

Resource Allocation in Higher Education: A Case Study of Selected Polytechnics in Nigeria

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Abstract. This article explores internal resource allocation as a major thorny issue in higher education institutions. The researchers focus on how resources are managed by academic leaders providing a qualitative case study using semi-structured interviews on internal financial allocation in three polytechnic higher education institutions in Nigeria. The article argues that the bureaucracies, inconsistencies and non-practice of internal allocation of resources within the polytechnics under study would not provide the desired technological and development transformation needed within the polytechnic system. Findings showed that the three polytechnics were practicing centralized model of internal resource allocation. The researchers equally found that four themes; allocation process; allocation model; allocation implementation and incentives represent the polytechnic organs of internal management of funds. The article concludes that internal resource allocation can be meaningful if consistencies and more funds are encouraged within the polytechnic system in order to satisfy numerous stakeholders who are interested in the production of high quality graduates from the polytechnics. A more decentralized model of allocation is really in need of further critical scrutiny.

Keywords: Budgeting, Polytechnic, Academic Leaders, Internal Resources, Centralization

1. Introduction

The focus of this research is on polytechnic education in Nigeria. ‘Polytechnic’ can be described as a generic term connoting a non-university higher education. As an institution of higher learning, its responsibility is to offer different courses in technical subjects, technology, industrial production, agriculture, commerce and communication. In addition, it should offer the knowledge and skills associated with the handling of relevant tools and equipment, and develop students through both theoretical and practical experience. The term ‘polytechnic’ was decided upon by the National Council of Education (NCE) in 1987 and was in accordance with the National Policy on Education (NPE) in Nigeria, which defined technical education as the acquisition of basic scientific knowledge, involving both practical and applied skills. The term ‘polytechnic’ distinguishes between secondary technical colleges and post-secondary higher institutions that offer two- and four-year programmes leading to the awarding of the National Diploma (ND) and Higher National Diploma (HND) respectively (Yabani, 2006, p.17; Yakubu, 2006, p.80). Considering polytechnic from a vocational standpoint, Oni (2007, p.271) defines it as an educational system that equips an individual for employment or self-reliance and provides the necessary skills for agricultural, industrial and commercial roles that accelerate the economic growth of a country. Putting forward its own understanding, UNESCO/ILO (2001) described polytechnic education as:

“A segment of the general education that prepares individuals for occupational fields and for effective participation in the world of work, life-long learning for responsible citizenship preparation, sustainable development promotion, a best method of facilitating poverty alleviation, and enable individual to develop technical and entrepreneurial skills and attitudes” (pp. 10&11).

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The next section of the article reviews the literature, followed by the methodology comprising the sample and the analysis. The result of the findings and discussions are then considered while conclusion ends the article.

2. Literature Review

Internal resource allocation in higher education is of high importance because it is concerned with the satisfaction of various units through the resources received. This criterion focuses on how polytechnic institutions manage their internal funds, the model in use, and the criteria for allocation, and see how effective the criterion is in achieving their goals. Notable researchers (Chevaillier, 2002; Herbst, 2007; Kogan and Becher, 1980; Massy, 2003) assert that resources are allocated due to perceived relative needs and are constrained by the availability of resources determined by fiscal policies and regulations. They emphasise that funds flowing into institutional systems or institutions for the purpose of annual base funding will have to be distributed down the line, noting that the internal allocation of funds is not a trivial matter as it shapes, to a greater extent, the character and performance of an institution.

