Analysis of the Quality of Educational Resources and Effective Instructional Service Delivery in Nigerian Universities

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Abstract

This study evaluated the quality of educational resources vis-à-vis effective instructional service delivery in Nigerian universities. Particularly, the study was carried out in University of Calabar, using five hundred and nineteen (519) students selected through the simple random sampling technique from the fifteen faculties of the University of Calabar. To achieve the purpose of the study, two hypotheses were formulated. A questionnaire titled quality of educational resources and effectiveness of instructional service delivery questionnaire (QEREISDQ) was developed by the researchers, this was subjected to face and content validity by three experts in measurement and evaluation and Administration of Higher education all in Faculty of Education University of Calabar. A pilot test was carried out using forty students from University of Uyo in Akwa Ibom state to establish the reliability of the instrument. Using the Cronbach’s alpha reliability method, the instrument had a reliability coefficient of \( \alpha = 0.79-0.85 \). The instrument was administered to the respondents and retrieved with Zero attrition rate. The data collected was analyzed through means, standard deviation, Pearson product moment correlation and multiple regression analysis. It was revealed among other things that; the quality of educational resources has a significant relationship with effective of instructional service delivery, with the quality of lecturers being the strongest predictor of effective instructional delivery. However, it was also revealed that the quality of library was significantly low and influenced effective instructional delivery negatively. It was therefore, recommended that government and corporate organizations should provide adequate educational resources and promote viral development programmes for lecturers to enhance effective instructional delivery in Nigerian universities.

Keywords: Quality, Educational, Resources, Effective, Instructional, Delivery

Introduction

One of the cerebral functions of schools at all levels is effective teaching and learning or instructional delivery. This is because, the school is a well-structured environment set apart by the society and saddled with the responsibility of transforming individuals through the development of functional knowledge and skills that help them to lead meaningful lives and contribute to the survival of the society at large. However, the school does not exist as an existential vacuum but it survives and operates using essential human and material elements which influences and facilitates
the attainment of the objectives for which it is set up. These elements are technically referred to as “resources”.

According to Undie, Udama, Michael, and Anyoipi (2018) a resource is anything which can be used to create further wealth and contribute to economic activity. This include natural, human and capital goods. Educational resources therefore refer to human, materials, funds, and time at the disposal of educational administrator for the pursuit and attainment of the objectives and goals of education. Educational resources in a university setting include lecturers, administrative staff, buildings, books, library, laboratories, funds, time among other things, used to accelerate goal attainment in universities. Educational resources cover all those materials human and non-human, drawn or photographed, built, manually or electronically operated, books and all forms of related materials used in teaching and learning process (National Teachers Institute, 2006). Akpan and Etor (2015) claim that educational resources in higher education refer to everything needed by higher institutions to achieve its goals and objectives. Hence, the quality of these educational resources is critical to effective instructional delivery.

Quality can be seen as the degree to which a phenomenon conforms to an established standard. Quality according to Juran in Babalola, Adelejia & Erwat (2007) is fitness for purpose in relation to the user and customer needs. Balola et al further observed that the quality of education can be gauged through inputs, process and output. The inputs here refer to educational resources—teachers, time, fund, teaching aids and infrastructure. They further noted that the quality of educational input can be assessed in terms of: teachers who know how to teach and can actually teach, time for learning, and the requisite tools for teaching and learning. This is very essential because the quality of inputs will affect the quality of the process and output of school in the long run. It therefore follows that; the quality and quantity of educational resources/input can influence the quality of educational process (quality of educational services provided to students in the system) and output (quality of graduates).

Similarly, Ohia (2018) opines that the quality of any educational system is an index of the quality of inputs, into the education process. Therefore, the quantity, quality and suitability of educational resources (inputs) of the right type are the basis for assessing the quality of education at all levels and are very essential in the achievement of effective instructional delivery. Nwanna (2000) sees quality in education as scale of input in form of funds, equipment, facilities, teachers and pupils, transactions and output of instruction to which their products are acceptable, desirable, beneficial, effective and efficient from point of view of stakeholders. Ogbodo in Mbon (2015) observed that quality educational resources enable the skillful teacher to achieve a level of instructional excellence that far exceeds what is possible when they are not available. Therefore, poor quality of educational resources jeopardizes and reduces lecturers’ capacity for effective instructional delivery. Sadly, Odia and Omofonmwan (2007) lamented that Nigerian education system is beset with many problems. These include; poor funding, poor educational infrastructures, inadequate classrooms, teaching aids (projectors, computers, laboratories and libraries), paucity of quality teachers and poor polluted learning environments which has negatively affected teaching or instructional delivery of teachers.

