

## **Underfunding of Federal Polytechnics in Nigeria and Perceived Impact on Administration: An Exploratory Case Study**

<sup>1</sup>Njemanze Livingstone Obi & <sup>2</sup>Onyewuchi Veronica E.

<sup>1</sup>Department of Accounting, School of Business and Management Studies, Abia State Polytechnic, Aba-Abia State

<sup>2</sup>Accountancy Department, School of Financial Studies, Federal Polytechnic, Oko

---

### **Abstract**

---

**P**olytechnics in Nigeria have historically faced underfunding, and at an operational level, compete for attracting the best pool of students, achieving the highest grades. Adequately funded polytechnics not only ensure a higher standard of polytechnic curriculum, but also have the potential to result in competitive advantages over other polytechnics. Nigerian polytechnics function with the shortage in key educational resources, such as research materials, library facilities, science lab equipment, and suffer the consequences of underfunding. In this study, the problem of underfunding in Nigerian federal polytechnics, its effect on the polytechnic central administration, and its relationship with external actors was explored. Employing resource dependency theory, the researchers considered external environmental factors such as alternate financial sources and competing organizations. A qualitative research methodology was adopted to examine the federal polytechnic Oko as a case study. The central research question was: What are the organizational and systemic factors in the Nigerian Federal polytechnic system that impact funding management by polytechnic administrators? The four sub-questions which guided the study focused on: the role of polytechnic personnel in resource acquisition, the impact of the external environment, the alternative revenue generators explored by polytechnic administrators to overcome underfunding, and the experience of administrators as they contend with the impact of underfunding by the Federal Government. The study found that polytechnic administrators at Oko require training on securing alternative resources. This research has also identified administrative practices that help federal personnel, on a broader scale, to function in an environment of financial uncertainty.

**Keywords:** *Polytechnic underfunding, Administrator perception, Resource dependency theory*

---

Corresponding Author: **Njemanze Livingstone Obi**

<http://internationalpolicybrief.org/journals/science-publishing-corporation-journals/intl-jrnl-of-adv-research-in-stats-mgt-and-finance-vol-7-no1-june-2019>

### **Background to the Study**

Underfunding of a Polytechnic is defined by the lack of resources within a higher education institution. It is a condition which occurs when the allocations are not sufficient to be effective, and money needed to cover current and future expenses is not readily available. Ogot and Weidman (1993), caution that funding higher education should be a major priority in government budgets in Africa because of its importance in social and economic development. Polytechnics are the main source of the knowledge acquisition and skill technology development that equip students to perform well in the competitive global marketplace. Due to the increasing interconnectedness of countries' economies, it has become necessary for each country to produce students who can compete in the global economic marketplace. Adequate funding for higher education and research institutions is key to achieving this goal (Geuna, 2001). This study will address the general problem of underfunding in Nigerian federal Polytechnics and its effect on the Polytechnic central administration and its relationship with external actors.

Inadequate funding of higher education institutions is not specific to Africa; it is a global issue. In a research on U.S. tertiary institutions, Standler (2009) established that all research-oriented tertiary institutions in the United States, both state and private, faced financial problems resulting from a drastic reduction in government financial support for scientific research in the 1970s. The consequences of these funding issues include tuition increases, which have since made college education unaffordable for many low- and middle-income families in the United States. President Barack Obama, in a report prepared by the Department of the Treasury with the Department of Education on February 27, 2012 stated, "We can't allow higher education to be a luxury in this country. It's an economic imperative that every family in America has to be able to afford" (Snyder & Dillow, 2012). Government involvement in and support for resource allocation to higher education institutions differs among countries (Rosa, Amando, & Amaral, 2009). Meyer-Krahmer and Schmoch (1998) noted that in most advanced countries tertiary education have more industrial funds in their research budget than government or public funds. In Germany, for example, state fund allocations are based on tertiary education performance and are "one way of setting an incentive for competitive practices amongst tertiary institutions" (Orr, Jaeger, & Schwarzenberger, 2007). Similarly, Dewatripont, Aghion, Mas-Colell, Hoxby, and Sapir (2007) documented a high variance in the funding and governance of polytechnics across countries, including the United Kingdom and Switzerland. Table 1 presents the annual budgetary allocation for education by 20 different countries.

**Table 1:** Budget allocation to education in selected countries

Country	Budget allocation to education (%)	Rank
Ghana	31.0	1
Cote d' Ivoire	30.0	2
Uganda	27.0	3
Morocco	26.4	4
South Africa	25.8	5
Swaziland	24.6	6
Mexico	24.3	7
Kenya	23.0	8
United Arab	22.5	9
Botswana	19.0	10
Iran	17.7	11
USA	17.1	12
Tunisia	17.0	13
Lesotho	17.0	14
Burkina Faso	16.8	15
Norway	16.2	16
Colombia	15.6	17
Nicaragua	15.0	18
India	12.7	19
Nigeria	8.4	20

**Source:** Adapted from “Selected 20 countries annual budgetary allocations to education” by World Bank, 2012. Washington D.C.

The table shows Nigeria at the bottom of the table with 8.4 percent allocation to education with Ghana occupying the first position with 31.0 percent allocation to education. In Africa, Polytechnics were established with the objective of training and supplying manpower highly skilled in technology, as well as producing political and administrative elites to control state structures. Tertiary institutions were also established for promoting technology, civic standards, societal values, and knowledge, to improve standards of living, internal and international harmony and establishments of peace, based on human rights, democracy, tolerance and mutual respect (UNESCO, 1998). According to Ibukun (1997; 2004), the main purpose of Polytechnic education in Nigeria is to provide the needed technology and manpower to accelerate the socio-economic development of the nation. To achieve these purposes, these institutions of higher learning need to be adequately funded. Without sufficient funding, polytechnics are not able to effectively manage the resources they are given (Ekundayo & Ajayi, 2009), nor are they able to fulfill the mandate for which they are established.

### **Statement of the Problem**

Nigeria's higher education system is like the British higher education system, due to the history of colonization to understand the problem of underfunding of Nigerian higher education and its impact on administrators, the system infrastructure needs to be explored.

Nigeria's higher education system started with the Elliot Commission of 1943, which led to the formation of the tertiary institutions like University College of Ibadan in 1948 as an affiliate of the University of London (Ike, 1976). Tertiary institutions established in Nigeria between 1960 to 1970 under the British colonial government are called first-generation universities; universities established in the 1970s are called second-generation universities; and universities established between 1980 and the 1990s are called the third-generation universities by the Federal Government of Nigeria. Along with the establishment of federal universities, polytechnics and colleges of education, many state governments, private organizations, and individuals established regional, and specialized privately-funded tertiary institutions in various cities within Nigeria. Reported in a study by Bamiro & Adedeji, (2010), government funding to polytechnics has declined and has negatively affected the ability of polytechnics to perform their duties effectively, especially in the areas of technology, teaching and research. They further stated that the quality of teaching and research has fallen because of inadequate research and teaching materials and overcrowded teaching and learning environment.

### **The Tertiary Education System in Nigeria**

Nigerian higher education system reflects the regime changes that the country has experienced in its history. As a former colony, Nigerian higher education system resembles the British system with three years of undergraduate education required after completing high school. The first few universities in the country were established in the colonial rule. Thereafter, more universities polytechnics and colleges of education were established to meet the demand of higher education in the military and current democratic rule. In Nigeria, polytechnics may be classified by their year of establishment, public or private ownership, and whether they are diploma granting or technical colleges.

### **Impact of Underfunding**

Documentation of underfunding of Nigerian polytechnics was provided in a study by Nwadiani and Akpotu (2002) who explicitly linked the crises in Nigerian polytechnics to governance, control, and underfunding. According to the authors, the polytechnic system has experienced a “high state of anxiety and frequent crises of different types and intensity”. Among these crises, scarce resources and technology manpower, underfunding, brain drain, and staff turnover are the most crucial and central (Nwadiani, 1999). Halidu (2015) reported that federal polytechnics are seriously underfunded and the underfunding issues has affected academic performance which has resulted to lack of physical facilities, brain drain among highly qualified school, and administrative staff, library facilities and laboratory equipment and professional development for staff.