Ehrenberg (2000) identifies four types of resource allocation used by research higher education institutions: *central control* where nearly all the revenue is under the control of central administration to cover costs while the balance is allocated to the spending units; *tub*, where each college or unit keeps the revenue it generates, including tuition fees and fees, but must be responsible for all costs incurred and funds are only remitted to central administration to cover shares of central costs; *tubs with franchise fees*, where each unit is regarded as a tub but remits more than its share of central costs and the franchise fee is allocated back to the units at the discretion of the central administration; and *activity-driven allocation*, where each unit remits to the centre a share of its total expenditure, which differs across activities (e.g. teaching, research, etc.). The centre covers the central costs and allocates excess funds back to units without explicitly having calculated the central costs for each unit. In analysing these methodologies, Ehrenberg (2000) asserts that the tub reduces the central administration control over resources and the actions of the dean, and as such it is not the best way of allocating resources because it will not improve efficiency and cost control. The notion is that what is in the best interest of the individual unit is not in the best interest of the whole institution. Ehrenberg (2000) recommends that for incentives to be provided for the units to raise additional revenue and reduce costs, as well as contribute to the overall efficiency of the institution, variants of the tubs with franchise fees or the activity-driven models are preferred alternatives.

Massy (1996) identifies three factors for effective resource allocation. The first is to understand the incentives system that guides spending in higher education institutions. The incentives are based partly on intrinsic values and partly on instrumental ones. Massey advises that no institution should ignore the market place in order not to risk financial dislocation, while those that ignore intrinsic values in the academic vision and mission tend to behave like an ordinary business enterprise. The second factor involves recognizing and managing the diversity of intrinsic values that abound within any higher education institution. Economic theory examines the role of self-interest which diverts resources away from institutional goals. The third factor is related to managing the complexity of resource allocation reform. The reform aims to move resource allocation from traditional central organizational units to decentralization units. With regard to investment, Massy (1996) recommends the 'high-assay' principle, which means quality relative to the institution's mission, vision and goals delivered as productively as possible (p.7). He also contends that no meaningful transformation can be accomplished without first developing an appropriate resource allocation process because traditional resource allocation methods do not pave the way for the required re-engineering.

The resource allocation model (RAM) is defined as a means by which available resources are used judiciously to achieve the objectives of an institution to a high level of satisfaction. Morgan and Prowle (2005) and Woods (2008) support this view. Furthermore, Morgan and Prowle (2005) and Shattock and Rigby (1983) maintain that the RAM provides essential incentives to academic units in a devolved approach to enable those units to contribute to the strategic and financial objectives of the institution as a whole. In the resource allocation literature, distinctions can be made between centralized and decentralised models. In the former, the top management directs the affairs of the institution and this is regarded as a top-down system of governance, while the latter is participatory and collegial, where decisions are not confined to the top

management but includes the unit segments of the institution. This is regarded as a bottom-up system. This is an indication that the power over how to spend the allocated resources rests on the faculty rather than the top management of the institution.

Jarzabkowski (2002) defines the centralized RAM as a way in which resources are authorized and allocated on a zero basis from the central pool because such a practice encourages institutional strategic directions.

Chevallier (2002) argues that under a centralized system, the political authority dictates the resources allocated to institutions. He stresses that the highly centralized allocation of resources operates through the appropriation system in which resources are allocated to units in kind. This system makes all of the units cost centres, and the effect is that units are unable to spend as their purchasing power is eroded. The ability to substitute one resource for another is not possible. On behalf of units, the centre incurs all purchases made from the market and as such describes the budget of the unit as a list of drawing rights on various physical resources, valued at a price which can be the market price or any price calculated by the centre. Furthermore, Chevallier (2002) distinguishes between charging units and withholding resource allocation from units. A unit which chooses to purchase a resource is charged by either the centre or by another unit, while an accounting device to record a planned use of resources by a budget unit constitutes withholding as it is not mandatory for accounts to be balanced within units but it can be done when required by altering the accounting prices. Chevallier (2002) therefore concludes that if resources are allocated in this manner, a budget is nothing more than a set of figures describing a list of physical items expressed in monetary terms so that they can be compared and added. This does not attract any incentive that encourages efficient use of the resources allocated since transfers between budget lines are not allowed and any savings through under-spending cannot be carried forward. Units will attempt whenever possible to hoard unused resources to protect themselves from the impact of future budget cuts and other uncertainties. Chevallier (2002) concludes that under a centralised model, incentives likely to promote efficient use of resources at the unit level may not be possible.

