Assessment of Educational Facilities and Administrative Effectiveness in Colleges of Education

Abstract

This research aimed to assess the impact of educational facilities on administrative effectiveness within Colleges of Education. To achieve this, six research questions were formulated, and six hypotheses were proposed. The study utilized a correlational research design, and a sample of 800 administrative staff from Colleges of Education in Delta State was randomly selected. Questionnaires and checklists were employed as data collection instruments and were validated by the research supervisor. Descriptive and inferential statistics were used to analyze the gathered data. Mean, standard deviation, and Pearson coefficient of determination were used to address the research questions, while t-test and simple regression were employed to test the hypotheses at a significance level of 0.05. The study's findings indicated that educational facilities are available, adequate, and utilized in Delta State Colleges of Education. Additionally, significant differences were observed in the availability, adequacy, and utilization of educational facilities among the various colleges of education in Delta State. Furthermore, a significant relationship was identified between the availability, adequacy, and utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State. Based on the study's results, the researcher recommended an increase in the purchase of educational facilities to further enhance administrative effectiveness in Colleges of Education.

Keywords: Educational Facilities; Administrative Effectiveness; Colleges of Education; Utilization; Adequacy; Availability.

Introduction

Education is universally recognized as a powerful tool that drives progress in various domains, such as social, political, scientific, and technological spheres (Ohiwerei, 2005). Its significance lies in the fact that neglecting the education of citizens can impede development and hinder progress, causing a society to move at a sluggish pace. Education encompasses a broad range of processes through which individuals, particularly children and young adults, nurture their abilities, cultivate attitudes, and develop behaviors that hold value for the society they inhabit (Ohiwerei, 2005). By imparting knowledge and skills, education equips individuals to thrive in their personal lives while contributing meaningfully to the betterment of society.

As emphasized by Peretomode and Chukwuma (2007), higher education is a prerequisite for a nation's scientific and technological development. Higher education institutions, such as colleges of education, play a significant role in this process by producing highly motivated, conscientious, and efficient classroom teachers for the primary and post-primary levels of the educational system (Ogbonnaya, 2010). Colleges of education are instrumental in equipping individuals with the knowledge and skills required for positions of responsibility in government, business, and other spheres of life, making them essential for economic and social development worldwide (Ogbonnaya, 2010).

However, for colleges of education to fulfill their critical roles in shaping future leaders and developing high-level manpower, effective management is essential (Maduabum, 2002). The rector, as the administrative head, plays a central role in the management process, working with both academic and non-academic staff to achieve the institution's objectives (Ojo, 1999). Management in colleges of education involves a sequence of coordinated events, including planning, organizing, and controlling available human and material resources to

achieve desired outcomes (Ojo, 1999). When management is effective, outlined objectives of an organization can be accomplished through a careful and systematic arrangement and use of resources in a faster and more efficient manner.

Despite the importance of management, observations and comments by major stakeholders, including academic and non-academic union leaders, indicate that certain administrators in colleges of education in the country, particularly in Delta State, exhibit weaknesses and lack administrative skills (Taiwo, 1980 in Ekaette, 2001). These leaders are characterized by an obsolete traditional personnel administration style, leading to the neglect of staff welfare, inadequate supervision, and a lack of vision for the colleges (Ekaette, 2001). Such shortcomings can result in a nonchalant attitude toward work and hinder the continuity of good track records of performance in the system.

In addition to external challenges like inadequate infrastructures, lack of political will, and overpopulation in colleges of education, the state of educational facilities is another critical factor that affects management and educational outcomes (Salisu, 2001; Ade-Ajaye, 2003; Akuezuilo, 2007; Udida et al., 2009). Educational facilities, including buildings, equipment, instructional materials, libraries, and laboratories, play a pivotal role in the smooth running of teaching and learning processes (Buckley et al., 2004). Availability, adequacy, and utilization of these facilities are crucial for creating a conducive learning environment and enhancing educational efficiency (Ozioko, 2014).

