

Influence of Physical Amenities on Quality Assurance in Delta State Polytechnics

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Abstract: *This study examined influence of physical amenities on quality assurance in Delta State polytechnics. The study is a descriptive survey which adopted the ex-post-facto design. The population of the study consisted of 538 lecturers in Delta State Polytechnics. Using a stratified random sampling procedure, 161 lecturers were sampled for the study representing 30% of the entire population. The instrument used for the study was a self-developed questionnaire titled Physical Amenities and Quality Assurance Questionnaire (PAQAQ). The instrument was validated through face, content and construct validity. The instrument was further subjected to split-half reliability test using 30 respondents who were excluded from the main study and coefficient of 0.75 was obtained. Data collected were carefully analyzed using mean scores and standard deviation to answer research questions while ANOVA was used to test the hypotheses at 0.05 level of significance. Findings show that physical amenities influence quality assurance through building of adequate classroom, erecting multipurpose buildings. Also, it was discovered that physical amenities can lead to optimistic quality assurance when amenities are made available in the institution, institution is safe for staff and students, amenities are staff and students' friendly. Based on findings the researcher recommended among others that management of polytechnics should provide physical amenities that is of global standard with functional laboratories, learning materials, classrooms and library, regular supply of electricity, ICT and recreational centre.*

Keywords: *Physical Amenities, Quality Assurance, Delta State, Polytechnics*

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I. Introduction

Education is a way of conveying society's culture, instituting the present and refining the future from generation to another. It is the procedure of conveying change in human conduct. It is a prime instrument utilized by society to reserve, maintain and promotion social symmetry. Societal prospect probably depends largely on the quality of its citizen's education, since it is a major determinant of nations development. Individual educational experiences has significant insinuations for cumulative macro conditions in the nation. Thus the relative importance of education as a process is that education is at the centre of policy discussions which affects human growth, quality assurance and development (Rufai, Olaniyonu & Mohammed, 2018). Quality is at the top of most agenda and improving quality is probably the most important task facing any institution, tertiary institution inclusive (Ansah, 2015). In everyday life, many people seem to take quality for granted, especially when it is regularly provided. Quality is often recognized when frustration and time wasting associated with its absence is been experienced. Without any doubt, quality assurance is what makes the difference between things being excellent. Increasingly, in education, quality assurance makes the difference between success and failure. Successful and efficient organisations, whether public or private, understands quality and knows its secret. Seeking the source of quality assurance is therefore an important issue in organizational effectiveness (Sallis, 2013).

Statement of Problem

Quality is at the top of most agenda and improving quality is probably the most important task facing any tertiary institution polytechnics inclusive. In education, quality assurance makes the difference between success and failure. The factors that determine quality assurance in education are physical amenities, outstanding teaching, high moral values, and adequate resources to mention but a few. It is believed that for quality assurance to be recorded in an institution of learning there must be physical amenities. There is speculation that Nigerian polytechnics have grown from infancy through adolescence to near maturity but have challenged within a short space time due to inadequate funding and lack of physical amenities. These combined deficiencies impair the quality of teaching and learning in polytechnics and also create health and safety problems for staff and students. The effect of poor physical amenities seems to be a threat to school management as well as students' academic accomplishment.

Purpose of the Study

The aim of this study is to investigate influence of physical amenities on quality assurance in Delta State polytechnics. In specific, the study is aimed at;

1. Identifying how physical amenities influence quality assurance in Delta State polytechnics.
2. Determine how physical amenities compile with quality assurance benchmarks.
3. Examine how physical amenities can lead to optimistic quality assurance.

Research Questions

The following research questions gave the study a direction.

1. In what ways can physical amenities influence quality assurance?
2. How has physical amenities compile with quality assurance benchmarks?
3. How will physical amenities lead to optimistic quality assurance?

Hypotheses

From the research questions, the following hypotheses were formulated;

1. The three polytechnics do not significantly differ on their assessment of ways physical amenities influence quality assurance.
2. The three polytechnics do not significantly differ on their assessment of how physical amenities compile with quality assurance benchmarks.
3. The three polytechnics do not significantly differ on their assessment of ways physical amenities can lead to optimistic quality assurance.

