

EVALUATION OF THE ADEQUACY OF EDUCATIONAL FACILITIES IN PRIVATE AND PUBLIC EARLY CHILDHOOD AND CARE CENTRES IN PLATEAU STATE, NIGERIA

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ABSTRACT

The study evaluated the adequacy of educational facilities in private and public Early Childhood and Care Education (ECCE) centres in Plateau State, Nigeria. The descriptive survey research design was adopted. The population of schools used in the study comprised 933 ECCE schools in 17 Local Government Areas of Plateau State, Nigeria. The population of teachers was 1786 (632 in private and 1154 in public ECCE schools), then, care givers were 660 in number (221 in private and 439 in public ECCE schools). The sample for the study consisted of 277 ECCE centres and 1154 teachers (75 from 30 private ECCE schools and 202 teachers from 177 public ECCE schools) with 158 care givers (38 from private and 120 from public ECCE schools). The objectives of the study were to determine: the extent to which educational facilities were adequate in private and public ECCE centres in nursery schools in Plateau State and the level of achievement of the objectives of the educational resource centres in nursery schools in Plateau State, Nigeria. Two research questions and one hypothesis guided the study. An instrument, named Evaluation of Early Childhood Care Education Scale (ECCES) with a reliability index 0.78 was used to collect data from the participants. The research questions were answered using mean and standard deviation while the hypothesis was tested at 0.05 level of significance. Findings from the study showed that educational facilities were adequate in public ECCE schools to a moderate extent while it was adequate to a large extent in private ECCE schools in Plateau State, Nigeria. Furthermore, findings showed that the objectives of the educational resource centers have been achieved.

INTRODUCTION

Early Childhood and Care Education is the sequential development of a child, physically, intellectually, and psychologically. It is an education given in an educational institution to children aged 3-5 plus prior to their enrollment in the primary school. It includes the kindergarten, playgroup and nursery schools. Agwu and Osuji (2021) see the Early Childhood and Care Education as the education offered to children who have not yet reached the statutory age of beginning primary school. The authors further maintained that it is a semi-formal education arrangement, usually outside the home whereby, young children from about the age of 3 years are exposed through play-like activities in a group setting through mental, social and physical learning suited to their developmental stage, until the mandatory age of six years the government approved for admission into formal school.

The objectives of pre-primary education according to the National Policy on Education (Federal Republic of Nigeria [FRN], 2014) include effecting a smooth transition from home to the school, prepare the child for the primary level of education, provide adequate care and supervision for the child while their parents are at work on the farms, in the markets, offices; inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and playing with toys.

When facilities are adequate for Early Childhood and Care Education programme at the pre-primary school level, it helps the caregiver or teacher to nurture and support the development of young children, and to successfully implement the ECCE curriculum. According to Bagattini (2019) the quantity and quality of resources adequate for any educational programme would determine the school's systems capacity for the implementation of the type of education.

Educational facilities include human and material facilities Pather (2018). They are the sources from which institutional benefits are produced, which include: instructional materials,

energy, services, staff, knowledge or other assets that are transformed to produce educational benefits in the society. Human resources are the teaching and non-teaching staff. Instructional resources include schools facilities, instructional materials, instructional aids, time and finance. Adequacy of these facilities in schools aids the achievement of educational goals and objectives. Human resources in the school system are set of individuals that transmit knowledge necessary for individual and societal development into the learners. Human resources in education (teachers) impart knowledge, skills, attitude and knowledge through desirable changes in the behaviour of pupils. Instructional facilities are resources the teacher uses to make lessons more interesting and understandable to the learners. Instructional facilities refer to the totality of non – human resources that are used for the attainment of educational goals. These can be also be referred to as the infrastructural facilities and finance adequate for use by the human resource within the school system. Adequate instructional facilities are the main contributors to teaching and students' learning outcomes in the school system. Instructional resources include educational facilities, instructional materials and finance, which involve school buildings, classrooms, furniture, libraries, recreational equipment, apparatus among others. Hence, there is need for instructional facilities as well as space to be adequately provided in the school system.