Other research (Ibukun, 1997; Ekundayo & Ajayi, 2009; Faniran & Akintayo, 2012) has demonstrated that in Nigeria, underfunding of polytechnics has led to overcrowded classrooms, deteriorating physical facilities, and a lack of resources such as textbooks, teaching materials, and laboratory equipment and technology development. Lack of resources and deteriorating teaching facilities have subsequently led to campus unrest and strikes by both students and staff, resulting in the unscheduled closure of polytechnics for

months (Faniran & Akintayo, 2012). Osun Radio (2013) analyzed the history of ASUP strikes in the Country since 1999 as follows. In 1999, ASUP went on strike for 5 months, 3 months in 2001, 2 weeks in 2002, 6 months in 2003, 3 days in 2005, 1 week in 2006, 3 months in 2007, 1 week in 2008, 4 months in 2009, 5 months 1 week in 2010, 3 months in 2011 and 5 months 20 days in 2013, etc. Lack of funding was central to these strikes. Similarly, Sanni (2009) reported that many organizations, parents, labor unions, etc, have been pointing to the government as the cause of inadequate funding of the polytechnic education system in Nigeria.

In 2010, at a federal executive council meeting, the Nigerian education minister declared that the government would be establishing more tertiary institutions in each of the six geopolitical zones of the country that did not already have federal tertiary schools to extend access to both university and polytechnic education in 2011. Reacting to this announcement, Subair Omotayo, an administrator from the Obafemi Awolowo University (OAU), “described the creation of new federal tertiary schools as ill-conceived and unnecessary” (Furtune, 2010). According to him, “existing ones were facing the problems of accreditation, funding, technology development and staff welfare and suggested expanding the existing tertiary institutions to absorb more students, while academic programs should be strengthened and improved to get proper accreditation.

The underfunding of federal polytechnics was highlighted in a study by Muhammad (2012) who found that the polytechnics needed funds to pay staff salaries, human resources, staff and technology development, equipment for classrooms and offices, and the construction of new buildings, security, research development, library facilities, and scholarships. Availability of resources in the polytechnics was not commensurate with increases in student enrollment and other services needed. Further, Muhammad (2010) established that low funding of federal polytechnics, including federal polytechnic Oko, affected Polytechnic management negatively, as it jeopardized the ability of polytechnics to meet its operating costs, which constituted expenses such as salaries and learning resources. In addition, inadequate funding limited the federal polytechnics from allocating monies towards capital expenses which are required to maintain the existing infrastructure assets so they do not depreciate rapidly.

### **Alternative Funding Sources**

In Nigeria, federal institutions do not charge any tuition; this is a problem because the customers (students) are not paying for the goods (education). Thus, they do not always appreciate its value. A study by UNESCO (2003) revealed that since the abolition of tuition fees in the year 1976 by the Nigerian Federal Government, the tertiary institutions started on the path of being underfunded, and it is being continued today. In a study on Nigerian higher education, Okojie (2010) reported that federal polytechnic administrators are not happy that there is the problem of underfunding in the polytechnics, yet they were not allowed to charge undergraduate tuition.

Udoh (2008) suggested the following ways of dealing with resource shortfall, i.e. graduate tax, checking fraudulent practices such as embezzlement of funds or fund mismanagement, commercializing activities on campuses, imposing a charge on polytechnic accommodation, endowment funds, scientific breakthrough, consultancy, scholarship, loans, payment of tuition fees, part-time programs, staff exchange program, loans, scholarship, tax-relief, vacation and part-time job. In his discussion of potential sources of funding higher education in Nigeria, Adeyemi, (2011) listed bank loans for capital development, dedicated funds from property tax levies, donations from endowment, donations from parents/teachers/alumni associations, education tax, development levy, and lottery taxes. The Federal Government's effort to carry out some of these suggestions has not been easy, as they have met with stiff oppositions from parents, instructors, and students (Udoh, 2008). Hisle (2002), who researched Nigerian Polytechnic libraries, stated that raising funds from alternate sources is difficult for polytechnics as they depend primarily on government financing (Emojorho, 2004) and do not have the need or experience in fundraising. This insight drawn by Hisle (2002) pertains to the organizational nature of universities, which are large bureaucracies in the Nigerian higher education system. Specifically, for such institutions, heavy reliance on citizen's donations, lack of flexible administrative system, clear fundraising roles contribute to the inertia in seeking alternate funding sources. The issue is further complicated by the deep-seated culture bias where citizens view education as the government's responsibility.

Arikewuyo (2001) discussed the ideology adopted by the larger civic community in Nigeria, which views higher education of the citizens as a public good, and places the responsibility of financing higher education on the government. This ideology implies that funding of polytechnic programs and operations is the responsibility of the government. Udoh (2008) clarified that according to most people in Nigeria, issuing scholarships, checking fraudulent practices, and loans are the responsibility of the government, while polytechnic administration can help the government by administering the staff-exchange program and scientific breakthrough.

Udoh's study highlighted antagonism in the views held by instructors, parents, and students on financing polytechnic education through student and employee fees or charges. In the conclusions, the author reported that instructors, parents, and students accepted scholarship, scientific break-through, staff exchange programs, checking fraudulent practices and loans but rejected commercializing accommodation, payment of tuition fees, graduate tax, and tax-relief and commercializing activities on campuses as alternative sources of funding polytechnic education. In the study, Udoh (2008) documented how underfunding of polytechnic results in organizational stress in the polytechnics and causes resource strain as they lack adequate resources to deliver essential services. The author warned that the Nigerian government should be careful in reintroducing tuition fees in the polytechnics to avoid student strikes, which sometimes lead to closure of some polytechnics. He proposed that rejection of tax-relief by citizens, as alternative source of funding polytechnic education in Nigeria, displays a lack of trust in government policy on the issue of funding.

### **Nigerian Federal Polytechnic's Internally Generated Revenue**

Federal polytechnics are pursuing other sources of generating revenue instead of relying completely on the Federal Government for funding; this category of funds will be termed internally generated revenue (IGR) in this dissertation. Bamiro (2012) listed some innovations in program offerings which have helped polytechnics boost their revenue considerably. These include establishment of part-time programs to consultancy outfits as the Federal Government expects federal polytechnics to generate 10 percent of their total annual allocation (2012). To meet these requirements, some polytechnics offer evening/regular two and weekend diploma programs at National and Higher National levels, some by establishing satellite campuses in major cities. While such programs generate revenue for the polytechnic, it is not sufficient to improve significantly the funding shortfall experienced by these polytechnics (Akinyemi, 2012).

As a means of finding solution to the unending financial problems in the nation's polytechnics, and the mandate that each federal polytechnic need to generate at least 10 percent of its total revenue, polytechnics have expanded the scope of their internally generated revenue to include student fees, grants, private contributors, tertiary education trust fund (ETF), commercial ventures, alumni relations associations, and undertaking research and consultancy services (Akinyemi, 2012). Each of these funding sources will be discussed briefly to provide a context for the statement of the problem. Famurewa (2014) reported that polytechnics should seek for alternate funding to supplement government funding, through internally generated revenue and there should be adequate monitoring of how allocated funds are used and areas where they are applied. This should reduce the number of academic staff union of polytechnics (ASUP) strikes in Nigerian Polytechnics.