The availability of educational facilities refers to the provision made for effective teaching and learning in colleges of education (Uzoechina, 2014). It is essential for new institutions to ensure adequate provisions of facilities as they are a prerequisite for the approval of any college of education in Nigeria (Uzoechina, 2014). However, it is not uncommon for many colleges, especially in Delta State, to have dilapidated and inadequate

facilities (Afolabi, 2002). This deficiency can lead to poor learning outcomes and frustrate the efforts of both teachers and administrators.

Moreover, the adequacy of educational facilities is vital for effective management. In this context, adequacy refers to the state of being sufficient to meet the requirements for a conducive learning environment (Ozioko, 2014). The National Commission for Colleges of Education has set criteria for determining the adequacy of facilities (Ozioko, 2014). Unfortunately, many colleges in Delta State have outdated and insufficient facilities, which can hinder the achievement of educational goals.

Furthermore, the utilization of educational facilities is crucial for effective teaching and learning activities (Olagboye, 2004). When facilities are optimally used, they generate greater student interest in learning and enhance idea retention (Uguru & Abdullahi, 2007). However, in some colleges of education in Delta State, even the available facilities may not be fully utilized due to various reasons, including lack of funds and inadequate skills of the educators (Uguru & Abdullahi, 2007). Overcrowding and overutilization of available physical space and facilities can also lead to rapid deterioration and breakdown of resources (Famade cited in Akinfolarin et al., 2012).

The availability, adequacy, and utilization of educational facilities are crucial for administrators' effectiveness in managing colleges of education. Effective management, supported by proper facilities, can lead to improved educational outcomes, better performance of both students and educators, and the production of high-quality graduates (Oyeniyi, 2010). However, the lack of adequate facilities and their effective utilization can hinder educational efficiency and contribute to dissatisfaction with the education system (Oyeniyi, 2010).

In conclusion, education is a vital force that drives progress in various domains of society. Effective management, availability, adequacy, and utilization of educational facilities are essential for the success of colleges of education and the overall educational system. Addressing these factors can lead to improved outcomes and the production of well-prepared teachers and educated citizens, contributing to the development and progress of the nation (Ogiugo, 2012).In view of this, the focus of this study is on the assessment of the impact of educational facilities on administrative effectiveness within Colleges of Education in Delta State.

Research Questions

The following research questions will guide the study:

1. To what extent are educational facilities available in colleges of education in Delta State?
2. To what extent are educational facilities adequate in colleges of education in Delta State?
3. To what extent are educational facilities utilised in colleges of education in Delta State?
4. What is the nature of the relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State?
5. What is the degree of relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State?

6. What is the nature of the relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Hypotheses

The following null hypotheses will be tested at 0.05 level of significance:

1. There is no significant difference in the availability of educational facilities among the various colleges of education in Delta State
2. There is no significant difference in the adequacy of educational facilities among the various colleges of education in Delta State
3. There is no significant difference in the utilization of educational facilities among the various colleges of education in Delta State
4. There is no significant relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State
5. There is no significant relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State
6. There is no significant relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Methods

This study adopted a descriptive research design. This research design is considered appropriate because the researcher studied the availability, adequacy, utilization of

educational facilities and school administrators' effectiveness as they exists in their natural state.

The population of the study will comprise all staff of the public colleges of education across Delta State. There are currently four colleges of education in Delta State and 2,925 staff.The sample size will comprise the four (4) colleges and 800 staff which represents 27% of the total population. The sampling techniques to be adopted in the study is simple random sampling techniques. The simple random sampling technique is considered appropriate because it gives all the staff in the colleges of education equal chance of being selected.

Two instruments will be used to obtain data for the study. A questionnaire and an Educational Facility Inventory Checklist (EFIC). The questionnaire will be titled Staff Survey for Administrator's Effectiveness

(SSAE), adapted from Minnesota Department of Education's Teacher Survey for Principal Development and Evaluation: Administration Guidance (2016) and reorganise to reflect the objective of the study. It contains 2 sections; section A will contain demographic data of respondents which will include sex, years of experience and cadre. Section B of the questionnaire will contain items structured on a 4-point likert scale of SA for Strongly Agree (4), A for Agree (3), D for Disagree (2) and SD for Strongly Disagree (1). The Staff Survey for Administrator's Effectiveness (SSAE) will be used to measure the dependent variable of school administrator effectiveness. The inventory Checklist will contain educational facilities which the respondent will be required to respond in order of availability, adequacy and utilization.