Hence, the poor quality of educational resources has continued to occupy several academic discourses with much attention on higher education in Nigeria. This triggers concerns from critical stake holders who bemoan the quality, quantity and suitability of educational resources in most Nigerian universities. This is critical because, universities are engine rooms of knowledge creation
and the drivers of modern technologically innovative knowledge economy. Therefore, poor quality of educational resources results to ineffective instructional delivery and is capable of crippling national economic advancement and the attainment of the objectives and goals of university education. In reality, the attainment of the goals and objective of tertiary education can only be guaranteed by the quality of educational resources and effective instructional delivery (Mbon, 2017). Federal Government of Nigeria in the National Policy on Education (2013) articulated the goals of Nigerian university education to include:

1. Contributing to national development through high level relevant manpower training.
2. Developing and inculcating proper values for the survival of the individual and the society.
3. Developing intellectual capability of individual to understand and appreciate their local and external environments.
4. Acquiring both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society.

FGN (2013) further holds that universities are expected to achieve these goals through teaching, research and dissemination of new information, service to community and serve as knowledge warehouses. By this, effective instructional delivery has been identified as an essential instrument for achieving the goals of university education. Effective instructional delivery is characterized by teachers making use of their knowledge and abilities at work, being particular about teaching methods, getting familiar with teaching materials, encouraging students, creating a fine learning environment and atmosphere, and helping students to achieve performance excellence (Lin, 2001; Korthagen, 2004; Borich, 1994).

Regrettably, a major setback to the achievement of these lofty national aspirations remains ineffective instructional delivery as a result of the poor quality of educational resources available to actors in the system. Therefore, Nigeria education system particularly public schools have continued to face the challenge of delivering effective teaching and impart the relevant skills that enhance learners’ ability to compete globally in the contemporary emerging knowledge economy. These challenges partly arise from the ever-increasing population and increased enrolment, inadequate budgetary allocation to education, shortage of both human and material resources of the right type, quality and quantity. This has adversely affected the capacity to deliver effective teaching and learning services over the years. This is because, students’ population in most Nigerian schools more often than not surpass the capacity of available educational resources. This leads to pressure on existing educational resource (human and materials) which are bearing beyond their capacity and educational specification. Thus, making effective instructional delivery almost a mirage. This is because, without the right type, quality and quantity of educational resources, effective teaching cannot occur.

Human resources in education are the academic and non-academics staff in a university system. Material resources include textbooks, charts, maps, audio-visual and electronic instructional materials such as computers, internet connectivity, radio, television etc. Physical resources include classrooms, lecture theatres, auditoriums, libraries, laboratories, sickbay, among others. While financial resources are monetary inputs available for and expended on the educational system. However, one of the educational resources closely linked to effective instructional delivery is the quality of teachers or lecturers in the system. Teachers are primarily concerned with facilitating student learning and are therefore, responsible for the impartation of desirable knowledge and skills in the learners.
Hence, the quality of teachers or lecturers in a system is critical to the quality of instruction students receive in school. Teacher quality is defined as teacher’s ability to engage in education tasks, with certain characteristics, being able and qualified to conduct teaching activities, arousing students’ interest in learning, and enhancing students’ learning achievements. Ko (2003) believes that teacher quality is a general term for teacher cultivation, professional qualification and abilities. Peng (1999) observed that the content of teacher quality can be categorized into: (1) common quality, (2) professional knowledge and abilities, (3) professional beliefs and attitude, (4) personality and (5) professional subject accomplishment. Wu (2003) divided the aspect of superior teacher quality into three categories: (1) knowledge, (2) abilities and (3) morals. Jian (1997) considered high quality teachers as teachers possessing: (1) knowledgeable cultivation, (2) teaching techniques and experiences, (3) ability to improve students’ learning achievements and (4) promoting school effectiveness (Wright, Horn & Sanders, 1997). Summarizing the results from documentary analysis, it is concluded that, in this research, teacher quality should cover: (1) professional competence, (2) personality, (3) performance responsibility, (4) teacher-student interaction and (5) student problem handling.