II. Literature Review

Educational system is recognizing the need to pursue quality and to deliver it to their students. Okigbo (2010), stated that educational system has grown from infancy through adolescence to near maturity. He further buttressed his assertion by saying that Nigerian tertiary institutions as a whole has lost their focus, lost touch with the needs of the surrounding society and prove they are incompetent to cope with the changing environment. Kayode (2012) stated that in the early 1970s, the tertiary institutions provided a lever for Nigerian undergraduates to uplift their quality of life to an unimaginable level. They were accommodated in hostel surroundings where they received close educational attention including tutorial classes of small groups, as a result of which their academic lives were rich and rewarding. In recent time, it seems that hostel accommodation of those days has now become overcrowded hostel where a room meant for two is shared by up to six. Even at that, this crowded amenity is for the lucky few. The classrooms are overflowing with students and tutorial classes are out of the question.

This explains the continuing massive brain drain and low morale among those who remain, but resulting in a substantially reduced quality of academic life. All these bother down on poor funding, infrastructural decay and unstable academic calendar due to epileptic closure and reopening of tertiary institutions arising from protracted incessant strike actions by staff and students unrest, (Kayode, 2012). Sallis (2013) stated that there are plenty of factor which determines quality assurance in education prominent among them include well maintained physical structures; outstanding teachers; high moral values; excellent examination results; specialisation; support of parents; businesses and local community; plentiful resources; application of latest technology; strong and purposeful leadership; care/concern for students; well balance curriculum, or some combination of these factors are sources of quality assurance in education. Quality assurance in teaching and learning as part of polytechnics' governance and management have become a prime subject in higher education (Steinhardt, Schneijderberg, Götze, Baumann., & Krücken, 2016).

Rufai, et, al., (2018) reported that physical amenities in higher education is multifaceted and cost intensive. This is because it involves provision of buildings; classrooms; hostels; staff quarters; workshops; laboratories; Information Communication Technology (ICT) centres; libraries; health centres and sporting amenities. It also includes provision of stimulating learning environment with adequate safety considerations. Ndinechi and Ementa, (2013) opine that physical amenities in tertiary institution involves provision of buildings, classrooms, hostels, staff quarters, workshops, laboratories, ICT centre, libraries, health centre and sport amenities. FME (2005) that opines quality assurance is measured through physical amenities, learners' achievements, teaching and learning, management and leadership, care, support and guidance. School building improvement and maintenance according to the Department of Education (2010), are essential aspects of school plant management which requires constant attention and careful planning by administrators. It is essential that educational administrators should undertake and maintenance minor repair of the school physical structures using immediate resources. This is obligatory since educational buildings need to incorporate technical modernisations in almost all aspect of school amenities. In accumulation to basic checklist approaches, educational administrators should put in place judicious planning and proactive procedures that will welcome flexible usage of school amenities (Rufai, et, al., 2018).

Kaira, (2006), explained that physical amenities are social economic overheads which require huge capital as well as advanced technology that are largely developed by the state. This implies that for the government to develop or raise educational status of the state to a standardized level, one good device is for the government, first to develop the structure. Physical amenities have always remained a constraint, because the demands are always on the increase due to the growing population and demands for quality education. Okorie and Uche, (2014) stated that physical amenities and quality assurance are those characteristics that amenities must possess to pledge their attraction to workers and capability to enhance exploitation for the achievement of the pre-set goals for which they are being provided. According to Enaohwo, (2010) quality assurance on institutional physical amenities can be guaranteed if basic guidelines are followed from onset, basically it means that physical amenities must make provision for modification; prospect; flexibility to user demands; accessibility to students; staff and society and regard for aesthetic/clean environment.

The uproar for standard classroom; science laboratories; technical workshop among others in the face of very limited funds has been a challenge, (Oduate, 2007). Quality assurance is intended to advance the quality of an institution's methods and educational outcomes. Controlling and monitoring mechanism put in place to safeguard quality through external review, according to Uvah (2005), include NUC's accreditation of undergraduates programmes; ranking of institutions and quality support mechanism (QSM) such as a virtual library Virtual Institute for Higher Education Pedagogy (VIHEP) etc. Adepoju, (2013) stressed that for physical amenities to bring high optimistic quality assurance these strategies should be considered as one of the cornerstone for quality assurance in tertiary institution.