Flingert and Field (2001) advocate a flexible decentralized model. They maintain that it becomes absolutely unnecessary for any faculty to agitate for how much it will receive if it has no control over its resources. They provide reasons why a RAM is very important as internal management to achieve strategic objectives and as wishes of users and external pressure. They also recognize the advantages and disadvantages associated with a RAM. The disadvantages are consensus and conflict in implementation, overhead costs, and small disciplines; the advantages are strategic fit, transparency, incentives and rewards, and reliability and predictability. Other researchers (Liefner, 2003; Nkrumah-Young & Powell, 2008; Simon & Dressel, 1976; Sizer & Morris, 1982; Thompson, 1997; William, 1992) have carried out comprehensive studies on internal resource allocation.

3. Research Question

In addressing the internal resource allocation problems in higher education, this research raised a specific question to guide the study:

How do the polytechnic institutions compare in terms of managing internal resource allocation as a mission within the higher education system?

4. Research Methodology

The strategy for this study is qualitative. According to Lincoln and Denzin (2003), qualitative enquiry among human disciplines possesses a reputable history. They describe qualitative research as a valuable inquiry, which affects numerous disciplines, fields, and subject matters. It is regarded as complex, with different but related terms, concepts and assumptions. In a very precise definition, whereby qualitative research is regarded as a process that recognises the researcher in the world, and changes the world through interrelated activities and material practices which make the world attractive. The world is changed into numerous representations which include; field notes, interview conversations, photographs, recordings, and memos to one-self. In essence, qualitative research is much more concerned about the world through an

interpretive and naturalistic approach. Therefore, this reveals that qualitative researchers embark on phenomena that are of natural settings in nature and interpret them according to peoples' meanings (pp.1-5).

Glaser (1992, p.12) contends that qualitative methodology can be used to explore the actions and experiences of people and perspectives which are unknown or which little is known in the world of research outcomes.

4.1. Sampling

We gathered purposive and qualitative data through in-depth semi-structured interviews with top-management, academics, and non-academics from the three polytechnics. The participants were similarly selected and were asked similar questions about the internal management of financial resources in the polytechnics. The study being a comparative study provided avenue to observe similarities and differences in the trends that existed between 2009 and 2012 across the institutions. The interviews were conducted face-to-face. In-depth probing emanated from consistency in questioning. Further, the interviewees included 10, 8, and 5 from the federal, state, and private polytechnics respectively. Those interviewed were selected from the top management, academics and non-academics respectively. The top management interviewed included; the rectors/president, deputy rectors, registrars, bursars, medical directors, school chief librarians, and a former top management staff. The academics included lecturers whose cadres ranged from chief lecturer to technologist. The non-academics included heads of units other than academics. Three polytechnics representing higher education structure; federal, state and private were used as sample.

The Federal Polytechnic is one of the leading academic institutions recognized as a centre of excellence with nine world-class faculties and thirty-four departments. The alumni and academic staff shape the world that they inhabit. They include numerous prize winners, some of the nation's renowned politicians, doctors, computer scientists, bankers to mention but few. Federal Polytechnic programs have been accessible to students through full time and part-time courses.

As at 2009/2010, there were over 17200 students studying for one program or the other in the polytechnic. The polytechnic maintains robust and effective quality assurance mechanisms for all its programs. Part-time students get specially designed programs of study, which is at par with the full-time courses. Federal Polytechnic started as a technical institute. The total number of staff stood at 1,869 comprising 525 academic and 1344 non-academic staff respectively. In Nigeria today, there are 21 federal polytechnics across the country.

In 1975, the State Government decided to approve the establishment of a College of Science and Technology as the first State owned tertiary institution. The State Edict No 1 of 1978 effective from 1st June, 1977 gave the college its legal existence. In January 1978, classes commenced at a temporary site, and in 1986, the name of the Institution was changed to reflect a polytechnic.

