

PREDICTORS OF PRODUCT QUALITY IN COLLEGES OF EDUCATION IN NIGERIA

T. M. Adewale

Department of Educational Management & Curriculum Studies

Tai Solarin College of Education, Omu- Ijebu

Ogun State, Nigeria.

Email: tmade2008@yahoo.com,

+2348033283615

E. O. Kayode

Tai Solarin University of Education, Ijebu-Ode

Ogun State, Nigeria.

+2348034106497

Abstract

*The study appraised the predictors of product quality in colleges of education in Nigeria and quality of NCE graduates in Secondary school level. Three research hypotheses were formulated to carry out the study. Six colleges of education drawn from both public and private colleges of education were used. Thirty-six Principal Officers were used as respondents to the 15-item questionnaire that was used. Simple percentages and means were used to analyze the data. The result shows that there was no significant difference in the position of physical facilities in the sampled Colleges of Education. It also Showed that all the four available educational resources when combined, have no correlation with quality of NCE graduates ($r = .066$, $N = 161$, $P > .05$). Therefore, availability of educational resources had not influenced quality of colleges' graduates. The result further showed that there is a positive significant relationship between Availability of teaching staff and rank compositions with the quality of university graduates in selected institutions ($r = .475^{**}$, $N = 161$, $P < .05$). This finding was not surprising because the situation in all the sampled Colleges of Education appears to be the same.*

Introduction

The inadequate provision of resource inputs for the education system has affected the productive capacity of the system and its products quality. Obanya (1999) reported that the quality of education offered by higher education institutions in the recent times has deteriorated substantially and this has made the quality of many Nigerian Colleges graduates to reduce. From the foregoing, it can be concluded that the products quality of any educational system is a function of the quality and quantity of resource inputs devoted to the system. Apart from this, there are some other factors that can contribute to the determination of the quality of products of any educational system. Such factors are: political pressure, insufficient funds, student population explosion, deteriorating standard of available physical facilities and regular labour strike and students' unrest are peculiar problems in Nigeria that poses serious threat to the production of quality outputs in the educational system. Longe (1999) stated that the quality of education includes the learning environment and students' outcome. Therefore, to measure quality, Babalola, Adedeji and Erwat (2007) said that it involves two broad approaches. They said that one involves examining the 'outputs' from the education system. The other involves examining the 'educational processes' which produce these outputs. According to them, these approaches can be used separately or together. From the input side, quality of education can be gauged through students' capacity and motivation to learn and the curriculum or the subjects to be learned (Babalola, et al, 2007). The output indicators for measuring quality of education would be the qualifications and the levels of competence in performance of the outputs (students) using the knowledge and skills acquired. In addition, the effective performance of the outputs in the job competitive market, their impact on moral conduct, and serviceability in the society are also indicators for measuring the quality of education (Babalola, et al, 2007). This illustration has indicated how quality can be measured based on the efficiency of the system in terms of resource inputs provided for the system and the performance capacity of its products.

Teachers are the hallmark of any educational system. They are both the interpreters and Implements of the educational curriculum. The success or failure of any educational programme depends largely on the quality and commitment of teachers at that level of education.

