

# Analysis of Levels of Learners Achievement in Basic Literacy in Primary Schools: A Case of Busia Sub-County, Kenya

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**Abstract:** Basic Literacy is essential for children's educational access, success, lifelong learning and communication in today's technologically advancing society. According to UNESCO, it is considered absolutely as a human right, and yet the persistence of illiteracy remains one of the major concerns in Kenya. Literacy studies in Kenya suggest that while there have been substantial advances in expanded access to primary education, real results in literacy are still missing in different places in the country. The purpose of the study was to establish the levels of achievement in basic literacy in Busia Sub – County, Busia County, Kenya. The study adopted cross-sectional survey design to organize the study and obtain data. Head teachers, Curriculum Support Officers, language teachers, parents and class four learners in both public and private primary schools comprised the study population. The collection of data from schools was carried out through questions, interview schedules and achievement tests. The findings show that domestic environmental factors influencing the achievement of fundamental literacy skills include parent socioeconomic status, parent education level, parent employment and access to home education services.

**Key words;** Basic Literacy, level of achievement, primary schools

## I. BACKGROUND INFORMATION

Quality and relevant education is essential for any country's national development. However, achievement of basic literacy among school going children remain significantly low worldwide. In today's knowledge societies in particular, literacy is of key importance for economic, social and political engagement and development according to a 2006 Education For All (EFA) Global Monitoring Report (2006:17). The value of literacy is also illustrated by the international commemoration of World Literacy Day on September 8th each year. "In the primary years, quality teaching is essential for giving students the foundational literacy and numeracy on which lifelong learning depends," according to the World Bank Education Strategy Statement for 2020. The lowest literacy rates are observed in Sub-Saharan Africa and South-Western Asia in 2011, according to a 2011 UNESCO report. According to a 2013 United Nations survey, 53% of the world's illiterate population lives in the region in the south and west of Asia. A survey on literacy and numeracy assessment in East Africa 2011 gave a very damning report on literacy achievement in East Africa. The survey included 320 districts

in Kenya, Uganda, and Tanzania, accounting for roughly 90% of all districts in the three countries. The vast majority of students, according to the study, did not learn basic numeracy and literacy skills during their early years of schooling, as required by national curricular standards. Though Kenyan children performed fairly well in comparison to their counterparts in Tanzania and Uganda, children from poor social and economic backgrounds performed poorly. The primary school curriculum, according to the study, is the cornerstone upon which mastery of formal learning skills must be built. All acceptable standards must be taught to ensure a smooth transition to high-school, reading, writing and communication skills, such as listening and self-expression. Busia district was covered in the Uwezo East Africa survey in 2011 in which it emerged position 89 out of the 320 districts covered in East Africa (Uwezo East Africa, 2011). This result indicates that the district's literacy rate should be improved further. The aim of this analysis was thus to analyze the levels of learners achievement in basic literacy in Busia Sub - County to provide the basis for reform and action in Kenya to boost basic literacy in other Sub counties.

## II. LITERATURE REVIEW

UNESCO describes literacy as the capacity to identify, understand, interpret, build, communicate and compute printed and written material in different contexts (UNESCO, 2012). Literacy also involves a lifelong learning process which allows people to reach their objectives, increase their understanding, and participate actively in the communities and the wider society. In the national adult literacy assessment literacy is defined as both task- and skill-setting (NAAL). This task-based concept focuses on the day-to-day activities of adult literacy without assistance. The ability description implies that an adult must fulfill his or her qualifications from basic words to higher levels of skills (White S and Mc Closkey, 2003).

Literacy according to Langer (1991), can be understood as the capacity to think and understand like an alphabet in a particular society in a broader and more educationally effective fashion. He also said that literacy is conveyed in different forms in oral and written languages of different cultures. As a result, if educators are to create bridges and

promote transitions between various concepts of literacy, they must first consider these forms of thinking.

Eradication of analphabetism is now a major concern in education. This is due to the recognition that education in general and literacy in particular has an effect on personal and national development (Fordhan, 1985). Analphabetism places relative and absolute burdens on the economic wellbeing of the nation (WCEFA 1990).

