



NIGER DELTA UNIVERSITY
WILBERFORCE ISLAND, BAYELSA STATE.

57th Inaugural Lecture

**UNIVERSITY
FUNDING:
DOES THE 'MULTIPODA' MATTER?**

MARK LEIGHA

B.Ed (UNIPORT); M.Ed (RSU); PhD (UNIPORT)

Professor of Educational Management

Department of Educational Foundations,
Faculty of Education, Niger Delta University
Wilberforce Island, Bayelsa State, Nigeria.



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NIGER DELTA UNIVERSITY
Wilberforce Island, Bayelsa State, Nigeria

Motto

Creativity, Excellence, Service

Vision

To be a centre of excellence defined by well articulated programme that will produce creative and innovative minds

Mission

To strive to maintain an international reputation for high quality scholarship, research and academic excellence for the promotion of the socio-cultural and economic well-being of mankind

**NIGER DELTA UNIVERSITY ANTHEM
(THE BRIGHTEST STAR)**

Like the brightest star we are, to lead the way
To good education that is all our due,
The dream of our fathers like the seed has grown;
Niger Delta University if here to stay.

In all that we do, let us bring to mind
Our duty as staff and students of N.D.U
Ev'rywhere to promote peace towards mankind.
Creativity, Excellence and Service

Let us build on this noble foundation
And with love, let our dedication increase,
To rise and uphold this noble vision
Ev'ry passing moment let our zeal never decrease.

CHORUS
Rejoice, great people old and new, rejoice
For the good fruit through us is shown;
Be glad in our worthy contribution
To the growth of humanity (x2)

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Protocol

The Vice-Chancellor

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Other Academic and Administrative Staff

Great Students of Niger Delta University

Clergy

Royal Fathers

Distinguished Guests

Members of the Press

Ladies and Gentlemen

Preamble

Many years ago, after completing Primary education with staggered financing, proceeding to the Secondary school became an issue of family concern. Further schooling became turn by turn; not according to who was ready. Why? The answer was simple: No money! Secondary education pursuit became a joint responsibility of uncles, cousins, friends and well-wishers. The present and clear concern, at all times, was scarcity and shortage of almost all educational necessities, making college graduation another struggle. Like a curse, undergraduate days in the University of Port Harcourt was marked by crucial inadequacies: no matriculation, no textbooks, wristwatch or sandals. The wisdom was simple; even bathroom slippers can attend classes so, why worry about shoes?

Thank God, universities do not require school uniforms; and feeding was stylish with either a '010', '001', or even a '000'; never a 111. Why was it that even a University education was not stress-free? Again, the simple answer was: No money! Debt situation escalated during the Master's degree programme in Educational Administration from the Rivers State University of Science and Technology (RSUST) now Rivers State University. A few months later, I was employed in the Bayelsa State newly established Niger Delta University (NDU) and posted to the Amassoma Campus at Wilberforce Island, in present day Southern Ijaw Local Government Area.

On arrival at Amassoma on the 14th of September, 2002, I was quickly shown to a shade-tree which was to become my 'office'. On the resumption of school activities in

October 2002, it was realized that there were also few classrooms available; few chairs and tables, not to talk of recreation centers and eateries. Very few infrastructure and instructional materials; but no library, laboratory, or workshop. Just a few other trees. It was difficult to learn and understand that even the State Government was trapped in the same quagmire: 'NO MONEY'!

I was thrown into confusion on whether to condone the 'no money – no facilities' situation and remain in Amassoma, in which case I would forgo the tens of thousands salary elsewhere or stay put at Yenagoa and be shuttling to Amassoma to give lectures or to stay at Amassoma and manage anything else. I decided on the latter option.

How then was I to manage? While pondering over this one evening, an official memo came that all lecturers without a PhD should proceed for further education or forfeit their teaching placement with the university. So, I was not even qualified to teach the Educational Administration/ Planning degree obtained from the RSUST. The next day I went with this worry to the Head of Department, Dr. T.T. Asuka, presented it to him and ask him the possibility of further studies, while being already employed. Dr. Asuka, an Educational sociologist, quickly supported me and I started looking out.

A few months after, I saw an advertisement in the Daily-times Newspaper requesting qualified candidates to apply for a Doctorate programme in Educational Management in the Faculty of Education of the University of Port Harcourt. I applied, was admitted and subsequently became one of the few persons to be admitted by the

Senate of the University of Port Harcourt, to the degree of Doctor of Philosophy in Educational Management (in the Economics of Education) on the seventeenth day of October two thousand and ten.

Vice-Chancellor Sir, Ladies and Gentlemen, this is the history of my foray into the Economics of Education as an academic discipline which I have practiced, the past thirteen years. Although Professor Allen A. Agih, was the first person to occupy a professorial chair in Educational Management, and also the first to deliver an inaugural lecture in Educational management, today I am privileged to present the first inaugural lecture in this emerging discipline – the Economics of Education - in this University. May I humbly begin this lecture by examining my subject matter: The Economics of Education.

Brief history on the Economics of Education

The birth of economics of education – an aspect of economics -began in the 1960s through theoretical and empirical contributions made by American economists: Gary Becker and Jacob Mincer. It is understandable that, as a young discipline, the subject matter lack precise and concise definition; at least, for now. This difficulty is due to variance in perspectives among scholars in the discipline as each scholar attempts to drag the content in his/her favour.

Hence, the economists see the subject as an 'applied economics' where economic theories and practices are used to solve problems in education; such issues concerning the financing and costing of the educational industry (Blaug, 1970). Of course, this is an aspect of the

economics of education but, not all of it. The educationist is convinced, and rightly too, that economics of education deals, mainly, with the impact of education on economic issues like the labour force (mainly, its occupational structure), labour employment (recruitment and promotion practices), labour migration (both inter and intra), foreign trade patterns, saving propensities and, most importantly, economic growth (including school wealth). It attempts to describe and explain; prescribe and recommend investment criteria for education needed to achieve a specified economic objective (Blaug, 1970). By so doing, the subject sometimes, unavoidably, encroaches into labour economics, public sector economics, welfare economic, economic growth and development, etc, because education (somehow) becomes a determinant in such analysis.

The main idea is that, in a modern economy, acquiring education means making personal investment which culminates into public educational expenditure - the aggregate of personal (private) investments - usually stimulated by expected economic returns. This understanding trigger investigation into private demand for education and the rationale for Government to provide educational facilities. This makes the study of economics of education interesting, *ab initio*; and continue to stimulate periodic research efforts (Leigha, 2023).