The indices of measuring teacher quality as outlined by Owan (2012); Arop, Owan, and Madukwe (2019) are punctuality, time management, academic performance of students, relationship with others, respect for rules and authority, adherence to school norms, effective communication, proper record keeping, and professional behavior. Furthermore, quality teachers have a positive attitude, develop pleasant social/psychological climate in the classroom, have high expectations of what students can achieve, present clear lessons, use different teaching methods, incorporate learners ideas, use appropriate/varied questioning techniques, are good chalkboard managers, use effective disciplinary approaches, understand learners’ individual differences, dress decently, demonstrate good grasp of subject mastery, maintain statutory/non-statutory records effectively (Owan, 2018); and possess other good personal characteristics such as honesty, politeness, flexibility, simplicity, trustworthiness, firm and fairness (Arop, Owan, & Ekpang, 2018; Owan & Ekpe, 2019). Bietenbeck (2017) further maintained that teachers’ quality can also be measured using teachers’ CV or academic qualification, ability to raise students’ scores in standardized exams, teachers score in qualifying exams, and teacher value added (TVA), Teachers’ CV is a criteria used to assess teachers based on their qualification (B.Ed/Sc; M.Ed/Sc; and Ph.D).

Therefore, the higher the qualification attained by a teacher, the better the quality of the teacher. Though most scholars have argued that in most cases higher academic qualification does not translate into quality of teacher. But worrisome is the fact that most lecturers in Nigerian universities do not hold Ph.D. According to Okecha (2014) academic staff mix in most Nigerian universities is bottom heavy with over 70% without Ph.Ds. whereas, the minimum qualification for lecturing is Ph.Ds. Apart from lecturers’ other educational resources which could influence quality instructional delivery in school are also reported to be in acute shortage, dilapidated and not commensurate to student population and in dire state of disrepair. Hence, the need for the study to investigate the influence educational resources and effective instructional delivery.

Statement of the problem

The sole aim of Nigerian university education is the production of high skill manpower to enhance national economic wellbeing. However, one of the most effective instruments for achieving these goals and objective is teaching and or effective instructional delivery as pointed
out in the national policy. Regrettably, the attainment of these goals via effective instructional delivery/teaching has remained a daunting challenge due to the poor quality of educational resources at the disposal of critical actors of the university system.

Researcher’s observation and experience shows that the quality of educational resources at all levels of education nation-wide, and particularly in universities is dismally low. None of these resources is left out; beginning from lecturers, classrooms, libraries, teaching aids, and financial resources. This has adversely affected instructional delivery in most Nigerian universities because, no teacher can teach effectively without the requisite qualification that affords the professional competence to do so. Similarly, effective instructional delivery has become difficult for even highly qualified lecturers due lack of adequate and poor quality of classrooms, teaching aids, libraries, and funds. Consequently, this has affected the quality of university graduates as well as threatened the possibilities of a secured future economic wellbeing, as most graduates have been acclaimed to be regrettably unemployable. Hence the problem of the study is thus stated: what is the relationship between quality educational resources and effective instructional delivery?

Hypotheses

1. There is no significant relationship between the quality of educational resources (lecturers, lecture halls, school library and teaching aids) and effective instructional service delivery.
2. There is no composite influence of quality academic staff, lecture halls, teaching aids, library, and financial resources on effective instructional delivery.

Methods

This study evaluated the quality of educational resources vis-à-vis effective instructional service delivery in Nigerian universities. Particularly, the study was carried out in university of Calabar. The survey research design was adopted for the study, the population of the study was all the students of University of Calabar, the sample for the study was five hundred and nineteen (519) students selected through the simple random sampling technique from the fifteen faculties of the University of Calabar. To achieve the purpose of the study, two hypotheses were formulated. A questionnaire titled quality of educational resources and effectiveness of instructional service delivery questionnaire (QEREISDQ) was developed by the researchers, this was subjected to face and content validity by three experts in measurement and evaluation and Administration of Higher education all in Faculty of Education University of Calabar. A pilot test was carried out using forty (40) students from University of Uyo in Akwa Ibom state to establish the reliability of the instrument. Using the Cronbach’s alpha reliability method, the instrument had a reliability coefficient of $\alpha=.79-.85$. The instrument was administered to the respondents and retrieved with Zero attrition rate. This process was facilitated by the researcher and two trained research assistants. The data collected was analyzed through means, standard deviation, Pearson product moment correlation and multiple regression analysis. It was revealed among other things that; the quality of educational resources has a significant relationship with effective of instructional service delivery, with the quality of lecturers being the strongest predictor of effective instructional delivery. However, it was also revealed that the quality of library was significantly low and influenced effective instructional delivery negatively. It was therefore, recommended that government and corporate organizations should provide adequate educational resources and
promote viral development programmes for lecturers to enhance effective instructional delivery in Nigerian universities.

