EVALUATION OF LEARNING OUTCOMES OF PRIMARY SCHOOL PUPILS IN EBONYI STATE, NIGERIA

Dr. Ikoro Ibekwe Stanley and Dr. Eleri Nnanna Otu-Eleri

Ebonyi State College of Education, P. M. B.02 Ikwo, Ebonyi State-Nigeria.
Nigerian Educational Research and Development Council[NERDC],P.M.B.91, Garki, Abuja.

ABSTRACT: *This research study which focused on Evaluation of Learning Outcomes for both Public and Private Primary School pupils in Ebonyi State Nigeria, adopted a descriptive survey design. The sample size for the study was 3,041 pupils and was restricted to primary four (4) pupils, made up of 1503 males and 1538 females. Three research questions and two null hypotheses guided the study. Instrument for data collection was 110 test items developed by the researchers in the areas of Numeracy, Literacy and Life-skills .The instrument was given to the Experts for face and construct validity and was finally subjected to a reliability test, using Kudar-Richardson formula 20(K-R 20) which yielded a reliability co-efficient of 0.78. The test instruments were administered to the pupils with the help of research Assistants. Mean, Standard deviation and Percentage were used to answer the research questions while t-test and Chi-square (x^2) Statisticts were used to test the null hypotheses at 0.05 level of significance. The results of the of the findings revealed that both male and female primary 4 pupils performed very poor and had very low competencies in Numeracy, literacy and Life skills. It is therefore recommended that the Federal Government of Nigeria should mount training and retraining programmes for the teachers on the methods of teaching the pupils, Mathematics, English language and Life skills, in addition to the provision of adequate textbooks. Also, Supervisory Team should be set up to monitor classroom teaching, learning, and evaluation of pupils' activities among other recommendations.*

KEYWORDS: Learning Outcomes, Evaluation of Learning Outcomes, Primary School, Ebonyi State, Nigeria

INTRODUCTION

An efficient education system should serve as an effective means of accelerating social, economic, scientific and technological process (Liman, 1997). In pursuit of these aspirations, successive governments have set up universal functional education. This explains why government spends huge sums of money on education. The huge investment on education is justifiable only to the extent that schooling is effective in promoting the realization of national objectives and serves as a mean of actualizing the basic learning needs of those exposed to the system. The extent to which schooling meets the basic learning needs of the pupils/ learners can be ascertained through evaluation.

It should be recalled that the Jomtien Declaration in 1990 and the follow-up framework for Action adopted at the World Education Forum in Dakar, Senegal in April 2000, recognized the quality of education as a crucial component in the broad movement of achieving Education for All (Worldbank,2013). Goal 6 of the Dakar Framework states that all aspects of education quality should be improve so that recognized and measurable learning outcomes are achieved by all, especially in Literacy, Numeracy and essential Life skills. According to

World Bank (2013), Learning outcomes are particular knowledge, skills or behaviour that students are expected to exhibit after a period of study. Learning outcomes reflect the nation's concern with the level of knowledge acquisition among its students population. In his own view, Byu   (2013) States that learning outcomes are what a student is expected to be able to "Do", as a result of a learning activities. In other words, "Do" suggests what skill, knowledge or behaviour a student is able to demonstrate as a consequence of a learning activity. Jude (2001) states that learning outcomes are what the students will do that demonstrates learning, the context within which the student will demonstrate learning and how well he/she have to demonstrate his/her learning. He further stressed that, learning outcomes must be something to be observed. This is why Kennedy, Hyland and Ryan (2006), state that learning outcomes are direct statements that describe the competences that student should know and be able to demonstrate upon completion of a course or programme. The researchers succinctly state that learning outcomes are the extent to which the learner/student is able to perform tasks after he/she has been taught or exposed to instructions/programmes. Evaluation of learning outcomes, can be defined as a systematic process of collecting, analyzing and interpreting data on a measured performances of the students/learners with a view to determine the extent to which the learners are achieving the instructional objectives (Ikoro, 2011). On the other hand, evaluation of learning outcomes should flow from needs assessment, and the need assessment should determine the gap between an existing condition and a desired condition (American Association of Law Libraries,2013). Therefore, it is the desired conditions expected from the students/learners that are to be assessed. Proper evaluation of learning outcomes should be based on student/learning behavior, appropriate assessment methods and specific student performance criteria for success. In view of the above therefore, the evaluation should cover the basic domains. Starting from the lowest to the highest cognitive skills of knowledge, comprehensive, application, analysis, synthesis and evaluation.