The instruments were validated based on experts' judgement and factor analysis. The Educational Facility Inventory Checklist (EFIC) was given to experts in Educational Management and Measurement and Evaluation. The experts were given copies of the

instruments for them to ascertain and assess their relevance to the study. They ensured that the face and content validity of the Educational Facility Inventory Checklist (EFIC) was met. Initially, they made some recommendations which entailed obtaining the National Commission for Colleges of Education (NCCE) standard requirement for educational facilities, which was used to compile the educational facilities inventory checklist.

The Staff Survey for Administrator's Effectiveness (SSAE) was validated using factor analysis by a Psychometrician in the Department of Guidance and Counselling. The instrument was administered to 57 staff of College of Education Ekiadolor, Edo State and the data obtained was subjected to factor analysis to determine the construct validity of the instrument. The factors (components) was extracted using Principal Component Analysis, and factors whose eigenvalue is greater than 1.0 were retained while those whose eigenvalue is less than 1.0 were discarded. The factors were thereafter rotated to determine the loading of each item in the various components. This was done using orthogonal solution with Varimax method. The reason for the factor analysis was because the instrument was adapted originally from an instrument which measures secondary school principal's effectiveness far away in Minnesota USA. Since the researcher is adapting it for the measurement of the effectiveness of an administrator in College of Education here in Delta State Nigeria, there was need to ascertain the suitability of the instrument to the area and objective of study. The total cumulative variance was obtained as expressing the content validity of the instrument (see Appendix I). The values for shared vision for high students' achievement was 71.34%, for Instructional leadership, 82.00%, for high quality and effective staff, =
75.79%, for personal leadership, = 79.63% and for Systems and Operation, = 80.44. These values are the content of validity of the total number of items that measure the variables domain which also indicated the percentage or amount of contribution made to the shared vision for high students' achievement, instructional leadership, high quality and effective

staff, personal leadership and systems and operation that explains the total cumulative variance.

However, the construct validity was estimated by using the rotated factor loading matrixes. The Eigen values were used to select factors that genuinely measure similar constructs. The items in the instrument that measured staff survey for administrative effectiveness had loading matrixes that ranged between 0.51 and 0.93 for shared vision for high students' achievement, 0.61 and 0.91 for instructional leadership, 0.65 and 0.91 for high quality and effective staff, 0.55 and 0.90 for personal leadership and 0.81 and 0.91 for Systems and Operation.

In order to ascertain the reliability of the research instrument, the Staff Survey for Administrator's Effectiveness (SSAE) was administered to 30 staff of College of Education Ekiadolor, Edo State, since they were not part of the study. The data obtained was subjected to a cronbach alpha reliability coefficient and the coefficient obtained was 0.83.The instrument was administered directly to the respondents by the researcher with the help of 6 research assistants. The staff of the various colleges were approached and asked to respond to the questionnaire and the inventory checklist, after permission had been sought from him/her. Salient areas were explained to the respondents for clarity. The data were retrieved on the spot.

The data obtained were analysed with the aid of descriptive and inferential statistics. Research question 1-3 were analysed with mean and standard deviation while research question 4-6 were analysed with Pearson Product Moment Correlation Coefficient. Hypothesis 1-3 on the other hand were tested with independent samples t-test while hypothesis4-6 were tested with Pearson Product Moment Correlation Coefficient.All hypotheses were tested at 0.05 level of significance.

Results

Research Question 1: To what extent are educational facilities available in colleges of education in Delta State?