**Student fees:** Even though federal and state higher education institutions are not allowed to charge tuition fees, they can charge the students for the provision of services. These include providing residence halls, sports facilities, and laboratory supplies in science-based programs. A limited fee is charged to meet the cost of municipal services (Bamiro, 2012). Private institutions on the other hand are autonomous and depend largely on fees paid by students for their sustenance. Tuitions are very high in these schools and thus, students from low and middle-income families are deprived of the opportunity to go to those schools due to high cost. In his study Bamiro (2012) explained that there is a disconnect in setting the budget for polytechnics between the Federal Government and the polytechnic management; as a result, there is lack of funding to meet the established requirements. Any attempt by polytechnics to increase fees results in student protest and crises. Okojie (2013) highlighted that some tertiary institutions have done well in their drive for substantial IGR and have used it to positively change the landscape of the institutions while some were yet to catch up with the vision.

In a study, which surveyed Nigerian polytechnic student curriculums and diploma programs, Adeyemi and Osunde (2005) conclude that polytechnics have cherry picked disciplines in which they have introduced the part time programs. These programs are offered more often in disciplines such as financial studies, business administration management, public administration, Mass communication, etc. This is because these fields are more popular, and

attract more students, and through the process, more revenue. Students find these courses easy to get into unlike medicine, pharmacy, and engineering just to name a few. These programs generate revenue to the universities which helps in solving some of the underfunding problems.

**Endowment funds and donations:** Many polytechnics have established endowment funds where rich citizens assist in the development of quality education (Akinyemi, 2012). Prominent citizens donate money and infrastructure assets, in their honor.

**Grants:** Many federal polytechnics receive foreign grants in form of aids to support academic programs and staff development from agencies such as World Health Organization (WHO) etc.(Akinyemi, 2012).

**Private contributors:** Big firms, and investors such as Innoson, Emeka Ofori etc. contribute towards the infrastructure of Nigerian polytechnics. They do this through free will donations to these polytechnics. Some of the donations are done annually while some are one time donation. Organizations such as Rotary Club and Lions Club also donate buildings, books and money to Nigerian polytechnics (Akinyemi, 2012). The institutions where PTDF was established have benefitted from annual allocations ranging from 14 million naira to 20 million naira per institution per year to support the professional chairs (Bamiro & Adedeji, 2010).

**Tertiary Education Trust Fund (ETF):** The fund was established by the Education Tax Decree of 1993, in response to the recommendations of policy making groups which identified that the private sector must share in the burden of financing higher education since it is the primary beneficiary. The decree requires private sector to pay two percent of their profits to education Trust Fund, which is disbursed among education institutions in Nigeria (Akinyemi, 2012). The purpose of introducing ETF was to fund educational projects, and Polytechnic management, with the goal of improving the quality of education in Nigeria (Agunbaide, 2006). Resources collected through these funds are disbursed to federal and state tertiary institutions for the provision and maintenance of essential physical infrastructure for teaching and learning, institutional material and equipment, research and publication and academic staff, training and development (Omopupa & Abdulraheem, 2013).

The effectiveness of ETFs and TET funds was discussed in a study by Omopupa & Abdulraheem (2013). They explained that government instituted Educational Trust Fund (ETF) and Tertiary Education Trust Fund (TET Fund) created high expectation that the resource shortfall in polytechnics would be addressed; however due to misplaced priorities in polytechnic administration, the effect on institutions was not significant. Yet, the authors pointed that without ETF intervention in Nigeria, the higher education system would have been in serious problems.

**Commercial Ventures:** Nigerian polytechnics are now exploring commercial ventures such as built up shops for rent, gas stations, cybercafés, hotels, transportation companies, bookstores, and supermarkets to generate additional funds (Akinyemi, 2012). Each federal



polytechnic in Nigeria realizes funds from different ventures ranging between 4.7 million naira and 82.9 million naira annually (Ogbogu, 2011). University of Ibadan which is the oldest Nigerian federal University was the first to develop insights into commercial ventures, and the money collected from these ventures are used for University expansion and improvement of staff working conditions. Ofoegbul & Along, 2016 in their study on Internally Generated Revenue (IGR) and effectiveness of polytechnic administration identified that commercial ventures were among the main sources of IGR. In their study, they stated that proceeds from IGR were used for services including staff welfare, maintenance of facilities and beautification of the polytechnic premises. According to Idialu & Idialu, (2012) underfunding of polytechnics is the most significant reason for lack of maintenance of existing infrastructure and improving the quality of education in Nigerian polytechnics.

**Alumni relations and associations:** Alumni relations are maintained through a database through which polytechnics keep in touch with its alumni. This has resulted in a sense of belonging in the alumni, and has increased alumni representation in Polytechnic's events (Okojie, 2010). Alumni from public polytechnics in Nigeria have demonstrated keen interest in providing for the needs of their alma mater. Through alumni support, polytechnics have provided for projects such as construction of modern toilets on campus; provision of seating on campus for relaxation; and construction of lecture halls and buildings (Akinoyemi, 2012).

**Endowment, gifts, and donations:** Polytechnics engage in different forms of endowment such as professional chairs, scholarships for students, donations towards programs of interest to the donors (Bamiro, 2012).

**Research consulting:** Nigerian polytechnics provide research consulting services to big organizations in the form of medium and small scale researches, collaborative research and development, providing the needed technological know-how to industries, capacity building services, organizing workshops, seminars and in-service training for government workers, and workers of private organizations; and management development services (Akinoyemi, 2012).

**Manufacturing and processing.** Some polytechnics in Nigeria engage in food processing; developing useable products from in-house research, and fabricating tools during the idle time for foundries to generate revenue (Okojie, 2010).

### **Research Questions**

This study will examine the following central research question: What are the organizational and systemic factors in the Nigerian federal polytechnic system that impact funding management by polytechnic administrators?

Four sub questions will be explored as part of answering the central research question.

1. What role do polytechnic administrators play in resource acquisition?
2. How does the external environment affect polytechnic resource acquisition?
3. What are the alternative revenue generators explored by polytechnics administrators to overcome underfunding?

4. What is the experience of polytechnic administrators in Nigerian federal Polytechnics as they contend with the impact of underfunding by the Federal Government?

## **Literature Review**

### **Conceptual Framework**

#### **Higher Education in Nigeria**

Nigerian National Education Policy (2004) noted that higher education in Nigeria is responsible for providing the labor and skills needed for the country's socioeconomic development. According to a document published by the Federal Ministry of Education, (Brubacher, 2003), “the main purpose of establishing universities is to promote quality of life; improve the mind through intellectual inquiry; and generate, store, and transmit specialized knowledge, sophisticated expertise, and strong leadership” . In another opinion expressed by Fafunwa, (1995), “Nigerian education is important for the needs and aspirations of the child, the community, and the nation, and should be tailored toward the rediscovery of Nigerians' cultural heritage”. This could be accomplished through good leadership. According to Udey, Ebuara, Ekpoh, and Edet (2009), articulated benefits for higher education could also be accomplished through proper implementation of higher educational policy; supervision of educational activities; use of adequate technology, funding and prompt remuneration of staff; and discipline, dedication and determination to improving the falling standard of education as to reinventing the Nigeria polytechnics dream and the challenge of leadership.

The Nigerian higher education system consists of universities, polytechnics, colleges of technology, and colleges of education affiliated with four-year graduate degree universities and other professional, specialized institutions. There are two levels of polytechnic education in Nigeria. Level 1 is comprised of a two-year, National Diploma (ND) program. Level 2 includes Higher National Diploma (HND) which takes one or two years. These levels are offered by both federal, state and privately owned Polytechnics in Nigeria.

A World Bank (1999) report stated that the economic and social development of any country depends on the advancement and application of acquired knowledge. However, higher education systems in developing countries are often disrupted by the inefficient management of finances and other resources (Saint, Hartnett, & Strassner, 2003). A report by World Bank (2010) stated that this problem is more acute in Africa, than in the rest of the world. According to Ifedili and Ojogwu (2007), “Nigerian education policy formulation and implementation is vulnerable to governmental control, propaganda, political pressure, and public opinion”. According to Ifedili and Ojogwu (2007), the budgetary allocation to education has consistently remained low and many educated Nigerians are worried about the future of the country's educational system. Similarly, Adegbite (2007) documented inadequate funding as the primary challenge facing the management of Nigerian polytechnics in general and federal polytechnics particularly.