**Results**

Hypothesis 1: 1. There is no significant relationship between the quality of educational resources (lecturers, lecture halls, school library and teaching aids) and effective instructional service delivery.

**TABLE 1**

Pearson product moment correlation analysis of the relationship between quality of educational resources and effectiveness of instructional delivery

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>Cal. r</th>
<th>P val.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of lecturers</td>
<td>519</td>
<td>11.60</td>
<td>3.07</td>
<td>517</td>
<td>.89</td>
<td>.000</td>
</tr>
<tr>
<td>Quality of classrooms</td>
<td>519</td>
<td>10.21</td>
<td>3.11</td>
<td>517</td>
<td>.57</td>
<td>.000</td>
</tr>
<tr>
<td>Quality of libraries</td>
<td>519</td>
<td>9.99</td>
<td>3.13</td>
<td>517</td>
<td>-.014</td>
<td>.755</td>
</tr>
<tr>
<td>Quality of teaching aids</td>
<td>519</td>
<td>10.33</td>
<td>3.13</td>
<td>517</td>
<td>.59</td>
<td>.000</td>
</tr>
<tr>
<td>Effective instructional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>519</td>
<td>11.83</td>
<td>3.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result on table 1 indicates that there is a significant relationship between quality of lecturers ($r=.89, p<.05$), quality of classrooms ($r=.57, p<.05$); quality of teaching aids ($r=.59, p<.05$) and effectiveness of instructional delivery. Meanwhile, there was no significant relationship between quality of libraries and effective instructional delivery.

**Table 2**

Multiple regression analysis of the influence of the quality of educational resources and effectiveness of instructional delivery

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4130.796</td>
<td>4</td>
<td>1032.699</td>
<td>69.282</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>765.644</td>
<td>514</td>
<td>1.490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4896.439</td>
<td>518</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>B</th>
<th>Std Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.400</td>
<td>.274</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Quality of lecturers</td>
<td>.824</td>
<td>.021</td>
<td>.825</td>
<td>.39941</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Quality of classrooms</td>
<td>-.027</td>
<td>.062</td>
<td>-.028</td>
<td>.438</td>
<td>.662</td>
<td></td>
</tr>
<tr>
<td>Quality of libraries</td>
<td>-.128</td>
<td>.017</td>
<td>-.131</td>
<td>7.401</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Quality of teaching aids</td>
<td>.195</td>
<td>.063</td>
<td>.198</td>
<td>3.080</td>
<td>.002</td>
<td></td>
</tr>
</tbody>
</table>

R=.918, R$^2$=844, Adj. R$^2$=842, Std Error=1.22048

The results of the multiple regression analysis presented in table 2 shows that the Adj. R$^2$=842, which implies that the variation in the dependent variable (effectiveness of instructional
delivery) could be explained by 84.2% of the contribution of the independent variable (quality of educational resources). A cursory look at the analysis of variance table, the result further showed that (F=69.28p<.05). Since p(.001) is less than p(.05), this implies that there is a significant composite influence of quality of educational resources on effectiveness of instructional delivery in university of Calabar. Hence, the null hypothesis is rejected. More so, to determine which of the variable has the highest prediction on the dependent variable, Table 3 showed that Quality of lecturers (β=.825, p<.05) is the highest predictor followed by Quality of teaching aids (β=.198, p<.05), Quality of classrooms (β=-.028, p<.05) and then Quality of libraries (β=-.131, p<.05).

Discussion of findings

The findings of the study revealed that there is a significant relationship between the quality of educational resources and effective instructional service delivery. In more precise terms, the results of the correlation analysis show that there is a significant relationship between quality of lecturers, classrooms, and teaching aids and effective instructional delivery. However, there was no significant relationship between the quality of library and effective instructional delivery. The findings of the study are so because, teachers are the most important educational resource in the school. In fact, a university is as good as the quality of its teaching staff, because they are the heart of the institution and produce its graduates, research and its services to the institution, community and the nation (Adetunji, 2016a).

