Influence of Infrastructural Facilities on Academic Performance of Adult Learners in Non-Formal and Adult Education Centers in Rivers State

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ABSTRACT

The study examined the influence of instructional facilities on student academic performance of non-formal and adult educationprogramme in Rivers State. Three research questions were formulated to guide the study and three hypotheses were tested for the study. The descriptive survey research design was adopted with a population 0f 460, out of which a sample of 210 samples was drawn with the aid of Krejcie and Morgan sample size determination table. An instrument titled "Influence of Infrastructural Facilities on Academic Performance of Adult Education Students" was used to elicit information from respondents. The 20 items questionnaire was drafted and coded using a 4 point interval scale of Very High Extent, High Extent, Low Extent, and Very Low Extent. The instrument was duly validated by experts, while the test-retest method was employed in testing the reliability of the instrument and it yielded a reliability index of 0.79 through the use of Pearson Product Moment Correlation. The research questions were answered using means and standard deviation, while the hypotheses were tested using z-test of significance. The results show that instructional facilities played a vital role in students' academic performance. Hence, recommended that; all efforts should be geared to the best means of employing infrastructural facilities in all adult education training centers in the State and secondly students should be reoriented on the importance of information and communication technology so as to be acquainted with it in due season.

Keywords: Infrastructural Facilities, Academic Performance, Non formal Education

Introduction

Over the years and more especially in different facets of life -laymen, parents, clergy the recent years, people from , educationists etc. have been very much concerned about the relationship between school facilities and students' academic performance in higher institution. Nwanewezi (2010) viewed that school facilities have direct relationship with students' academic performance, others hold that inadequate school facilities can have adverse effect on students performance. School facilities refer to human resource like academic and non academic staff, physical facilities like the school buildings and instructional materials equipment like the information and communication technology, textbooks, library and so on. Human resources include teachers, store attendants, librarians and library attendants, laboratory assistants to mention but a few. Physical facilities and instructional materials1 equipment on the other hand, comprise classrooms, staff rooms, administrative blocks, dormitories, libraries, laboratories, examination halls, teachers' quarters, text books, audiovisual materials and items of furniture, laboratory chemicals and equipment. Ani in Ndu, Ocho and Okeke (1997) defined physical facilities and equipment as the location, the school buildings and other material resources provided in the school for the purpose of enhancing teaching and learning processes. According to him, physical facilities and equipment include the fixed and mobile structures and materials in the school such as the classroom buildings, laboratories, laboratory equipment, the audio and visual aids etc.

The importance of school facilities can never be over-emphasized. It is the talk of the day in our national dailies. The availability of human resources and physical facilities ensures effective teaching and learning and is closely correlated with the students' performance. Ike (2007) attributes students' low performance in adult education studies to the lack of qualified staff. According to him, there has been an unprecedented expansion at all levels of education, which has not been matched with a corresponding increase in the number of qualified teachers. Nworgu (2005) on the other hand, asserted that no matter the strength of manpower resources in the system, educational process must require conducive physical accommodation, libraries, furniture, and play ground. Adesina and Ogunsaju (2004) in support noted that for effective teaching and learning situations, physical facilities and educational goals should be viewed as being closely interwoven and interdependent. Similarly,

Mbadiwe-Woko, Ogwo and Taylor (2019) asserted that there is a strong relationship between physical facilities and enhancement of adult learning in tertiary institutions. In other words, poor performance of students in adult education has direct correlation with non-availability of school facilities. The problem generated by non-availability of school facilities in higher institution can no longer be dismissed with a wave of hand. Ezegbe (2002) maintained that a good teacher may not operate effectively arid efficiently under bad conditions of work. Njoku in Ezeocha (2009) stated some of these conditions in his article and they include manageable class size, adequate classrooms, books, writing materials and well -equipped libraries. Ogunsaju, (2009) asserted that the best curriculum could be near inefficient, unqualified and poorly rewarded and undisciplined teachers.

Osobonye (2002) stated that laboratory has been identified as the most suitable place to acquire the right skills and attitudes. In the laboratory, the student is afforded the opportunity to develop and practice the processes of science such as observations, communication, and formulation of hypotheses, experimentation and classification. Osobonye then concluded by saying that if one was to achieve any or all of the aims of teaching and learning in non-formal and adult education one has to take proper stock of laboratories and identify those factors which constitute a draw back to the use of the laboratory for the purpose it was set up and take appropriate step to correct them. On the issue of dormitory, many schools are day schools because they lack accommodation facilities. This appears to contribute to the low academic performance of students because many of them' absent themselves from school at will, prefer watching films than reading their books. Worst still, some of the students may not be accommodated in the schools and are therefore exposed to the danger of staying in hired houses.

