
2	Valuables like cash, stocks, cars and other assets are physically secured.	12	
	a) Strongly Agreed	9	44.44
	b) Agreed	4	33.33
	c) Disagree	2	14.81
	d) Strongly Disagree		7.42
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
3	Transactions figures are correctly calculated and recorded from the source documents.	6	
	a) Strongly Agreed	11	22.22
	b) Agreed	5	40.74
	c) Disagree	5	18.52
	d) Strongly Disagree		18.52
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
4	Transactions are posted into the relevant books of accounts accordingly.	4	
	a) Strongly Agreed	7	14.81
	b) Agreed	8	25.93
	c) Disagree	8	29.63
	d) Strongly Disagree		29.63
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
5	The right people are assigned to the right jobs	4	
	a) Strongly Agreed	6	14.81
	b) Agreed	9	22.22
	c) Disagree	8	33.33
	d) Strongly Disagree		29.63
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
6	All transactions relating to the institution are appropriately authorize and approved by officers responsible.	8	
	a) Strongly Agreed	9	29.63
	b) Agreed	6	33.33
	c) Disagree	4	22.22
	d) Strongly Disagree		14.81
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
7	Budget and or management accounting is use to plan and control the institution's operations.	2	
	a) Strongly Agreed	4	7.42
	b) Agreed	12	14.81
	c) Disagree	9	44.44
	d) Strongly Disagree		33.33
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
8	There is an organizational chart in the institution which defines responsibilities and as well identifies lines of reporting and it is being put into use.	4	
	a) Strongly Agreed	6	14.81
	b) Agreed	8	22.22
	c) Disagree	9	29.63
	d) Strongly Disagree		33.33
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
9	Superior officers do check the activities of the subordinate	6	
	a) Strongly Agreed	7	22.22
	b) Agreed	8	25.92
	c) Disagree	6	29.63
	d) Strongly Disagree		22.22
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	
10	Duties are fairly segregated in the department and no one person is responsible for all aspect of a transaction.	9	
	a) Strongly Agreed	11	33.33
	b) Agreed	4	40.74
	c) Disagree	3	14.81
	d) Strongly Disagree		11.11
<b>TOTAL</b>	<b>27</b>	<b>100.00</b>	

Responses from the administered questionnaire

On physical security of the institution's assets, 12 and 9 respondents representing 44.44% and 33.33% respectively agreed that the institution's asset are physically secured, while 4 (14.81%) and 2 (7.41%) fail to agree. On whether

transactions figures are correctly calculated and recorded from the source documents, 6 (22.22%) and 11 (40.74%) are of the view that transactions are correctly calculated and recorded from the source documents, whereas only 10 (37.04%) have a

contrary view. On whether transactions are posted into the relevant books of account accordingly, a total of 11 or 40.74% supported the fact that transactions are posted into the relevant books of account accordingly while a total of 16 representing 59.26% disagree. On whether the right people are assigned the right job, 4(14.81%) and 6(22.20%) agree to the assertion while 9(33.33%) and 8(29.63) have a contrary view. On whether transactions are appropriately authorized and approved by the officer responsible, 8 and 9 respondents representing 29.63% and 33.33% respectively are of the view that transaction are authorized appropriately by the approving officer. On whether budget and management accounting are used for planning and control of the institution's operations, 2(7.42%) and 4(14.81%) affirmed that budget and management accounting are used for planning and control of the institution's operations, while 12(44.44%) and 9(33.33%) disagrees with the fact. In addition, analysis from Table I shows a negative view on the fact that the department has an organizational chart with well define responsibility and an identified line of reporting. This is confirmed by the fact only a total of 10 representing 37.03% supported the existence of the chart, 17 representing 62.96% disagreed. On whether superior officers supervises work done by their subordinate, 13 representing 48.14% answered in the affirmative, while 14 or 51.58% disagreed. And on whether duties are fairly segregated in the department, a total of 20 respondents representing 74.07% affirmed that duties are fairly segregated in the department and that no one single person is responsible for all aspect of a transaction. Only but 7 representing 25.93% disagreed.

### B. Hypothesis Testing

This section relates to the testing of hypothesis earlier stated. The decision rule is to reject the null hypothesis and accept the alternative if the  $X^2$  calculated is greater than the critical value of  $X^2$  at 5% significant level with degree of freedom of 4.

TABLE II  
COMPUTATION OF THE TEST VALUE FOR Z FOR HYPOTHESIS

Responses	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	TOTAL
Strongly Agree	3	12	6	4	4	8	2	4	6	9	58
Agree	6	9	11	7	6	9	4	6	7	11	76
Disagree	10	4	5	8	9	6	12	8	8	4	74
Strongly Disagree	8	2	5	8	8	4	9	9	6	3	62
Total	27	27	27	27	27	27	27	27	27	27	270

TABLE III  
CALCULATION OF CHI SQUARE

Responses	Total Observation	Expected Observation	(o - e)	(o - e) <sup>2</sup>
Strongly agree	58	67.5	-9.5	90.25
Agree	76	67.5	8.5	72.25
Disagree	74	67.5	6.5	42.25
Strongly Disagree	62	67.5	-5.5	30.25
Total				235
$X^2 \text{ Cal} = \sum(o-e)^2 / \sum e$	270	270		0.8703
$X^2 0.95,4$				9.488

The analysis on Table III shows that null hypothesis is accepted and the alternate rejected since the  $X^2$  calculated value 0.8703 is lower than the critical value of 9.488 at 95% confidence interval. This therefore means that internal control is not effective in the Bursary unit of Nasarawa State Polytechnic, Lafia.

### V. SUMMARY/FINDINGS

Management of every organisation has the line responsibility for designing, implementing and monitoring their internal controls system. Effective internal control system in an organisation could be a strong determinant for achieving the institution's set objectives. The study revealed that the institution's assets are physically secured, transactions are correctly calculated although not properly entered in the relevant books of accounts, segregation of duties is fair and transactions are appropriately authorized by the responsible officer. Findings have also shown that the right people are not assign to the right job in the department, budget and management accounting were never used in the institution's operation and checking of subordinate by their superior officers is not regular. This renders the current internal control structure in the Nasarawa State Lafia as ineffective. It was also observed that both practice and detective security control system is lacking in the institutions as revealed in Table I. Respondents attested by the hypothesis which accepted the null hypothesis that, there is no effective internal control system in the Nasarawa State Polytechnic, Lafia.

### VI. RECOMMENDATION

The paper recommends that: transparency should be seen as significant, as the institution work toward meeting its objectives, it therefore means that the right staff be assigned the right job and regular checking of the subordinates by their superiors be ensued.

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