It is true that education is not the only type of investment in human beings worth considering. Because there are many other forms including expenses on medical care, migration, career or vacancy information, job training, etc. This is why economics of education is sometimes

referred to a human-related subject, or, 'the economics of human resources' (Blaug, 1970). Nevertheless, the scope of this lecture does not cover these wider issues but focus on formal university education provision, and the products of research activities (by-products).

The fundamental Problems of Economics of Education

But, the major issues in the economics of education concerns the type of educational decisions by individuals, households, institutions, and the society and how such decisions impact and, indeed, determine economic phenomena especially regarding labour market practices, the propensity to save and invest and, of course, economic growth and economic development. The major issue in this lecture concerns the type of educational decisions by university departments and faculties and how such decisions impact and, indeed, determine outputs especially regarding marketable by-products. And that solution to the most fundamental problem in education, education funding, largely determine the type and dimensions of teaching and research activities in universities.

Many observers still believe that university education is, primarily, concerned with teaching youths notes about job security and salaries in society. But, indigenous and economic skills of firms, industries, factories, and such other occupations are core aspects. Indeed, teaching and research activities in the university system requires economic treatment for some reasons: (1) education, unlike economic industries, pursue variegated ends connected to occupations in the society, (2) it is configured

in semesters and sessions of teaching and research orientation, which requires gathering of necessary facilities, (3) also, mainly, adopts manual methods, and (4) produces most by-products needed by firms, industries, and/or the government, etc. This implies: (1) an output system impermeable, somehow, to comparative input shortages, and (2) high disconnection in the funding cycle. This combination culminates to a kind of seasonal imbalance in the corresponding output and funding mix; mainly, in systems experiencing fund 'scarcities' and/or 'stagnations'. Obviously, such issues require strategic educational planning; education operations research, cost- effectiveness analysis and such related instruments (which some countries have recently developed) in order to improve the educational management – being a 'fund-demanding' activity (Hanushek, 1980).

It must be mentioned that just as economics of education has teething problems as a young discipline -such as the precise content of the subject -which understandably, still remains controversial. In fact, no two experts in economics of education would totally agree on the relative import of the issues or even on the appropriate sequence of ideas (Blaug, 1970; Ebong, 2006). My conviction may be controversial; but proposed here that: students' education and training activities, and particularly research activities in the university Faculties and Departments, also creates by-products of economic value which, where sold, can improve the funding structure of these universities.

Vice Chancellor Sir, teaching and research activities creates various farm nurseries, engineering models, architectural designs, model schools and classrooms, and

so on; economic wealth. Many countries like China, Britain, Germany, USA, Canada, and especially Finland, have realized these activity – by-product educational processes and have reaped gains long ago and are still reaping. These feats could not have been possible without research activities of undergraduate and postgraduate students in agriculture, engineering, architecture, education, amongst others. The evidences below are clear testimonies:



ENGINEERING AND ARCHITECTURE



Engineering Technology
Beautiful design



Engineering Technology
Beautiful design



Wooden Pallet Ideas
More Ideas @



Pallets Designs



Wood Pallet Reuse Ideas



Wooden Pallet Ideas
More ideas @



Wooden Pallet Ideas



So, what is Education?

Education is fluid in character because it takes the shape of any subsisting context and complicate perspectives and definitions. Hence, in a rather broad sense, Okorosaye-Orubite in Kosemani (2002, p.16) sees education as “transmission of culture from one generation to another for the benefit, survival and continuity of any given society”. Culture encompasses “not only people's art, music, and literature, but also their science and technology, commerce and political organizations, philosophy and religion as well as all ideas and values which permeate the society and bind its people into a recognizable unit” (Nduka, 1986, p. 18). Moreso, education:

...encompasses all the processes through or by which all the components (material and non-material) of culture are transmitted to the young ones in the society, so as to enable them become functional adults ... Education is a social creation, designed to meet the specific needs of the society ... its form, content, methodology and clientele are determined by the society (Okorosaye-Orubite in Kosemani, 2002, pp. 20-21).

Education can be formal, informal and Non-formal. Formal education is properly designed, compartmentalized, highly programmed, involving deliberate activities that occur in formal settings. It is a “formal and deliberate process by which the cultural and normative heritage of a society is transmitted from generation to generation and through which that heritage is improved through scientific discovery” (Fagerlind and Saha 1989, p. 33). University is one such formal education designed to “make optimum contribution to national development by:

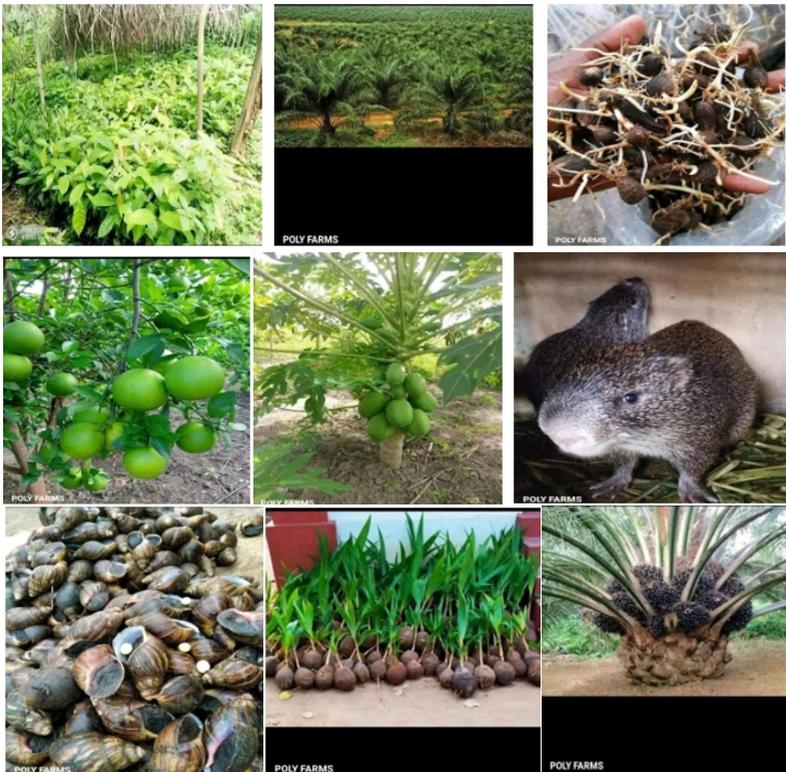
- i. Intensifying and diversifying its programmes for the development of high-level manpower within the context of the needs of the nation;
- ii. Making professional course contents reflect our national requirements;
- iii. Making all students part of a general programme of all-round improvement in university education, to offer general study courses such as history of ideas, philosophy of knowledge, nationalism, and Information Technology (IT); and
- iv. Making entrepreneurial skills acquisition a requirement for all Nigerian universities (FRN 2013, p. 42).