Ejikeme (2009) in support added that "neighboring schools are unable in most cases to accommodate students from far away homes. Students are forced to live in nearby private rooms whereby they do whatever they like" Ukeje (2009) summarized these problems when he stated that in Nigerian adult education everything is in short supply: "schools are in short supply, teachers or perhaps the right caliber of teachers are in short supply, classrooms are in short supply and above all, throughout the system people with the right attitude, orientation and dedication are in extreme short supply:"

It has also been observed that even the few school facilities available are not properly utilized for the better performance of students. Store keepers, laboratory attendants, librarians and library attendants are conspicuously absent in most of non-formal and adult education centers. What they have are what they call substitutes. The so-called substitutes may not be efficient because it is difficult for one to give what he/she has not. To buttress, this, many schools have teacher librarians without library assistants. The teacher librarian locks up the library when he goes to class to teach. The consequence is that the students are not allowed to make effective use of the library. On the other hand, the teacher librarian may not have fair idea of the use of libraries. He/she may not have an idea about filing, numbering and cataloguing of newly purchased books. The resultant effect is that 'many books may be there but the students cannot have access to them. So, effective performance or poor performance has to do with all the problems identified above. So, since, the main instrument of evaluating the quality of our adult education students' performance in Rivers State; the factors affecting the students performances with particular reference to school facilities give everybody great concern. It is this that inspired, the present researcher to try to investigate into the extent to which the availability and utilization of school facilities relate to students' academic performances in adult education programme.

Statement of the Problem

Rivers State Agency for Adult and Non-formal Education was established on 23rd October 1991 with sole responsibility of eradicating illiteracy in the state. In order to achieve this aim, various literacy programmes have been carried out by the agency to empower male and female adult learners in the state. These include basic literacy for skills of reading, writing, numeracy, health education and environmental sanitation. This also include functional literacy, which helps learners to acquire basic occupation that will make enable them be self- reliance-oriented skills. In spite of all the efforts, attempts have not been made in times of adequate infrastructure in terms of human resources, like academic staff and non academic, infrastructural such as conducive learning environment and adequate classroom (Abdulkadir, 2011). But unfortunately, non-formal and adult education programme is poorly equipped such that 60% of students within that category could not read and write, the expected health education and environmental sanitation which helps learners to acquire basic occupation that will make enable them be self- reliance-oriented skills has become a mirage.

Most non-formal and adult education programme center in Rivers State seems to lack the necessary facilities that could enhance effective teaching and learning as a result little is expected from adult learners (students) in terms of academic performance. Experience shows that inadequate physical facilities have some adverse effect on adult learners (students') interest to learn. Hence, this may invariably affect their academic performance. In a situation where adult learners (students) are not having access to normal facilities like standard library, poor ICT equipment, dilapidated school buildings, and poor equipped laboratories has been observed as a contributing factor to low performance among adult learners (students). Apart from protecting student from sun, rain, heat and cold, there should be enough space, seats, laboratory and internet facilities and a host of other physical facilities that could enhance the level of motivation and academic performance of adult learners in all the programme centers. It is as a result of this poor situation of non-formal and adult education programme in Rivers State that prompted this research.

Purpose of the Study

The purpose of this study was to examine the effect of infrastructural facilities on academic performance of non-formal and adult education programme in Rivers State. Specifically, the study sought to:

1. Determine the extent to which library influence academic performance of adult learners in non-formal and adult education centers in Rivers State.
2. Determine how information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State.
3. Investigate how school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Research Questions

The following research questions guided this study.

1. To what extent does school library influence academic performance of adult learners in non-formal and adult education centers in Rivers State?
2. To what extent does information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State?
3. To what extent do school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State?

Hypotheses

The follow null hypotheses were tested for this study at 0.05 level of significance.

1. There is no significant difference between the means score of instructors and learners on the extent to which school library influence academic performance of adult learners in non-formal and adult education centers in Rivers State.
2. There is no significant difference between the means score of instructors and learners on the extent to which information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State.
3. There is no significant difference between the means score of instructors and learners on the extent to which school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Method

This study adopted the descriptive survey research design. The population of this study comprised 460 persons, out of which 55 are instructors and 405 adult education students/participants in Rivers State.A sample size of two hundred and ten (210) respondents were chosen with the aid of Krejcie and Morgan sample size determination table , out of which 26 are instructors and 184 are adult learners (students/participants). Hence, the simple random sampling technique was employed in chosen the respondent. The instrument was a self-structured questionnaire titled "Influence of Infrastructural Facilities on Academic Performance of Adult Learner" (IIFAPAL). The 20 items questionnaire was drafted and coded using a 4 point interval scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE). The instrument was validated by two experts in Educational Management and Measurement and Evaluation respectively. The reliability of the instrument was established using Cronbach Alpha method. Reliability indexes of 0.79, 0.83 and 0.88 respectively were obtained for the three clusters of the instrument. The research questions were answered using mean and standard deviation while the hypotheses were tested using z-statistics at 0.05 level of significance.