Okebukola (2010) noted that apparently under-funding of the higher institutions has overtime, led to the deterioration of existing structures and the lack of additional structures to match the phenomenal rise in student populations. More than that, it has caused a decline in the quantity and quality of the wide array of teaching amenities that would normally enhance the practical aspects of training. The point was also made that administrators in higher institutions of learning should be more resourceful in the acquisition, control, utilization and maintenance of physical amenities. Babalola (2011) who corroborated with Kayode (2012) when reported that there is less money to spend on teaching, research for quality assurance to be assured. Libraries in the polytechnics lack adequate and relevant books, laboratories do not have essential apparatus, classrooms are without adequate seats for the students and even office accommodation for the staff is a mirage. Some of the polytechnics lack lecturers in the right quality and quantity.

Pervin and Cennet (2011) in their study on quality of education in rural schools discovered that teachers and students are satisfied with the school's physical conditions. Conversely, the number of teachers teaching outside their areas of license is quite high. Besides, lack of technology and lack of parental involvement were found to be factors that might have an effect on the quality of education.

III. Method

The study is a descriptive survey which adopted the ex-post-facto design. The population of the study consisted of 538 lecturers in Delta State Polytechnics. Using a stratified random sampling procedure, 161 lecturers was sampled for the study representing 30% of the entire population. The instrument used for the study was a self-develop questionnaire titled Physical Amenities and Quality Assurance Questionnaire (PAQAQ). The instrument was validated through face, content and construct validity. The instrument was further subjected to split-half reliability test using 30 respondents who were excluded from the main study and coefficient of 0.75 was obtained. Data collected were carefully analyzed using mean scores and standard deviation to answer research questions while ANOVA was used to test the hypotheses at 0.05 level of significance.

IV. Presentation of Results

Research Question 1: In what ways can physical amenities influence quality assurance?

Table 1: Mean and standard deviation on ways physical amenities influence quality assurance

S/N	Ways physical amenities influence quality assurance	Mean	SD	Remark
1.	Building of adequate classroom	2.92	.83	+
2.	Erecting multipurpose buildings	2.96	.77	+
3.	Provision of library resources	3.09	.84	+
4.	Provision of classroom furniture	2.98	.85	+
5.	Functional laboratories	3.07	.80	+
6.	Provision of students' hostel	2.91	.79	+
7.	Provision of staff residential quarters	2.98	.81	+
8.	Regular supply of electricity	3.08	.81	+
9.	Provision of visual/other learning materials.	3.12	.79	+

10.	Provision of ICT centres/amenities.	3.01	.83	+
11.	Provision of recreational centre.	3.04	.85	+

Data in Table 1 shows mean and standard deviation on ways physical amenities influence quality assurance. The result shows that respondents agreed in all the items with mean scores above 2.50 benchmark. It can therefore be concluded that physical amenities influence quality assurance through building of adequate classroom, erecting multipurpose buildings, functional laboratories, regular supply of electricity, provision of library resources, classroom furniture, students' hostel, staff residential quarters, visual/other learning materials, ICT centres/amenities and recreational centre.

Research Question 2: How has physical amenities compile with quality assurance benchmarks?

Table 2: Mean and standard deviation on how physical amenities compile with quality assurance benchmarks

S/N	How has physical amenities compile with quality assurance benchmarks	Mean	SD	Remark
1.	Money is spent on material resources for quality to be assured	2.95	.85	+
2.	Available physical amenities serve number of students enrolled	3.02	.81	+
3.	Laboratories have vital apparatus	2.86	.81	+
4.	Physical amenities compiles with quality assurance benchmark	2.92	.79	+
5.	Classrooms are with adequate seats	3.06	.82	+
6.	Amenities are severally maintained	3.05	.80	+
7.	Lecturers office are of standard	3.05	.79	+
8.	Library in the polytechnic are well equipped with relevant materials	2.90	.80	+

Data in Table 2 shows mean and standard deviation on how physical amenities compile with quality assurance benchmarks. The result shows that respondents agreed in all the items with mean scores above 2.50 benchmark. Thus, physical amenities compile with quality assurance benchmarks when money is spent on material resources for quality to be assured, available physical amenities serve number of students enrolled, laboratories have vital apparatus, physical amenities compiles with quality assurance benchmark, classrooms are with adequate seats, amenities are severally maintained, lecturers office are of standard and library in the polytechnic are well equipped with relevant materials.