The Polytechnic is presently non-residential and students attend lectures from their respective homes. The polytechnic as at 2009/2010 had 36,987 students in full-time enrolment, 5 faculties, and 31 departments. The strength of the staff stood at 813 comprising of 368 academic and 445 non-academics respectively. There are 38 state polytechnics in Nigeria.

The private Polytechnic started as a Computer College in the early 90s'. Following the Decree 9 of January 1993, allowing for the establishment of Private Polytechnics in the country, the private polytechnic was one of the lucky Polytechnics registered by the Federal Government in 1999. The Certificate of registration number is *FME/NBTE PP/00/02* dated 4th September, 2000, thus making the Polytechnic the second private Polytechnic institution in Nigeria.

As a private Polytechnic, its functions, and general objectives do not defer from its public counterparts as they are all under the same regulatory body. However, the private polytechnic institutions in Nigeria can only award presently the National Diploma (ND) until permission is granted for the award of Higher National Diploma (HND) in the nearest future hence their highest and lowest qualifications remain at the National Diploma (ND). The private polytechnic has 2 faculties and 6 departments. The staff strength stood at 32 comprising 17 academic and 15 non-academics respectively, and full-time students' enrolment as at 2009/2010 was 1825. There are 15 private polytechnics across the country. All the institutions are multi-

campuses in nature. The highest qualification in the Nigerian polytechnics is the Higher National Diploma (HND) while the lower qualification is the National Diploma (ND).

4.2. Data Analysis

The case study analysis is based on multiple cases permitting cross-case analysis and follows replication rather than sample logic. Each case is treated as separate entity that permits replication. Replication logic requires the careful selection of each case so that it either predicts similar results (a literal replication) or contrasting results but for predictable reasons (theoretical replication) Yin (2003, p.47).

In order to achieve this, a constant comparison method Strauss and Glaser (1967) was used. The analysis began from the case study sites when permission was granted for the recording of the interviews which were later transcribed through listening to the recorded interviews and checked for clarity; whilst the flow of the discussions was compared with the interview schedule and any place where local language such as ‘Yoruba’ was used were identified for proper translations to be undertaken according to each polytechnic which reflected the federal, state and private polytechnics respectively.

The next step involved the description of the characteristics of the cases in order for the readers to have knowledge of the polytechnic higher education institutions under study.

The next step involved the coding of themes from the collected data which was highly central to the analysis. The coding was manually facilitated due to the complexity surrounding qualitative data analysis and followed a thematic approach. At this stage, I became familiar with the transcribed interviews through their reading and re-reading in order to identify initial themes, concepts, processes and the context related to the study.

In this study, 4 themes (Table: 1) through coding were identified. I subsequently provided definitions for all of the codes as pointed out by (Charmaz, 2006) who suggested that categories could be developed through synthesising and explaining data that had been coded because categories involved several codes leading to definitions that contributed to the conceptual analysis.

In this particular analysis, codes were defined as a compilation of how a particular code was expressed in the interviews (Bailey and Jackson, 2003). For example; for the code, “allocation process” one respondent at the federal polytechnic said; “*well the department are allocated funds by the college management headed by the rector*”. At the state polytechnic, another respondent said; after funds are allocated to the faculty, *the dean allocates to the department according to their needs*; and at the private polytechnic, a respondent said; *we don’t have an internal allocation of resources for now*”.

These three responses became the definition for the theme coded internal resource allocation process. This process was consistently followed for coding, and using extensive quotes from the interviewees which allowed the participants to construct their life experiences. Miles and Huberman (1994) referred to this process as a verbatim transcription from the interviews and documents analysed to identify common themes, and to Smith and Firth (2011), the process involved using printed versions of the transcripts while key phrases were summarised using the participants’ own words.

The final step involved the comparison and contrasting of the themes by clumping together themes which were similar or went together and those that differed in order to bring out clear-cut distinctions as reflected from the data and to ensure that the research questions were answered. As pointed out by Dawson (2009), comparative analysis occurs when data is derived from different people and compared and contrasted; whilst the process continues until the researcher is satisfied that no new issues are arising.