In subsection 87, the policy further indicated that:

university research shall be relevant to the nation's developmental goals. Particular attention shall be paid to research and promotion of indigenous knowledge in Nigeria. In this regard, universities shall be

encouraged to collaborate with government, industries and the global community in the conduct of research and disseminate the results. (And, that) university teaching shall seek to inculcate community spirit in the students through projects and action researches (subsection 88, p.42).

Expectation is that universities would be able to engage community-based research **products for dissemination** as shown below (Photosetting: Miss Grace Isaac):





Education and Production Characteristics

The evidence above clearly indicates that research (i.e. education) involves production which requires resources, such as (1) Land: (1) forests, minerals, etc, (2) Labour: all human resources, mental and physical; inherited and **acquired**; and (3) Capital: all those man-made aids to further production, such as assets, machinery, equipment and buildings, which are used up in the production process rather than being used up for their own sake (Lipsey, 1989; Nwaimo, 2009; Begg.et.al., 2009). To anywhere it is directed or applied, Labour (especially in skills and dexterity) is the greatest power in production (Smith, 1776). In other words, improvements (i.e. changes) in labour is capable of causing proportionate changes in productivity (wealth). Or, that productivity (wealth) only changes in proportion to changes in labour.

Labour – further analysis

Labour is all human efforts, both rational and sensual; hereditary or **gotten through education and training** employed in production. Factory workers, medical services, lawyers, civil servants, political appointees, and even educators (teachers) are all classified as labour (Lipsey, 1989; Begg.et.al., 2003; Nwaimo, 2009; Jhingan, 2012). But all material or intellectual work undertaken, merely, for enjoyment purposes and not wages are excluded from this definition. For example, a doctor treating own child; a lawyer handling own case in court, etc, are not regarded as 'labour' in economics because such activities do not receive wages. However, our interest here is not the unskilled labour, - the 'physical' efforts -but, **skilled labour**, - the 'mental' effort engaged in production - which is more productive. Smith (1776) specifically

concur that even in:

... a very trifling manufacture, ... the trade of a pin-maker: a workman not educated to this business ..., nor acquainted with the use of machinery employed in it ..., could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty (pp.9-10).

He further explained that:

great increase in the quantity of work, (even if by) ... division of labour, ... is owing to three different circumstances: first, to the increase in dexterity (skill) in every particular workman (labour); second, to the saving of the time which is commonly lost in passing from one species of work to another; and, lastly, to the invention of a great number of machines (capital) which facilitate and abridge labour, and make one man to do the work of many (p. 12).

Vice-Chancellor Sir, labour (skill and dexterity) - particularly those taught and learnt in schools - is the real *causes of production (Wealth)*; not factors of production. Again, it is a confirmation that there is production (economics) in education which is better explained by the concept of 'production function'.

Production Function in Education

This function determines probable relationship between input and the output of a firm (a university); the highest output that can be produced from any given input

(material) mix, at the current knowledge base (Blaug, 1970). It is a kind of regression analysis aimed at identifying the micro-influence of materials-mix on the output hence, determine the significance of relationship (Hanushek, in Psacharopoulos, 1987). By adoption, the concept describes a mainly technological link between what is admitted into the university system (libraries, laboratories, workshop, textbooks, teaching and non-teaching staff, curriculum, etc) and what is finally churned out (graduates). It is a flow determinable per period of time (say, per semester or session). Accordingly, a university can raise the rate of production per semester from say, 100 to 101; meaning going from a rate of producing 100 graduates each session to a rate of 101 graduates per session. Using functional notation, the production function could be written as:

$$p = p(f_1, \dots, f_n)$$

Where p is the graduate level and $f_1 \dots f_n$ are the units of n various material employed in production, all things stated in proportion each session. For the rest of this discussion attention would only focus on a very simple function regarding the production of a given university graduates. For the requirement of this lecture, and ease of understanding, land and capital (as a factors of production) would be held constant (since they only change in the long-run) and deal with the only variable factors in the short-period, labour (teachers), assigned the symbol L . Therefore, the simple production function would be:

$$P = p(L).$$

Where P is droves of graduate output per session, L is

weeks of teaching and research employed, and p stands for the relation that links p to L . It also means that a university can only change (increase or decrease) rate of graduate output produced by changing only one factor input (L). The character of demand notwithstanding, the university cannot vary all the factor input with the same degree of ease, particularly on a short notice, but can achieve this feat with time when capital would have been installed (Lipsey, 1989).

We can capture the real effect through a hypothesis drawn from the very complicated nature of the real decisions to demonstrate each university as facing three decisions: (1) how best to use the available teaching and non-teaching resources (staff), (2) what new teaching and non-teaching staff and pedagogy to choose from, within the context of current technology, and (3) action on encouraging or establishing fresh methods. The first decision can be made within a few weeks to a month – the short-period (Lipsey, 1989).

The Short-Period (SP)

The SP defines a short time covering few weeks; too short for fixed factors (land and capital) to change or vary; except services of skilled labour such as the supply of professional teachers. What matters in the above definition is that, at least, one major factor (say, land or capital like machines and equipment) is fixed.

Hence, production in the SP can change only by using more or less of variable input – i.e. labour (teaching and non-teaching staff); other factors are held constant. This period may vary significantly from one university to

another; and from one course of study to another. In the Engineering faculty, for instance, it will obvious take several years to build new workshops such that a sudden increase in student enrolment would be constrained only to the existing workshop equipment for those number of years. On the other hand, the Education faculty acquire just a new classroom in few weeks, and therefore the SR is equally short. In other words, the length of the SR depends on technological considerations – equipment, machinery, teacher quality, teaching methods, etc. These factors may also be affected, to a large extent, by the sacrifices the university is willing to make.