Results

Research Question 1: To what extent does school library influence academic performance of adult learners in non-formal and adult education centers in Rivers State?

Table 1:   **Mean Response on the extent to which library influence academic performance of Adult Learners in Non-formal and Adult Education Centers.**

S/N	Items	Instructors (26)			Adult learners (184)		
		$\bar{x}1$	SD	Remarks	$\overline{x2}$	SD	Remark
1	Reading habit is cultivated through the use of library.	3.67	1.02	HE	3.67	1.02	VHE
2	Library gives indebt knowledge on research.	3.23	0.84	HE	3.63	1.01	VHE
3	Students that use the school library perform better than those that do not use it.	3.40	0.91	HE	3.50	0.95	HE
4	Reading is the number one factor for better performance among students.	3.40	0.91	HE	4.00	1.18	VHE
5	The use of school library is a key to students' success in academics.	4.00	1.18	VHE	3.50	0.95	HE
	Grand Mean	**3.54**		**HE**	**3.66**	**1.02**	**VHE**

From table 1 above, item 1 reveals that reading habit is cultivated through the use of library with tie means score of 3.67 for instructors and adult learners. Item 2 show that library gives indebt knowledge on research among adult learners with means score of 3.23 and 3.63. Item 3 indicated that adult learner that use the school library perform better than those that do not use it with means score of 3.40 and 3.50. Item 4 show that reading is the number one factor for better performance among students with means score of 3.40 and 4.00 for instructors and adult learners. Item 5 demonstrated that the use of library is a key to students' success in academics with means score of 4.00 and 3.50 respectively. Therefore, with grand means score of 3.54 and 3.66 which are greater than the criterion mean value of 2.50, it can be reasonably concluded that library actually influenced academic performance of adult learners in non-formal and adult education centers in Rivers State

Research Question 2: To what extent does information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State?

Table 2:   **Mean Response on the extent to which information and communication technology influence academic performance of Adult Learners in Non-formal and Adult Education Centers.**

S/N	Items	Instructors (26)			Adult learners (184)		
		$\bar{x}$	SD	Remarks	$\bar{x}$	SD	Remark
6	ICT makes student to be computer literate.	1.42	0.98	VLE	1.80	0.83	LE
7	ICT is the basis for distance learning.	1.36	1.01	VLE	3.80	1.08	VHE
8	ICT aid students in assignment.	1.95	0.77	LE	3.67	1.02	VHE
9	ICT aid student for easy research.	1.66	0.89	LE	3.67	1.02	VHE
10	ICT is important in every sector.	1.76	0.85	LE	2.83	0.74	HE
	Grand Mean	**1.63**	**0.90**	**LE**	**3.15**	**0.94**	**HE**

From table 2 above, item 6 reveals that ICT does not makes students to be computer literate with means score of 1.42 and 1.80 which are less than the criterion mean value of 2.50. In item 7, there is discrepancy in the view of instructors and adult learners on whether ICT is meant for distance learning or not with mean score of 1.36 and 3.80. Item 8 indicated that ICT aid students in assignment with mean score of 1.95 and 3.67.

Item 9 show that ICT aid student for easy research with means score of 1.66 and 3.67. Item 10 demonstrated that ICT is important in every sector with means score of 1.76 and 2.83 respectively. Meanwhile, with grand means score of 1.63 and 3.15 for instructors and adult learners respectively, it is believed that information and communication technology does not really influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Research Question 3:To what extent do school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State?

Table 3: Mean Response on the extent to which school buildings **Influence Academic Performance of Adult Learners in Non-formal and Adult Education Centers.**

S/N	Items	Instructors (26)			Adult learners (184)		
		$\bar{x}$	SD	Remark	$\bar{x}$	SD	Remark
11	School buildings have positive influence on student academic performance.	4.00	1.18	VHE	3.40	0.91	HE
12	The school building is the beauty of studying.	3.73	1.05	VHE	4.00	1.18	VHE
13	School building motivates student's performance.	3.26	0.86	HE	3.40	0.91	HE
14	Building is the number one facilities in school planning.	2.80	0.73	HE	3.80	1.08	VHE
15	Seating arrangement influences student performance.	3.26	0.86	HE	3.53	0.96	VHE
	Grand Mean	**3.41**	**0.94**	**HE**	**3.63**	**1.01**	**HE**