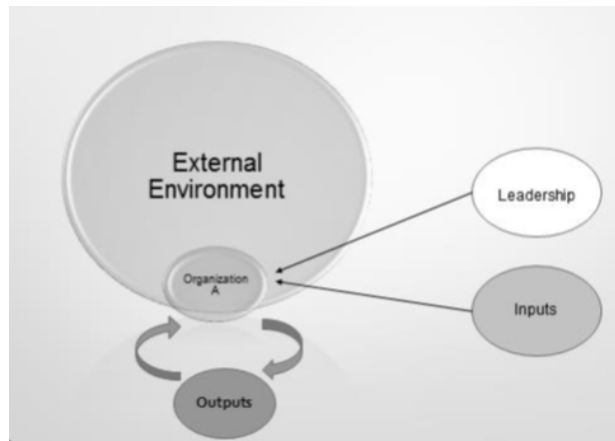
Nigeria, a developing country, has a population of 170 million people, and is the most populous country in Africa, with 20 percent of the continent's population. However, due to the poor funding of its tertiary educational system, Nigeria is lagging many other countries at

the same level of development, in terms of the amount of people engaged in research and development (World Bank, 2002). With only 15 scientists and engineers engaged in research and development per one million persons, its scholarly activities fall behind countries such as Ghana, Egypt, Libya, Brazil, China, India, and the United States (World Bank 2002). Comparatively, the World Bank report (2002) puts the figures of the following nations at 168 for Brazil, 459 for China, 158 for India, and 4,103 for the United States. Such figures confirm that Nigeria is facing a critical situation regarding its higher education that requires urgent attention.

### **Theoretical Framework**

This study explored the problem of underfunding in Nigerian federal polytechnics, its effect on the polytechnic central administration, and its relationship with external actors. To understand underfunding, and its effects on Polytechnic administration, resource dependency theory is presented as a framework. To provide the context to the problem of polytechnic underfunding in Nigeria, this review of literature included research on the history of polytechnic education system, and the funding process. Through this review, the researcher also proposed a potential formula for better polytechnic funding based on Resource Dependence Theory frameworks first established in Pfeffer and Salancik's work (1978). Resource dependency theory (RDT) is one of the most influential organizational theories that addresses strategic management, and deals with the connection between environment, organization and organizational decisions or actions (Pfeffer & Salancik, 2003).

First articulated in Pfeffer and Salancik's (1978) book, *The External Control of Organizations*, this theory states that dependence on critical and important resources influences the actions and decisions of organizations (Hillman, Withers, & Collins, 2009). The main tenets of the theory are that organizations depend on resources; these resources originate in the organization's environment. The theory assumes that there are other organizations in the larger environment, and these organizations compete for the same resources. The organizations that control resources exert power in the environment. These resources are often expressed in terms of budgets and resource allocations (Mudambi & Navarra, 2004; Pfeffer & Moore, 1980). Organizations that exert power i.e. control resources and organizations that depend on them are directly connected. Organizations that compete for resources depend on each other.



**Figure 1:** Resource Dependency Theory.

**Source:** *The external control of organizations: A resource dependence perspective*, by J. Pfeffer & G.R. Salancik, 1978, New York, NY: Harper & Row.

Resource dependency theory associates power with management for coping and solving critical problems of any organization or institution that arise from its environment (Pfeffer & Salancik, 1977). Powers (2000) referred to resource dependency theory as “environmentally driven aspects of organizations”. An organization's success depends on its ability to compete with its environment and those that fail to solve their critical problems or compete successfully, either fully cease to exist or function at sub optimal levels, not accomplishing their goals. This assertion is applicable to this dissertation because polytechnics compete for resources and those that develop creative ideas to seek for resources gain flexibility in administering programs than those that depend on one source of funding.

Resource dependency theory is a current theoretical paradigm, and has been developed further by scholars to continue its use in literature (Casciaro & Piskorski, 2005; Davis & Cobb, 2010). This theory was tested by Vos and Schiele (2014) on five specific elements of theory development criteria namely, units, laws, boundaries, system status and why. The results confirmed that RDT contains all requirements related to conceptual theory development and it can be considered as an organizational theory possessing the minimum requirements for empirical testing and predicting. General empirical findings suggest the relevance of RDT for today's research. It has been used to describe managerial activities and organizational behavior (Sheppard, 1995); in describing actions of organizations, striving to overcome dependencies and improve an organizational autonomy and legitimacy (Sharif & Yeoh, 2014), and organization actions to reduce uncertainty by acquiring resources from external resource providers in the environment (Delke, 2015).

A few criticisms of RDT have been voiced in the literature. Most criticisms originate from the view that the boundaries of RDT are not empirically testable (Mudambi & Pedersen, 2007), while others find it impossible to test all hypotheses from the theory (Nienhuser, 2008). In fact, Davis & Cobb, (2010), state that there is almost no empirical examination available. With such limitations, the theory has found much acceptance, but less examination, thus reducing it to a metaphorical statement about organizations (Pfeffer & Salancik, 2003).

In his study, Nienhuser (2008) reviewed Clegg & Rura-Polley (1998) who criticized resource dependency theory for being too narrow on the concept of power over controlling objective resources. Nienhuser (2008) agreed partly with the criticism stating that if RDT is interpreted solely as a materialistic or objective way, it will limit the understanding of the process of power. Further, Nienhuser (2008) stated that while the proposition of resource dependency may be empirically tested, the information content in the theory was low. For example, Pfeffer & Salanik (1977) state that changes in the amount or distribution of critical resources within the environment should lead to changes in the distribution of power, or may be actors are so powerful beyond their pure control of resources that they are able to withstand the changes. They did not state under which condition the changes can lead to the above scenario.

In literature, there is a widespread acceptance and agreement among researchers on the major tenets of resource dependency theory, while there are a few researchers, as the literature review has shown, who find the RDT amiss by not yielding testable hypothesis. However, the review of literature has shown that scholars agree with the basic premise of the theory (Davis & Cobb, 2010).

Resource dependency theory provides the framework on how polytechnic action can reduce uncertainty of inadequate funding, and provide more resources for effective management. (Handfield, 1993). The theory can prove as a guide for administrators for managing the forces of external organizations. Some of the organizational assumptions of RDT are present in mainstream literature on organizational behavior (Drees & Heugens, 2013). The basic assumption commonly used in literature is that administrators try to ensure their Polytechnic survival. Resource dependency theory has helped in explaining behaviors of the polytechnic (Hillman, Withers, & Collins, 2009).

## **Empirical Review**

### **Nigerian Education Policy**

The National Policy on Education in Nigeria includes a philosophy of education as well as the aims and objectives of the National Educational System. The education policy is designed to reflect the United Nations' 1948 Charter on Education, which stated that everybody has the right to free and compulsory education at the primary school level; higher education should be available to all based on merit and affordability; and parents have the right to choose the type of schools their children will attend (Ifedili & Ojogwu, 2007). Even though this policy has undergone many changes, it has not been able to overcome the obstacles in achieving the outcomes, including poor policy implementation, inadequate funding, political instability, corruption, and dishonesty among institutional management (Ifedili & Ojogwu, 2007). A report by UNESCO (2010), based on documents from the Central Bank of Nigeria (2012), shows that the highest annual budget allocation to the education sector was 17.59 percent and this was in 1997. Every other allocation made to the sector from 1960 to 2013 had been below 14 percent. This implies that on the average Nigeria spent 5.7 percent yearly from 1960 to 2013 on education which is grossly below the benchmark of 26 percent of the annual budgetary allocation to education.