Agile (2018) opined that there must be enough space for children to play and that the playground should be covered with either grass or sand; the dimension of the classroom should be 16m² for 20-25 children, and, there should be provisions for science, health and nutrition, drama and shopping corners; 15 statutory record books, ranging from admissions and withdrawal registers up to the acquisition of school diaries by the centres. The furniture for the ECCE classroom suggested by the Minimum Standards for ECCE programmes include child-size chair (one per child and a round table for four children). It was also part of the standards that the ECCE centres must be fenced for security and safety purposes. Other concerns of the minimum standards are necessary human resources: One caregiver and a help should be in custody of 20-25 children. Health facilities, such as, weighing scales, growth charts, and first aid materials were suggested too. Assessment methods that would give proper record of growth and development were suggested, using of growth monitoring equipment and child assessment records (which should cover all round development). Others include government, community and parental involvement, quality of nutrition and nutrition facilities, safety measures, stakeholders "roles and supervision organogram. The social, emotional, physical and intellectual development of the ECCE children should be equally and adequately emphasized by the centers among other developmental factors, such as nutrition, health, safety, protection and security, water and environmental sanitation.

Statement of Problem

Educational facilities are known to be critical to successful implementation of any ECCE programme. When facilities are available for the ECCE programme, they will in no small measure help teachers and caregivers to nurture and support the development of young children and to successfully implement the curriculum. They also enhance the cognitive and psychomotor development of the child which help the child to successfully transit from preprimary to the primary level of education.

Inadequate facilities in ECCE centres is a problem that affects the smooth teaching and learning process in the centres. The findings of Alabi and Ijaiya (2014), Moruf and Muhammed (2015) who assessed the facilities adequate for ECCE at pre-primary school level of education confirmed that facilities for ECCE teaching and learning were inadequate. Again, observations by the researchers show that the state of Early Childhood and Care Educational resource centres development in Nigeria is deplorable. Little wonder, Sooter (2011) asserted that the role of educational resource centres in the attainment of educational excellence is yet to be fully appreciated in Nigeria. Furthermore, available literature shows that there is paucity of studies on evaluation of ECCE programmes in nursery schools in Nigeria. No study carried out in Plateau

State, Nigeria, on evaluation of the adequacy of educational facilities in private and public Early Childhood and Care Centres was available to the researcher. The need for more empirical studies in this area, therefore, becomes imperative. Moreover, the consequences of not addressing the issue of inadequacy of up to-date teaching and learning facilities in the Early Childhood and Care Educational resource centres are that, the smooth transition of young children from the early childhood education to pre-primary level would be hindered; the cognitive and psychomotor development of the child which are critical for preparing him for effective living in a knowledge-driven society would also be impeded.

Aim and Objectives

1. determine the extent to which educational facilities are adequate in public and private ECCE centres in nursery schools in Plateau State, Nigeria.
2. determine the level of achievement of objectives of the educational resource centres in nursery schools in Plateau State, Nigeria.

Research Questions

1. To what extent are educational facilities adequate for teaching and learning in public and private ECCE nursery schools in Plateau State, Nigeria?
2. What is the level of achievement of the objectives of the educational facilities in nursery schools in Plateau State, Nigeria?

Hypothesis

1. There is no significant difference between the mean scores of respondents on adequacy of facilities in public and private schools in Plateau State, Nigeria.

Method

The study employed a descriptive survey research design, specifically, the cross-sectional survey research design using a researchers-developed instrument tagged; Evaluation of Early Childhood Education Scale (ECC-ES). The ECC-ES was based on four-point scale of Highly Adequate = 4, Moderately Adequate = 3, Adequate = 2, and not Adequate = 1. The Content validity of the ECC-EQ was established using four experts, two of the experts were from the Department of Science and Technology Education, while the other two were from Research, Measurement and Evaluation all of the Department of Educational Foundations Faculty of Education University of Jos. The internal consistency of the ECC-EQ was established using the Cronbach alpha method as 0.78. was computed which showed that the instrument was reliable and adequate as suggested. The research questions were answered using mean and standard deviation while the hypothesis was tested using t-test at 0.05 level of significance.