Table 1: Mean analysis of the extent to which educational facilities are available in Colleges of Education in Delta State

S/N	Educational Facilities	Mean	SD	Remark
1	Classrooms	2.25	1.06	NA
2	Lecture theatres	2.24	1.09	NA
3	lecture halls	2.56	0.98	A
4	Office furniture	2.31	0.98	NA
5	Computers	2.52	1.00	A
6	Science Laboratory	2.24	0.97	NA
7	School library	2.39	0.99	NA
8	Departmental library	2.35	0.99	NA
9	Library facilities	2.39	0.97	NA
10	Vehicles for administrative use	2.36	0.98	NA
11	Counselling Centre	2.44	0.97	NA
12	Demonstration Schools	3.09	0.98	A
13	Staff Offices	3.17	0.80	A
14	Typewriters	3.10	0.90	A
15	Reprographic machines	3.15	0.92	A
16	Books	3.08	0.93	A
17	Photographic studio	2.87	0.99	A
18	Graphic studio	2.88	0.98	A
19	Projection room	2.96	0.95	A
20	Computer room	3.00	0.94	A
21	Workshop for production of instructional materials	3.11	0.87	A
22	Closed circuit television (CCTV)	3.01	0.96	A
23	CCTV Monitors (television sets with remote controls)	3.13	0.90	A
24	Video camera with accessories	3.10	0.91	A
25	Video player/recorder	3.26	0.83	A
26	Editing/dubbing machine	2.94	1.01	A
27	Slide projectors with accessories	2.94	1.01	A
28	Opaque projectors with accessories	2.91	0.92	A
29	Overhead projectors with accessories	2.92	0.89	A
30	Audio projectors	2.76	1.01	A

31	Amplifiers	2.89	1.06	A
32	Microphones	2.24	1.08	NA
33	White board	2.51	1.02	A
34	Magnetic chalkboards	2.59	0.97	A
35	Air-conditioners	2.37	1.03	NA
36	Toilets	2.24	1.05	NA
37	Water supply	2.23	0.96	NA
38	Electricity supply	2.44	1.10	NA
39	Tables and chairs	2.56	1.03	A
40	Hostel accommodation for students	2.43	1.00	NA
41	Co-curricula facilities	2.06	1.01	NA
42	Electricity (power supply)	2.57	1.07	A
43	Water supply	2.48	1.04	NA
44	Medical facilities	2.46	1.03	NA
45	Sport facilities	2.75	0.98	A
46	School bookshop	2.71	1.03	A
47	White board marker	2.37	0.99	NA
48	Magnetic white board duster	2.49	1.00	NA
	Average Mean	**2.66**	**0.98**	**Available**

Criterion Mean = 2.50; A – Available; NA – Not Available

Table 1 shows the mean analysis of the extent to which educational facilities are available in Delta State Colleges of Education. The grand mean of 2.66, which is higher than the criterion mean of 2.50 implies that educational facilities are available.

Research Question 2: To what extent are educational facilities adequate in colleges of education in Delta State?

Table 2: Mean analysis of the extent to which educational facilities are adequate in Colleges of Education in Delta State

S/N	Educational Facilities	Mean	SD	Remark
1	Classrooms	0.26	0.44	NAD
2	Lecture theatres	0.68	0.47	AD