Nigerian policymakers instituted the quota system, to enforce equal tribal participation and equitable distribution of positions in higher education institutions. The quota system was set up with the intention of addressing the differences in socio-economic development of different parts of Nigeria. However, the quota system has led to discrimination against merit and the promotion of mediocrity, while suppressing excellence and diligence in the appointments and promotions of personnel in public institutions (Ifedili & Ojogwu, 2007). While Diso and Njoku (2007) have argued that the current crises in Nigeria's polytechnic education system are a result of inconsistent educational policies through frequent changes and poor implementation, and in many cases non-implementation of national educational policies.

In his study, Iwhiwhu (2005) reported that there are no record management programs or policies in the Nigerian polytechnic system to govern (for example, polytechnic records manual, records retention, or disposition schedule). There is also a lack of trained staff to manage records. Such records would assist polytechnic administration in solving potential financial problems and aid the decision-making process.

Muhammad (2012) proposed that the National Board for Technical Education (NABTED) should adhere strictly to existing financial policies, rules, and regulations; and ensure good management and accountability with polytechnic administrators concerning funds allocated to their institutions. He further argued that polytechnic education reform committees should consist of educational experts, academics, and other stakeholders in the diaspora to bring polytechnic education in Nigeria to life. Ifedili and Ojogwu (2007) reported that not all major stakeholders in education were involved in drawing up educational policies. The authors recommended that all stakeholders in education be part of educational policy formulation (Ifedili & Ojogwu, 2007).

### **Higher Education Funding in Nigeria**

Research conducted by the National Board for Technical Education (NABTEB), the premier higher education policy making arm of the government, indicated that Nigerian polytechnics were low in the world ranking of polytechnics in all areas—especially in research—due to inadequate funding, lack of equipment, and lack of time due to overloaded teaching and administration schedules (Makunjuola, 2008).

Nigerian federal polytechnics are funded by the Federal Government; State polytechnics are funded by State governments. Shuara (2010) identified three categories of funding sources for Nigerian public polytechnics: the primary source of funding for polytechnics is the government. The second category of funding is secured through internally generated revenue (fees, and other sundry charges). These are largely under-reported by polytechnics. The third identifiable sources of funding are donations, & endowments. This type of funding is not very significant due to the economic down turn experienced by the country.

Private polytechnics are funded by individuals and organizations. There are more public than private polytechnics in Nigeria. All government-funded higher education institutions in Nigeria, whether state or federal, are considered public polytechnics, while the rest are private

polytechnic. Public polytechnic education in Nigeria is funded by grants provided from both Federal and State governments, as well as small contributions from students in the form of fees and levies (Ayo-Sobowale & Akinyemi, 2011).

The funding, supervision, and allocation of resources in public polytechnics are controlled by NABTEB. The policy of the Nigerian Federal Government is not to charge tuition in federal polytechnics, while state governments charge tuition and room and board. Although tuition is free in federal polytechnics, the Federal Government, through the NABTEB, has mandated that all federal universities must generate 10 percent of their total yearly funds internally through fund-raising programs (Odebiyi & Aina, 1999). As such, all federal polytechnics receive 95 percent of their funding from the Federal Government through the NABTEB, and polytechnics must adhere to the NABTEB's budgeting and expenditure formula of 60 percent for total academic expenditure, 39 percent for administrative budgets, and one percent for pensions and benefits (Hartnett, 2000). In the examination of sources of funding in Nigerian federal polytechnics, Ogunlade (1989) reported four main funding streams; (a) support from Federal and State governments (98 percent of recurrent costs and 100 percent of capital costs), (b) student contributions towards living expenses on campuses (less than one percent of total costs), (c) private contributions (i.e., grants) by commercial organizations, and (d) interest earnings on short-term bank deposits and polytechnic rental properties. Esenwa, (2011) reported that funding formula for allocating funds to Nigerian polytechnics has been reviewed based on several factors such as year of establishment, number of diploma students admitted, number of academic and non-academic staff, etc. Due to these factors, the funding formula keeps on changing the funding formula for Nigeria polytechnics has been revisited twice many times.

Nigerian public polytechnics have adopted several cost-sharing measures, such as student contributions, private sector contributions, and student loans (Ajayi & Alani, 1996). Student contributions involve fees for tuition, acceptance, registration and certification, caution or security deposits, sports, identity cards, late registration, examinations, transcripts, and use of the laboratory and medical center. These fees vary in amount, depending on the Polytechnic (Ajayi & Alani, 1996) and are less than one percent of the total operating cost of the Polytechnic (Ogunlade, 1989). Private sector contributions come from endowment of prizes, professional and academic chairs, and voluntary donations.

Underfunding of Nigerian federal polytechnics has adversely affected the quality of teaching and research in Nigeria (Faniran & Akintayo, 2012). Many of the pedagogical practices and curricula in Nigerian polytechnics do not meet academic standards and are outdated due to a lack of funding (Ikoya & Onoyase, 2008). Olayiwola (2012) noted that research funds are irregular, inadequate, and difficult to access. This has contributed to a decline in research activities as a means of attaining sustainable development in Nigeria.

Nigerian government, through the NABTEB, has requested all federal polytechnics to explore ways of generating revenues internally to enable polytechnic managements solve some of their financial problems, instead of relying on the government. Nigerian federal polytechnics are required to generate minimum of 10 percent of their total annual sources from IGR (Okojie, 2009).

A recent study by Omopupa and Abdulraheem (2013) on Nigerian polytechnics established that misplaced and misapplication of necessary fund allocated to the Polytechnic is a problem. For example, funds allocated to polytechnics are hardly accessible to library staff to attend refresher training and workshops (Omopupa & Abdulraheem, 2013). Funds allocated to polytechnic libraries for development purposes are sometimes diverted to non-library purposes; as a result, the staff does not have any opportunity for skill development. Most importantly, there is minimal or no access to online information and knowledge tools, such as the integration of modern information and communication technology system (ICTS) in academic and research activities (Ani & Edem, 2010). Limitations in accessing ICT tools may adversely impact higher education outcomes.

In Nigeria, polytechnics are responsible for preparing a budget that reflects the projected income and expenses to meet its goals. In a study by Bamiro (2012), it was reported that often polytechnics do not prepare appropriate budgets due to unpredictability in handling finances at the NABTEB's budgeting and expenditure formula of 60 percent for total academic expenditure, 39 percent for administrative budgets, and one percent for pensions and benefits (Hartnett, 2000). In the examination of sources of funding in Nigerian federal universities, Ogunlade (1989) reported four main funding streams; (a) support from Federal and State governments (98 percent of recurrent costs and 100 percent of capital costs), (b) student contributions towards living expenses on campuses (less than one percent of total costs), (c) private contributions (i.e., grants) by commercial organizations, and (d) interest earnings on short-term bank deposits and polytechnic rental properties. Esenwa, (2011) reported that funding formula for allocating funds to Nigerian polytechnics has been reviewed based on several factors such as year of establishment, number of diploma students admitted, number of academic and non-academic staff, and ratio of technology based disciplines. Due to these factors, the funding formula keeps on changing. The funding formula for Nigeria Polytechnics has been revisited time without number.

Nigerian public polytechnics have adopted several cost-sharing measures, such as student contributions, private sector contributions, and student loans (Ajayi & Alani, 1996). Student contributions involve fees for tuition, acceptance, registration and certification, caution or security deposits, sports, identity cards, late registration, examinations, transcripts, and use of the laboratory and medical center. These fees vary in amount, depending on the polytechnic (Ajayi & Alani, 1996) and are less than one percent of the total operating cost of the polytechnic (Ogunlade, 1989). Private sector contributions come from endowment of prizes, professional and academic chairs, and voluntary donations.

