



NIGERIA
Development or
Underdevelopment



(Selected Seminal papers)

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Chapter One

HUMAN RESOURCE MANAGEMENT FOR SUSTAINABLE DEVELOPMENT OF NIGERIAN UNIVERSITIES

INTRODUCTION

For any economy to achieve sustainable growth and development, human resources (human capital formation) must play a crucial role. Labour is conventionally acknowledged as one of the factors of production. Hence for an economy to expand its production frontier, the quantity and quality of its labour force must be perceived as necessary and sufficient.

Every institution must be able to manage efficiently its human resource so as to achieve maximum results. A University, for example, ought to manage its human resource so as to realize its stated objectives of research, teaching and community service. More important, a University must optimize its internal human resource while at the same time producing quality human resource for the wider economy.

If the Nigerian Universities must grow qualitatively over time then how to effectively and efficiently use its human resource ought to be part of the Universities' decision matrix. In other words, sustainable development of Nigerian Universities is anchored on the optimum utilization of the available human resource at any point in time.

The objective of this paper, therefore, is to examine issues relevant to the management of human resource in our universities. It is anticipated that the discussion will shed some light on the importance of managing human resource if the development of our universities is to be sustained.

I intend to approach the paper in the following way: Following this introduction, section 2 will consider briefly some theoretical issues. In section 3, I will periscope the present state of our universities especially as regards human capital formation. Section 4 considers the role of stakeholders while in section 5, I examine some ways of enhancing the quality of human resource in

our universities. The role of the education tax fund and human resource management nexus is analysed in section 6. Section 7 concludes the lecture.

2. THEORETICAL UNDERPINNINGS: IMPORTANCE OF HUMAN RESOURCES

It is generally agreed that it is the human resources of a nation, not its capital nor its material resources, that ultimately determine the character and pace of its socio-economic development. Social scientists of the Marxist persuasion have maintained that labour is the most important input in the production process. Labour is the main determinant of production, other inputs or factors are secondary. There is no production that does not require the human being - even machines, have been developed by labour. This 'labour' is the human being that has been trained. It is this labour that is often referred to as human resource or human capital formation.

Human resources ...Constitute the ultimate basis for wealth of nations. Capital and natural resources are passive factors of production, human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organizations, and carry forward national development. Clearly, a country which is unable to develop the skills and knowledge of its people and to utilize them effectively in the national economy will be unable to develop anything else (Harbison, 1973, p.3)

The main institutional mechanism for developing human skills and knowledge is the formal education system such as the University.

In the neo-classical growth orthodoxy, it is often agreed that, the growth of an economy was influenced by labour, capital:

$$Y = f(K,L) \dots \dots \dots (1)$$

Where:
Y = growth in real output
K = physical capital
L = labour force

(see the Appendix)

From equation (1), labour force is often measured in terms of changes in a country's population. The desire to alter or stimulate production or growth is determined through changes in technology. In the above general specification, the importance of labour especially its transformation through education and skills acquisition is not captured. A more recent specification ascribes importance to human capital formation by endogenising labour (that is the production function does not exhibit diminishing returns):

$$y = a + b + ck + (1 - c)h \dots \dots \dots (2)$$

Where:
y = growth rate of real output;
a = the change in the efficacy of the use of resources;
b = rate of technical changes;
k = physical capital growth; and
h = human capital

From equation (2), the growth of real output is decomposed into three sources. An increase in physical capital will have a positive effect on growth. The public sector invests in education through current and capital expenditures. It is useful to include current and capital expenditures in the social sector as explanatory variables in explaining the growth of human capital. Recent studies have stressed the importance of human capital in the growth process (Otani and Villanueva, 1989; Otani and Villanueva, 1990). These studies suggest a positive relationship between human capital and long-run economic growth.

At the theoretical plane, human resources can enhance growth as well as explain changes in the growth process.