3	lecture halls	0.58	0.49	AD
4	Office furniture	0.55	0.50	AD
5	Computers	0.89	0.32	AD
6	Science Laboratory	0.53	0.50	AD
7	School library	0.64	0.48	AD
8	Departmental library	0.56	0.50	AD
9	Library facilities	0.56	0.50	AD
10	Vehicles for administrative use	0.59	0.49	AD
11	Counselling Centre	0.74	0.44	AD
12	Demonstration Schools	0.54	0.50	AD
13	Staff Offices	0.67	0.47	AD
14	Typewriters	0.62	0.49	AD
15	Reprographic machines	0.60	0.49	AD
16	Books	0.63	0.48	AD
17	Photographic studio	0.71	0.45	AD
18	Graphic studio	0.56	0.50	AD
19	Projection room	0.57	0.50	AD
20	Computer room	0.63	0.48	AD
21	Workshop for production of instructional materials	0.55	0.50	AD
22	Closed circuit television (CCTV)	0.81	0.40	AD
23	CCTV Monitors (television sets with remote controls)	0.86	0.35	AD
24	Video camera with accessories	0.80	0.40	AD
25	Video player/recorder	0.64	0.48	AD
26	Editing/dubbing machine	0.34	0.48	NAD
27	Slide projectors with accessories	0.62	0.49	AD
28	Opaque projectors with accessories	0.67	0.47	AD
29	Overhead projectors with accessories	0.32	0.47	NAD
30	Audio projectors	0.72	0.45	AD
31	Amplifiers	0.65	0.48	AD
32	Microphones	0.79	0.41	AD
33	White board	0.54	0.50	AD
34	Magnetic chalkboards	0.63	0.48	AD
35	Air-conditioners	0.45	0.50	AD
36	Toilets	0.85	0.36	AD
37	Water supply	0.80	0.40	AD
38	Electricity supply	0.71	0.45	AD
39	Tables and chairs	0.37	0.48	NAD

40	Hostel accommodation for students	0.59	0.49	AD
41	Co-curricula facilities	0.80	0.40	AD
42	Electricity (power supply)	0.69	0.46	AD
43	Water supply	0.53	0.50	AD
44	Medical facilities	0.47	0.50	NAD
45	Sport facilities	0.74	0.44	AD
46	School bookshop	0.71	0.45	AD
47	White board marker	0.72	0.45	AD
48	Magnetic white board duster	0.58	0.49	AD
	Average Mean	**0.63**	**0.46**	**Adequate**

Criterion Mean = 0.50; AD – Adequate; NAD – Not Adequate

Table 2 shows the mean analysis of the extent to which educational facilities are adequate in Delta State Colleges of Education. The grand mean of 0.63, which is higher than the criterion mean of 0.50 implies that educational facilities are adequate.

Research Question 3: To what extent are educational facilities utilised in colleges of education in Delta State?

Table 3: Mean analysis of the extent to which educational facilities are utilised in Colleges of Education in Delta State

S/N	Educational Facilities	Mean	SD	Remark
1	Classrooms	2.24	1.05	NU
2	Lecture theatres	2.23	0.96	NU
3	lecture halls	2.44	1.10	NU
4	Office furniture	2.56	1.03	U
5	Computers	2.43	1.00	NU
6	Science Laboratory	2.06	1.01	NU
7	School library	2.57	1.07	U
8	Departmental library	2.48	1.04	NU
9	Library facilities	2.46	1.03	NU
10	Vehicles for administrative use	2.75	0.98	U
11	Counselling Centre	2.71	1.03	U
12	Demonstration Schools	2.37	0.99	NU
13	Staff Offices	2.49	1.00	NU
14	Typewriters	2.33	1.03	NU

15	Reprographic machines	2.45	1.02	NU
16	Books	2.27	1.07	NU
17	Photographic studio	2.37	1.05	NU
18	Graphic studio	2.67	1.02	U
19	Projection room	2.39	1.02	NU
20	Computer room	2.73	1.01	U
21	Workshop for production of instructional materials	2.20	1.05	NU
22	Closed circuit television (CCTV)	2.46	1.02	NU
23	CCTV Monitors (television sets with remote controls)	2.56	1.04	U
24	Video camera with accessories	2.67	1.00	U
25	Video player/recorder	2.39	1.05	NU
26	Editing/dubbing machine	2.51	1.04	U
27	Slide projectors with accessories	2.23	1.09	NU
28	Opaque projectors with accessories	2.56	0.98	U
29	Overhead projectors with accessories	2.30	0.98	NU
30	Audio projectors	2.51	1.00	U
31	Amplifiers	2.22	0.97	NU
32	Microphones	2.40	1.00	NU
33	White board	2.35	1.00	NU
34	Magnetic chalkboards	2.38	0.98	NU
35	Air-conditioners	2.35	0.98	NU
36	Toilets	2.44	0.98	NU
37	Water supply	3.11	0.98	U
38	Electricity supply	3.18	0.79	U
39	Tables and chairs	3.11	0.90	U
40	Hostel accommodation for students	3.15	0.92	U
41	Co-curricula facilities	3.07	0.94	U
42	Electricity (power supply)	2.87	1.00	U
43	Water supply	2.87	0.99	U
44	Medical facilities	2.97	0.94	U
45	Sport facilities	3.02	0.93	U
46	School bookshop	3.13	0.86	U
47	White board marker	3.03	0.95	U
48	Magnetic white board duster	3.15	0.89	U
	Average Mean	**2.59**	**0.99**	**Utilised**