The UNESCO 2016 report also shows that literacy rates vary greatly between and within regions around the world. South Asia, with 49 percent of the world's illiterate population, was discovered to be home to almost half of the world's illiterate population. Furthermore, Sub-Saharan Africa has 27% of all illiterate adults, Eastern and South Eastern Asia has 10%, Northern Africa and Western Asia has 9%, and Latin America and the Caribbean has 4%. Lowest literacy rates have been found in Sub-Saharan Africa and Southern Asia. Lowest literacy rates have been found in Sub-Saharan Africa and Southern Asia.

In Africa, NGO's have carried out literacy interventions in early primary grades. Some of these NGOs include Save the Children, the project for the study of Alternative Education in South Africa (PRAESA) and School Improvement Project International (SIL). In East Africa, since 2009, Uwezo has conducted literacy and digital surveys. The study showed that in the early years of primary school, a significant number of students did not gain fundamental competences in literacy and numeracy. The situation among the poor was much worse, with children from socially and economically impoverished families in all areas poorly performing relative to their rich peers.

The efforts, programs and services in child literacy in Kenya have been intensive. Simple literacy was the subject of literacy programs in Kenya in the 1960s. In 1972 UNESCO, which funded experimental foreign literacy initiatives implemented in Kenya, introduced the idea of functional literacy (Bunyi 2001). In the 1970s and 1980s Kenya was made familiar with vital literacy, although the government did not accept it at the time. The latest proposal for literacy intervention was the Tusome Early Literacy Program launched by the Ministry of Education through Triangle International Research in 2015.

Literacy is necessary for school learning and has an impact on the capacity of learners to engage in society and consider important public issues. So literacy offers the basis on which skills are rooted in the labor market. Fleer (2000) maintains that it can be established to what degree a learner benefits from the instruction on a particular field of study, for example the activities of language and mathematics among other aspects of academic programs, assessed by exams and tests. Literacy can be assessed in primary schools by reading and writing assessments that can be the basis of an evaluation for literacy.

Literacy achievement (performance) is a predictor of the future of a learner in the world of today. In education, the success of children is evaluated by literacy or how well they meet the goals of academic achievements. UNICEF (2007) states that academic performance in preschools and lower levels of elementary schools can predict the future success of a person in education at a subsequent stage. The degree and standard of student literacy achievements are determined by different factors according to Gay (1981). Research has shown that middle-grade literacy performance is attributable to a variety of individual, family, school and family influences. Either these factors can foster or hinder academic achievement and always start much sooner.

### III. METHODOLOGY

The researcher used a cross-sectional survey design. This method is convenient because it facilitates collection of data from many respondents spread in a wider area. It also provides quantitative and numerical description of part of the population which is tabulated to give valid and sound generalization about the study. This survey was conducted in the Western part of Kenya in Busia Sub- County, Busia County. About 431kms from Kenya's capital, Nairobi is Sub-County. It occupies an area of 196, 20 km<sup>2</sup> with a population of around 111,345 by 2009 and a housing census. Busia Sub-county borders Uganda to the West. The Sub-county is mainly inhabited by the Luhya and Iteso communities. However, Busia town being an urban centre hosts people of varying origins.

The study population consisted of elementary schools, head teachers, four-level language school teachers, parents, and four-level students in the public and private primary registered schools in the district of Busia. Grade four was targeted because the grade from the bottom to the top was transitional. Three sampling techniques, specifically streamlined and simple random sampling techniques were used for this analysis. Purposive sampling was used to select grade four primary school learners in Busia Sub-county because of the sub-county's low rating in the Annual Learning Literacy and Numeracy Assessment report by Uwezo (Uwezo 2011-2012), stratified sampling was used to select schools. The schools were categorized into two; public and private. The sample comprised 15 out of 45 public primary schools and 5 out of 11 Registered Private Primary schools which represent 30% of all primary schools in the Sub-county. For every grade 4, two language teachers and 50 pupils per stream formed the study sample.