5. Results

The aim of this section is to present the findings on the internal management of funds from the interviews and documents. The data are presented by reporting the responses of the interviewees as well as the discussions that emanated from the findings.

The internal resource allocation process is concerned with how institutions distribute financial resources to their faculties and departments and is also concerned with the consistency of implementation. At the federal polytechnic, several respondents revealed that centralized models of resource allocation were in

practice at faculties and departments, and were not allowed to have control over their accounts, as no accounts were opened in their names. Several respondents claimed that there was no consistency in the implementation and indicated that the allocation was characteristic of the overly bureaucratic system. Here four themes were identified from the interviews:

- Internal resource allocation process
- Internal allocation model
- Internal allocation implementation and
- Incentives

5.1. Internal Resource Allocation Process

At the private polytechnic, there was no internal distribution of funds to any unit as the proprietor dictates the movements of funds within the institution. An interviewee attested to this as follows:

“We don’t have an internal resource allocation for now. The bulk of the money is being invested on the permanent site, so resources are not being allocated to any sector right now. Any department that needs anything like stationery or any other thing, they prepare the paperwork and the president approves and buys for that department but to allocate a vote for a department is not being done as at now” (Private polytechnic, top management).

Another member of top management supported this:

“Well, to the best of my knowledge, I wouldn’t say that is in place. What we do is that for every department, they bring in their requests and these will be passed to the president for approval and once approved, funds would be released from my unit” (Private polytechnic, top management).

At the federal polytechnic, a member of top management explained the allocation process as it affected her unit as follows:

“Well, at the beginning of each year, we are asked to make a budget proposal for the unit as a whole. The budget will take care of promotions where vacancies exist, budget for personnel and then another budget for finance. We also have budget for refurbishment of equipment and furniture, while we have a central pool for stationery. Basically, our budget takes care of our needs in the year and it is central. When the budget is approved for the unit, we usually have a meeting of all heads of departments with the dean and then allocate based on the activities of each department. It does not mean that we share the allocation equally, the activities and need of each department determines how much each department gets and we now share the total funds allocated to the unit and each department administers what is given to it” (Federal polytechnic, top management).

Similarly, another lecturer explained the allocation process thus:

“Well, the departments are allocated funds by the College management headed by the Rector. The management determines the allocation to the school. On an annual basis, they send it to us to budget for how much we are going to spend on activities such as conference attendance by staff, short courses, students consumables, maintenance, entertainment, cleaning materials, furniture, office equipment and so on. So we submit our request for the year, they will deliberate on it and they will send to the dean’s office the approved fund for the school. Thereafter, a meeting of all departments will be held to share the funds among the departments and the dean’s office, adding into consideration the number of staff in each department” (Federal polytechnic, lecturer).

The lecturer however made it clear that these funds do not include capital expenditure. Such a request, when it is made, is always approved at the discretion of management.

5.2. Internal Resource Allocation Model

Even though there was no internal allocation process within the private polytechnic, the operations of the accounting system were centralized on the president as all expenditure must be vetted and approved by him before any money can be disbursed. An interviewee confirmed thus:

“No. For the fact that everything is being centralized - it comes directly from the president but one thing I can assure you is that we do not lack anything when it comes to funding. The moment we forward it to the appropriate quarters, they ensure that they supply us whatever we need” (Private polytechnic, lecturer).

At the state polytechnic, a centralized model of allocation was also in place, but funds were being distributed to heads of units according to budget approvals.

“The allocation is central. Central in the sense that all areas of resource allocation, including capital and recurrent, are done centrally, and whenever any school or department requires anything for its advancement and growth, resources are made available to make this happen. Sometimes also, we approach the state government for funding but like I said that it is central and each year, each school prepares its own budget which is defended, and the allocation is done to cover the areas that are finally approved” (State polytechnic, lecturer).