Research Question 3: How will physical amenities lead to optimistic quality assurance?

Table 3: Mean and standard deviation on how physical amenities lead to optimistic quality assurance

S/N	How has physical amenities lead to optimistic quality assurance	Mean	SD	Remark
1.	Amenities are made available in the institution	2.96	.80	+
2.	Amenities in the institution are safe for staff	2.84	.82	+
3.	Amenities in the institution are safe for students	3.01	.83	+
4.	Amenities are staff friendly	2.91	.82	+
5.	Amenities are students friendly	2.93	.80	+
6.	Amenities are relevant to students' course of study	3.07	.79	+
7.	Amenities have global standard	3.02	.81	+
8.	Amenities in the institution meets quality assurance benchmark	3.11	.83	+

Data in Table 3 shows mean and standard deviation on how physical amenities lead to optimistic quality assurance. The result shows that respondents agreed in all the items with mean scores above 2.50 benchmark. Therefore, physical amenities can lead to optimistic quality assurance when amenities are made available in the institution, institution is safe for staff and students, amenities are staff and students' friendly, amenities are relevant to students' course of study, have global standard and meets quality assurance benchmark

Hypothesis 1: The three polytechnics do not significantly differ on their assessment of ways physical amenities influence quality assurance.

Table 4: Analysis of Variance (ANOVA) on ways physical amenities influence quality assurance

	Sum of Squares	df	Mean Square	F	Sig.
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Between Groups	5.877	2	2.938	.490	.613
Within Groups	946.968	158	5.993		
Total	952.845	160			

Table 4 shows that the F-calculated of .490 is less than the F-critical of .613 at 0.5 level of significance, this implies that the null hypothesis of the three polytechnics do not significantly differ on their assessment of ways physical amenities influence quality assurance was retained.

Hypothesis 2: The three polytechnics do not significantly differ on their assessment of how physical amenities compile with quality assurance benchmarks.

Table 5: Analysis of Variance (ANOVA) on how physical amenities compile with quality assurance benchmarks

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	46.178	2	23.089	4.132	.018
Within Groups	882.816	158	5.587		
Total	928.994	160			

Table 5 shows that the F-calculated of 4.132 is less than the F-critical of .018 at 0.5 level of significance, this implies that the null hypothesis of the three polytechnics do not significantly differ on their assessment of how physical amenities compile with quality assurance benchmarks was rejected and alternative hypothesis accepted thus, the three polytechnics significantly differ on their assessment of how physical amenities compile with quality assurance benchmarks. To test for which of the variables that caused the significant difference a post-hoc analysis using Scheffe test was conducted and the result obtained shows that significant difference exists between Delta State polytechnic Ogwashi-Uku and Delta State Polytechnic Oghara on their assessment of how physical amenities compile with quality assurance benchmarks.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: how physical amenities compile with quality assurance benchmarks
Scheffe

(I) VAR00001	(J) VAR00001	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Delta State Polytechnic Oghara	Delta State Polytechnic Ogwashi-Uku	-1.26106*	.45499	.024	-2.3854	-.1367
	Delta State Polytechnic Ozoro	-.33962	.45918	.761	-1.4743	.7951
Delta State Polytechnic Ogwashi-Uku	Delta State Polytechnic Oghara	1.26106*	.45499	.024	.1367	2.3854
	Delta State Polytechnic Ozoro	.92144	.45499	.132	-.2029	2.0458
Delta State Polytechnic Ozoro	Delta State Polytechnic Oghara	.33962	.45918	.761	-.7951	1.4743
	Delta State Polytechnic Ogwashi-Uku	-.92144	.45499	.132	-2.0458	.2029

*. The mean difference is significant at the 0.05 level.