In quantitative analysis, a minimum sample of 30 percent is appropriate according to Mugenda and Mugenda (2003). Gay (1981) adds that a sample of at least 10% of the available population is sufficient in descriptive research of social sciences. That is why 30% of all primary schools and 20% of grade four learners were chosen to participate in this study by simple random sampling. The sample size for this study therefore comprised 200 grade four pupils, 40 language

teachers, 20 head teachers and 40 parents drawn from 56 public and private registered schools in Busia Sub-county

For this study, data was collected using three types of instruments; Questionnaires, interview schedule and Learners' achievement test. The instruments' validity was measured using material validity. It was accomplished by ensuring that all of the study's variables and goals were addressed in the instrument pieces. The first test and second test results were compared after the pilot, and for head-teacher questionnaires a correlation coefficient of 0, 87, for the teacher questionnaire, and for the student achievement test a correlation coefficient of 0, 82 was obtained. The coefficient of correlation (r) of 0.80 or higher implies a high degree of reliability (Mugenda and Mugenda, 2003).

In two primary schools, one public and one private, the research instruments were piloted along with the students, teacher and head teacher. The selected schools were not part of the report. The aim of piloting was to personally test the instruments' reliability and validity. The data were analyzed using mean, frequency and percentage descriptive statistics. The research goals dominated the discussion of the results. The results of the analysis. The conclusions and suggestions were eventually drawn in narrative form.

IV. RESULTS AND DISCUSSIONS

4.1. Learners' Achievement in Basic Literacy Skills

The purpose of this study was to establish the level of learners' achievement in basic literacy skills. To realize this objective, a learner's achievement test was administered to sampled grade four learners in all the schools that participated in the study. The test was marked and results analysed as shown below.

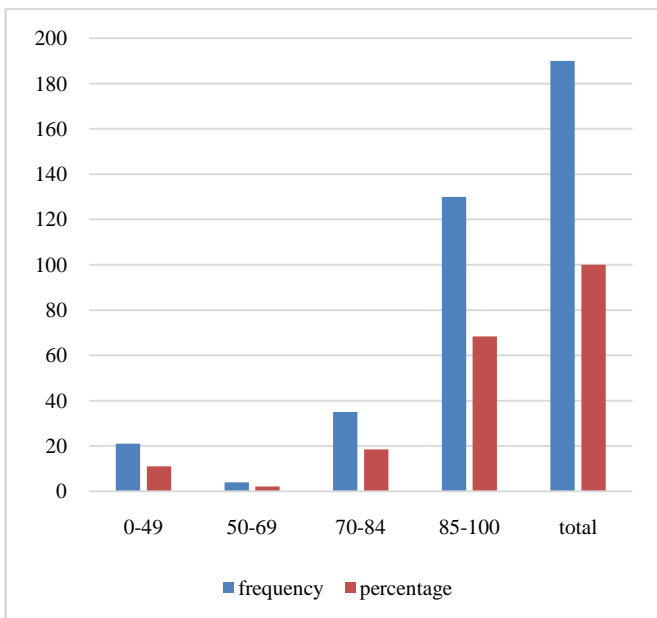


Figure 1: Learners' achievement in the reading test.

Figure 1 above shows that majority (89%) of the learners passed the reading test while 11% scored below average marks. This implies that most of the grade four learners in Busia-sub-county have mastered the reading skills. This may be attributed to the Tusome Early Literacy Programme initiated in the year 2015 by the ministry of Education in collaboration with the research Triangle International to improve reading among Kenyan primary school children in lower primary classes. Consequently, this might have helped to improve learners reading literacy levels in grade four.

Table 1: The mean and standard deviation of the reading test

Marks	Mid-Point ( $\chi$ )	f	$f\chi$	$\chi^2$	$f\chi^2$
0 – 1	5	8	40	25	200
10 – 20	15	4	60	225	900
20 – 30	25	5	125	625	3125
30 – 40	35	2	70	1225	2450
40 – 50	45	2	90	2025	4050
50 – 60	55	1	55	3025	3025
60 – 70	65	3	195	4225	12675
70 – 80	75	35	2625	5625	196875
80 – 90	85	109	9265	7225	787525
90 – 100	95	21	1995	9025	189525
Total		190	14520	3325	1200350

$$\begin{aligned} \text{Mean } \chi &= \frac{\sum f\chi}{n} \\ &= \frac{14520}{190} \\ &= 76.42 \end{aligned}$$

$$\begin{aligned} \text{Standard deviation} &= \frac{\sqrt{\sum fx^2}}{n} - (\chi)^2 = \frac{\sqrt{1200350}}{19} - (76.42)^2 \\ &= \sqrt{6317.63 - 5840} \\ &= \sqrt{477.63} \\ &= 21.85 \end{aligned}$$

