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The Challenge of Teacher Quality and Human Development in Nigeria

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Teaching has been changed from what it used to be in Nigeria. The change has been in structure and quality. The increasing expansion of pupils' enrolments at both the primary and secondary schools has led to the existence of six categories of teachers with different academic qualifications. This paper explored the levels of these qualifications and their influence on Human Development Index (HDI) including Life Expectancy Index (LEI), Education Index (EI), and Income Index (II). The study adopted the descriptive research design by collecting data on the quality of primary and secondary school teachers from ministries of education in 20 of the 36 states in Nigeia. The "Categories of Primary and Secondary School Teachers' Checklist" was given to the planning units of the affected ministries for completion. The responses were then thematically analysed and discussed. It was discovered that the quality of teachers in 80% of the sampled states may be incapable of boosting the HDI of the states in Nigeria. This is because of the relatively high percentage (15%) of voluntary corps members and part-time teachers (state-organised employment opportunity programme) employed particularly at the secondary school level in the south-west; and high percentage of unqualified teachers in the northern states (up to 76% in Bauchi State). It was concluded that specific guidelines for teachers' recruitment at both primary and secondary school levels be legislated upon and enforced across the states in Nigeria in order to ensure improved HDI.

Keywords: Life Expectancy Index (LEI), teacher quality, Income Index (II), qualifications, Education Index (EI)

Introduction

In its 2008 edition of the World Bank Report, the World Bank ranked Nigeria 61st in the formal unemployment scale in the world with 4.9% unemployment rate (Word Bank, 2008). This has further worsened the poverty rates in Nigeria since unemployment is a major determinant of poverty rates.

The three major stakeholders in the public education industry are teachers, clients, and government. The effectiveness of collaborative efforts of these stakeholders however rests most on the teachers and their inputs which are directly related to their quality. Teacher quality, in this paper, is discussed using the indicator of qualification. Two of the hallmarks of teaching are the knowledge of content and the technology of pedagogy.

These are the hallmarks of the training programme of teacher education which the unqualified teachers may not possess. These competencies are further advanced by Perresnoud (1999) with managing student learning progression, working in teams, and tackling professional duties and ethical dilemma. These, to a large extent, predetermine teachers' levels of productivity in Nigeria; teachers with various qualifications are

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employed. These include teachers with university degrees (Bachelor of Education (B.Ed.), Bachelor of Arts (B.A.), Bachelor of Arts in Education (B.A.Ed.), Bachelor of Science (B.Sc.), Bachelor of Science in Education (B.Sc.Ed.)), teachers with Nigeria Certificate in Education (NCE), teachers with Higher National Diploma (HND), and teachers with Ordinary National Diploma (OND). Teachers with teaching qualifications (B.Ed., B.Sc.Ed., or B.A.Ed.) and NCE holders are further subdivided into permanent and voluntary corps cadre organized by the state governments for participants to teach for two years on a salary usually not higher than NGN10,000 a month as found in Ondo, Osun, and Edo states. There is also the National Youth Service Corps (NYSC) (established in 1974) cadre posted to states by the central government to serve in various public and private establishments including schools.

The contribution of schooling to economic growth has remained a topical issue in the discourse on human capital formation since the 1960s (Bowman & Anderson, 1963; Lewis, 1961; UNESCO, 1962; Schultz, 2001 (as cited in Adelokun, Ajayi & Oni, 2010); Denison, 1963; Eicher, 1960; Aromolaran, 2002; Babatunde & Adefabi, 2005; Barouni & Broecke, 2012; Hector, 2006; Saharawati, 2008; Sackey, 2008).