The former rector shared his experiences regarding centralized allocation of resources thus:

“The Allocation System, to the best of my knowledge, during my time - I don’t know whether it has changed - was not centralized; because I was aware that we had departmental budgets, schools, works and services, all units including ventures, school of Part time studies then, their directors control their budgets. So much so that if I want anything from the school of part-time studies e.g. I want to buy a car, I will lobby the director to get a vote but it’s not for me to sit in my office and say bursar take N4million out of director’s budget and so for department, if mechanical engineering wants to buy electrodes, he would raise a memo, come for approval - and he gets them. It is not so central but I don’t know if it has changed but if it has, it will be so unfortunate because I am not an advocate of central allocation” (State Polytechnic, former top management).

However, an interviewee at the state polytechnic defended the action of management on their centralised model of resource allocation.

“Well, you cannot give money to the departments or the schools, otherwise there would be wastage. The funds are centralised. There is monitoring of expenditures, so if you have requests for anything, you bring it, they look at it and approve the purchase. Each school and department has its own budget and you don’t hand the allocation directly to them to spend, otherwise there may not be adequate control. For control purpose, the funds are centralised. This enables funds to be allocated as the need arises and enables one to spend according to the budget. Of course you may require emergency funding but that notwithstanding, it has to be approved either by the governing council or management committee and the academic board” (State polytechnic, top management).

In a similar response, a member of top management at the federal polytechnic defended the centralised model of resource allocation.

“The bursary does this to monitor the movements of funds and to ensure that whatever information is given by the head of units as regards such units’ allocation is not exceeded” (Federal polytechnic, top management).

5.3. Internal Resource Allocation Implementation

“There is nothing like that. Like I told you earlier, funds are kept centrally. Anytime we need to purchase any item, we make requisitions but to be honest with you, sometimes, we were told there was no money and there is nothing you can do. It is very frustrating” (Federal polytechnic, lecturer).

Another lecturer confirmed money was not received in bulk but on a line basis:

“When we have projects, the bursary unit releases funds after being approved by the coordinator”.

To another lecturer, the most unfortunate thing is that the money when allocated is seen on paper not physically.

“As I am talking to you, the votes for this academic session have not been allocated to my school to share among our departments and this is July. This has been usual practice by the management for quite some time now” (Federal polytechnic, lecturer).

A member of top management also explained that no bulk amount of money was given to any unit for implementation of resources allocation thus:

“No, when the budget for the whole school is approved, each unit will be informed about its own allocation and when we have such a document, based on that, we now share to our departments and then inform the bursary about how much each department has been allocated, so from thereon, each head of department will spend his/her department’s allocation by liaising with the bursary” (Federal polytechnic, top management).

A lecturer explained the purposes of the internal allocation as follows:

“Every school is allocated votes for the running of the programmes in each department. The votes also cover things like furniture, maintenance of infrastructure, running expenses and staff sponsorship to workshops and conferences” (Federal polytechnic, lecturer).

Another lecturer expressed the implications of a centralised model of resource allocation as follows:

“No, it is interesting to let you know that the money does not come at once, it comes periodically and this delays the implementation of the budget. This financing system cripples a lot of objectives to be realised at school and departmental levels. To me, this is not very good. All money is kept with the bursary. We only know how much has been allocated to us on paper. Based on this, we spend the money according to our budgets. I don’t know why they don’t give us the allocation all at once, probably; they believe we can’t manage money or that there should not be a separate account. But the belief is that the money belongs to the unit but it is not every time we exhaust the money and not every time the money is given to us. There are a lot of things that happen due to the nature of how the money comes in. We are not fully in control of the money allocated to us” (Federal polytechnic, lecturer).

It was the same story at the state polytechnic. Several respondents indicated that the internal resource allocation model was centralised:

“They don’t give money en block but they give as requested and based on what you have left in your budget. There is, however, a rat race among departments and staff on the spending of the allocation because if you are not fast enough, others will go before you and the funds will be exhausted before you get there. But the school is still looking to take care of that” (State polytechnic, lecturer).