Empirically, I have shown elsewhere (Ekpo, 1994) the importance of human capital formation in Nigeria's growth process. Using ordinary least squares (OLS) with annual data for 1960 - 1990, the following results were obtained:

$$Ip = 31.31* + 21.375Cae** + 31.64Cah** + .02dy - .5341FS** \dots (3)$$

(1.86) (5.143) (2.175) (.078) (-3.042)

R² = 0.82; F_{5,25} = 22.8

Notes:

**= Significant at the 5% level

t scores are in parenthesis

Ip	=	Gross private fixed capital formation;
Cae	=	Capital expenditure on education;
Cah	=	Capital expenditure on health;
dy	=	acceleration; and
FS	=	Foreign saving

Capital expenditure, proxy for human capital formation, exerts positive impact on private investment, which invariably enhances growth. Its coefficient is statistically significant. There is no doubt that private investment benefit from the stock of skilled manpower trained by government through various educational institutions such as universities. The Nigerian government following the oil boom embarked on massive training of the country's manpower. Schools (primary, secondary, polytechnics, universities, etc.) were constructed and equipped by government. Though not shown in this paper, the study also confirmed a positive relationship between current expenditure on education and private investment. It is clear that human capital formation crowd in private investment.

The 1998 budget illuminates the importance of human resources to the economy.

No nation can afford to ignore its human resources. This year; government will invest massively in human capital development. Our future as a country is positively linked with the quality of human resources hence all levels of education will be strengthened. We want to stop the brain drain and utilize our vital human resources in building our country (Federal Government, 1998, p.2.).

Based on the above theoretical discussion, the importance of human capital in the development process has been established theoretically and empirically. It becomes the responsibility of institutions such as universities to manage efficiently and effectively its human resources.

Let me note that by human resources, I am referring to all

categories of staff - senior and junior as well as academic and non-academic.

3. THE PRESENT STATE OF OUR UNIVERSITIES

The staffing of our Universities is less than optimum. The situation is very serious among academic staff. Our universities have experienced brain drain (academic and non-academic) in the last twelve years. Qualified staff have either left the university system, for the private sector within the domestic economy or outside Nigeria.

The exodus of qualified staff has been influenced by low pay, lack of facilities thus re-inforcing lack of job satisfaction. For example, some universities have had to rely on retired administrators through contract appointments because the new or young administrators are either not properly trained or outright unsuitable for administrative duties. There are instances in which the university cannot even retain its own graduates to carry out administrative responsibilities. If the situation is not reversed, the administrative component of our universities will contribute sub-optimally in running the system. A well-trained graduate will prefer the private sector to the university system because the former provides not only attractive salary benefits but also a conducive environment for work. This situation was different and in favour of universities in the 1970s.

Take the case of a qualified chartered accountant. What will he or she be doing in a university system that will offer a salary four times below what is obtainable in the private sector. It follows that, all things being equal, the bursary department in our universities will either attract those who want to become qualified chartered accountants by studying for the relevant examinations while working or those not interested in being qualified. More often, once the person is qualified, the university employment is abandoned for the private sector.

The situation in the academic sphere of the university is not different. Most departments are not properly staffed and as a result less qualified academics are handling upper level courses. The brain drain has been severe in the areas of management sciences, engineering, medicine, law and selected natural science areas. The few remaining competent ones are thus over stretched with several courses to handle. The resultant effect is a decline in research - an

aspect crucial for the growth of a university system.

According to Umo (1995, p. 42): "at the university level, the rate at which people are quitting is becoming alarming. It is estimated that three facilities of medicine alone have lost up to 120 top medical specialists to the Gulf States within the last one year. Some departments like Finance, Insurance and Economics have lost their first rate lecturers to greener pastures of the domestic private sector or outside the country. The remaining ones who now share the ever increasing teaching burden left by their departing colleagues are greatly disillusioned and are desperately looking for lucrative alternatives.

The university system presently is guilty of what I call **the recycling of ignorance syndrome**. Half-baked students become half-baked lecturers who in turn produce half-baked graduates. These half-baked graduates are now finding themselves into the administrative cadre in our university system, the other agencies in the public sector and the private sector. If the situation is not reversed, in the next twenty years, the country would have been taken over by half-baked citizens working in different professions.