Underfunding of Nigerian federal polytechnics has adversely affected the quality of teaching and research in Nigeria (Faniran & Akintayo, 2012). Many of the pedagogical practices and curricula in Nigerian polytechnics do not meet academic standards and are outdated due to a lack of funding (Ikoya & Onoyase, 2008). Olayiwola (2012) noted that research funds are irregular, inadequate, and difficult to access. This has contributed to a decline in research activities as a means of attaining sustainable development in Nigeria.



Nigerian government, through the NABTEB, has requested all federal polytechnics to explore ways of generating revenues internally to enable Polytechnic managements solve some of their financial problems, instead of relying on the government. Nigerian federal polytechnics are required to generate minimum of 10 percent of their total annual sources from IGR (Okojie, 2009).

A recent study by Omopupa and Abdulraheem (2013) on Nigerian polytechnics established that misplaced and misapplication of necessary fund allocated to the Polytechnic is a problem. For example, funds allocated to polytechnics are hardly accessible to library staff to attend refresher training and workshops (Omopupa & Abdulraheem, 2013). Funds allocated to University libraries for development purposes are sometimes diverted to non-library purposes; as a result, the staff does not have any opportunity for skill development. Most importantly, there is minimal or no access to online information and knowledge tools, such as the integration of modern information and communication technology system (ICTS) in academic and research activities (Ani & Edem, 2010). Limitations in accessing ICT tools may adversely impact higher education outcomes.

In Nigeria, polytechnics are responsible for preparing a budget that reflects the projected income and expenses to meet its goals. In a study by Bamiro (2012), it was reported that often polytechnics do not prepare appropriate budgets due to unpredictability in handling finances at the institutional level, beyond the regular payment of salaries and wages. Bamiro (2012) documented that between 2005 and 2008, Federal Government started “envelope” system of fund allocation, which does not take the institution's projected budget into account, and therefore polytechnics have stopped engaging in a detailed process for preparing budgets.

According to Dike (2006), funding for the Nigerian higher education sector is not commensurate with the demand for higher education, and the percentage of the federal budget allocated to education has decreased. For example, it was 7.2 percent in 1995 and only 4.5 percent in 2004. Dike (2006) further highlighted that the portion of Nigeria's gross national product allotted to education is troubling when compared to less affluent African nations. For example, Côte d'Ivoire allocates 5 percent of its gross national product to education and Kenya allocates 6.5 percent, compared to Nigeria's 0.76 percent allocation. Dike (2006) linked the acute shortage of qualified teachers and the falling standards of Polytechnic education to the lack of teaching tools, and poor remuneration, as well as the government's inability to show how Polytechnic funds are being managed. Dike (2006) described this lack of government supervision as “corruption and mismanagement of funds”. The author also noted that inadequate polytechnic funding has resulted in cheating during examinations, which has led to the production of low-standard graduates, unemployment, and poverty in Nigeria.

According to Ajayi and Haastrup (2006), the Nigerian government considers funds allocated to higher education an ordinary expense rather than a long-term investment useful for society. Ebuara, Udida, Ekpiken, & Bassey (2009) noted that Nigerian polytechnics lagged for years in contributing to the economic development of the nation in the areas of teaching, research,

technology/capacity building, and community service due to the dynamics of leadership and the political and economic environment of the institution.

Odia and Omofonmwan (2007) documented that in 1998, the United Nations Education, Scientific, and Cultural Organization (UNESCO) recommended that 26 percent of a nation's total budget be allocated to education. Ajayi and Ekundayo (2007) reported that the Nigerian government has not been keeping up with UNESCO's recommendation and, for this reason the Nigerian government is the major contributing factor to the problem of underfunded polytechnics. The budgetary allocation to education in Nigeria has never exceeded 10 percent (Odia & Omofonmwan, 2007).

### **Underfunding of Higher Education Quality in Nigeria**

Nigerian polytechnics have lagged for years in contributing to the economic development of the nation in the areas of teaching, research, technology/capacity building, and community service due to the dynamics of leadership and the political and economic environment of the institution (Ebuara, Udida, Ekpiken, and Basse, 2009). Inadequate funding is a major factor that affects the quality of higher education in Nigeria (Ekpo, 2002; Arikewuyo, 2010; Ayo-Sobowale & Akinyemi, 2011). Federal polytechnics in Nigeria lack the financial resources to maintain quality education with recent increases in student enrollment (Babalola, 2002; Samuel, 2003). Okojie (2010) reported that student enrollment to tertiary institution has increased from 104 in 1948 to 40,000 in 1976 to over 950,000 in 2010. When higher education are inadequately funded in any country, the institution's foundation is financially weak, and students' educational foundation is intellectually weak (Nwangwu, 2005). Nigerian polytechnics and other tertiary institution produce poor quality graduates because of poor physical facilities (Ajayi & Ekundayo, 2008).

Per Chikwem (2006), many reputable corporations in Nigeria such as Shell, Mobil, Chevron, and Texaco prefer to hire from elsewhere in the world, due to a lack of trust and confidence in Nigerian higher education system. Chikwem (2006) reported that companies pay expatriates more than they pay Nigerian graduates, and justify this by claiming that they spend more money training Nigerian graduates on things they should have learned in school. Chikwem (2006) also explained that poor Polytechnic funding in Nigeria has created great impacts on students' general performance because students often go to school hungry, have no clean water to drink, and live in poor sanitary conditions. A presidential panel looked into the operations of all federal polytechnics between 1999 and 2003 and reported that the academic and physical facilities at the polytechnics were in deplorable state with insufficient lecture theatres/halls, textbooks and other teaching resources, and technological equipment (National Board for Technical Education, 2010). Students had no option but to learn in dilapidated buildings and environments that is not conducive to learning.

Dike (2006) further noted that Nigerian polytechnics are offering programs but do not have the resources to run them effectively. For example, polytechnics in Nigeria award diplomas in computer science and engineering without equipped libraries and laboratories. Ayo-Sobowale and Akinyemi (2011) argued that globalization has made it more difficult for

leaders in the Nigerian Polytechnic system to compromise the quality of education given to the students and get away with the adverse consequences. Low-quality education will prevent Nigerian graduates from competing effectively in the global economy, especially given the increased integration of economies through trade, financial flows, the exchange of technology and information, and the movement of people. Okoroma (2007) noted that higher education in Nigeria is under severe pressure and stress due to the lack of trained administrators and instructors, facilities, and equipment. Ololube, Eke, Uzorka, Ekpenyong, and Nte (2009) noted that there is a significant relationship between the impact of instructional technology, the use of instructional technology, and students' academic achievement. The authors contended that the education system's shortcomings are a result of a lack of information; a lack of communication, technological, and instructional materials; ineffective policy implementation; and a lack of other resources (e.g., infrastructure) that support technical teaching and learning. Ofulue (2011) noted that technological issues are a big problem facing higher education in Nigeria. Such issues include low internet connectivity, unreliable bandwidth infrastructures, and a lack of reliable electricity.

In their discussion of internal and external factors that affect the quality of Nigerian Polytechnic education, Ayo-Sobowale and Akinyemi (2011) listed internal factors as lack of employee motivation, poor remuneration, poor accountability for educational performance, and management incompetency. The external factors included underfunding, teacher shortages, corruption, and embezzlement. Adeyemi and Osunde (2005) established that economic conditions have forced government leaders to ask Polytechnic leaders to seek additional funding for the degree programs offered by their institutions.

In a study of the funding of Nigerian polytechnic education, Onuka (2004) included various stakeholders in the education sector, which included parents, polytechnic management, administrators, students, academic staff, taxpayers, and company executives. The main findings indicate that as the funding is insufficient, the burden of funding universities is borne by the government and parents. However, as the study reported, inmost of these parents live below the poverty line, and struggle to pay any money towards student fees. The study also showed that corporate bodies are more interested in funding sports and other shows that attract high publicity (e.g., gambling), and suggested that corporate leaders in Nigeria should invest in education funding to ensure the continuous production of quality graduates for hire. Ezekwesili (2006) explained that the underfunding is a recurring theme because fund allocation to the education sector does not meet sectorial and sub sectorial needs. This means that fund allocation to the education sector is never enough.