Patrinos (2014) called nations' attention to the need to encourage education at public cost in order to ensure quality, but defined in terms of "public system" which includes households, the private sector, and the government structure. Patrinos (2004) further advocated that the public sector should "learn, disseminate, and regulate" education. Teacher quality is one of those factors which should be regulated. With these, the emphasis should be shifted to disseminating what the private education providers do to their teachers, which have added value and innovation to teacher quality. The six goals of the World Bank Forum in Dakar, Senegal, in 2000, reiterated the need for quality in all aspects of education in member states with the concurrence of the "Education for All" (EFA) proponents. Thus, the EFA programme should be stressed at both primary and secondary education levels (UNSCO, 2014). Teacher quality, in this regard, is perceived from the quantity and quality perspectives. The quantitative aspect of teacher quality focuses on adequacy of qualified teachers, while quality refers to the depth of qualifications of such teachers.

Most of the early authors on economics of education (Eicher, 1960; Denison, 1963) argued for the positive contribution of education to economic growth and human capital development. Schultz (1961) (as cited in Adamu, 2003) itemized five ways of developing human capital as:

(a) Investment in health facilities and services;

(b) On the job training in form of apprenticeship;

(c) Formally organized education at all levels;

(d) Study programmes, such as agricultural extension (in form of agriculture education);

(e) Migration of individuals and families to adjust to changing job opportunities.

It was observed that, of these five means of developing human capital, the last three are associated with schooling or formal education. Formal education, at the primary, secondary, and tertiary levels, has the potential of widening job opportunities, increasing income, and by so doing, widening access to some expenditure, and thereby increasing consumption (Adelokun, Ajayi, & Oni, 2010).

All these are based on the assumption of taking teaching and teacher quality as given. In the Nigerian context, despite the promulgation of Universal Basic Education (UBE) Act in 2004, which makes the first nine years of schooling free and compulsory, the number of out-of-school children, exacerbated by high repeater and drop-out rates, increased from 6,000,000 in 2002 to 9,000,000 in 2011 and projected to 10,500,000 in 2014 (United Nations International Children's Emergency Fund (UNICEF), 2012). Yet, teachers of various

categories are employed in most of the 36 states annually to replace the retired ones. It was argued here that the level of influence which education has on the economy is a function of the quality of teachers available for the process when the teaching-learning process is perceived from the systems theory perspective.

In the measurement of human capital index, various models have been adopted (Griffin & Knight, 1990; United Nations Development Programme (UNDP), 1990). Since macro-economic variable of Gross Domestic Product (GDP) per capita has not shown sufficient proof of the standard of living of Nigeria, the indicators of human development, such as Life Expectancy Index (LEI), Education Index (EI), and Income Index (II), focus on micro-economic variables. These are treated in turns below.

Life expectancy is defined (in statistical sense) here as the average age which an individual who is of x age has left before he dies at age $x + u$, where u is unknown but fixed as average due to previous analysis of the country.

Nigeria's LEI increased from 47.56 years in 2008 to 51.9 years for the total population in 2011. This, according to the UNDP (2012), was because of improved provision of potable water, sanitation, and child mortality. Health education, which is carried out by teachers and government agencies, thus paid off. However, this was at the national level. Across the states of Nigeria, the LEI varies from region to region. UNDP (2014) reported a substantial improvement in the LEI in the southern region of Nigeria but a worsened condition in the northern states. This may not be unconnected with the preponderance of unqualified teachers in both primary and secondary levels of education in most of the northern states.

In spite of the much-advanced arguments for the role of education in the reduction of poverty in countries (Weisbrod, 1963 (as cited in Adelokun, Ajayi, & Oni, 2010); Colclough, Kingdon, & Patrinos, 2009) supported by evidences from the experience in advanced countries, the status of Nigerian education system, even when the nation introduced free education at all levels during the military era, has not alleviated poverty in the country. The Human Development Index (HDI) including LEI, II, and EI has been worsening over the recent years (2005-2012) while LEI has been rising, though slowly, due to the privatization of the health sector and access to health education in Nigeria. These unfavourable trends in the three indicators have culminated in worsened standard of living and higher poverty rates. With education on the concurrent list, state governments have saddled themselves with the establishments of more secondary schools for both political patronage and/or necessity. To meet the needs of the teeming secondary schools, teachers of various categories are employed. There is doubt however that whether these teachers could meet the quality criterion for improving lives in terms of LEI, EI, and II of the products of these schools. This study examined the quality of secondary school teachers in Nigeria and its influence on the development of the products of secondary schools in Nigeria. This was with a view to locating the nexus between the quality of teachers in Nigeria's secondary schools and the indicators of LEI, EI, and II.