The point being made is not to suggest that there are no qualified personnel in our system. On the contrary, there still exist competent non-academic and academic staff but they are few. Hence, the challenge becomes how best to manage the few remaining qualified staff as well as increasing the number without sacrificing quality.

4. HUMAN RESOURCE MANAGEMENT: CRISIS IN MANAGEMENT

There is no question that crisis in our universities have exacerbated the ability of management to optimize the use of human resources in the system. The nature of the crisis has varied from university to university. Student demonstrations, strikes by various unions, internal intrigues and petition writings have all affected the human resource management situation.

It is often argued that management in some of our universities has adopted a "fire brigade" approach in handling some of the crisis. A "fire brigade" approach further reduces moral of workers within the system. In some universities, the authorities only

decide to handle such situation when the said crisis erupts. In other words, there are no built-in mechanisms for handling crisis. Nonetheless, it must be noted that some crisis are often spontaneous and may therefore take authorities by surprise. For example, student demonstrations for the most part occur without warning signals. In the last ten years, our university system has been characterized by several forms of crisis particularly strikes by the academics. The argument being made is that crisis in any form affects human resource management. What then should be the role of the various stakeholders in minimizing crisis within the system so as to ensure optimum utilization of available human resources?

4.1 Role of the Institutions

Here, I am referring to what should be put in place by the university management in dealing with crisis that threaten the optimum use of its manpower. It is crucial that management be transparent and accountable. In certain instances, management has indirectly created suspicion and distrust by not being open consciously or unconsciously. It is important that workers be informed correctly about decisions concerning their welfare. Those whose responsibility includes heading units and / or departments must be seen as fair and just in dealing with complaints and other matters. However, this must take place within the confines of being firm and defending the principles of the university system.

The university institution must be made to function properly in terms of its day to day activities. This way, stakeholders will have confidence in the system; human capital within the system will see the need to be efficient and effective. The system must operate as an institution and not be personalized.

4.2 Role of Government

Government is the major provider of funds for our universities. At present, the Federal and State governments own most of our universities. Hence, government is a stakeholder and should rightly be concerned on any crisis that threatens to affect the management of human resources. In the management of crisis, the role of government is noticeable through the university council set up by

government. The crisis must become so serious for government to intervene directly; in such government will have to dissolve council.

4.3 Role of Unions

In our university system, three unions are recognized in (i) ASUU for academic staff; (ii) SSANU for non-academic staff; and (iii) NASU for mainly junior staff. Given the fundamental objectives of unions, each tries to optimize the welfare of its members. The frequent strikes of the unions have centered on better conditions of service though for ASUU its industrial action more often insists on the provision of teaching and research facilities in order to enhance the quality of human capital within the system.

There are, also instances in which the unions have indirectly been at cross-purposes. For example, it is an open secret that the academic staff feels that the administrative staff are auxiliary workers in the system and as such do not see why non-academic staff should receive equal remuneration with the academic staff. The two-step dichotomy is a case in point.

Tension created by unions either within or in confrontation with management will definitely affect the morale of the available human resource; a prolonged crisis will deter potential labour interested in joining the university. For optimum management of human resources within our universities, it is desirable that tension is reduced and one possible way of achieving this is through frank dialogue. It is crucial that channels of communication exist between management and unions. It is preferable to dialogue in order to avert a crisis than to dialogue either during or after a crisis.

5. ENHANCING THE QUALITY OF HUMAN RESOURCES IN THE UNIVERSITIES

There must be the commitment to improve both the quantity and quality of human resource(s). I wish to discuss the short, medium and long-term approaches to improving the quantum and quality of human capital.

5.1 Short and Medium Term Measures

This will include the following:

- (i) **Upward Mobility:** Policy at the management level must encourage staff to strive to move up by acquiring skills. There is nothing wrong in junior workers being allowed to undertake part-time studies in order to improve themselves. This should be seen as a continuous effort. However, staff must not perceive upward mobility as a way of defrauding the university by not being fully committed to his / her duties. What is being suggested here is that cleaners and messengers, for example, can attend evening classes of the University extra-mural classes to improve themselves.
- (ii) **Training and Retraining:** Staff both academic and non-academic need constant training and retraining through staff development, seminars, conferences and workshops. Let me state here that even a Professor needs retraining. The Director in any of the directorate's needs retraining. This is the only way of acquiring new ideas, new techniques, and be in the frontier of one's discipline. Administrators erroneously think that staff development is only for academic staff. All categories of staff are entitled to staff development.