This is attested to by the Federal Government of Nigeria as contained in the National Policy on Education (NPE: 2004:39) when it states "... No education system may rise above the quality of its teachers..." The NPE (p. 39) also stipulates the Nigeria certificate in Education (NCE) to be the minimum teaching qualification for Nigeria. The objectives of teacher education as contained in the NPE, 2014 (p. 39) are to: Produce highly motivated, conscientious and efficient classroom teachers for all levels of the educational system, Encourage further the spirit of enquiry and creativity in teachers; Help teachers fit into the social life of the community and society at large and to enhance their commitment to national goals; Provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situations, and Enhance teachers' commitment to the teaching profession. An analysis of the objectives of teacher education shows that it centers on quality, adaptability and commitment to the teaching profession. The goal here is to make sure that quality assurance is maintained in the educational system for effective and efficient production of quality products. The most important predictor which affects Product Quality is classrooms, furniture and equipment. Marianhi (1979) commented that a simply, dignified, artistic exterior is suggestive of the purpose for which school building exists, make the scholars proud of their school and will have an impressive influence on their Product Quality. The magnitude of instructional resource make teaching more productive; give instruction a more scientific base; make teaching and learning individualistic; make instruction more powerful and immediate; and finally make attainment of objectives easier. The availability in quality and quantity of suitable material, physical resources, in good supply, are crucial for the academic Product Quality. Ramon-Yusuf (2002) viewed quality assurance criteria as a global issue. According to him, no educational system is inferior to another because every higher education always strives towards common ultimate goal which is "fitness for purpose" and to achieve this purpose, tertiary institutions should embrace all their functions and activities including teaching academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. This shows apparently, how comprehensive and important the quality assurance criteria are. Tertiary institutions with a very high quality standard would feed the

society with similar standard, in terms of products quality (Ramon Yusuf, 2002). When there is depreciation, in terms of standard and quality in the system, the productivity and the products from the system will be negatively affected, thereby affecting the society adversely in the same manner. The quality of the products that emerge from an efficient educational system will be more productive, in terms of contributing to the growth and development of the society, than the products from an inefficient system.

Therefore, to promote the quality product of the system by ensuring the effective allocation, distribution and utilisation of resource inputs devoted to the educational system and to guarantee its successful operations for high quality products, Bogue and Hall (2003) identified seven key areas which institutions, governments, practitioners, professional bodies and associations have been using to promote quality and progress in their practice. These are accreditation, rankings and ratings, outcomes, licensure, professional reviews, follow-up studies, and total quality management.

Statement of the Problem

This study is to make sure that quality assurance is maintained in the educational system for effective and efficient production of quality products. No educational system is inferior to another because every higher education always strives towards common ultimate goal which is "fitness for purpose" and to achieve this purpose, tertiary institutions should embrace all their functions and activities including teaching academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment.

Hypotheses

- HO₁: There is no significant relationship between available educational resources and quality of NCE graduates in the selected Colleges of education.
- HO₂: There is no significant relationship between Availability of teaching staff and rank compositions with the quality of NCE graduates in selected institutions.
- HO₃: There is no significant relationship between pupils' attitude towards learning and the declining of the quality of education.

Review of Related Literature Human Resources

Teachers are the cornerstone or the hub of any educational system. The National Policy on Education states: "no education system can rise above the quality of its teachers" (FGN, 2004:70^a). The qualifications and experience of teacher is a pre-requisite to the quantity of carrying capacity. Inadequate teaching and non-teaching staff is a bane to successful implementation of carrying capacity and teachers are the major factor in Product Quality. Teachers are the pivot of any educational system, and that upon their number; their quality and quantity depend on the success of any academic programmes carrying capacity. This study noticed high student-teacher ratio in some of the Colleges of Education. This is as a result of non-recruitment of additional teaching staff to meet up with the increase in the enrolment; this in turn affects academic programmes carrying capacity.

Teaching Staff

Teaching is the bedrock of knowledge and the quality of teaching among other things depends on the quality of teachers. The quality of teachers on the other hands is influenced by their qualifications and experience. We shall examine quality of teaching in the higher institutions in terms of its inputs. The issue of brain is affecting the quality of teaching negatively because it is becoming difficult to get a replacement those who will be as highly qualified and experienced as those who are leaving. This situation is worse in disciplines such as medicine, engineering and the science. The rise in student enrolment has not been matched by the growth in the number of teachers available. Nation -wide, the number of academic staff increased by an average of 2 percent each year between 1988 and 1994 while student numbers grew at the rate of 12 percent per year. The average teacher/student ratio was 1:14 in 1988 and was 1:21 in 1994 and increased to 1:31 in 2005 (NUC, 1995; NMB, 2006).