Without teachers in school, other educational resource will be useless and cannot be adequately harnessed to facilitate teaching and learning in the school. No matter the level of technological advancement, the indispensability of human facilitators (teacher) cannot be replaced or over emphasized in the teaching and learning process. This was affirmed in the National policy on education that no educational system can grow beyond the quality of its teachers (Federal Government of Nigeria, 2013). Goe (2007) found that teacher is the strongest and consistent predictor of students’ achievement. Therefore, effective instructional delivery is one of the role expectation of every teacher in the school but, this is only possible when the teachers have the requisite academic qualifications which arm them with the required pedagogical skills and competencies that facilitates seamless instructional delivery. Similarly, Goe and Stickler (2008) showed that students taught by teachers with higher degrees recorded higher learning gains compared to their counterparts taught by teachers with lesser academic qualification. They also found that other characteristic of teacher which constitute the quality of the teacher such as knowledge of subject matter, collegiality, experience, classroom management strongly correlate with students’ achievement.

The results of the study also showed that, there is a linear relationship between quality of classroom and effective instructional delivery. This is because, the classroom is supposed to be a carefully designed environment purposely set apart for teaching and learning and or instructional delivery. Therefore, its quality and suitability in terms of the ratio of space area, desk, ventilation, heating and cooling system, lightening and convenience facilities to student at a given point in time has a rippling effect on the performance of the teacher or overall instructional delivery. This is because, in congested classrooms where students seat on bare floors and or more than designated carrying capacity of desk or classroom, result to students’ distraction, perspiration, and suffocation thus impeding effective teaching and learning. This is in tandem with the assertion of Ogbodo in Mbon (2015) that a well-equipped classroom and adequate educational facilities helps the teacher
to achieve a higher level of instructional excellence than when they are not available. Additionally, it was also found that, the quality and suitability of teaching aids such as public address system (PAS), functional projectors and interactive white boards, blackboards, internet, and information technologies significantly influenced instructional delivery.

Regrettably, the results also proved no correlation between the quality of school library and instructional delivery in university of Calabar. This was shocking, but however, it reflects the poor condition of libraries in some Nigerian universities, because some school libraries lack books on basic curricular offerings and where there are available, there are old and obsolete and lack current and emerging trends in the various disciplines. Thus lecturers and students do not find them as relevant reference materials for note making or personal studies. Additionally, the current global trend of digitization of libraries still seem strange or a mirage in the Nigerian university setting. Although, some schools like university of Calabar have since purchased units of information technologies such as computers, photocopiers, digital catalogues but again, poor power supply, internet connectivity, and poor ICT compliance of library staff has remained major bottlenecks to successful digitization policy. This has in no small measure reduced the role of libraries as the hub of research that facilitates effective teaching/instructional delivery and learning process in most Nigerian universities and university of Calabar in particular.

These findings are in line with the results of Onadiran’s (1999) investigation on students’ opinion on the services of Ahmadu Bello University Library, the study focused on the extent of students’ satisfaction with the university library services and reasons for dissatisfaction. It was revealed that two thousand eight hundred and sixty-five (2,865) students were completely dissatisfied, 64.2% were dissatisfied due to lack of relevant books in the library and 64.4% were dissatisfied about lack of current periodicals. Onadiran further pointed out that the findings of the study are not surprising because Nigerian university libraries have problems even in maintaining core collections which represents the universities curricula due to lack of money and inflation.

Conclusion

Based on the strength of the findings of the study, it was concluded that, there is a significant relationship between quality of educational resources and effective instructional delivery. Particularly, the quality of lecturers, classrooms and quality of teaching aids showed positive relationship with effective instructional delivery. This implies that, the presence of these facilities in adequate quantity, and quality facilitates teaching and learning in school.

Recommendations

1. Lecturers in universities should be trained and provided with adequate funds for attendance of conferences, seminars and workshops to keep themselves abreast with modern methods of instructional delivery to remain relevant in the universities.
2. There should be revitalization of our Nigerian universities libraries through adequate funding and provisions of relevant and current textual materials as well as information technology. Therefore, government and relevant agencies should should show commitment and political will in this direction.
3. More classrooms block and instructional aids should be provided to make for ease in the process of instructional delivery in Nigerian universities.
References