The Long Run (LR)

The LP covers few months to few years; a period that allows all factor inputs to change, except the main technical knowledge of production. Again, the LP may be different among universities, and course of study. Its relevance in educational production is that it corresponds to the context where some private university proprietors, or even some over-zealous public administrators, may be planning to enter into large scale operations. It must be noted that such decisions can only be made, typically, with constant technical feasibilities – that is, allows choice of feasible factor combinations. Where such planning decisions are made – like where new school buildings are constructed, equipment bought and installed, and so on – the university is left with fixed factors and can only make administrative decisions in the LP.

The Very Long Run (VLR)

Quite different from the SP and the LR, the VLR relates to

situations where even the existing technical know-how in the university can be changed, resulting into fresh and refined graduate output and new production pedagogy. The VLR accounts for changes in the production function such that, in the production function of equation (2), inputs of K, and L can correspond with various quantities of graduate outputs. The university may produce, partly internally, (in research and development variables); while other developments emanate from the external environment – either from the host community or from foreign countries.

A Situational Analysis

Going by economic theory, we can deduce that varying quantities impact productivity level which translates to fund generation over the semesters in the university. By increasing productivity (graduate output levels), corresponding level of funds can be generated; and vice versa. This achievement could be affected by: –i) academic index, ii) length of schooling index, and iii) economic index, in addition to graduates' productivity in the labour market on graduation; although, there is difficulty in measuring individual academic performance vis-à-vis labour market expectations. Academic index also cannot be independently used as a measure of productivity due to individual differences. For instance, students (inputs) who are academically deficient may be vocationally endowed.

Also, the quantity of education (length of schooling) responds to variations in school programmes and management hence it is difficult to prove that the quantity of education acquired determines a graduate's future

success. Nevertheless, it is generally expected that more educated individuals have higher ability to perform more complicated tasks or adapt to change and innovation than poorly educated persons; sometimes, even in jobs requiring manual skills (Hanushek, 2009).

For the purpose of this lecture, productivity implies the size of the Gross Faculty Product (GFP) which refers to the money value of the teaching and research by-products. It can also be seen as the hypothetical annual income per by-product over semesters. Measuring Faculty by-product is important in educational productivity, which relates educational inputs to outputs; other indices include student attitudes, attendance rates, continuation and dropout rates, etc. Educational studies focus on quality differences; as it were, which transforms fixed quantities of inputs to quality outputs. Output level is evaluated in terms of by-product which has money (economic) value – a veritable source of IGR. This lecturer is interested in how Faculty teaching and research activities both produces by-products (see examples below) as well as impact graduates' future capabilities, i.e., their ability to perform learnt skills in the labour market on graduation.

It is pertinent to, humbly, sound this caution that my perspective is not to claim superiority for education over the might of economics; rather it is to state the reality as it is. The obvious is that teaching and research activities undertaken by students and their teachers (lecturers) create by-products which must be accounted for. And that university administrators (Vice-Chancellors) all over the country can be convinced that these research discoveries/inventions do have economic values and can

be commercialized to provide necessary funding support for the universities. However, most of these highly creative and innovative artifacts are perennially ignored. And, the real danger lies in the fact that the orientation which students would have acquired, having undertaken these researches 4-years in a row, would lose meaning if they are not effectively 'aligned' with the possible reason for their education and training. Perhaps, both students and teachers' current ovation on project wastage is a serious reminder that university administrators are 'over-depending' on government allocations, while ignoring the fund-generating by-products below.

University Department By-Products

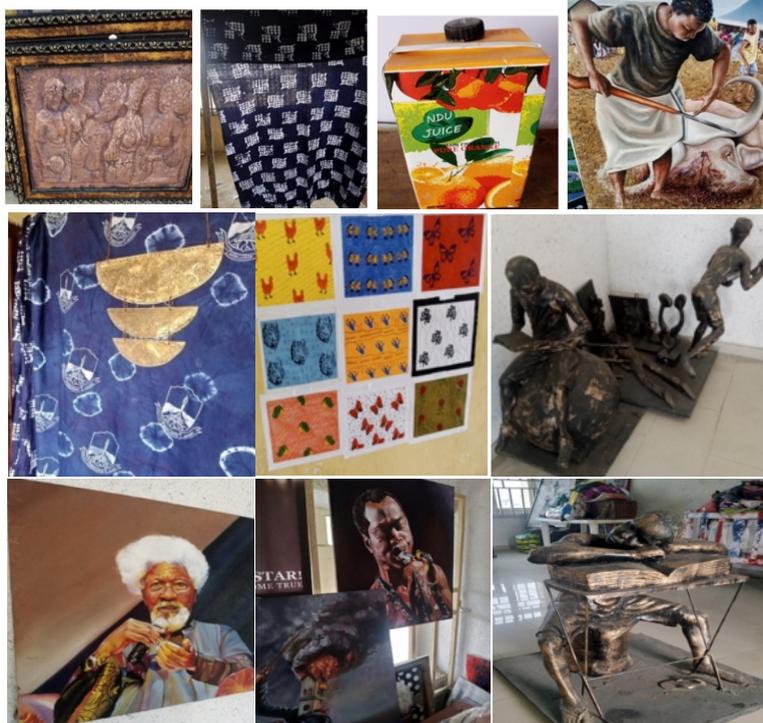
By-products, whether produced in a University Department or Faculty, is a translation of inputs (raw students, instructional materials, libraries, laboratories, workshops, various raw materials, etc) into valuable intermediaries – some useful to firms and even the government; others fit for consumption in the community/society. They are creation of the teaching and research processes (activities) culminating into the final output (graduates) but are yet to culminate. Indeed, 'university graduates' are not created in one week but under go many grinding activities; through weeks, months, semesters, and sessions that eventually culminate into certain intermediate products.

For instance, the Faculty of Education trains teachers using raw students, instructional materials, some libraries, laboratories, and workshop activities. While students strive to become competent teachers, teaching and research activities like sample or model schools,

teaching methods, classroom designs, etc, are being created as enablers in the learning process – also known as by-products.