The training being alluded to here assumes that the worker has already received some basic (preferably tertiary) education and therefore, required retraining to keep pace with changes in the global environment.
- (iii) **Remuneration:** Salary schemes for university personnel should be regularly appraised. Regular salary payments should be guaranteed. In order to attract and retain good lecturers and other workers in the university system, remuneration and conditions of service should provide incentives for quality performance and rewards for excellence.

- (iv) **Facilities:** There is the need to provide appropriate and modern facilities to enhance the quality of human resource; basic textbooks and other instructional materials should be available in libraries. The workforce should be exposed to the use of computers. In addition, it is important that existing facilities be rehabilitated and maintained regularly.

5.2 Long-Terms Measures: As I noted in the theoretical section human resource can alter positively the growth process in the long-run. This is because of the assumption that once labour is endogenized; diminishing returns do not exist. Hence, for this process to take place, the following palliatives are suggested:

- (i) **Endowments:** The University system requires endowments from rich individuals, communities, companies, etc. Endowments will generate the funds necessary for long-term improvement in human resources. In Nigeria, the university system has not done enough to expose or inform the populace on the advantages of endowing universities.
- (ii) **Commercial Ventures:** Our universities must establish commercial ventures to generate revenue. Some universities already have commercial ventures.
- (iii) **Patented Research:** Inventions and ideas from our universities ought to attract revenue through patents. Some universities outside Nigeria have been known to derive a lot of revenue through research.
- (iv) **School Fees:** Government must introduce tuition fees in our universities. A situation where all undergraduates, regardless of the class in which they will graduate, do not pay tuition should be discontinued and scholarship should be awarded to excellent students.

The revenue saved by government should be ploughed back into primary and secondary education. The university system derives its students from the lower levels of education. It follows that qualitative education at the lower level would ensure even higher standards at the university level.

6. EDUCATION TAX FUND: WHAT ROLE?

The Education Tax Decree 7 of 1993 mandated that two percent of the assessable profit of a company should be collected by the federal Bureau of Internal Revenue and paid into an Education Tax Fund (ETF). This fund is to be managed by the Education Tax Board of Trustees. Originally, the funds were to be used for work centers, staff development, conference attendance and the library system of all three levels of government.

The decree stipulates that higher education will get 50% of the fund, primary education 40% and secondary education 10%. Recently, the government has appointed the Board of the ETF. The amount assessed and collected from 1994 to 1997 is presented in Table 1.1 below:

Table 1.1: Education Tax in Nigeria: Amount assessed and Collected, 1994 - 1997 (N billion)

Year	Assessment	Collection
1994	2.413	2.195
1995	2.754	2.492
1996	3.349	2.188
1997	1.359	0.866
Total	9.875	7.741

It should be noted that the 1997 assessment is incomplete. According to the 1998 budget, N7.741 billion being amount collected is with the Central Bank Nigeria.

The ETF can play a positive role in enhancing the quality of human resources in our Universities. It is hoped that the Fund should not become another bureaucracy but instead contribute to enhancing the quality of human resources in our universities.

7. CONCLUSION

Human resources remain a vital determinant in Nigeria's development calculus. For the sustainable development of our universities, the quantum and quality of human resources must be continuously improved. This is one way of ensuring that our universities continue to be a lighthouse to the nation. I hope that in this lecture I have examined issues, which will stimulate further discussions on the subject.

Appendix A

I: Neoclassical model of Solow and Swan.