RESULTS

Table 1: Extent to which Educational Facilities were Adequate in Public and Private ECCE Centres in Plateau State, Nigeria

| S/N | | Public | | | | Private | | | |
|-----|--------------------------|--------|------|------|--------------|---------|------|------|--------------|
| | | N | SD | SD | Remark | N | SD | SD | Remark |
| 1. | Chalkboard | 202 | 3.71 | .604 | Adequate | 75 | 3.61 | .676 | Adequate |
| 2. | Textbook | 202 | 4.00 | .000 | Adequate | 75 | 4.00 | .000 | Adequate |
| 3. | Chalk | 202 | 4.00 | .000 | Adequate | 75 | 4.00 | .000 | Adequate |
| 4. | HumanVoice | 202 | 3.77 | .424 | Adequate | 75 | 3.09 | .293 | Adequate |
| 5. | Maps | 202 | 2.10 | .909 | Not adequate | 75 | 2.04 | .877 | Adequate |
| 6. | Fieldtrips | 202 | 1.59 | .665 | Not adequate | 75 | 2.85 | 1.09 | Adequate |
| 7. | Model | 202 | 1.88 | .673 | Not adequate | 75 | 3.47 | .844 | Adequate |
| 8. | Radio sets and Cassettes | 202 | 2.07 | .814 | Not adequate | 75 | 1.96 | .951 | Not adequate |

| | | | | | | | | | |
|-----|----------------------------|-----|------|------|--------------|----|------|------|--------------|
| 9. | Television sets | 202 | 1.54 | .528 | Not adequate | 75 | 3.55 | .684 | Adequate |
| 10. | Still pictures | 202 | 1.71 | .454 | Not adequate | 75 | 3.92 | .487 | Adequate |
| 11. | Cartoons | 202 | 2.10 | .698 | Not adequate | 75 | 3.92 | .487 | Adequate |
| 12. | Computers | 202 | 1.32 | .466 | Not adequate | 75 | 3.63 | .540 | Adequate |
| 13. | Newspapers | 202 | 1.71 | .454 | Not adequate | 75 | 2.11 | .967 | Not adequate |
| 14. | Film & Film Projectors | 202 | 1.95 | .217 | Not adequate | 75 | 3.92 | .487 | Adequate |
| 15. | Tape Recorders | 202 | 1.85 | .758 | Not adequate | 75 | 2.01 | .966 | Not adequate |
| 16. | Cameras | 202 | 2.01 | .819 | Not adequate | 75 | 3.51 | .503 | Adequate |
| 17. | Telephones | 202 | 1.65 | .479 | Not adequate | 75 | 3.84 | .436 | Adequate |
| 18. | Electricity | 202 | 1.80 | .399 | Not adequate | 75 | 3.87 | .342 | Adequate |
| 19. | Flash cards | 202 | 2.13 | .628 | Adequate | 75 | 3.65 | .479 | Adequate |
| 20. | Playing ground | 202 | 1.31 | .551 | Not adequate | 75 | 1.68 | .470 | Not adequate |
| 21. | Record players | 202 | 1.80 | .399 | Not adequate | 75 | 1.80 | .678 | Not adequate |
| 22. | Realia | 202 | 1.97 | .209 | Not adequate | 75 | 1.72 | .534 | Not adequate |
| 23. | Marker board | 202 | 1.85 | .758 | Not adequate | 75 | 3.44 | .598 | Adequate |
| 24. | Slides & slides projectors | 202 | 2.01 | .823 | Not adequate | 75 | 3.72 | .534 | Adequate |
| 25. | Video Tape Recorder | 202 | 1.67 | .472 | Not adequate | 75 | 1.64 | .584 | Not adequate |
| 26. | Module | 202 | 1.80 | .399 | Not adequate | 75 | 3.53 | .502 | Adequate |
| 27. | Handbooks | 202 | 2.13 | .628 | Not adequate | 75 | 3.85 | .425 | Adequate |
| 28. | Journals | 202 | 1.22 | .414 | Not adequate | 75 | 3.36 | .671 | Adequate |
| 29. | Overhead projector | 202 | 1.80 | .399 | Not adequate | 75 | 1.69 | .545 | Not adequate |