Hypothesis 3: The three polytechnics do not significantly differ on their assessment of ways physical amenities can lead to optimistic quality assurance.

Table 6: Analysis of Variance (ANOVA) on ways physical amenities can lead to optimistic quality assurance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.758	2	3.879	.497	.708
Within Groups	866.229	158	5.482		
Total	873.988	160			

Table 6 shows that the F-calculated of .497 is less than the F-critical of .708 at 0.5 level of significance, this implies that the null hypothesis of the three polytechnics do not significantly differ on their assessment of ways physical amenities can lead to optimistic quality assurance was retained.

V. Discussion of Results

Finding shows that physical amenities influence quality assurance through building of adequate classroom, erecting multipurpose buildings, functional laboratories, regular supply of electricity, provision of library resources, classroom furniture, students' hostel, staff residential quarters, visual/other learning materials, ICT centres/amenities and recreational centre. Hypothesis tested shows that the three polytechnics do not significantly differ on their assessment of ways physical amenities influence quality assurance. This finding agrees with Okorie and Uche, (2014) who revealed that physical amenities and quality assurance are those characteristics that amenities must bear or possess to guarantee their attraction to users and ability to enhance utilization for the achievement of the predetermined goals for which they are being provided. This finding also agrees with Enaohwo, (2010) who revealed that quality assurance of institutional physical amenities can only be guaranteed if basic conditions and guidelines are followed from the onset, basically this means that physical amenities must make provision for adoptability or alteration, probability, flexibility in user demands, accessibility to students, staff and society and due regards for aesthetic and clean environment. This finding further agrees with Ndinechi and Ementa, (2013) who discovered that physical amenities in tertiary institution involves provision of buildings, classrooms, hostels, staff quarters, workshops, laboratories, ICT centre, libraries, health centre and sport amenities.

Finding shows that physical amenities compile with quality assurance benchmarks when money is spent on material resources for quality to be assured, available physical amenities serve number of students enrolled, laboratories have vital apparatus, physical amenities compiles with quality assurance benchmark, classrooms are with adequate seats, amenities are severally maintained, lecturers office are of standard and library in the polytechnic are well equipped with relevant materials. Hypothesis tested shows that the three polytechnics significantly differ on their assessment of how physical amenities compile with quality assurance benchmarks. This finding concurs with FME (2005) who opined that quality assurance is measured through physical amenities, learners' achievements, teaching and learning, management and leadership, care, support and guidance. This finding also concurs with Babalola (2011) who corroborated with Kayode (2012) when they reported that there is less money to spend on teaching, research for quality assurance to be assured. Libraries in the polytechnics lack adequate and relevant books, laboratories do not have essential apparatus, classrooms are without adequate seats for the students and even office accommodation for the staff is a mirage. Some of the polytechnics lack lecturers in the right quality and quantity.

Finding shows that physical amenities can lead to optimistic quality assurance when amenities are made available in the institution, institution is safe for staff and students, amenities are staff and students' friendly, relevant to students' course of study, have global standard and meets quality assurance benchmark. Hypothesis tested shows that the three polytechnics do not significantly differ on their assessment of ways physical amenities can lead to optimistic quality assurance. This finding supports Adepoju, (2013) who discovered that for physical amenities to bring high optimistic quality assurance necessary strategies should be considered as one of the cornerstone for quality assurance in tertiary institution.

VI. Conclusion

It is therefore concluded that physical amenities influence quality assurance in Delta State Polytechnics. This influence arises as a result of building of adequate classroom and multipurpose buildings with functional laboratories and library, regular supply of electricity, classroom furniture, visual/other learning materials, ICT centres/amenities and recreational centre.

VII. Recommendations

Arising from the findings, the researcher recommended the following:

1. Management of polytechnics should provide physical amenities that is of global standard with functional laboratories, learning materials, classrooms and library, regular supply of electricity, ICT and recreational centre.
2. Management of polytechnics should ensure that they follow quality assurance benchmarks in providing physical amenities. This will help the available physical amenities meet quality assurance benchmarks.
3. For physical amenities to bring about optimistic quality assurance management of polytechnics should ensure that physical amenities are safe for staff and students and relevant to students' course of study.

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