The Nigerian government, in an effort to address the problem of underfunding experienced by polytechnics, has made a series of policy changes including: (a) reconstituting all polytechnic board to incorporate broader stakeholder representation, (b) according greater autonomy to university councils and managers in an effort to promote institutional responsiveness, and (c) adopting a formula-based block grant resource allocation procedure that facilitates strategic planning and rewards institutional performance (Saint, Hartnett, & Strassner, 2003). The Government also established reference points for quality improvements

and began to develop academic benchmarks based on demonstrated student competencies (Saint, Hartnett, & Strassner, 2003). Despite these efforts by the Government, little attention has been given to institutional operations such as funding graduate and research output, detaching annual budget reviews from Polytechnic management performance, the quality of academic outputs and research contributions, and the Government's budget review of the overall education sector (Saint, Hartnett, & Strassner, 2003). Saint, Hartnett, and Strassner (2004) argued it was unlikely that the NABTEB could provide national leadership to develop a vision for the future of the system, or play a useful role in anticipating and analyzing important issues of higher education policy. Saint, Hartnett, and Strassner (2004) argued that the Federal Ministry of Education and senior Polytechnic officers need to develop a political will and broad-based leadership for the reform package to be successful.

### **Summary**

In a study by Kalama, Etebu, Martha, & John (2012) it was established that spending on recurrent expenditure such as the legislator salaries, and servicing domestic debts have contributed to the neglect of the higher education and other critical sectors of the economy. On the other hand, studies document that Nigeria is currently experiencing increase in student enrollment without corresponding increase in funding because fund allocation does not match up with the enrolment increase (Udoh, 2008). Funding that is not commensurate with the increased enrollment has a negative impact on the quality of education because polytechnics are always being shut down by various staff unions demanding various financial needs such as staff welfare, teaching facilities, laboratories, utilities, staff and student accommodations and library resources (Omopupa & Abdulraheem, 2013).

### **Conclusion**

Federal polytechnic Oko plays a crucial role in Nigerian higher education in general, and offers quality education and research activities. The commitment and engagement in the leadership of federal polytechnic Oko administrators are impressive. The mission of federal polytechnic Oko is to advance the frontiers of learning and make education accessible to all. The academic program of the school is primarily tailored to suit the needs of the immediate environment with adequate funding. Federal polytechnic Oko's complex structure, the diversity of different areas of research and education as well as the inadequate infrastructure and the difficult financial situation are the biggest challenges to overcome.

The study shows that federal polytechnic Oko administrators do not play a crucial role in resources acquisition to bridge the financial gap. There is no policy that promotes or empowers administrators in research acquisition, as some of the administrators seem not to be aware of their role in fund acquisition. The increase in the number of federal universities has decreased the amount of funds federal polytechnic Oko receives in allocation from the government every year.

Considering the growing number of federal polytechnics in Nigeria, it is apparent that the Federal Government may no longer be able to bear the financing of these polytechnics alone. There is a need for federal polytechnics to identify other ways of generating more money,

internally or externally, to reduce the financial burden on the government. The critical analysis of federal polytechnic Oko's financial operations and records in terms of expenditure (actual) income for the past ten years revealed the need for diversification of funding sources. For management to achieve its objectives, the appropriate staff with the requisite experience, and qualification, age and personality need to be employed which requires adequate funding.

The issue of underfunding of Nigerian federal polytechnics has led to nonpayment of staff salaries, lack of human resources and staff development, classroom and laboratory equipment, security, library facilities, technology development, quality of teaching and research. More federal polytechnics are being established without commensurate funding while existing ones are facing funding, accreditation and staff welfare problems. This study explored the problem of underfunding in Nigerian federal polytechnics, and its effect on the polytechnic administration and its relationship with external actors.

### **Recommendation**

Underfunding of Nigerian Polytechnic has resulted in multifaceted problems in the Nation. Not only are the current higher education institutions unable to keep up with the student demand, they are also facing a problem of low or no maintenance of their infrastructural assets. In the future, this may lead to increased demand for new structures, and increase the burden on the government.

As mentioned in this case study research, there are five federal polytechnics which are the closest to federal polytechnic Oko in terms of annual allocation and student enrollment. The five federal polytechnics on the same level with federal polytechnic Oko could be studied for a better comparison, especially those that receive more funding than federal polytechnic Oko such as Yaba Tech-Lagos and federal polytechnic Kaduna. These polytechnics could be studied to examine the impact of underfunding to the administration, students, staff, and research, as well as their efforts in collaborating with other administrators in seeking for more funds, and their efforts in getting international actors to get more research funds. Extending the research to other similar federal polytechnics on the same level with Oko polytechnic will enable the researchers to see what their perceptions are about underfunding of their institution and the criteria for some federal polytechnics getting more funding than others from the allocation.

While survey and quantitative research method could be useful so that more participants are included in the sample size, the usefulness of qualitative design in this context is higher. Any quantitative study cannot offer the insights that can be generated through a qualitative methodology using interviews. One recommendation from this study is, underfunding effects on students should be studied at federal polytechnic Oko, and different federal polytechnics.

## References

- AbouAssi, K., & Trent, D. (2013). Understanding local participation amidst challenges: Evidence from Lebanon in the Global South. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 24(4) 1113-1137 <http://tinyurl.com/mwgf843>
- Adegbite, J. G. O. (2007). *The education reform agenda: Challenges for tertiary education administration in Nigeria*. Paper presented at the 6th Annual Seminar of the Conference of Registrars of Colleges of Education in Nigeria, Ikere-Ekiti and Ekiti State, Nigeria.
- Adeniyi, T. O. (2008). *Repositioning Nigerian universities for national sustainable development*. paper presented at the 10th Iju Quarterly Public Affairs Forum Series, Ondo state, Nigeria.
- Adeyemi, T. O. (2011). Financing of education in Nigeria: An analytical review. *American Journal of Social and Management Sciences*. 2(3), 295-303. doi:10.5251/ajms.2011.2.3.295.303
- Adeyemi, J. K., & Ajayi, I. A. (2006). Analysis of cost of spillover students' wastage in a Nigerian University. *International Studies in Educational Administration*, 34, 34-45. Retrieved from <http://www.cceam.org/>
- Adeyemi, K., & Osunde, A. (2005). An assessment of the academic achievement of students in two modes of part-time program in Nigeria. *International Review of Research in Open Distance Learning*, 6(2), 1-14. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/239/331>.
- Afolayan, F. O (2015). Funding higher education in Nigeria. Nigerian educational research and development council, Sheda, Abuja. *IOSR Journal of Research and Method in Education*, 5 (1), 63-68. doi: 10.9790/7388-05116368
- Agunbaide, S. O. (2006). *Quality assurance and the role of education trust fund (ETF) interventions in Nigerian University library system*. Paper presented at the National Workshop on Quality Assurance in the Management of the Nigerian University Library, Abuja, Nigeria. Federal polytechnic Oko (n.d.). Financial report from 2001-2006; Financial report
- Ahmadu Bello University. (2015). *ABU Journal 2015*. Ahmadu Bello University, Zaria.
- Ahmadu Bello University. (2015). *ABU press 2015*. Ahmadu Bello University, Zaria.
- Ahmadu Bello University. (2016). *ABU press 2016*. Ahmadu Bello University, Zaria.