Vice-Chancellor Sir, teaching and research activities in most, if not all, university departments per semester, engaging students 4 or 5 years in a row, produces 'learning enablers' or by-products of economic value (Leigha, 2016a; 2016b; and 2016c). Here are evidences from NDU:

Department of FINE & APPLIED ARTS (UNDERGRADUATE PROJECTS)



UNDERGRADUATE PROJECTS - CONTINUED



DEPARTMENT OF FINE & APPLIED ARTS (DOCTORATE PROJECTS)



Faculty of AGRICULTURE



Faculty of THEATRE ARTS



Vice-Chancellor Sir, there must be a strong justification/s (locked up in shelves and store-rooms) why Government and funding partners would continue to release staggering amounts of money to pay University education bills. Why must 'they' finance education?

Meaning of Educational Financing

Finance, literally denotes 'unavailability' (Wehmeier, McIntosh, Turnbull & Ashby, 2005; Robinson & Davidson, 2007); capital supply expected (Anderson, Fortson, Kleindler, & Schonthal, 2000) for the payment of business, activity, or project bills. The character portrays susceptibility to borrowing or external sourcing (Leigha, 2015; 2016a; 2016b; 2017); and explains why the process is often “laden with unavoidable procrastinations, political intrigues and protracted debates that result in fund-scarcities and fund-starvations” (Leigha, 2017, p.673). Applied to any situation, it is usually treated as an 'after thought' (Blaug, 1970); like 'sending a child to school first, and looking for money (fund) to pay fees later'.

Vice-Chancellor Sir, A University relying on this technique must be ready to admit students first and then, look for money (fund) to undertake teaching and research later (from one session to another) through waves of political debates and intrigues; with resultant fund-scarcities and fund-starvations, etc, as shown below:

Table 1: Total Budget (TB) and Total Education Budget (TEB) in Nigeria, 2010 – 2021

Year	Total Budget (tr)	Total Educ. Budget (bln)	Approx. %TEB	TEB less the 26% Standard
2010	4.01	249.8	6.0	-20
2011	4.24	806.3	7.00	-19
2012	4.75	400.15	8.00	-18
2013	4.99	426.03	9.00	-17
2014	4.96	493.00	10.00	-16
2015	4.50	492.03	11.00	-15
2016	6.01	480.03	8.00	-18
2017	7.44	448.01	6.00	-20
2018	8.61	605.08	7.00	-19
2019	8.92	620.05	10.00	-16
2020	10.59	691.01	7.00	-19
2021	13.08	742.05	8.00	-18

Source: Online – www.governemnt finance office.org

Table 1 above shows that even the UNESCO and Nigeria adopted 26% minimum budgetary allocation to education is politicized (continuous deficiencies, 2010 - 2021). Not even a stable 13% (half) of the required minimum standard financing, could be achieved; an educational system heading towards 'Niagara falls'. What about Bayelsa State?

Table 2: Total Budget (TB) and Total Education Budget (TEB), Bayelsa State 2010 – 2021

Year	Total Budget (bln)	Total Educ. Budget (Bln)	Approx. %TEB	%TEB less 26% affir.
2010	117.4	5.40	5.00	-21
2011	161.2	6.40	4.00	-22
2012	217.58	23.10	11.00	-15
2013	285.93	28.40	10.00	-16
2014	332.40	26.60	8.00	-18
2015	251.00	20.96	8.00	-18
2016	150.65	4.00	3.00	-23
2017	221.20	13.50	6.00	-20
2018	295.20	22.00	8.00	-18
2019	299.20	23.00	8.00	-18
2020	242.00	21.00	9.00	-17
2021	290.30	24.90	9.00	-17

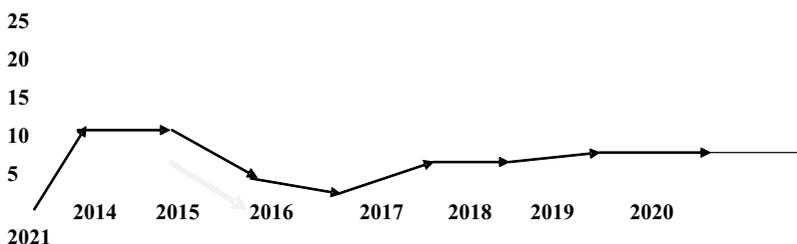
Source: Ministry of Budget & Planning, Bayelsa state, 2021.

Table 2: shows even greater deficiencies; -16% was the best over the period, 2010 – 2020. Situation portends systematic educational convulsion and epilepsy; sliding into 'coma'. Was the era of Educational funding any better?

Table 3: Total Budget and Total Education Budget (TEB) of Bayelsa State, 2015 – 2021

Year	Total Budget (bln)	Total Education Budget (bln)	Approx. %TEB	%TEB less the 26% recom.
2014	332.40	26.60	8.00	-18
2015	251.00	20.96	8.00	-18
2016	150.65	4.00	3.00	-23
2017	221.20	13.50	6.00	-20
2018	295.20	22.00	8.00	-18
2019	299.20	23.00	8.00	-18
2020	242.00	21.00	9.00	-17
2021	290.30	24.90	9.00	-17

Rate of investment



The funding summary in Bayelsa State depicts a 'low flat-line'; indicating near total collapse; an 'educational eclipse', a 'melt-down' or an imminent 'paralysis'.

But, does Educational funding hold any potentials?

Yes, it is different! Because it literarily denotes “money that is (already) provided ...” (Longman Dictionary of

Contemporary English, 2003, p. 655); “a large store or supply; money **available** for spending”(Chambers 2007, p. 540). To the Americans, funding is “a source of supply; a stock; available money; ready cash” (the American Dictionary of Contemporary English language, 2000 p.721). The British sees it as a “financial backing, the action of providing money for a project”; “an amount of money that has been saved or has been made available for a particular purpose. Money that is available to be spent” (the Oxford Advanced Learner's Dictionary, 2005 p.630).

In other words, with this technology, education bill payment would be backed up with money (i) already provided, (ii) stored, (iii) supplied, (iv) available; (v) saved, etc. Funding means 'pooling cash; and/or physical capital (assets) in a 'continuous flow' first, before opening the University for teaching and research to avoid procedural epilepsy. This technology does not throw budgetary allocations at the university rather it makes such allocations a funding source (Leigha, 2018; 2019). The scheme is aptly exemplified in the Federal Republic of Nigeria (2013, p.70) funding template defined vividly to circumvent shortfalls in funding practice and enable realization of quality education delivery in all institutions of learning.