The Federal Government of Nigeria in Conjunction with United Nations International Children Education Scientific and Cultural Organization (UNESCO), laid a foundation of a national assessment in Nigeria primary education in 1997. The assessment which was carried out nation-wide was called "monitoring of learning achievement" (Falayajo, Makoju, Okebukola, Onugha, and Olubodun, 1997). In that national evaluation of primary education, primary four (iv) pupils were selected and their curriculum used in the test item development. However, due to logistics problems the administration of the test was delayed and it was administered to the pupils after their 1st term in primary five (v) of 1995/1996 academic session. The results of the evaluation exercise revealed very low performances of pupils nation-wide in the three competency areas assessed. The national performance of 6,233 pupils tested were: For Numeracy test, the mean was 32.2 and standard deviation of 17.04. The Literacy tests had a national mean of 25.2 and standard deviation of 18.19 and Life-skill tests had a mean of 36.86 and standard deviation of 21.16.

Other researchers such as Kachii (2005) and Ikoro (2009) made similar findings thus; Kachii (2005) assessed the performance of primary 6 pupils of Staff School Jalingo. His sample size was 99 pupils. The results revealed a very poor performance of the pupils with mean of 25.90 and standard deviation of 7.17. Then, Ikoro (2009) computed the mean performance of primary school pupils in the Common Entrance Examinations for 2001 and 2005 and found out that their average mean performances were 19.75 for 2001 and 18.75 for 2005. In all the cases sited above, the pupils' performances or competency levels were very low and poor. According to Falayajo et al (1997), the poor performance by the pupils at the penultimate to

completion level of primary education, constitutes a cause for concern and has implications for curriculum planning, teacher education and classroom teaching-learning process.

Statement of Problem

Despite the huge investment in education, individuals and groups have raised alarm over the perceived falling standard of education especially at the primary education level. During the nation-wide assessment of primary school pupils on learning achievement in 1997, Ebonyi State was not included or captured in that survey. It therefore, becomes imperative that the study should be carried out in the state. The researchers are therefore, faced with the challenge of evaluating the learning outcomes of primary four (4) pupils as to ascertain their level of competencies in Numeracy, Literacy and Life-Skills.

Purpose of the Study

Generally, the purpose of the study was to evaluate the learning outcomes of primary four (4) pupils in Ebonyi State. Specifically, the study determined to find out:

1. The extent to which primary four (4) pupils show level of competencies in Numeracy, Literacy and Life-skill.

2. The performance of male and female pupils in the three test forms.

3. The proportion (male or female) that will perform better or show greater mastery of the competencies in the tests.

Scope of the Study

The study focused on the Evaluation of learning out- comes of primary four (4) pupils in Ebonyi state. It was restricted to primary 4 because they have passed Junior Basic Education which is primary 1 to 3, and are in the 1st year in their Middle Basic Education which is primary four (4). Equally, the Federal Ministry of Education in Nigeria in conjunction with the UNESCO used primary four (4) pupils in their own assessments of other states in Nigeria. Also the pupils were assessed only on the three key constructs, Numeracy, Literacy and Life-skills.

Research Questions.

These research questions guided the study.

1. To what extent does the primary four pupils show level of competency in Numeracy, Literacy and Life-skill.

2. What is the performance of male and female pupils in the three test forms.

3. What proportion of the pupils (male or female) that will perform better or show greater mastery of the competencies in the tests.

Research Hypotheses

The hypotheses were tested at 0.05 significant level.

HO_1: There is no significant difference in the mean scores between male and female of primary 4 pupils in each of the test forms.

HO_2: There is no significant difference in the proportion of primary 4 pupils performance in favour of any sex groups, male or female.

Design of the Study

The study adopted a descriptive survey design because it seeks to find out and describe the learning outcomes of primary 4 pupils on the tests.