Physical/Material Resources

Physical and material resources are other predictors of academic programmes carrying capacity. This study discovered a very positive and significant relationship between instructional resources and academic programmes carrying capacity. Universities endowed with more material resources carry more students than universities that are

less endowed. It was realized further that instructional materials increase teachers' effectiveness in the classroom because they augment, complement and supplement their effort. The most important predictor which affects Product Quality is classrooms, furniture and equipment. Marianhi (1979) commented that a simply, dignified, artistic exterior is suggestive of the purpose for which school building exists, make the scholars proud of their school and will have an impressive influence on their Product Quality. The magnitude of instructional resource make teaching more productive; give instruction a more scientific base; make teaching and learning individualistic; make instruction more powerful and immediate; and finally make attainment of objectives easier. The availability in quality and quantity of suitable material, physical resources, in good supply, are crucial for the academic Product Quality. Proper planning should be done on school facilities and there should be a direct bearing between a range of resources (physical and material) and Product Quality. Adequate and qualitative facilities are required for an effective learning and teaching to take place which brings about Product Quality. School facilities are the operational inputs, which enable a teacher to achieve some level of instruction efficiency and effectiveness. School facilities can be said to be the physical and spatial enablers of desired results. School buildings that can adequately provide a good learning environment are essential for product quality and availability of resources is an important variable in Product Quality.

Financial Resources

One of the greatest challenges that appear to face the Nigerian universities is that of underfunding. Finance is so crucial to any organization as it continues to dominate discussions on state of university education in Nigeria. The establishment and the running of tertiary institutions are capital intensive. Running the institution, therefore, requires significant investment in providing and maintaining a basic level of infrastructure – such as facilities, staff salaries, and residential housing. Universities in Nigeria have been supported largely by government kinds in the time pasts, but with economic downturn, Nigerian universities have been grossly under-funded and this had invariably led to the quality of university education being adversely affected. Some of the colleges of education in Nigeria are characterized

by poor infrastructures, overcrowded classrooms, incessant strike and students' unrest. As observed by Nwagwu (2003:7), one impressive feature of educational institutions in Nigeria since independence has been the phenomenal increase in number of students and students' population. For this magnitude of expansion and development to be effective, there must be massive investment of resources in the form of funds. Unfortunately, all indicators point to a chronic gross under-funding at the school system. Furthermore, Nwagwu reported that this serious shortfall and inadequacies in education funding manifest in over-crowded classrooms, equipped workshops, libraries and laboratories, where they exist at all. We also have a lot of indiscipline, frequent strikes and poor job productivity due to low morale and poor job satisfaction among school personnel; and un-conducive learning environment for students.

Alani (2005: 42) opines that many parents/guardians that can afford the fees in private primary and secondary schools prefer them to public schools have grossly inadequate physical, material and human resources needed to give quality service. This problem he asserts arose from the age-long neglect of the public school system through inadequate funding of education. Ukeje (1991) is of the opinion that most of our educational institutions are sub-standard largely because of poor financing. He concludes: ...education is the key that unlocks the door to modernization. But the quality and efficiency of the key depend largely on its design and fabrication, both function of financial provision. Clearly, we cannot have quality education without adequate funding.

Enrolment

In terms of enrolment into Colleges of Education in Nigeria, it has witnessed growth since its inception. The total student population of Colleges of Education has grown from a mere 210 students in 1948 to 1995 in 1960 and increased to 40,000 in 1976 when the Universal Primary Education (UBE) scheme was introduced. It was 172,000 in 1988 when the first set of graduates from the 6-3-3-4 system of education entered universities. By the year 2000, the population stood at 448,000 and was 1,237,520 in 2004 (NMB, 2006; NUC, 2006). The trend shows an increase in the teacher-student ratio indicating that teachers were coping with more students than the NUC norm of 1:9. It

shows a shortage in the supply of academic staff in the Nigerian universities. This coupled with the aforementioned problems aids decline in the quality of teaching. In order to control the growth in the student enrolment the first generation universities were restricted to a growth rate of 2.5 percent a year, second generation universities to an increase of 10 percent annually and the third generation universities to an increment of 15 percent. The JAMB a body establish to provide a central admission process for all Nigerian tertiary institutions help to ensure that the admission policy of 6 0:40 Science/Arts ratio is maintained. It is found from JAMB's statics that only 10 percent of those qualified could be offered places in the university this led to the establishment of private universities as well as the open universities of Nigeria. This has given rooms for more candidates to have access to higher educations.