Method

The study focused on the nexus between human development and education which was defined as schooling by exploring the levels of education across Nigeria and the three indicators of human development. This was with a view to delineating how teacher quality would assist in achieving improved LEI, II, and EI in Nigeria.

The study adopted a descriptive research design. The population covered 36 states in Nigeria while proportionate random sampling technique was used to select 20 states with seven, 10, and three states sampled in the south, north, and west respectively. Data on quality of teachers in Osun State secondary schools in

Nigeria were collected from the State Ministry of Education. These were thematically analysed and discussed against the backdrop of the HDI of Nigeria using Ghana as a reference point. This paper focused on 20 of the 36 states of Nigeria whose data on secondary education were available. The 2009 data on primary education from the Federal Ministry of Education were of essence. The data on secondary education centered on Osun State whose details were also available.

Results

The secondary data gathered on Ghana and Nigeria's LEIs are presented in Table 1.

Table 1

LEIs of Nigeria and Ghana (2001-2012)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nigeria	51.56	51.07	50.59	51.01	50.49	46.74	47.08	47.44	46.53	46.94	47.24	47.56	52.05
Ghana	57.42	57.24	57.06	56.53	56.27	58.47	58.87	59.12	59.49	59.85	60.55	61	61.45

Note. Source: Adapted from World Bank (2013).

A critical look at the LEIs of Nigeria above shows a steady decline from 2000-2009 before the peak of 52.05 in 2012. The decline might be as a result of multiple factors, but quality education which comes from the use of quality teachers is not exempt. On its own part, Ghana recorded slight decreases from 2000 to 2004 (from 57.42 to 56.27) and gradual increases till 2012 (61.45). It is argued here that the quality of education of the citizenry in both countries accounts for the observed status. The quality of education is a product of quality teachers.

Data on quality of teachers were also collected from the ministries of education of 20 of the 36 states in Nigeria (see Table 3).

Table 3

Quality of Primary School Teachers by State and Qualification (2009)

S/N	State	Graduates above NCE	Below NCE	Others	Unqualified (%)
1	Abia	7,048	5,306	2,188	43
2	Bayelsa	1,934	2,414	170	56
3	Cross River	8,334	3,096	2,471	40
4	Ebonyi	2,973	2,519	1,441	63
5	Edo	8,219	2,833	1,957	26
6	Imo	12,379	4,484	2,986	27
7	Rivers	6,696	1,874	1,518	23
8	Adamawa	5,579	8,564	2,504	61
9	Bauchi	2,930	9,474	2,196	76
10	Benue	14,601	7,030	3,830	32
11	Borno	5,157	5,974	1,971	54
12	Gombe	2,969	5,382	1,479	64
13	Jigawa	2,261	6,059	1,473	73
14	Kano	6,473	13,198	3,483	67
15	Katsina	2,981	6,359	1,654	68
16	Sokoto	2,021	4,042	1,074	67
17	Zamfara	1,249	2,964	746	70
18	Oyo	24,679	6,698	5,556	21
19	Ogun	14,893	6,187	3,733	29
20	Osun	13,634	2,906	2,929	18

Note. Source: Extracted from Federal Ministry of Education (2010), Abuja, Nigeria *Statistics Digest*.

In the 20 states under focus in the study, Bauchi State had the highest percentage (76%) of unqualified teachers in its primary school system in 2009. This was closely followed by Jigawa (73%), Zamfara (70%), Katsina (68%), and Kano and Sokoto (67%). In the educationally advantaged states (Osun, Oyo, and Ogun) in the south-west region, Oyo State had 21%, Ogun 29%, and Osun 18%. The northern part of Nigeria—Adamawa and Gombe states, had 61% and 64% of their primary school teachers unqualified respectively. This situation certainly could have become even worse with the uncontrolled increase in the birth rate, thus evoking an appointment of unqualified teachers or teachers with high qualifications but low remunerations in the guise of "state corps".