Criterion Mean = 2.50; NU – Not Utilised; U – Utilised

Table 3 shows the mean analysis of the extent to which educational facilities are utilised in Delta State Colleges of Education. The grand mean of 2.59, which is higher than the criterion mean of 2.50 implies that educational facilities are utilised.

Research Question 4: What is the nature of the relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State?

Table 4: Correlation and coefficient of determination of the relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Variables	N	Mean	SD	r	r2	Decision
Availability of Educational Facilities	787	127.79	16.26	0.44	0.19	Positive Relationship
Administrative Effectiveness		102.65	12.88			

As shown in table 4, the coefficient of determination obtained was 0.19, which signifies a positive relationship between Teachers' availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Research Question 5: What is the degree of relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State?

Table 5: Correlation and coefficient of determination of adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Variables	N	Mean	SD	r	r2	Decision
Adequacy of Educational Facilities		30.08	5.98			Positive Relationship

Administrative Effectiveness	787	102.65	12.88	0.07	0.01	

Table 5 showed that the coefficient of determination obtained was 0.01. This means that there is a positive relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Research Question 6: What is the nature of the relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State?

Table 6: Correlation and coefficient of determination of utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Variables	**N**	**Mean**	**SD**	**r**	**r2**	**Decision**
Utilization of Educational Facilities	787	122.88	15.63	0.50	0.25	Positive Relationship
Administrative Effectiveness		102.65	12.88			

Table 6 showed that the coefficient of determination obtained was 0.25. This means that there is a positive relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Hypothesis 1: There is no significant difference in the availability of educational facilities among the various colleges of education in Delta State

Table 7: t-test analysis of the difference in the availability of educational facilities among the various colleges of education in Delta State

College of Education	**N**	**Mean**	**SD**	**t**	**P**	**Decision**
State	355	125.30	17.53	3.88	0.000	Significant
Federal	432	129.84	14.84			

As shown in table 7, the result shows that $t = 3.88$, $p<0.05$ level of significance. The null hypothesis is therefore rejected. This means that there is a significant difference in the availability of educational facilities among the various colleges of education in Delta State.

Hypothesis 2: There is no significant difference in the adequacy of educational facilities among the various colleges of education in Delta State

Table 8: t-test analysis of the difference in the adequacy of educational facilities among the various colleges of education in Delta State

College of Education	N	Mean	SD	T	P	Decision
State	355	29.03	5.81	4.55	0.000	Significant
Federal	432	30.95	5.99			

As shown in table 8, the result shows that t = 4.55, p<0.05 level of significance. The null hypothesis is therefore rejected. This means that there is a significant difference in the adequacy of educational facilities among the various colleges of education in Delta State.

Hypothesis 3: There is no significant difference in the utilization of educational facilities among the various colleges of education in Delta State

Table 9: t-test analysis of the difference in the utilization of educational facility es among the various colleges of education in Delta State

College of Education	N	Mean	SD	t	P	Decision
State	355	121.15	15.61	2.88	0.01	Significant
Federal	432	129.84	14.84			

As shown in table 9, the result shows that t = 2.88, p<0.05 level of significance. The null hypothesis is therefore rejected. This means that there is a significant difference in the utilization of educational facilities among the various colleges of education in Delta State.