The State of Product Quality in Colleges Education

Nigerian colleges of education find it difficult to meet their expectations especially in terms of the quality of teaching and researching. Lack of adequate funding has clearly impaired the performance and standard of Nigerian Colleges Education as the vicious circle inadequate funds, helplessness, frustration, and recrimination is continually fed in a mutually reinforcing manner (Kayode, 2002).

Enrolment Explosion: This over enrolment has become a common feature in the Nigeria Colleges Education. Many of the facilities on ground are being overstretched. A situation that will surely affect the quality of colleges of education in Nigeria, since excess usually leads to overcrowded classrooms, ineffective teaching and examination malpractices.

Inadequate Physical Facilities: The state of physical facilities in many of the Nigerian universities is revealed by the NUC (2006) report that facilities in Nigerian universities are in poor shape, the available physical facilities are severely overstretched and ill maintained. Hence, with this development quality seems not to be guaranteed in the Nigerian universities system.

Inadequate staffing: One of the reasons for low level of quality assurance in Nigerian universities is a severe shortage of teaching staff. Report from NUC, 2006) shows that only 16,856 out of 72,704 staff in the federal universities are academic staff. Many universities in Nigeria are bottom heavy in terms of academic staff mix.

Physical Resources

About 78 percent of the heads of department reported that they were not involved in estimation for physical facilities while 22 percent said they participate in deciding for needed facilities. In the case of control over the identification and provision of physical facilities and in the issue of facilities been flexible and innovative for large numbers all the respondents said that they were not in control neither are facilities flexible enough to accommodate large numbers

Methodology

During the fieldwork, random sampling and structural questionnaires were used for collecting the primary data from 36 respondents. All the respondents were from 6 colleges of education. One hundred (100) questionnaires were distributed and the response rate was 90%. The research instruments were subjected to scrutiny by research experts in order to establish the validity of the research.

Findings

The information from the questionnaires administered with reference to the *predictors of product quality in colleges of education in Nigeria and* quality of NCE Graduates are presented below.

Result of Hypotheses tested

Ho₁: There is no significant relationship between available educational resources and quality of NCE graduates in the selected Colleges of education.

Table 1: Pearson Product Moment Correlation of available educational resources and quality of NCE graduates Availability of educational resources and quality of NCE graduates

Variable	Mean	Std. Dev.	N	R	P	Remark
Product Quality of graduates	49.2655	38.4682	161	.066	.403	n.s.
Available educational resources	82.7143	08.2791				

Ho₁ Accepted – Not Significant P>.05

Table 1: Showed that all the four available educational resources when combined, have no correlation with quality of graduates ($r = .066$, $N = 161$, $P > .05$). Therefore, availability of educational resources had not influenced quality of colleges' graduates. This means that the relationship among the variables is positive and the positions of the four available educational resources (Human resources, financial resources, Physical & Materials resources) in a stance that can effectively influence quality of university graduates in the selected universities in Nigeria. The above table showed that there is no significant relationship between available educational resources and the quality of colleges' graduates. The above table confirm that there is no significant relationship between Available educational resources and the quality of NCE graduates in the selected Colleges ($r = .066$, $N = 161$, $P > .05$). Therefore null hypothesis was accepted.

Ho₂: There is no significant relationship between Availability of teaching staff and rank compositions with the quality of university graduates in selected institutions.