The results of the analysis from Table 1 shows the adequacy of educational facilities in the ECCE center. From the Table, chalkboard, textbooks, chalk, human voice and flash cards are educational facilities that were adequate in public schools, while field trips, television set, still pictures, cartoons computers film and film projectors, telephones, electricity, playground, relia, marker board, slide and slide projectors, handbooks, journals and overhead projects are inadequate. In the same vein, chalkboard, textbooks, chalk, human voice, flash cards, field trips, television set, still pictures, cartoons computers film and film projectors, telephones, electricity, playground, relia, marker board, slide and slide projectors, handbooks, journals and overhead projects are adequate in private schools, while radio sets, newspapers and tape recorders were not adequate. From the results, it shows that private schools had more educational facilities provided than public schools. This implies that private early childhood and care centres had more facilities than government early childhood and care centres.

Table 2: Responses of Caregivers on Extent of the Adequacy of Play Facilities in Private and Public ECCE Centres in Plateau State, Nigeria

| S/N | Facilities | Public | | | Private | | | | |
|-----|-------------------------|--------|------|------|----------|----|------|------|----------|
| | | N | Mean | SD | Remark | N | Mean | SD | Remark |
| 1. | Puzzles | 120 | 3.92 | .278 | Adequate | 38 | 3.95 | .226 | Adequate |
| 2. | Plastics bowls and lids | 120 | 3.62 | .488 | Adequate | 38 | 3.00 | .000 | Adequate |
| 3. | Plastic bottles caps | 120 | 3.52 | .608 | Adequate | 38 | 2.95 | .226 | Adequate |
| 4. | Shells | 120 | 4.00 | .000 | Adequate | 38 | 3.97 | .162 | Adequate |
| 5. | Counting bears | 120 | 3.93 | .264 | Adequate | 38 | 3.95 | .226 | Adequate |

| | | | | | | | | |
|------------------------------------|-----|------|------|--------------|----|------|------|--------------|
| 6. Building blocks | 120 | 3.02 | 1.12 | Adequate | 38 | 3.95 | .226 | Adequate |
| 7. Transportation toy | 120 | 1.79 | .721 | Not adequate | 38 | 2.00 | 1.07 | Not adequate |
| 8. Construction sets | 120 | 1.66 | .476 | Not adequate | 38 | 3.92 | .359 | Adequate |
| 9. Dolls with accessories | 120 | 2.83 | 1.10 | Adequate | 38 | 3.84 | .370 | Adequate |
| 10. Puppets | 120 | 1.81 | .395 | Not adequate | 38 | 1.76 | .431 | Not adequate |
| 1. Water play toys | 120 | 1.81 | .395 | Not adequate | 38 | 3.87 | .475 | Adequate |
| 1. Crayons and Markers | 120 | 3.76 | .430 | Adequate | 38 | 4.00 | .000 | Adequate |
| 1. Paint brushes and finger paints | 120 | 3.59 | .750 | Adequate | 38 | 3.05 | .226 | Adequate |
| 1. Preschoolers sized scissors | 120 | 2.10 | 1.10 | Not adequate | 38 | 2.08 | 1.10 | Not adequate |
| 1. Modelling Tools | 120 | 1.52 | .502 | Not adequate | 38 | 3.82 | .692 | Adequate |
| 1. Keyboards | 120 | 1.52 | .502 | Not adequate | 38 | 1.95 | .226 | Not adequate |
| 1. Xylophones | 120 | 2.32 | 1.20 | Not adequate | 38 | 3.89 | .311 | Adequate |
| 1. Maracas | 120 | 1.52 | .502 | Not adequate | 38 | 1.95 | .226 | Not adequate |
| 1. Tambourines | 120 | 1.52 | .502 | Not adequate | 38 | 3.71 | .802 | Adequate |
| 2. CD and DVD players | 120 | 3.44 | .754 | Adequate | 38 | 3.55 | .504 | Adequate |

The results of the analysis from Table 2 shows the responses of caregivers based on school type of private and public. From the table, puzzles, plastics bowls and lids, plastic bottles caps, shells, counting bears, building blocks, Dolls with accessories, paint brushes and finger paints, crayons and markers and CD and DVD players are adequate in public schools, while Transportation tools, construction sets, puppets, water play toys, preschoolers sized scissors, modelling tools, keyboards, xylophones, maracas and tambourines models are not adequate in most schools. For private schools, puzzles, plastics bowls and lids, plastic bottles caps, shells, counting bears, building block, construction sets, dolls with accessories, water play toys, crayons and markers, paint brushes and finger paints, modelling tools, xylophones, tambourines and CD and DVD players are adequate. Transportation toys, puppets, preschoolers sized scissors, keyboards and maracas are not adequate.