Funding technology works by branches (prongs or trajectories) which are actually sources, as exemplified in the FGN prescription below:

1. The 26% (UNESCO minimum standard recommendation) annual deduction from the federal, states and Local Government budgets;

2. sectorial bodies like UBEC fund, TETFund, Industrial Training Fund, National Science and Technology Fund, Universal Service Provision Fund (USPF), and the Petroleum Technology Development Fund (PTDF);
3. international and local Development Partners like World Bank, USAID, UNIDO, UNICEF, UNDP, DFID, JICA, KOICA, Nigeria/Sao Tome and Principe Joint Development Authority, NGOs etc;
4. 1.5% minimum of contract sum/fees from contractors, consultants and other service providers; and
5. Alumni bodies (FRN, 2013, section 10, subsection).

Each funding source (nos 1 - 4) is a prong; can be assigned funding quotas, just like the governments (Federal, States, and Local) 26% budgetary allocation. Others are: parents, guardians, philanthropists, funding agencies (both local and international). Total commitment, resilience, determination and doggedness is required for success. The difficulty in implementation seem to arise from a poor understanding and appreciation of the very nature of money – the object of education bills payment.

Relationship between Finance, Fund and Money

Most interestingly, both finance and fund relate to money and hence share common properties. So, using these twin concepts to solve educational problems also require effective cognition and embracing of the properties and mobility of money.

Money: Meaning and Value

Money, either by Barter – the direct exchange of goods for goods and service for service - commodities, such as salt, cowries, cows, etc, metals like iron, copper, bronze, gold and silver; coins and pounds is simply, a medium of exchange. This is the first rule which must be naturally observed, in exchange; also known as the value in exchange of commodities (Smith, 1776; Lipsey, 1980; Jhingan, 2012).

The term 'value' conveys two different meanings; as it states the use of a specific item, or, the ability to purchase other products that holds what such object carries. Firstly, 'value in use'; and the second is 'value in exchange'. Apparently, products of greatest value in use often hold little or no exchange value; but, products that possess greatest exchange value often hold little or no value in use. For instance, water possess great value in use; but poor exchange value. Also, a diamond possesses poor use value; but very high exchange value. Hence, real measure of exchange value determines the real price of a commodity.

Moneyness must be fulfilled

Money must fulfil “not only one but three functions, each of them providing a criterion of moneyness ... those of unit of account, a medium of exchange, and a store of value” (Scitovsky in Jhingan, 2021 p.433). It is arguable that money fulfils its moneyness, especially as a 'store of value'. Hence, until and unless, a **commodity possesses value**, commanding financial (money) expenditure becomes, or remains, a struggle.

Moneyness in Education

As a medium of exchange: Government and funding agencies must understand, appreciate and embrace 'funding' as the 'medium' by which education is exchanged'. Hence, funding level determines the quantity and quality of 'education commodity' exchanged; deficient funding exchanges for poor quality education, and vice versa.

As a unit of account: Funding serves as a yardstick, criterion or standard for determining or measuring value of education. For instance, if we value a particular 'education commodity' at N370,000.00 worth per annum then, we will also expend only N370,000.00 to acquire that education.

As a store of value: by funding it is easier to transfer the value of education to a time in the future, including its transforming or reconstructing power. When an individual or Bayelsa State accepts specific funding (money) today in exchange of some quantity of education, Bayelsa State can also hold the money and become a buyer or seller of that education quality at some future time. To perform this function creditably, funding must have a relatively stable value.

Therefore, the real funding (libraries, laboratory, workshops, buildings and classrooms, and general infrastructure) level in any university depends on the value of its education (teaching and research) productivity. In other words, level of budgetary allocations and financial allocations from other funding agencies will not exceed the value content of the university's research by-product (wealth), *ab initio*; research by-products of commercial

value, to the Society (Leigha, 2018; 2019).

Federal Government and Commercialization policy

In subsection 84, the Federal Republic of Nigeria (2013) contemplated this belief and urged that all “tertiary institutions are encouraged to explore other sources of funding such as endowments, consultancy services and **commercial ventures**” (p.41). This directive is expected to be actualized by:

- (a) Providing an actual practical-based curriculum germane to labour market demands; and
- (b) Generating and distributing knowledge, skills and competencies which can contribute to national and local economic objectives and can enable students succeed in a knowledge-based economy (FRN, 2013).

Vice-Chancellor Sir, marketing the quantum of by-products (wealth) currently locked up in storerooms and the attic (the archives) of many, if not all, Departments and Faculties would mean fulfilling Government encouragement to explore other sources of funding including “**commercial ventures**”; which would generate funds to supplement payment of university bills as well as enabling students graduate with skills employable in a knowledge-based economy. There are scenarios below:

In the Faculty of Education: Where model School designs; model Classrooms, teaching methods; professional teachers; consultancy services, etc, could be produced as by-products equally has the following fund

generating capacity: Supposing each student admitted into the Faculty of Education produces about 5 Model School Designs (MSD) per semester; (10 per session); as part of their undergraduate training requirement, at N55000 market price. Each student fund generation per semester would be N275,000.00 (55000×5), and N550,000 ($N55000 \times 10$) per session. In other words, a batch of 45 students pursuing Educational Management programme, designing 225 schools, would generate N12,375,000.00 (i.e. $N55000 \times 225$ MSDs) per semester; and could generate N24,750,000.00 per session. Similar amount of money would be generated by students in years 2 to final year. If we further assume that there are 35 students in each of years 2 to 4, then, funds generated by 105 students (i.e. 35 students into 3 different levels) would be N115,500,000 (i.e. $105 \times N1,100,000$) per semester and, N231,000,000.00 per session. The process would reverberate across every Department in the Education faculty. And, the final result would be handsome.

Department of Sculpturing:

Supposing 1 sculptor costs N65,000 and each student produces about 20 model sculptures per semester, as part of their undergraduate training requirement. And, assuming there are 45 students admitted into that programme. The per student generated fund would be $65000 \times 20 = N1,300,000.000$; multiplied by 45 students admitted into, say year 1, would be $N1,300,000 \times 45 = N58,500,000$. Similar amount of money would be generated by students in years 2 to final year. If we further assume that there are 45 students in each of years 2 to 4. That would be 105 students; amount generated would be N136,500,000, i.e. $105 \times 1,300,000$. Again, final amount

would be exponential.