The study also focused on one of the educationally-advanced states in Nigeria—Osun State (see Table 4).

Table 4

2012/2013 Categories of Teachers in Public Secondary Schools by Type and Local Government in Osun State

S/N	Local government	Permanent teachers			Parent-Teacher Association (PTA), Osun Youth Empowerment Programme (OYES), and NYSC			Total number of teachers		
		M	F	T	M	F	T	M	F	T
1	Atakumosa East	49	7	56	53	45	98	102	52	154
2	Atakumosa West	80	34	114	8	3	11	88	37	125
3	Ayedaade	162	67	229	72	71	143	234	138	372
4	Ayedire	53	29	82	51	27	78	104	56	160
5	Boluwaduro	47	15	62	77	52	129	124	67	191
6	Boripe	63	35	98	92	62	154	155	97	252
7	Ede North	61	51	112	82	57	139	143	108	251
8	Ede South	113	21	134	48	25	73	161	46	207
9	Egbedore	53	59	112	44	49	93	97	108	205
10	Ejigbo	136	50	186	132	78	210	268	128	396
11	Ife Central	35	105	140	44	81	125	79	186	265
12	Ife East	97	78	175	71	61	132	168	139	307
13	Ifedayo	22	4	26	25	17	42	47	21	68
14	Ifelodun	34	45	79	24	45	69	58	90	148
15	Ife North	91	35	126	73	71	144	164	106	270
16	Ife South	113	21	134	48	25	73	161	46	207
17	Ila	52	39	91	48	38	86	100	77	177
18	Ilesa East	90	200	290	144	201	345	234	401	635
19	Ilesa West	65	149	214	95	86	181	160	235	395
20	Irepodun	16	10	26	99	93	192	115	103	218
21	Irewole	131	65	196	96	63	159	227	128	355
22	Isokan	74	50	124	167	70	237	241	120	361
23	Iwo	71	101	172	26	41	67	97	142	239
24	Obokun	78	27	105	47	41	88	125	68	193
25	Odo Otin	127	56	183	96	63	159	223	119	342
26	Ola Oluwa	52	20	72	30	14	44	82	34	116
27	Olorunda	139	199	338	104	230	334	243	429	672
28	Oriade	86	54	140	75	57	132	161	111	272
29	Orolu	34	32	66	70	55	125	104`	87	191
30	Osogbo	97	336	433	278	389	667	375	725	1,100
31	Ife East Area Office	50	39	89	25	21	46	75	60	135
	Overall total	1,366	1,433	2,799	1,521	1,558	3,079	2,887	2,991	5,878

Note. Source: Osun State Ministry of Education (2013).

The data reflect four categories of teachers in Osun State. Ifedayo local government area (LGA) had as few as 26 permanent teachers and 42 other teachers; Ifelodun LGA had 79 permanent teachers representing 53.3% of the total number of teachers. Osogbo, the state capital, had 433 permanent teachers (39.4% of the total number of teachers). In all the LGAs, Ife East Area Office recorded 65.9% as permanent teachers. This made the Area Office to fare best in terms of the existence of permanent teachers. Atakunmosa LGA was the worst in this regard: Only 0.9% of the teaching staff in secondary schools were permanent while Odo Otin, Oriade, Ejigbo, Ede South, and Ede North had 53.5%, 51.5%,47%, 64.7%, and 46.75% respectively in the state.

Discussion

The LEI is a variable which measures at birth the expected life span of a citizen. It is much affected by level of health care and the political terrain of a country (absence of internal dispute or external aggression resulting in loss of lives). There is no doubting the fact that the LEI, the EI, and the II have been relatively low in Nigeria. These culminated in the assessment of Nigeria by UNDP (2014) as one of the six with the lowest HDI among the petroleum exporting countries. The indicators highlighted above deserve some attention.