Table 3: Level of Achievement of Objectives of Educational Resource Centers in Nursery Schools in Plateau State, Nigeria

| S/N | Activities | HA | FA | PA | NA | N | Mean | Std | Decision |
|-----|--|-----|----|----|----|-----|------|------|----------|
| 1 | Centre for teachers' discussion, investigations, study, workshop, Short courses and conferences. | 95 | 97 | 81 | 4 | 277 | 3.02 | .834 | Achieved |
| 2 | For development and testing of teaching materials | 120 | 99 | 58 | - | 277 | 3.22 | .771 | Achieved |
| 3 | For enhancement of the study of language, science and mathematics | 92 | 98 | 87 | - | 277 | 3.02 | .805 | Achieved |
| 4 | Provision of the need of special education and serve as centre for educational innovation | 100 | 95 | 82 | - | 277 | 3.06 | .809 | Achieved |

HA: highly Achieved, FA: Fairly Achieved, PA: Poorly Achieved, NA: Not Achieved

The results of the analysis from Table 3 shows the level of achievement of the objectives of educational resource centers in Plateau State, Nigeria. From the result, all the items have mean

scores above the acceptable mean of 2.50, indicating that the centres are for teachers' discussion, investigations, study, workshop, short courses and conferences. They are for development and testing of teaching materials, enhancement of the study of language, science and mathematics and provision of the need of special education and serve as centre for educational innovation. This means that majority of the respondents agreed that the objectives of the educational resource centers have been achieved.

Table 4: Results of t-test Analysis on Extent of Adequacy of Educational Resources Facilities in Public and Private ECCE Schools in Plateau State, Nigeria

| S/N | School Type | N | | SD | df | t | p-value | Sig. | Decision |
|-----|-------------|-----|-------|------|-----|--------|---------|------|-------------|
| 1 | Private | 75 | 89.39 | 3.56 | | | | | |
| | | | | | 275 | -45.47 | 0.00 | 0.05 | Significant |
| 2 | Public | 202 | 60.47 | 5.06 | | | | | |

Results of the t-test analysis from Table 4 show that private schools had response mean score of 89.39, with a standard deviation of 3.56, while public schools had a mean score of 60.47 and a standard deviation of 5.06. The result yielded $t(275) = -45.47$, $P < 0.05$. Since the p-value of 0.000 is less than 0.000, the null hypothesis was rejected. Therefore, there is a significant difference in the responses of respondents on adequacy of facilities between public and private schools in ECCE centers in Plateau State. This implies that, private early childhood and care centres had more adequate educational facilities than government early childhood and care centers.

DISCUSSION

Findings from Table 4 revealed that both private and public schools had adequate facilities even though private had than public schools. This is in agreement with the views of Arum (2015), who reported that teaching facilities were provided adequately in private schools than public schools. The implication is that private schools had adequate facilities than private schools in the study area. Finding from Table 9 showed that there is no significant difference in the level of adequacy of facilities in public and private early childhood centers in plateau state. This in agreement with the findings by Abdul-Raheem Oluwagbohunmi (2015) who found no significant difference in the level of adequacy of facilities in secondary schools in Ogun State. The implication of this findings is that more needs to be done in the provision of facilities for teaching and learning in early childhood centres.

CONCLUSION

From the findings of the study, it was concluded that educational facilities were adequate in public ECCE schools to a moderate extent while it was to a large extent, adequate in private ECCE schools in Plateau State, Nigeria. Furthermore, findings showed that the objectives of the educational resource centers were shown have been achieved in the ECCE nursery schools in the area of the study.

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