Department of Civil Engineering:

Supposing one engineering model Building cost about N150,000 and each student produces about 15 model houses per semester, as part of their undergraduate training requirements. And assuming there are 40 students admitted into that programme. The per student generated fund would be $N150,000 \times 15 = N2,250,000$; multiplied by 40 students in year 1, would be N90,000,000. Hence, 120 students in each of years 2 to 4 would generate about N10,800,000,000. Final SGF would be staggering.

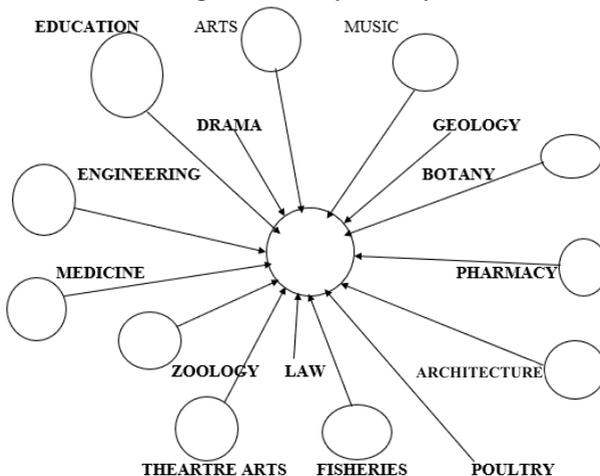
Model Boats (Marine engineering); model Cars and bicycles (mechanical engineering); model electronics and electrical designs, parts, etc (Electrical/Electronic engineering), etc. would further boost fund generation in that faculty incredibly. Indeed, Departments of Theater Arts and Fine and Applied Arts, MBBS, Law, and indeed, every other department in the university has innate fund generating capacity that can be developed and exploited.

What this means is that University Faculties are like economic firms, which takes input (raw students, instructional materials, libraries, laboratories, workshops, various raw materials, etc) from consumers or government, and produce output which are demanded by consumers and even the government. University teaching and research undergo processes (activities) culminating into the final output (graduates) and creates many valuable items. And, we know that 'Graduates' are not created in one week, month, semester, or session but, undergo activities through semesters (weeks and months)

and sessions (years) which eventually culminate into the terminal point of graduation. Intermediary or by-products are usually created in the process. For instance, while students strive to become competent teachers, certain sample or model schools, teaching methods, classrooms, consultancy services etc, are created as 'learning enablers' in the Faculty of education. These intermediary or by-products, (i.e. 'learning enablers') also possess economic (money) value.

Vice-Chancellor Sir, a University (like NDU) can adapt this scheme by substituting the teaching and research by-products from the various Departments and/or Faculties as funding sources. And, through well-planned curricula, functional workshops, libraries, and laboratories, stores; hypothetical funding quotas, etc, teaching and research by-products can be commercialized, and generated funds sucked up into a central portfolio (account) which can be withdrawn to pay University bills, as and when due.

Vice-Chancellor, Ladies and gentlemen, may I humbly introduce the 'Mulptopoda':



Note that in the multopoda, Government subventions only becomes' a funding source'; an investment to promote teaching and research rather than represent the main funding source (Leigha, 2015; 2017; 2018; 2019). This suggests a synergy between the Bayelsa State Government and NDU (as listed above) with a view to optimize education performance in the university. Government could engage direct funding through purchase of new infrastructure, equipment and gadgets, etc, necessary for functional education, systematically undertaken to, not only boost teaching and research activities but, further grow funding levels as the 'Multopoda' implements to maturity.

Conclusion and Suggestions

It is quite obvious that Nigerian education, particularly university education, have not attained 'adequate' funding status at all the levels of government that can make programme/project implementation successful, as envisioned in the policy since 1977, in spite of frantic policy summer saults by successive administrations – civil and military. As Okorosaye-Orubite (2009, p. 58) rightly posits: “the fault is not in our stars, but in us!”

Universities are remarkably blessed with enormous potentials, mainly in research skills and competencies which produce numerous by-products in various Departments, currently locked up in attics. Marketing of these by-products could generate revenue to support funds (monies) for school bill payment; a provision already made in policy. It is not clear why administrators lack the right muscle to implement the '**commercialization clause**

of the education policy'. What is apparent is that university administrators focus only on the 10% government subvention –which is one funding source; ignoring about 90% sure cash that could be gleaned from the other 'multopodic' sources, strong enough to contain the funding demand.

It is common knowledge that brilliant suggestions offered over the years were graciously ignored. The suggestions proffered hereunder by this lecturer may not be magical, especially in a national environment where 'sickness is allowed to remain so as to benefit the physician'. However, for academic purposes, let me state here a few necessary things that if seen to be done, can strengthen funding and place universities on a pedestal to function “as an instrument per excellence for social and economic reconstruction”, as envisaged (FRN, 2013, p. 1):

1. There should be an **'automated'** 26% minimum deduction app installed in the budgetary allocation formular in all tiers of government; no more a political exercise;
2. The 26% budgetary allocation should be treated 'only' as a funding source automatically deducted and paid into a central account created for the purpose;
3. Government should directly engage physical capital development in every Department in the university;
4. Departments must be encouraged to engage in practical-based researches aimed at producing by-products for commercial purposes;

5. Department should be empowered to operate commercial points (offices) to market their By-products and remit generated revenues to university multopoda account;
6. University and Departmental authorities should also be encouraged to plough-back part of their revenue to construct physical capital (laboratories and workshops) in order to boost their by-product producing base;
7. Staff and students in every department should be encouraged to engage individual researches like those in Arts, Theatre Arts, Engineering, medicine, etc, as their graduation requirements;
8. Each university should be encouraged to operate the 'MULTOPODA' technology as an alternative to improve funding practices.

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NDU 57TH INAUGURAL LECTURER



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ABOUT THE INAUGURAL LECTURER

Mark Leigha was born on the 10th of March 1967 at Azama town, to his parents – Mr. Ben Barnabas Leigha and Madam Iteme Iyebutemeh. He is the 4th child but the second son, in a family of nine (9) children.

He started his primary education at an early age, being the son of a Headmaster of the early Post-colonial era. Mark Leigha completed his Primary education and proceeded to the Government Secondary School, Ukubie (now Akpalakpa Grammar school, Ukubie) and obtained his West African School Certificate in 1982. Mark Leigha also attended and obtained another WASC at Government Secondary School Toru-Ebeni in 1984, in order to correct the subject combinations.