The Population of the Study

The population of the study comprised all the 1080 public and 258 private primary schools in Ebonyi State. Their population is 58,629 primary 4 pupils in public schools and 2,190 primary 4 pupils in private schools, making a total of 60,819 primary 4 pupils in Ebonyi State. This population is made up of 30,057 males and 30,762 females.

Sample and Sampling Techniques

Out of the population, a total of 3,041 primary 4 pupils was selected which comprised 1503 males and 1538 females from the sampled schools of 102 public primary schools and 26 private primary schools. Furthermore 5% was used to draw the pupils sample while 10% was used to select the schools. A stratified random sampling technique was used for the selection, because the schools are already in strata. These are appropriate because according to Nwana (2008), if a population is in several thousand, a 5% or less sample will do.

Instrument for Data Collection

The instrument for data collection was developed by the researchers titled: Evaluation of Learning Outcomes questions (EOLOQ)

The instrument covered three thematic areas namely: Numeracy 40 items, Literacy 55 items and Life Skills 40 items, given a total of 135 items.

Validity and Reliability of Instrument.

The draft instrument was face and construct validated by five experts. Three from Measurement and Evaluation, one from Mathematics and one English Language Department of Ebonyi State University Abakaliki.

The instrument was validated on the followings: item structure, as it pertains to the age and class of the pupils, general test format and appropriateness of the sub-heads and the clarity of the items. After the validation, 25 items were dropped. The remaining 110 items were restructured in line with the recommendations of the experts and were administered to a group of pupils who were not part of the sampled group. Scores generated from the instrument were further subjected to a reliability test, using Kuder-Richardson formula 20 (KR-20).

Method of Data Collection and Analysis

The researchers administered the tests to the pupils with the Assistance of the classroom teachers, after they have been trained on how to carry out the exercise in the selected primary

schools. The data collected were analyzed using mean and standard deviation to answer the research questions while the hypotheses were tested using T-test and chisqure (x^2) statistics.

The instrument yielded a reliability co-efficient of 0.78. The reliability of the sub scales are Numeracy 0.56, Literacy 0.58 and Life skills 0.90.

The development of final instrument format is presented below.

NUMERACY	Number/ numeration 6	Fractions 6	Measurement 6	Every day statistics 6	Geo metry 6	Total 30
LITERACY	Structure 15	Reading comprehension (guided) – 5	Completion of blank spaces – 10	Writing guided letter 15	Spelling 5	50
LIFE-SKILLS	Integrated science 6	Agricultural science 6	Social studies 6	Handicraft 6	6	30
Total Items	27	17	22	27	17	110

RESULTS

Research Question I

To what Extent do the primary four (4) pupils show level of competencies in Numeracy, Literacy and Life-skills.

Table I: Mean scores and standard deviation of pupils on their level of competencies in the three test forms.

Test form	Number of Pupils	Mean	SD
A. Numeracy		35.8	18.02
B. Literacy	3 0 4 1	24.43	13.14
C. Life skills		35.34	16.93
Grand mean		31.85	16.93

The data in table 1, above show that the pupils competency level is below 50.00 which is the acceptable mean score. However, they have almost the same level of competencies in Numeracy 35.8 and life skills 35.34 respectively while literacy has the least mean score of 24.43. In all, the grand mean is 31.85 with SD 16.93.

Research question 2

What is the performance of male and female pupils in the three test forms.

Table 2: Mean performance (score) of male and female pupils in the three test forms

Test Forms	Male – 1503		FEMALE - 1538	
	Mean	SD	Mean	SD
A. Numeracy	34.3	17.32	36.15	18.97
B. Literacy	25.26	12.23	23.60	14.06
C. Life skills	35.07	17.66	34.62	15.81
Grand Mean	31.54	15.66	31.45	16.28

The data in table 2, above reveal that females have a higher mean of 36.15 with SD 18.97 than males with mean of 34.3 and SD 17.32 in Numeracy. In literacy male has 25.26 with SD 12.23 higher than female with mean of 23.60 and SD

14.06 while in life skill male also perform slightly higher than female with mean of 35.07 and SD of 17.45 and female mean of 34. 62 and SD of 15.81. However their grand mean is almost the same male has 31.54 with SD 15.66 and female has mean of 31.45 with SD 16.2.