5.4. Incentives

This represents another theme associated with the internal resource allocation at the polytechnics. Responses showed that heads of units who generated revenues for the institution’s coffers were not satisfied by the lack of motivation from management. At the federal polytechnic, some respondents interviewed expressed their disappointment as follows:

“But the unfortunate thing is that such money is paid directly to the institution and not the school. This has become a serious concern to me as the Dean and each time, I have pleaded with management that even if you are not giving us all that has been generated through our school, give us part of the money to enable us refurbish some of our equipment to enhance our practical teaching. Well, I will continue to put pressure maybe management will listen. What I expect is that such money should be used to improve the standard of our workshops” (Federal polytechnic, lecturer).

Another lecturer at the federal polytechnic expressed his feelings as follows:

“Even, what is generated internally by the schools it is deposited in the central purse of the institution. This shouldn’t be because this is curtailing the freedom of schools as regards productivity of staff to the progress of both the school and the departments” (Federal polytechnic, lecturer).

Another lecturer expressed his anger on this issue, thus:

“Even, as the dean, I know some courses we can run that will bring money to our various departments but due to some constraints, such courses may not be approved, and besides, when you think such monies will go to the institution’s bank account rather than the school’s account, you decide to keep quite. Nothing is encouraged” (Federal polytechnic, lecturer).

At the state polytechnic, the top management who generated revenues through capitation fees expressed disappointment similar to his federal polytechnic counterparts:

“As the medical centre is an integral part of the Polytechnic, the cheque is in honour of the polytechnic, the central purse and unfortunately, we are not even benefiting from it because they believe we are doing our jobs. When I made a case for an honorarium on behalf of the medical centre, the bursar of the institution felt the money coming in was not enough for us to get anything. That was demotivating. That is why I have not been encouraged to source for more enrollees, because if I do, nothing comes to me so of course it has affected the patronage of this medical centre” (State polytechnic, top management).

A lecturer explained the bureaucracy associated with consultancy money thus:

“We get consultancy work where we carry out some laboratory work for some sites, when they pay, they pay the polytechnic. But to even access the money to carry out the work that the money is paid for, the bureaucracy is too much. Not only that, but although a percentage of the profit is meant to come to the department, everything goes to the central basket. So there is no way you can access the money. Unless this situation changes, there is no way I can generate and use the money generated for the department” (State polytechnic, lecturer).

In sum, there were tensions between centralized and decentralized models of internal resource allocation. While the top management was in favour of the former, most respondents described the model as highly inconsistent and bureaucratic in nature. However, the responses did not indicate any better resource allocation model; most respondents merely called for transparency, incentive motivation, and more participation at the faculty level.

Table 1: Similarities and Differences between the Institutions

Similarities	Differences
Internal resource allocation model	Internal resource allocation process
	Internal resource allocation implementation
	Incentives

Source: Researchers

6. Discussions and Conclusion

Internal resource allocation is concerned with how the institutions distribute financial resources to the faculties and departments within the institutions. As pointed by Pfeffer and Salancik (1974), decisions within organizations are important in understanding how resources are distributed to various activities within the larger society (p.138). Here four themes were identified: process of allocation, allocation model, allocation implementation, and incentives emerged under internal resource allocation.

With regard to the process of allocation, there were similarities within the public polytechnics whereas at the private polytechnic no internal allocation process was in practice. The internal allocation process began when the budget is approved for each unit, a meeting of all heads of departments with the dean is held and allocation is done based on the activities of each department. It does not mean that the allocation is shared equally, as the activities and needs of each unit determine how much each department gets and monies are then shared from the total funds allocated to the unit and each unit administers what is given to it. The bursar is informed and disburses funds when needed. In essence, the bursar is the custodian of all monies in the public polytechnics. This process, as pointed out by Baldrige (1971), represents a group of professionals organised on a collegial basis with emphasis on the interpersonal context and the making of decisions through processes of consultation rather than by recourse to formal authority.