Table2: Availability of Teaching staff, rank composition and quality of NCE graduates Availability of teaching staff and quality of NCE graduates

Variable	Mean	Std. Dev.	N	R	P	Remark
Product quality	49.2655	38.4682	161	.475**	.000	Sig.
Teaching staff quality	409.5466	436.0696				

Ho₂ Rejected –Significant at P < .05

It is shown in the above table 2 that there is a positive significant relationship between Availability of teaching staff and rank compositions with the quality of NCE graduates in selected Colleges of education ($r = .475^{**}$, $N = 161$, $P < .05$). Hence, availability of teaching staff and rank composition had influenced on quality of NCE graduates in the study. Table 2 also Shows that available teaching staff and rank compositions with the quality of NCE graduates when combined, have a positive multiple correlation ($R = .475$). This means that the relationship between available teaching staff and rank composition had influenced on quality of graduates in the study. It is shown in the above table that there is a positive significant relationship between available teaching staff and rank compositions with the quality of NCE graduates in the selected colleges of education ($r = .475$, $N = 161$, $P \leq .05$). Hence, Null Hypothesis is rejected.

H_{03} : There is no significant relationship between pupils' attitude towards learning and the quality of NCE Graduates.

Table 3: Pupils' Poor Attitude towards learning and Quality of NCE Graduates Pupils' Attitude and Quality of NCE Graduates

Response	No. of respondents	Percentages (%)
Strongly Agree	55	61
Strongly Disagree	45	39
Total	90	100

Source: Fieldwork 2013:

Table 3 indicates that, 61% of the respondents are of the notion that, poor pupils' attitude towards learning contributes to the low quality of NCE Graduates, whereas 39% have a different notion. Pupils' attitude towards learning affects the quality of NCE graduates. "A person who is emotionally upset, irritated, sluggish, restless, tired, indifferent or saddened is usually not ready to learn as he should. Most school pupils and students today have found themselves in this ugly situation as a result of which they hardly pay attention to learn in the classroom, talk more of doing home exercises and learning on their own.

Summary of Findings

There was no significant difference in the position of physical facilities in the sampled Colleges of Education. This finding was not surprising because the situation in all the sampled Colleges of Education appears to be the same. Without adequate physical facilities, one begins to wonder how effective teaching and learning will take place and the issue of product quality would also be at stake. For Product Quality to be realised, the essential physical facilities must be available. Without adequate physical facilities, no meaningful product quality can be achieved. With the tremendous increase in enrolment, one should have expected government authorities to match this large number of students with appropriate and adequate facilities. Since it appears that the problem of massification has come to stay, there is an urgent need for something to be done about the provision of physical facilities so that quality will not be compromised. For proper carrying capacity to take place, there must be adequate infrastructure and in many Colleges of Education institutions in the country, the lecture halls are overcrowded and many of the students stay outside because of inadequate accommodation. Even those who are seated inside are not comfortable because there are no air conditioners or fans and classrooms are poorly ventilated and not well lit.

Recommendations

In view of the findings from the study, the study recommendations are presented to the Federal, State and Local Government for consideration and necessary actions. It is the positive view of the researchers that, if the recommendations are implemented, they will improve the quality of NCE Graduates that will teach in both primary and Secondary Schools in Nigeria

- i. Government should embark on massive thorough training and recruitment of qualified teachers to serve in both primary and secondary schools in the country, apart from training of those in the field.
- ii. Modern Instructional materials/library facilities should as a matter of urgency be provided for colleges of education and supplied to both primary/ secondary schools to facilitate teaching and learning activities.

- iii. Teachers should be handsomely rewarded through good and mouth watering salary package. The general conditions of their services should be improved to enhance productivity.
- iv. Pupils must change their poor and halfhearted attitude towards learning. They should be properly supervised and motivated by parents and teachers to learn with enthusiasm both at school and at home respectively.

Conclusion

In conclusion, based on the data collected and its analysis so far, the major predictors of product quality in colleges of education in Nigeria can be drawn thus: Without iota of doubt, it is clear that there is generally a decline in the quality of Education in Nigeria, therefore, all stakeholders including government, school inspectors and supervisors, parents, pupils and the private sector are to put up combined effort to work together untiringly to stem the tide of academic quality in order to bring sanity to the educational sector.