Research Question 3:

What proportion of the pupils that perform better or show greater mastery of competencies than the other in the three test forms.

Table 3: Proportion and Percentage of Male and Female Pupils who passed each test form

Test Forms	Male = 1503		Female = 1538	
	No of correct response	Percentage of correct response	No of correct response	Percentage of correct response
A. Numeracy	605	42%	686	45%
B. Literacy	483	32%	457	30%
C. Life skills	515	34%	506	33%

The data in table 3 above, show that the female pupils have a high proportion of 45% that the male pupils with 42% in Numeracy. Then males have a higher proportion for literacy with 32% and female 30% while, in life skills male proportion is 34% higher than female's with 33Therefore, for the three test forms, males have higher proportion in two test forms (literacy and life skills), and so performed better than the females; who have higher proportion only in one test form; and that is 45% for Numeracy.

Ho$_I$: There is no significant difference in the mean score (performance) between male and female primary 4pupils in the test forms.

Table 4: T- test analysis of mean scores between male and female primary 4 pupils in the test forms.

Gender	N	X	SD	Dt	T-cal	T-crit	Decision
Male	1503	31.54	15.66				
Female	1538	31.45	16.28	3039	0.64	1.96	HO1 Accepted

 Table 4, showed the mean values of males and females on their performance in the tests. The males had a mean value of 31.54 and standard deviation of 15.66. while the female had 31.45

with standard deviation of 16.28. The T- test analysis indicates that t-cal had 0.64, while t crit is 1.96. This analysis showed no statistically significant difference in the score (performance) of males and females pupils in the test formats.

Ho2: There is no significant difference in the proportion of primary 4 pupils' performance in the tests, based on sex/gender

Table 5: Chi square (x^2) summary of the proportion of primary 4 pupils' performance in the tests based on gender/sex.

Sex	Counts	Numeracy	Literacy	Life/skills	Total	X^2 cal	Df	X^2crit.
Male	Observed	42	32	34	108			
	Expected	19.5	14.8	15.7	50.0			
Female	Observed	45	30	33	108	6.93	2	5.99
	Expected	20.8	13.9	15.3	50.0			
Total	Observed	87	62	67	216			
	Expected	40.3	28.7	31.0	100			

 In the table 5 above, the analysis of male and female pupils on their proportional performance in Numeracy, Literacy and life skills have a x^2 calculated value of 6.93 and the x^2 crit of 5.99

This analysis revealed a significant difference in the proportion of primary 4 males and females performance. This further confirm the findings in table 3. That out of the three test forms males have higher proportion in literacy and life skills while females have a higher proportion only in Numeracy.

Discussion

The discussion is made under the following sub headings

- Primary 4 pupils level of competencies on Numeracy, Literacy and Life-skills.

- The performance of male and female pupils in the three test forms.

- The proportion of the sex group that performed better than the other.

- If there is significant difference in the mean scores between males and females.

- If there is significant different in proportion in favour of any sex group.

The findings of the study showed that primary 4 pupils level of competencies in Numeracy, Literacy and Life-Skills are very low and poor as shown in table I with the mean 35.8 and SD 18.02 for numeracy. Literacy has a men of 24.43 and SD of 16. 63; and the average mean is 31.85 with SD at 16.93. This finding is in agreement with the findings of Falayago *et al* (1997), where they reported the pupils national performance thus: Numeracy had 32.2 and SD 17.04, Literacy – mean was 25.2 and SD 18. 19 and life-skills had a mean of 36.86 and SD of 21.16. This they declared as a very bad performance. Equally, this finding is in line

with the report of Ikoro (2009) on the poor performance of pupils in Common Entrance Examination where they had the state average mean performance of 19.75 for 2001 and 18.75 for 2005.

On the performance of male and female primary 4 pupils, the data in table 2, revealed that females have higher mean of 36.15 with SD 18.97 than males, who have mean of 34.3 and SD of 17.32 in Numeracy. Then in literacy, males have 25.26 mean with SD of 12.23 higher than females with mean of 23.60 and SD of 14.06.