The Neoclassical production Function

Ignoring technological progress, the Production function can be shown as

$$Y = F(K,L) \quad \dots \quad (1)$$

Where:

- Y = flow of output
- K = physical capital
- L = labour

The production function is neoclassical if the following three properties are satisfied. (1) For all $K > 0$ and $L > 0$, $F(\cdot)$ exhibits positive and diminishing marginal products with respect to each input:

$$\begin{aligned} \frac{\delta F}{\delta K} &> 0, & \frac{\delta^2 F}{\delta K^2} &< 0 \\ \frac{\delta F}{\delta L} &> 0, & \frac{\delta^2 F}{\delta L^2} &< 0 \end{aligned} \quad \dots \quad (2)$$

(2) $F(\cdot)$ exhibits constant returns to scale:

$$F(\lambda K, \lambda L) = \lambda F(K,L) \text{ for all } \lambda > 0 \quad \dots \quad (3)$$

(3) the marginal product of capital (or labour) approaches infinity as capital (on labour) goes to 0 and approaches 0 as capital (or labour) goes to infinity:

$$\begin{aligned} \lim_{K \rightarrow 0} (F_k) &= \infty & \lim_{L \rightarrow 0} (F_l) &= \infty \\ \lim_{K \rightarrow \infty} (F_k) &= 0 & \lim_{L \rightarrow \infty} (F_l) &= 0 \end{aligned}$$

These last properties are called Inada conditions. The condition of constant returns to scale implies that output can be written as:

$$Y = F(K,L) = L \cdot F(k, 1) = L \cdot f(k) \quad \dots \quad (5)$$

Where;

$$k = \frac{K}{L} \text{ is the capital-labour ratio}$$

$$y = \frac{Y}{L} \text{ is per capital output and}$$

the function $f(k)$ is defined to equal $F(k, 1)$.

This result implies that the production function can be expressed in

intensive form as:

$$y = f(k) \quad \dots \quad (6)$$

We can use the condition $Y = L \cdot f(k)$ and differentiate with respect to K , for fixed L , and then with respect to L for fixed K , to verify that the marginal products of the factor inputs are:

$$\begin{aligned} \frac{\delta Y}{\delta K} &= f'(k) \\ \frac{\delta Y}{\delta L} &= [f(k) - k \cdot f'(k)] = 0 \end{aligned} \quad \dots \quad (7)$$

The Inada conditions mean that:

$$\lim_{K \rightarrow 0} [f'(k)] = \infty \text{ (and } \lim_{k \rightarrow \infty} [f'(k)] = 0)$$

We can show that the neoclassical properties Equations (2) -(4) imply that each input is essential for production, that is

$$F(0, L) = F(K, 0) = f(0) = 0$$

The properties also imply that output goes to infinity as either input goes infinity.

One simple production of actual economies is the Cobb-Douglas function,

$$Y = A K^\alpha L^{1-\alpha} \quad \dots \quad (8)$$

Where $A > 0$ is the level of the technology and (is a constant with $0 < \alpha < 1$)

1. *The Cobb-Douglas function can be written in intensive form as:*

$$Y = A k^\alpha \quad \dots \quad (9)$$

Note that $f'(k) = A \alpha k^{\alpha-1} > 0$,

$$f''(k) = -A \alpha (1-\alpha) k^{\alpha-2} < 0,$$

$$\lim_{k \rightarrow 0} [f'(k)] = \infty \text{ and } \lim_{k \rightarrow \infty} [f'(k)] = 0$$

Hence, $k \rightarrow 0$ and $k \rightarrow \infty$

The Cobb-Douglas form satisfies the properties of a neoclassical production function.

II: Endogenous Growth Model

The key property endogenous growth model is the absence of diminishing returns to capital. The simplest version of a

production function without diminishing returns is:

$$Y = Ak \quad \dots \quad (10)$$

Where A is a positive constant that reflects the level of the technology. There is no diminishing return if we think of k in a broad sense to include human capital. Output per capita is $y = Ak$, and the average and marginal products of capital are constant at the level $A > 0$.