References

- Adedeji, S. O. (2007). *Access, Equity and Quality in Higher Education*. NAEAP Publication, pp. 241-253.
- Adesina, C. (1977). *Declining Quality Education in History of Education in Nigeria*. NPS. Ibadan: Educational Publishers Ltd.
- Adesina, C. (1988). *The Development of Modern Education in Nigeria*. Heinemann Educational Books NIG. LTD Ibadan, Nigeria.
- Akpa, G.O (2005) "Public and Private sector contributions to Access and Equity in Nigeria Education" in Nigerian Journal of Educational Administration and Planning, (NAEAP) Vol. 15.
- Amusan, T.A. (2005) Parents/guardians' view of private primary Education in Nigeria: "The Osun experience" in Nigeria Journal of Educational Administration and Planning, Vol. 5, 1.
- Arubayi, I.A. (1985)"The relationship of selected demographic characteristics and leadership styles of principle in Bendel State, Nigeria" in Benin Journal of Social Science. Vol. 1.
- Baikie, A. (2002). *Recurrent lessons in Nigerian Education*. Zaria, Nigeria: Tamaza Publishing Company Ltd.
- Babalola, J.B. 2006: Babalola Canvases Differential Fees in Varsities. *The Punch Newspaper*, March 14.
- Babalola, J. B. (2007): *Educational Planning Statistics and Models*. Ibadan: Keye-Yek Printing Production.

- Babalola, J. B., Adedeji, S. O. and Erwat, E. A. (2007). Revitalizing quality higher education in Nigeria: options and strategies in Babalola, J. B.; Akpa, G. O.; Ayeni A. O.; and
- Bogue, E. and Hall, K. 2003: *Quality and Accountability in Higher Education*, Routledge, London.
- Fafunwa, A.B. (1974): *History of Education in Nigeria*. London U.K: George Allen and Unwin.
- Esu, A.E. (2000) "Towards quality in teacher Education in Nigeria in Quality in Nigeria Education: Agenda for Action. Vol. 10 (1) Port Harcourt, OSIA INT'L pub.
- Fafunwa, A.B. (1969) "The overall Aim of Teacher Education in Nigeria" proceeding of conference on higher level Teachers Training. Lagos Oxford University Press.
- Federal Republic of Nigeria, (2004) National policy on Education. Abuja NERDC press.
- National Teachers' Institute, Kaduna, (2009). Postgraduate Diploma in Education, Module 205 on *Educational Supervision and School Inspection*. pp. 198-204.
- National Teachers' Institute, Kaduna, (1990). Historical Foundation of Education. NTI, Kaduna.
- Obanya, P. A. I. (1999). Higher Education for an Emergent Nigeria. 50th Anniversary Lecture. Ibadan: University of Ibadan.
- Oghuvbu, E.P. (2001) "Teachers Education and National Development" in Nigeria Journal of curriculum and instruction, Vol. 10 (1), Published by National Association of curriculum Theorists (NACT).
- Okafor, F.C. (1988)"Nigeria Teacher Education: A search for New Direction". Enugu: Fourth Dimension publishers.
- Obadia, G.O. (1979). *Essentials of Social Studies for Schools and Colleges*. Lagos and London: Macmillan Publishers.
- Ozigi, A.O. (1977). *A Handbook on Social Administration and Management*. Lagos and London, Macmillan Publishers Ltd.
- Ramon-Yusuf, A. (2002). Higher education in developing countries: Peril or promise Journal of Educational Development, 5.2:61-70.
- Sisk, III (1977) Management and Organization, Brighton, England South West Pub. Co.
- Uche, K.W. and Onyemerekeya, C.C. (1998) Teachers Education foe Nigeria Tertiary Institutions, Awkwa Nuel Centi Publishers.
- Yalokwu, P.O. (1990) "Teachers performance Appraisal in secondary schools: problems and suggestion in Management for Quality Education in Nigeria. A Publication of Nigeria Association for Educational Administration and planning (NAEAP).