Table 1. shows that the average (mean) literacy level in reading test for grade four learners in Busia sub-county is 76.42% with a standard deviation of 21.85. The national average level of literacy in class six was 82 percent, marginally higher than what was achieved in the present study compared to the results of Uwezo from the annual study evaluation in Kenya in February 2012. This may be attributed to the fact that this study was carried out at grade four levels, two grades lower than class six levels covered in the previous study. This implies that grade four learners have not mastered reading skills as compared to the class six learners.

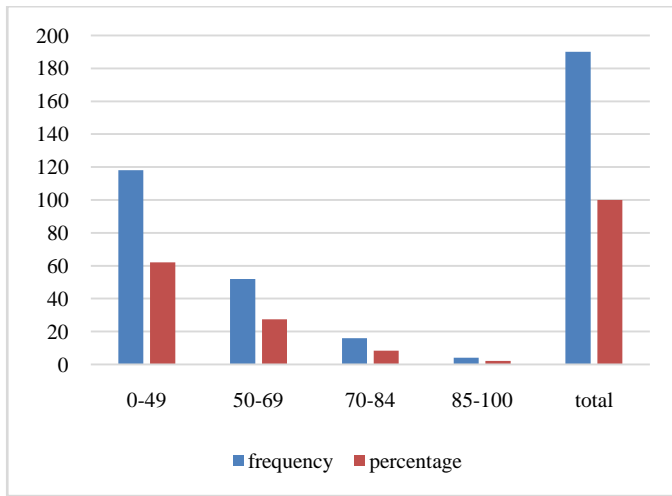


Figure 2: Learners Achievement Test in the writing Test

Figure 2. shows that the majority of the learners’ 62.1%, failed the writing test by scoring below average while only 37% of the learners passed the writing test. This therefore implies that the majority of grade four learners in Busia sub-county have not mastered writing skills to enable them construct simple compositions in English.

Table 4.2. The mean and standard deviation of the writing test

Marks	mid-point x	f	fx	x	fx <sup>2</sup>
0 -10	5	9	45	25	2075
10 - 20	15	11	165	225	2475
20 – 30	25	28	700	625	17500
30 -40	35	45	1575	1225	55125
40 – 50	45	25	1125	2025	50625
50 – 60	55	37	2035	3025	111925
60 – 70	65	15	975	4225	63375
70 – 80	75	16	1200	5625	90000
80 – 90	85	2	170	7225	14450
90 – 100	95	2	190	9025	18050
Total		190	8180	33250	425550

$$\begin{aligned} \text{Mean } \chi &= \frac{\sum f \chi}{n} \\ &= \frac{8190}{190} \\ &= 43.05 \end{aligned}$$

$$\begin{aligned} \text{Standard deviation} &= \sqrt{\frac{\sum fx^2}{n} - (\chi)^2} = \sqrt{\frac{425550}{190} - (43.05)^2} \\ &= \sqrt{2239.74 - 1853.30} \\ &= \sqrt{186.44} \\ &= 19.66 \end{aligned}$$

**Table 2** shows that the average (mean) literacy level in the writing test for grade four learners in Busia sub-county is 43.05% with a standard deviation of 19.66. This indicates that the literacy level in writing among grade four learners in Busia sub-county is below average. This may be attributed to the fact that grade four is a transition class from lower primary and therefore they have not mastered the writing skills to enable them write meaningful compositions. Further, writing is one of the language skills that develop later after listening, speaking and reading. The findings of this study are in line with Gardener’s theory of multiple intelligence which states that children do not learn in the same way. This may be the reason for higher standard deviation among the learners’ scores both in the reading and writing test. Therefore, it is important to establish for each learner a ‘intelligence profile.’ To know how any student learns, the professor can correctly assess the progress of the pupil (Lazear, 1992). This customized assessment practice allows a teacher to make more educated choices about teaching and teaching those competences, such as reading and writing.