Appendix B

Table 1.2 Nigeria Selected Education Indicators, 1965 - 91

	Nigeria	Indonesia	Venezuela	Mexico Africa	Sub-Sahara Middle Income	Low & &
Illiteracy Rate 1990						
Female	61	32	10	15	62	46
Male	49	23	12	13	50	36
Primary Pupil Teacher Ratio a						
1970	34	29	35	46	43	35
1990	41	23	23	31	41	35
Primary Enrollment Ratio						
1965	32	72	94	92	41	78
1989	78	116	94	117	69	105
1990	72	116	97	115	68	104
1991	71	116	99	114	66	102
Secondary Enrollment Ratio						
1965	5	12	27	17	4	22
1989	22	45	34	56	18	43
1990	20	45	34	55	17	61
1991	20	46	34	55	18	45
Tertiary Enrollment Ratio						
1965	0	1	7	4	0	3
1989	5	9	29	16	2	8
1990	4	10	30	15	2	7
1991	4	10	30	15	2	8

- ii. Enrollment ratios will exceed 100 percent when some of the pupils are younger or older than the country's standard school age.

Source: World Bank, World development Report.

Table 1.3: Nigeria: Compound growth Rate of Expenditure on Education, 1960 -1996 (%)

Year	Capital expenditure	Current Expenditure
1960 -65	-6.9	-2.0
1970 -75	143.9	102.2
1975-80	6.6	-0.5
1981-85	-10.3	-0.4
1986 -92	3.8	21.6
1993-96	34.1	21.6

Computed by author based on data: Central bank of Nigeria. Annual Report and Statement of Accounts, Various issues.

Table 1.4: Growth in Schools and Enrollment in Nigeria: 1973 - 1990

Years	PRIMARY SECONDARY UNIVERSITIES		TERTIARY POLYTECHINCS			
	No. of schools	No. of Enrollment	No. of schools	Enrollment schools	No. of schools	Enrollment schools
1973/74	14525	4764808	1337	448904	-	6 25000
1983/84	36126	16171380	5076	1627905	-	13 160000
1990	34904	12821087	6358	3062105	27	60533 36+ 180000

Notes:+ Figure includes degree awarding colleges of education.

Sources: (1) Calculated from various table in Umo 1985a. Central Bank of Nigeria, Annual Reports and Statements of Accounts, 1990 p. 101

Table 1.5: Approved Budget, Federal ministry of Education and Youth Development, 1989-94 (Naira millions)

	1989	1990	1991	1992	1993	1994
A. Recurrent	1719.8	1962.7	1265.2	2008.3	6436.1	7878.1
I. Education	241.9	317.7	407.1	632.4	1285.0	1657.7
a. Personnel	88.5	116.7	118.7	146.5	385.1	518.2
b. Overhead	153.6	201.0	288.4	486.0	899.9	1139.5
I. Grants, Contrib & Subventions	52.4	63.1	105.1	137.5	303.5	395.4
a. Personnel	15.9	19.2	34.2	52.1	110.2	127.5
b. Overhead	36.5	43.9	70.9	85.3	193.3	267.5

2. Other	101.2	137.9	183.3	348.5	596.5	744.1
2. National Universities Commission	575.0	655.1	655.1	748.1	3266.7	3497.5
a. Personnel	414.2	523.8	358.0	429.0	1826.7	1953.5
b. Overhead	160.8	131.3	297.2	319.2	144.0	1544.0
3. National Board for Technical Education	77.7	91.1	91.1	162.5	807.4	1037.1
a. Personnel	33.9	60.3	60.3	105.1	456.7	584.4
b. Overhead	43.7	30.8	30.8	57.4	350.7	452.7
4. Nat'l Comm. For Colleges of Education	22.3	89.7	89.7	120.8	555.7	822.0
a. Personnel	12.3	48.8	48.8	74.9	422.9	612.2
b. Overhead	10.0	40.9	40.9	45.9	132.8	209.8
5. Primary Education Commission ^{a/}	0.0	4.5	9.3	0.0	0.0	6.0
a. Personnel	0.0	3.0	4.1	0.0	0.0	0.0
b. Overhead	0.0	1.5	5.2	0.0	0.0	6.0
6. Primary Education Scheme	800.0	800.0	0.0	0.0	0.0	0.0
a. Personnel	0.0	0.0	0.0	0.0	0.0	0.0
b. Overhead	800.0	800.0	0.0	0.0	0.0	0.0
7. National Library	3.0	4.5	12.8	15.5	37.8	44.0
a. Personnel	1.7	3.5	6.8	9.5	22.8	25.5
b. Overhead	1.3	1.0	6.0	6.0	15.0	18.5
8. Youth Development ^{b/}	..	..	..	328.9	483.3	813.9
a. Personnel	..	..	..	0.9	1.7	1.7
b. Overhead	..	..	..	328.0	481.6	812.1
B. Capital	221.9	331.7	528.9	496.2	1233.0	2420.7
1. Education	100.3	113.2	140.3	139.9	506.4	676.4
2. National Universities Commission	80.0	93.2	76.3	97.2	700.0	1200.0
3. National Board for Technical Edu.	40.0	40.0	34.6	42.0	90.0	192.0
4. Nat'l comm. For colleges of Edu.	0.0	13.3	30.4	45.0	90.0	192.0
5. Primary Education Commission	0.2	0.5	0.0	0.0	0.0	0.0
6. National Library Board	1.5	1.6	2.5	50.0	50.0	60.0
7. Other Education	0.0	70.0	244.8	100.0	0.0	0.0
8. Youth Development	..	..	..	22.1	96.6	100.3