There is no doubt that the health care status of most countries has improved but epidemics, such as HIV/AIDS and recently the "Ebola" epidemic, have decimated the population in some African countries. Access to health facilities, number of patients per bed-space, and number of patients per doctor are indicators which have been staggering in African countries. Regarding teacher quality in the selected states, the implications of the dichotomy cannot be overemphasized. The "permanent teachers" are majorly qualified teachers with B.Ed., B.Sc.Ed., B.A.Ed., B.A./BSc. plus Post Graduate Diploma in Education (PGDE), HND plus PGDE, or awaiting PGDE results. The second category in columns 6, 7, and 8 is relatively "non-permanent teachers". Some of these non-permanent teachers are NCE holders, B.Ed, B.Sc.Ed., B.A.Ed., and HND holders who are remunerated from the PTA coffers, the OYES are paid NGN10,000 per month by the state government while the NYSC cadre are remunerated NGN19,500 by the Federal Government of Nigeria. These variations in remunerations have implications on productivity and invariably the national income since the consumption patterns of individuals are dependent on the disposable incomes. This is represented in the equations below:

$$Y = C + I + G + X - M$$
$$Yd = Y - \mathrm{T}$$
$$Yd = f(Y)$$

where, Y = National/personal income; C = Consumption; I = Investment; G = Government expenditure; T = Tax; and Yd = Disposable income.

Not only that, the use of a large number of temporary teachers in the secondary schools may appear cost-effective in the market run, but resource-wasting in the short and long run. This is because declining productivity as a result of short-changing of employees by their employers may lead to students' failure (a form of wastage), which eventually affects the disposable income (Yd) at both the micro and macro levels.

Akin to this is the effect of the use of unqualified and "discomfited" teachers on students' higher repeater rate which increases both the private and social costs of education. These increases have a multiplier effect on the rate of returns (RoR) to their investment in education.

This is measured by:

$$\text{ROR} = \frac{B - C}{C}$$

where, B = Benefits; and C = Costs.

Though Cameroun recorded zero rate of return to primary education (Jacques, 2006), positive *RoR* was computed for secondary education. Aromolaran (2002), however, computed positive *RoR* for both levels of education in Nigeria. This can be if repeater rates are reduced to the barest minimum.

The export (X) status at the macro level is also indirectly grossly affected with the use of unqualified teachers. This has reference in the low productivity levels presumed to come from their products. Necessary skills capable of engineering higher productivity are possessed by teachers who are trained and satisfied on the job.

Recommendations and Conclusion

This article examined some key issues bothering on the connection(s) between human development and education. Human development was discussed under its indicators of LEI, EI, and II. It was observed that most states in northern Nigeria had many unqualified teachers in their primary schools. It was equally noted that the existence of unqualified teachers in 80% of the states in Nigeria would not help to improve life expectancy of the citizenry; the incomes of the citizens would be low if low productivity caused by near absence of essential skills in unqualified teachers is not checked; the use of "private corps" as practised in three states of the south-western Nigeria would discount productivity and reduce disposable incomes.

In trying to examine the coordinates of human development and quality teachers, this paper has provided insights into the need for quality and permanent teachers in both primary and secondary levels of education in Nigeria. It has also called the attention of policy makers to see beyond state education but reason along education and its role in the macro-economy. States therefore should comply with minimum standards in the employment of teachers. Only a virile teacher quality can assist in developing human capital with relevant skills, as well as guarantee human development. Though the practices of teachers would go a long way to support that quality teachers are better and necessary indicators of anticipated quality outcomes in secondary school products, the qualifications of teachers acquired through an efficient teacher education system in colleges of education (which are empowered to prepare teachers for the junior secondary schools) and universities (which train teachers for senior secondary schools in Nigeria), can be taken as a necessary condition for such quality outcomes.

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