Hypothesis 4: There is no significant relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Table 10: Regression analysis of the relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Model	Sum of Square	df	Mean Square	F	P
Regression	24858.071	1	24858.071	184.826	.000[b]
Residual	105577.921	785	134.494		
Total	130435.992	786			

a. Dependent Variable: Administrative Effectiveness

b. Predictors: (Constant), Availability of Educational Facilities

From the result of table 10, $F(1, 786) = 184.826$, $p<0.05$. The null hypothesis is therefore, rejected. This means that there is a significant relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Hypothesis 5: There is no significant relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Table 11: Regression analysis of the relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Model	Sum of Square	df	Mean Square	F	P
Regression	681.640	1	681.640	4.124	.043[b]
Residual	129754.352	785	165.292		
Total	130435.992	786			

a. Dependent Variable: Administrative Effectiveness

b. Predictors: (Constant), Adequacy of Educational Facilities

From the result of table 11, $F(1, 786) = 4.124$, $p<0.05$. The null hypothesis is therefore, rejected. This means that there is a significant relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Hypothesis 6: There is no significant relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Table 12: Regression analysis of the relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State

Model	Sum of Square	df	Mean Square	F	P
Regression	32116.684	1	32116.684	256.426	.000[b]
Residual	98319.309	785	125.248		
Total	130435.992	786			

a. Dependent Variable: Administrative Effectiveness

b. Predictors: (Constant), Utilization of Educational Facilities

From the result of table 12, $F(1, 786) = 256.426$, $p<0.05$. The null hypothesis is therefore, rejected. This means that there is a significant relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State.

Discussion

The first fining showed that educational facilities are available in Delta State Colleges of Education. This finding disagrees with the finding of Bizimana and Orodho (2014), which showed that the level of teaching and learning resources in the study locale was insufficient. The second finding showed that educational facilities are adequate in Delta State Colleges of Education. This finding is at variance with the finding of Ekundayo (2012), which revealed that the schools' physical facilities were not all that adequate. The third finding revealed that educational facilities are utilised in Delta State Colleges of Education. This finding is disagrees with the finding of Muhammad (2017), who found that most senior secondary schools in Sokoto State have no laboratories.

The fourth finding showed that there is a significant difference in the availability of educational facilities among the various colleges of education in Delta State. This finding is in line with Owoeye (2011), who opined that availability of school facilities is a potent factor to quantitative education. The fifth finding revealed that there is a significant difference in the adequacy of educational facilities among the various colleges of education in Delta State. This finding disagrees with the finding of Okoli and Okorie (2015), which showed that there is no significant difference between the adequacy of business studies facilities in public and private junior secondary schools; and there is no significant difference between the adequacy of business studies curriculum compliant textbooks in urban and rural junior secondary schools.

The sixth finding showed that there is a significant difference in the utilization of educational facilities among the various colleges of education in Delta State. This finding is at variance with the finding of Nwankwo, Nwogbo, Okorji and Egboka (2015), which showed that learning facilities for implementing the entrepreneurship education programme in the State are inadequate. The seventh finding revealed that there is a significant relationship between availability of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State. This finding is in line with Owoeye (2011), who opined that availability of school facilities is a potent factor to quantitative education.

The eighth finding showed that there is a significant relationship between adequacy of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State. This finding is at variance with the finding of Asiyai (2012), who in her study found that the maintenance carried out on school facilities were inadequate for majority of the facilities. The ninth finding revealed that there is a significant relationship between utilization of educational facilities and school administrators' effectiveness in Colleges of Education in Delta State. This finding agrees with the finding of Usen (2016), which showed that there exists significant positive relationship between teachers' utilization of school facilities (library, laboratory, information and communication technology (ICT) center and recreation center) and academic achievement of student nurses in Human Biology.

Conclusion and Recommendations

Based on the findings of the study, it was concluded that educational facilities are available, they are adequate and are properly utilised in all the Colleges of Education in Delta State. The administrative effectiveness of staff was high, hence, there was significant relationship between availability, adequacy, utilisation and administrative effectiveness.From the findings of the study, the researcher recommends as follows:

1. more educational facilities should be purchased
2. staff should be properly trained on the use and maintenance of available educational facilities

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