Thereafter, Mark Leigha pursued his further education at the University of Port-Harcourt (Uniport) and obtained a Bachelor's Degree (B.Ed.) in Educational Management/Planning and Economics in 1991. After his National Youth Service Corps engagement at Women-in-Health, Ministry of Health, in Okelewo, Abeokuta, Ogun State, Mark Leigha worked briefly in the private sector but the crave for further education could not allow his permanent resident in that industry. He then enrolled into a postgraduate study in Educational Management at the Rivers State University of Science and Technology (RSUST), now Rivers State University (RSU) and obtained a Master's Degree (M.Ed.) in Educational Administration in 2001.

Having been employed as an Assistant Lecturer in the newly established Niger Delta University (NDU), Mark Leigha decided to pursue the ultimate academic height when he enrolled for yet another postgraduate study in the University of Port Harcourt (unique Uniport) where he obtained the coveted Doctor of Philosophy (PHD) degree in Educational Management (Economics of Education), in 2010.

Mark Leigha is an astute academician who has taught many courses in his chosen area – the Educational Management – for over 20 years. His towering experience and tenacious contributions to knowledge are not mistakable. No wonder the Niger Delta University (NDU) has consistently found him worthy in character and learning and has moved this academic colossus through the ranks: Lecturer II (2006), Lecturer I (2009), Senior Lecturer (2012), Associate Professor (2015). And only recently, he was pronounced a full professor in Educational Management in 2018.

Professor Mark Leigha is widely published and has over 60 peer-reviewed and published articles in both local and international journals. He has held several administrative positions within and outside this University, including:

- Faculty Co-ordinator, Center for Educational Services (CFES), now Institute for Education, Niger Delta University, Wilberforce Island, Bayelsa state, 2004 - 2006.
- Member, Faculty Time-table Committee, Niger

Delta University, Wilberforce Island, Bayelsa state, 2004 - 2008.

- Faculty Examination Officer, 2010 - 2011.
- Member, Post-Graduate Course Drafting Committee for Educational Management, 2010-2011.
- Chairman, Departmental (Educational Foundations) Academic Staff Seminar Committee, 2011/2012 Session.
- Member, Department (Educational Foundations) Accreditation Committee, 2011/2012 Session.
- Member, Project Defense Panel, (Educational Foundations), 2009/2010 and 2010/2011 Sessions.
- Sub Committee Chairman, Local Organizing Committee for the 25th Annual Congress of the Nigerian Academy of Education, 2010.
- Member, Local Organizing Committee for the First Faculty of Education International conference, 2011/2012 Session.
- Chairman, Departmental Journal Committee, 2012/2013 Session.

- Head of Department (HOD), Department of Educational Foundations, 2014- 2016.
- Editor, Niger Delta Research Review (NDRR) – a Departmental Journal, 2018 till date.
- Member, Governing Council, University of Africa, Toru-Orua, Bayelsa State, 2022 – date.

Professor Mark Ben Leigha has supervised several undergraduate (B.Ed.) projects, and has produced over 10 Master's (M.Ed.) graduates and over 7 doctoral (PhD) graduates, from 2017 to date. He has also produced several Post Graduate Diploma holders, both in NDU and at the National Teacher's Institute (NTI) Kaduna – Port Harcourt Study Center, since 2006 till date. He is still a Facilitator in that programme, with national recognition award.

Professor Mark Ben Leigha is a member of many professional associations, including:

- Member, Academic Staff Union of Nigerian Universities (ASUU).
- Member, Nigerian Association for Educational Administration and planning (NAEAP).
- Member, Teachers Registration Council of Nigeria (TRCN).
- Member, National Association for Quality

Assurance.

- Member, Board for the Development of Staff of the National Teachers Institute, Port Harcourt Study Center, Port Harcourt.
- Fellow, Institute of Policy and Management Development (IPMD).

Professor Mark Ben Leigha has attended many conferences and workshops, both locally and internationally and holds over 60 peer-reviewed and published articles in both local and international journals. He has also contributed immensely to several community development programmes in CDCs, Social clubs, Alumni, and NGOs. Professor Mark Ben Leigha is a family man.

Ladies and Gentlemen, may I present this gentle, calculative and amiable Azama born professor of Educational Management – Professor Mark Ben Leigha

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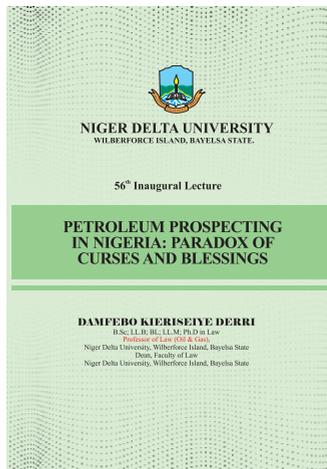
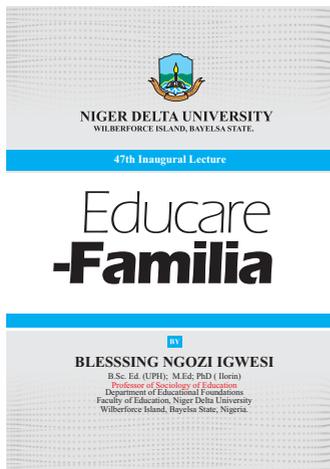
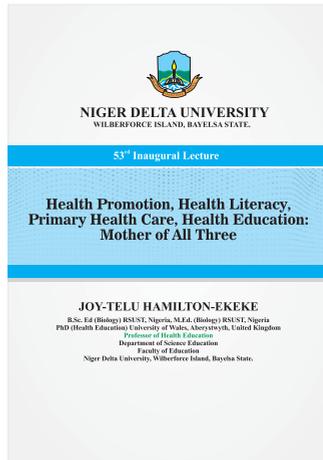
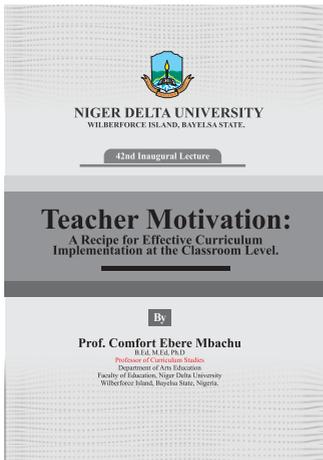
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