a. Recorded in approved budget as part of the FMEYD in 1994.

b. Recorded in approved budget as part of the FMEYD for 1992 - 94.

Source: Approved Budget, various issues.

Table 1.6: Nigeria: Real Recurrent Expenditures per Student
Constant 1985 prices Percent Change 1985 - 1990

	1985	1990	
Primary level	65	65	0
Secondary level			
Federal	1187	408	-66
State	219	167	-24
Tertiary level Federal Universities	3911	1606	-59
Federal Polytechnics	1460	1492	2
Colleges of Education	2890	1816	-37

Source: 1985 data from World Bank Report No. 6920-UNI, December 30, 1988; 1990 data are World Bank staff estimates on FMEYD data.

Table 1.7: Nigeria: Nominal Composition of Federal Budget Allocations, 1989 - 94

	1989	1990	1991	1992	1993	1994
Percent of Total Education Allocation						
By economic Use	100.0	100.0	100.0	100.0	100.0	100.0
A. Recurrent	88.6	85.5	70.5	78.0	80.4	75.3
1. Personnel ^{a/}	..	33.8	35.2	37.9	43.6	40.7
a. Ministry	4.5	5.1	6.6	6.8	5.2	5.5
b. Parastatals	..	28.7	28.6	31.1	38.4	35.2
2. Overhead	59.4	51.8	35.4	40.0	36.9	34.6
a. Ministry	7.9	8.8	16.1	22.6	12.2	12.1
b. Parastatals	51.5	43.0	19.3	17.5	24.7	22.4
By Capital	11.4	14.5	29.5	22.0	19.6	24.7
By Institution	100.0	100.0	100.0	100.0	100.0	100.0
A. Ministry of Education and Youth Development	18.8	18.8	30.5	35.9	24.4	24.9
1. Personnel	4.5	5.1	6.6	6.8	5.2	5.5
2. Overhead ^{o/w Grants, Contrib. & subventions}	9.1	8.8	16.1	22.6	12.2	12.1
3. Capital	5.2	4.9	7.8	6.5	7.0	7.2
B. NUC	33.7	32.6	40.8	39.3	53.6	50.1
C. NBTE	6.1	5.7	7.0	9.5	12.1	13.1
D. NCCE	0.0	4.5	6.7	7.7	8.7	10.8
E. Primary Education Commission	0.0	0.2	0.5	0.0	0.0	0.0
F. Primary Education Scheme	41.2	34.9	0.0	0.0	0.0	0.0
G. National Library	0.2	0.3	0.9	3.0	1.2	1.1
H. Other Education	0.0	3.1	13.6	4.6	0.0	0.0
By Educational level (Percent of Total)						
A. Tertiary (UNC, NBTE, NCCE)	39.8	42.8	54.5	56.5	74.4	74.0

- a. Excludes personnel cost recorded as part of grants and subventions.

Source: Approved Budget, various issues.

Fig. 1 **PRODUCTION FUNCTION: $Y = F(K_0, L)$**