From table 3 above, item 11 shows that school buildings have positive influence on student academic performance with means score of 4.00 and 3.40. In item 12, has it that, the school building is the beauty of studying with mean score of 3.73 and 4.00. Item 13 indicated that school building motivates student's performance with mean score of 3.26 and 3.40. Item 14 show that building is the number one facility in school planning with means score of 2.80 and 3.80. Item 15 demonstrated that seating arrangement influences student performance with means score of 3.26 and 3.53 respectively. Hence, with grand means score of 3.41 and 3.63 that are greater than the criterion mean value; it is obvious that school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Test of Hypotheses

Ho₁: There is no significant difference between the means score of instructors and learners on the extent to which school library influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Table 4: Analysis of Hypothesis One using Z-Test Statistics

Respondents	N	$\bar{x}$	SD	Z-cal.	Z-crit.	Sig.	Decision
Instructors	26	3.54	0.97				
				0.59	±1.96	0.05	Accepted
Adult Learners	184	3.66	1.02				

Table 4 above reveals that, the z-calculated is greater than 0.59 <±1.9 at 0.05 level of significance. This implies that, there is no difference between instructors and adult learners on how library influence academic performance of adult learners in non-formal and adult education centers in Rivers State. Meanwhile, the null hypothesis was accepted.

Ho₂: There is no significant difference between the means score of instructors and learners on the extent to which information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Table 5: Analysis of Hypothesis Two using Z- Test Statistics

Respondents	N	$\bar{x}$	SD	Z-cal.	Z-crit.	Sig.	Decision
Instructors	26	1.63	0.90				
				2.74	±1.96	0.05	Rejected
Adult Learners	184	3.15	0.94				

Table 5 above shows that, the z-calculated is greater than 2.74 >±1.9 at 0.05 level of significance. This implies that, there is difference between instructors and adult learners on how information and communication technology influence academic performance of adult learners in non-formal and adult education centers in Rivers State. Therefore, the null hypothesis was rejected.

Ho₃: There is no significant difference between the mean scores of instructors and learners on the extent to which school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State.

Table 6: Analysis of Hypothesis Two using Z-Test Statistics

Respondents	N	$\bar{x}$	SD	Z-cal.	Z-crit.	Sig.	Decision
Instructors	26	3.41	0.94				
				1.11	±1.96	0.05	Accepted
Adult Learners	184	3.63	1.01				

Table 6 above shows that, the z-calculated is greater than 1.11 <±1.9 at 0.05 level of significance. This implies that, there is no significant difference between instructors and adult learners on how school buildings influence academic performance of adult learners in non-formal and adult education centers in Rivers State. Hence, the null hypothesis was accepted.

Discussion of Findings

Research question one has indicated the extent to which school library influence adult education student academic with mean responses of 3.54 and 3.66 that are greater than the criterion mean value of 2.50. The hypothesis one was accepted in line with the fact that there is no significant difference between the means score of instructors and adult education learners. This is in line with the view of Fowowo (1988) stated that school library should be well equipped and accessible to all students and teachers. Ullah and Farrog (2008) indicated that reading of library materials have positive relation with students vocabulary, grammar, comprehension, writing and spelling skills. These abilities needs well managed library where they improve their skills and academic performance.

Research question two shows that, there is no discrepancy between the mean scores infrastructural facilities and adult education learners on the extent to which information and communication technology influences academic performance with grand mean scores of 1.63 and 3.15 respectively. Hypothesis two was rejected on the ground that there is significant difference between the means score of instructors and adult education learners. Information and communication is integral to human society. But, before the advent of technology in Nigeria, people communicated using various instruments and codes such as talking drums, flutes, gongs, town criers and village square meetings and most persons in our society are still use to such (Coates & Humphreys, 2004).

Research question three indicated the extent to which school buildings influence adult education learners academic performance, with a means score of 3.41 and 3.63 which are greater than the criterion mean value of 2.50. Hypothesis three was accepted on these premises. Hence, Adaja and Osagie (2015) stress that well-planned and maintained school plant and facilities do not only enhance good teaching but facilitate easy learning. There is need for planning the school buildings and facilities, to enhance the attainment of the aims and goals for which the school is established.

Conclusion

Basically, the study examines the extent to which in infrastructural facilities influences students' academic performance of adult learners' in adult education centers in Rivers State, and it was made clear that library is key factor, improvised materials and instructional resources. While, the results reveals that ICT does not really influence academic performance of adult learners' in adult education centers in Rivers State. However, it was discovered that the programme is lacking behind in a number of ways, therefore more efforts are expected to be put in by the government and other stakeholders of concern.

Recommendations

Based on the findings of the study the following recommendations were made:

1. Government should ensure that more libraries are build for the purpose of this adult education programme in Rivers State.
2. ICT is not too good for adult learners; therefore instructors should avoid the use of ICT among adult learners in Rivers State.
3. Government should try and improve on schools structures across the State.

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