De Bortoli and Thomson (2010) studied the contextual factors that affect the literacy achievement of students among indigenous students in Australia, which is also in line with their findings in the current research. The study revealed that literacy achievement that literacy achievement in lower grades of learning affects future learning and achievement in upper grades. The low achievement in literacy in primary schools in Busia Sub-county may also be attributed to poor foundation in lower grades of learning.

Table 3. Type of school and learners achievement in reading and writing tests

School attended	Frequency (f)	Mean score in the reading test	Mean score in the Writing test
Public	145	70.12	37.90
Private	45	82.70	48.20
Total	190	76.42	43.05

Table 3. indicates that for grade 4 students who attended public elementary schools, average literacy level was 70.12, compared with 82.70 for their peers attending private primary schools. The findings mean higher reading and writing performance compared to public primary schools in private elementary schools.

A student's success in public and private primary schools in literacy and technical literacy was reviewed by Lubienski and Lubienski (2006). The findings found that students at private primary schools perform better than their counterparts at public primary schools. The research by Odagboyi, Onche and Musa (2014) aims to examine the use of standard six pupils primary literacy and numeracy tests in literacy and scanning among two public and two private elementary schools in Nigeria (PLNT). The findings found that the performance of pupils in public elementary and those in private primary schools was significantly different, with private school pupils



doing well in the exam. Nevertheless the study used standard six pupils rather than the grade four learners investigated in this study.

The above findings concur with the current study which revealed that pupils in private primary schools performed better in reading and writing tests in comparison to their peers in public primary schools. Therefore the type of school attended by the learner has a powerful influence on the learners' individual academic achievement.

Table 4 Gender differences in literacy achievement.

Learners Gender	Frequency(f) Reading test	Mean Score in	Mean Score in Writing test
Boys	95	72.14	39.66
Girls	95	80.70	46.44
Total	190	76.42	43.05

Table 4. indicates that in both reading and writing exams girls scored higher than boys. The findings of the report, conducted in 1998 by Evans, showed that there was a gap between the sexes of girls and boys in literacy. The qualitative study also found that boys and girls were substantially different from learning practices in schools for girls in general.

A research by Nithi (2010) investigated whether in the Kwa Zulu Natal primary school there was a considerable gender disparity between mathematics and gender performance and the existence of gender. The research also examined factors linked to girls' and boys' difference in the mathematics class. In two years: 2008 and 2009, qualitative data were taken from the sixth grade of mathematics performance exam. The study found out that there was a significant gender gap in mathematics in favour of girls.

In 2004, Onsoma (Onsoma), Kosimbei and Ngware carried out a study on parity in primary schools in Kenya and factors explaining differences in mathematics and reading including sex. The key results included gender disparities in education, and many gender and socio-economic variables have an effect on the success of students' reading. The study showed that children in mathematics and reading are much more successful than girls. This however contradicts with the findings of the current study which indicates that girls performed better in both reading and writing tests. Therefore there are significant differences in academic achievement among boy and girls in different academic subjects in different places.

## V. CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the findings and discussion of the study the following conclusions can be made; - That the majority of the learners in primary schools in grade four in Busia sub-county have mastered reading skills. This is evidenced by their performance in the reading test. However the performance in the writing test was below average. Gender differences in literacy achievement were also noted with girls performing

better than boys in both the reading and the writing test. The type of school attended by the learners was also found to have a significance influence on learners' achievement in reading and writing skills with private primary school children performing better than their peers in public primary schools. This point to the general view that private schools may be offering better and quality teaching of literacy skills due to small class sizes and availability of adequate learning resources.

Based on the findings, analysis and conclusion of the study, the following recommendations were made;

- i. It will be prudent that parents be involved in the education of their children by making necessary provisions needed, monitoring their performance and guiding them where necessary
- ii. The study also recommends that primary schools should acquire adequate learning resources to support the effective learning of basic literacy skills.

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