While in Life-skills, males also performed slightly higher than females, with mean of 35.07 and SD of 17.45 as against female mean of 34.62 and SD, 15.81 However the grand mean performance of males and females is almost the same, because males have 31.54 with SD 15.66 and females have mean of 31.45 with SD 16.28. In all both performances are very poor.

For the proportion of the sex group that performed better than the other, the data in table 3 showed that for the three(3) test forms females have a higher proportion of 45% for numeracy against the males proportion of 42%. On the other hand, males have higher proportion of 32% against females 30% for Literacy and for Life-skills males also have 34% higher that females with 33%. Therefore, for the three test forms, males have higher proportions in two test forms which are Literacy and Life-skills, while females have a higher proportion only in one test form and that is on numeracy.

The findings in table 4, revealed in general terms that, there is no significant difference in the performance of males and females primary 4 pupils in the tests of Numeracy, Literacy and Life-skills; hence their performances are very low.

The findings of this study are in agreement with the findings of Falayojo et al (1997), kachii (2005) and Ikoro (2009) who variously stated and lamented on the very poor performances of primary school pupils and called for urgent remedial measures to be taken. However, data in table 5 showed that there is significant difference in the proportion of primary 4 pupils performance in favour of males. It implied that males have higher performance as can be observed from the data in table 3.

CONCLUSION

Primary Education is a foundation upon which every other education system rest and a key to the success or failure of the whole system (Federal republic of Nigeria 2004).Therefore the following conclusions were deduced based on results of the investigation generally, which has a far reaching educational implications thus; The Learning outcomes indicated that the primary school pupils have a very low competencies in Numeracy, Literacy and Life-skills. Both males and females performed poorly in the three areas.

This very poor performance of the pupils will be disastrous as they move to secondary and university levels. It therefore calls for urgent attention from all stake holders to forestall the urgly trend.

RECOMMENDATIONS

Based on the very low level of learning outcomes observed in this study. The following recommendations are made.

1. Government should mount a training and retraining programmes for teachers, in the subject areas, such as English studies, Mathematics and Life-kills (handicraft, survival skills, social studies etc) this should be done once a year. Possibly during long vocations.

2. Government should supply to the teachers and pupils the relevant textbooks and materials in these subject areas.

3. There should be effective supervision and monitoring of schools and teachers in the classrooms by the concerned authorities to ensure effective teaching and learning of the correct contents.

4. Head teachers and teachers should be made to adhere to the official school time table and to ensure that all the lessons for each day are adequately taught and covered.

5. Government and stakeholders should develop quality assurance mechanism to enhance sustainable better performance.

REFERENCES

American association of law libraries (2013). Writing learning outcomes. Chicago: hunt publishing co.

Brigharn young university (BYU) (2013). Students learning outcomes. Retrieved on September, 2013 from https: all clean of students byu. Edu.

Falayafo, W; Makoju G.A.E; Okebukola, P; Onugha D.E; and Olubodun (1997). Assessment of Learning Achievement of Primary Four Pupils Nigeria. Abuja: SCAPs Production.

Federal Republic of Nigeria FRN (2004). National policy on Education 4th Edition. Lagos: Nigeria Educational Research and Development council (NERDC)

Ikoro S.I. (2009). Education Development through effective maintain mathematics (competency) learning outcomes in Nigeria primary school. In A.O. Edegbo (ed). A book of Reading. Kogi State College of Education, Awka.

Ikoro, S.I. (2004) Measurement and Evaluation in Education and Behavioural Sciences Lagos: Hanab Printers Ltd.

Jude, C. (2001). Writing Learning outcomes; some suggestions. Britain: Oxford Brookes University.

Kachii, TM (2005). The study of mathematics Achievement of boys and girls[in the primary school. A case study of state school college of education, Jalingo. Nigerian Journal of science & Technology, and Environmental Education 1(1) 14-20.

Kennedy, D., Hyland, A. and Ryan, N. (2006). Learning outcomes. Available on-line www.tss.uoguelph.ca

Liman, M.T. (1997). Monitoring of learning achievement for primary four pupils. Abuja: Federal Republic of Nigeria.

University of Illinois Library. Tips on Writing Learning outcomes Retrieved on September, 2013 from www.library.illinois.edu.

World Bank Education for all. Retrieved on September 2013 from http://go.worldbank.org.