- Ajayi, I. A., & Ayodele, J. B. (2002). *History and development of education*. Ado-Ekiti, Nigeria: P.E.T.O.A. 1-118
- Ajayi, I. A., & Ayodele, J. B. (2004). *Fundamentals of educational management*. Edo-Ekiti, Nigeria: Green-Line.
- Ajayi, I. A., & Ekundayo, H. T. (2007). Funding initiatives in University education in Nigeria. In J. B. Babalola, G. O. Akpa, A. O. Ayeni, & O. Adedeji (Eds.), *Equity and quantity in higher education* (pp.?). Lagos, Nigeria: Awemark Printers.
- Ajayi, I. A., & Ekundayo, H. T. (2008). The deregulation of tertiary education in Nigeria: Implications for quality assurance. *Nebula*, 5(4), 212-224. doi:10.1.1.557.8522
- Ajayi, I. A., & Haastrup, E. T. (2006). Management of University education in Nigeria: Problems and possible solutions. *Revitalization of African Higher Education*, 8(10), 222-235. doi=10.1.1.565.4845
- Ajayi, T., & Alani, R. A. (1996). *A study on cost recovery in Nigerian Tertiary education: Issues of quality, access and equity*. Accra, Ghana: Association of African Universities.
- Akiri, A. A. (2014). Utilization of local inputs in the funding and administration of education in Nigeria. *Research in Education*, 91, 1-11. doi:10.7227/RIE.91.1
- Akinyemi, S. (2012). Funding strategies for qualitative University education in developing economies: The case of Nigeria. *International Journal of Higher Education*, 2(1), 53-59.
- Arikewuyo, M. O. (2004). Democracy and University education in Nigeria: Some constitutional considerations. *Higher Education Management & Policy*, 16, 121-134. Retrieved from <http://dx.doi.org/10.1787/hemp-v16-art26-en>
- Arikewuyo, M. D. (2001). Public participation in management of higher institution in gun State, Nigeria. *Evaluation Research*, 1, 30-37.
- Arikewuyo, M. O. (2010). Funding and quality assurance in Nigerian education system. *International Studies in Educational Administration*, 38(2), 41-56. Retrieved from <http://www.cceam.org/index.php?id=214>
- Ayo-Sobowale, M., & Akinyemi, S. (2011). Funding strategies for quality University education in Nigeria: The principle of fiscal justice. *Journal of Studies in Education*, 1(1), 1-13. doi:10.5296/jse.v1i1.1031
- Babalola, S. K. (2002). *Education and national ethics* [Keynote address]. Paper presented at the Workshop on Use of Global Knowledge in University Management Conference, Ibadan, Nigeria.

- Bamiro, O. A. (2012). Sustainable financing of higher education in Nigeria: Funding models Nigeria. *Evaluation Research, 1*(5), 63-71.
- Bamiro, O. A. & Adedeji, O. S. (2010). *Sustainable financing of higher education in Nigeria*. Ibadan: Ibadan University Press.
- Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, CA: SAGE Publications.
- Brubacher, (2003). *Education status report*. Lagos, Nigeria: Federal Ministry of Education.
- Casciaro, T., & Piskorski, M. J. (2005). Power imbalance, mutual dependence, and constraint absorption: A closer look at resource dependence theory. *Administrative Science Quarterly, 50*, 167-199.
- Chikwem, R. (2006). *The state of higher education in Nigeria*. Retrieved from <http://www.dawodu.com/chikwem3.htm>
- Cho, S., & Gillespie, D. F. (2006). A conceptual model exploring the dynamics of government-nonprofit service delivery. *Nonprofit & Voluntary Sector Quarterly, 35*(3), 493- 509.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage Publications.
- Creswell, J. W., Hanson, W.E., Plano, V. L. C., & Morales, A. (2007). Qualitative research designs selection and implementation. *The Counseling Psychologist, 35*(2), 236-264.
- Davis, G. F., & Cobb, J. A. (2010). Resource dependence theory: past and future. *Research in the Sociology of Organizations, 28*, 21-42.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Denzin, N. K., & Lincoln, Y. S. (2008). *Collecting and interpreting qualitative materials* (Vol. 3). Sage.
- Delke, V. (2015). *The resource dependence theory: Assessment and evaluation as a contributing theory for supply management*. Unpublished thesis University of Twente. Retrieved from <http://essay.utwente.nl/67470/>
- Dewatripont, M., Aghion, P., Mas-Colell, A., Hoxby, C., & Sapir, A. (2007). Why reform Europe's universities? Archive of European Integration Policy Paper. *Bruegel Policy Brief*. Retrieved from <http://ideas.repec.org/p/ulb/ulbeco/2013-101651.html>



- Dike, E. (2006). *Restoring sanity in Nigeria's University education*. Sacramento, CA: Center for Social Justice and Human Development.
- Diso, L. I., & Njoku, I. F. (2007). Library and information science education in Nigeria: Curricula contents versus cultural realities. *The International Information & Library*, 39(2), 121-133.
- Divala, J., & Waghid, Y. (2008). Challenges facing higher education governance practices on the African continent. *South African Journal of Higher Education*, 22, 1-16. Retrieved from [http://www.sajhe.org.za/volumes/volume-22-2008/-22-1/at\\_download/file](http://www.sajhe.org.za/volumes/volume-22-2008/-22-1/at_download/file)
- Drees, J. M., & Heugens, P. P. (2013). Synthesizing and extending resource dependence theory: A meta-analysis. *Journal of Management* 39(6), 1666-1698.
- Esenwa, F. O. (2011). *N.U.C.: Yesterday, today, and the future*. Retrieved from <http://www.urningpot.com/component/content/article/2383-nuc-yesterdaytoday-and-the-future>
- Ezekwesili, O. (2006). Lack of fund is the bane of the Nigerian education system. *Nine O'Clock NTA Network News*. Retrieved from <http://www.nta.ng/>
- Fafunwa, A.B (1974). *History of Education in Nigeria*. London: Macmillian Publishers.
- Fafunwa, A. B. (1995). *History of education in Nigeria*. London, England: Allen & Unwin.
- Fagbamiye, E. O. (2003). *Presidential address*. Paper presented at the Annual Conference of the Nigerian Association of Educational Administration and Planning, Ibadan, Nigeria.
- Hartnett, T. (2000). *Financing and trends and expenditure patterns in Nigerian federal universities: An update*. Background study conducted to inform the design of the Nigerian University System Innovation Project. November 2000. Unpublished report: Washington D.C.: The World Bank.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany: State University of New York Press.
- Hillman, A. J., Nicholson, G. J., & Shropshire, C. (2008). Directors' multiple role identities, identification and board monitoring, and resource provision. *Organization Science*, 19(3), 441-456.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage publications

- Mack, N., Woodsong, C., MacQueen K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: a data collector's field guide*. Research Triangle Park, NC: Family Health International.
- Mudambi, R. & Navarra, P. (2004). Is knowledge power? Knowledge flows, subsidiary power and rent-seeking within MNEs. *Journal of International Business Studies*, 35 (5) 385-406.
- Mudambi, R., & Pedersen, T. (2007). *Agency theory and resource dependency theory: Complementary explanations for subsidiary power in multinational corporations*. Center for strategic Management and Globalization. Location: Publisher.
- Onwunli, A. U., & Agho, A. O. (2004). Faculty opinion on shared authority: A Nigerian national survey. *Higher Education Journal*, 48 (4), 397-418.
- World Bank. (1999). *World development report: Knowledge for development*. Washington, DC: World Bank.
- World Bank. (2002a). *Constructing knowledge societies: New challenges for tertiary education*. Washington, DC: International Bank for Reconstruction and Development.
- World Bank (2010). *Financing higher education in Africa*. Washington, DC: World Bank.
- World Bank. (2012). *Selected 20 countries annual budgetary allocations to education*.
- Washington D.C. Yazan, B. (2015). Three approaches to case study methods in education. *Teaching and Learning Article*, 20(2), 134-152.
- Yin, R. K. (2002). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Zainal, Z. (2007). Case study as a research method. *Journal Kemanusiaan* 1-6.