At the private polytechnic, such a process was non-existent. While each head of unit at the public polytechnics had power over the money allocated to them, no head of unit had such powers at the private polytechnics as the president approves any expenditure item before the bursar can release any funds.

Under the resource allocation model, the practice among the three polytechnics was aptly described by Baldrige (1971) as bureaucratic model which stresses universalistic criteria, formulation of rules and procedures, a hierarchy of authority, well-defined channels of communication and concern for efficiency and goal attainment.

Respondents indicated that centralised models of resource allocation were in practice at the public polytechnics, while at the private polytechnic the president presides over all issues concerning finances

which were equally centralised. At the public polytechnics, respondents felt dissatisfied as faculties and departments were not allowed to have their own accounts. An interviewee noted that the resource allocations within the public institutions were characterised by bureaucracy as faculties and departments had no control over their allocations. However, there were opposing views as explained by two top management staffs members of the public polytechnics.

According to the state polytechnic top management official, money cannot be given to the departments or the schools, otherwise there would be wastage. Each school and department has its own budget and the allocation is not handed directly to them to spend otherwise there may not be adequate control. The federal polytechnic top management official, while agreeing with this comment, noted that the essence of centralised model of resource allocation was to monitor the movements of funds. The former top management official of the state polytechnic, pointed out that centralisation was not in practice during his tenure and the allocation system had changed. He asserted that he was not an advocate of centralisation.

With regards to the resource allocation implementation, the political model dominates as pointed out by Baldrige (1971). Here, the polytechnics are viewed as coalitions where conflict occurs among participants and the answer to what decisions will be made is to be found in examining who has power to apply the decision in a particular decision context. Thus power rather than what is optimal for achieving some institutional objective becomes an important decision element.

The incentives given should serve as motivation to those units who generate revenues for the institutions. But responses indicated that those units were dissatisfied with the actions of the public polytechnics as part of the revenues that were meant for the units generating the revenues went to the bank accounts of the central management. At the federal polytechnic, a dean said that she had pleaded with the management on several occasions that at least part of the money should be given to the school to refurbish some equipment to enhance practical teaching but such pleas fell on deaf ears. The same experience was recounted at the state polytechnic as the top management official who generated capitation fees had refused to encourage more enrollees due to lack of motivation. According to another interviewee who generated revenues through consultancy said that there is too much bureaucracy to even access the money to carry out the work that generates the revenue. Not only has that but the percentage of the profit which is meant to go to the department gone into the central basket. The same practice was being experienced at the private polytechnic as any income from the business and printing centre goes to the central purse of the institution.

Henry (2007) maintains that the degree by which higher education institutions are open and affordable is determined through proper management of fiscal resources. While noting that effectiveness in terms of resource allocation is not apparent in literature, he however suggests that all revenues expended in support of instructional delivery must be examined to determine resource allocations that will sustain the activities of the faculty and non-academic units to be able to achieve their mission and ensure fulfilment of the obligations of the institutions to ensure delivery of instructions in the most effective and efficient manner (pp. 52 and 53).

However, there were divergent opinions among the participants as there was support for both centralized and decentralized internal resource allocation models. The findings based on centralization and decentralization tally with the findings of a number of studies (Carnoy and Hannaway, 1993, p.34; Chevaillier, 2002; Flingert and Field, 2001; Jarzabkowski, 2002, p.7 and Massy and Hulfactor, 1993).

In supporting the decentralization model, Flingert and Field (2001) advocate for a flexible decentralized model to gain the most efficient use of resources and maintain that it becomes absolutely unnecessary for any faculty to worry about the amount of resources it will receive if it has no control over them.

However, based on the fact that there is no best internal resource allocation in literature, this study concluded that the three polytechnics were assumed to be practicing the most suitable resource allocation system in achieving their missions.

7. References

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