

Instructional materials provision on learners' participation in early childhood development and education in public primary schools in Embu County, Kenya

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ABSTRACT

Early Childhood Development and Education advancement is aligned to the global consensus that helps in development of children's emotional, intellectual, social and physical well-being. It is with this background that the study sought to establish the instructional material provision on learner participation in Early Childhood Development and Education in public primary schools in Embu County, Kenya. The objectives of the study were to: establish acquisition of instructional materials; assess the quality of instructional materials; determine the sharing of instructional materials; establish the effect of book/pupil ratio on progression. The study targeted head, ECDE, lower and upper primary teachers in 381 primary and 380 ECD schools. Stratified random sampling was used to select schools from the five sub counties. Purposive random sampling was used to select teachers. Descriptive survey design was used to collect the data by the use of questionnaires. Collected data was analyzed using SPSS. Results were presented in form of frequency tables, graphs. From the findings, 70.3% of the primary teachers showed that the schools get instructional materials from the county government though not adequate, 55% of the ECD teachers said that materials were of high quality since they prepared them, 67.5% of ECD teachers agreed they share materials with Grade 1 and 33.3% ECD teachers stated that book/pupil ratio negatively affects children ability to do homework. The study recommends that the county government in partnership with other stakeholders should provide adequate instructional materials in ECD schools in the county.

Keywords: ECDE instructional materials, ECDE pupil-textbook ratio, ECD participation, ECDE school resources, ECDE in Embu, education quality.

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INTRODUCTION

According to Fredrick Froebel, a German educator who lived in the year 1782 to 1852, a child's experiences in early years is critical to their educational achievement, health and development of the society (Nance, 2009). Anchored on this insight, the World Conference on Early Childhood Care and Education which was held in Moscow in Russia on September 27-29, 2010, provision of high quality education to all children was given great importance (UNESCO, 2013). High quality education is realized when Early Childhood Care and Education is

provided with school instructional resources particularly with instructional materials (OECD, 2012). Republic of Kenya, Ministry of Education, Science and Technology (MoEST), (2015) shows that Early Childhood Education has been mainstreamed from grassroots level to promote a healthy mind and body of the targeted child. Early childhood education and care is therefore a programmatic service that broadly combines education and care in one seamless experience for young children. Thus investing in children especially in their early years is

a priority.

Shonkoff and Richmond (2009) noted that investment in early childhood Development lays foundation for a prosperous and sustainable society. Thus, development of human capital in later years is determined by various factors that influence ECD interactions to produce success. This is measured by readiness of the child to learn when entering primary school (Dodge, 2007). Recent studies of early childhood investments as observed by Heckman and Schultz (2007) shows remarkable success and also indicate that the early years are important for early learning. Hence, early childhood investment of high quality has lasting effects on learning especially when there is provision of instructional materials in ECD schools.

Instructional materials according to Oke (2016) as quoted by Afoma and Omotuyole (2013) is a tangible or physical object which provides rigorous, visual or both to the five senses during teaching and learning. Hence instructional materials comprise all forms of information carriers that can be used to stimulate and boost effective teaching and learning accomplishments. Pupil/textbook ratio is a significant measure of education quality. Many classrooms in developing countries especially in poor and rural areas possess only one textbook, typically kept by the teacher. Pupils spend most of their time copying textbook content from blackboards to notebooks, which they are expected to memorize. Thus, textbook provision can reduce achievement disparities between urban and rural pupils. Teachers too do not possess a book or a guide in the subject they taught (UNESCO, 2008).

Pupil's access to textbooks is an important factor in addressing what and how much they learn. The book/pupil ratio is a significant measure of educational internal efficiency (EFA Global Monitoring Report, 2008). The Government of Uganda engaged in practice and advocacy in an effort to teach and train teachers on how to develop their own teaching and learning materials. Eventually this led to adequate instructional materials in primary schools through improvisation. This in effect affected the participation rates in ECDE. The participation of learners was higher due to high motivational level in the usage of improvised instructional materials (Fabian and Dunlop, 2007).

Psacharopoulos and Woodhall (1985) show a relationship between the provision of books and achievement. This was further affirmed by studies done in ten developing countries which showed consistent relationship between pupil's achievement and the availability of books. Young teachers were found to use textbooks than those with more experience to overcome their lack of experience. The survey further showed that teachers expressed negative attitude towards the use of textbooks hence the need to prepare teachers on how to use the textbooks since with proper use of textbooks; children can get high scores which prevent them from low participation in schools in latter grades.

The government of Mexico employed free textbook provision policy to improve educational efficiency and equity. This was actualized by the formation of the National Commission for Free Textbooks (CNLTG) in 1959, and by 1981 every primary school child had free textbooks. The use of textbooks was believed to raise academic standards and increase internal efficiency of a school system. The government further subsidized on books by 1 per cent of the total education budget. The conclusion was that, the textbook development and supply require and deserve the same priority as teacher development and school construction, though textbooks were found to require long-range government commitment supported by regular and adequate annual expenditures (Psacharopoulos and Woodhall, 1985).

To improve access, equity, quality and efficiency, schools resources especially textbooks, school operating expenses and other instructional equipment/materials are critical in making teaching-learning more effective. They help improve access and educational efficiency since students are less likely to have low participation in schools that provide space and resource for them (Education for All (Philippines), 2015). Fabian and Dunlop (2007) observed that to meet the high demand of instructional materials in Uganda, teachers prepared locally made materials as a supplement of what the schools could not manage to purchase from shops which were rather expensive. However, Public Procurement Oversight Authority (PPOA) (2009) advocated head teachers to improve procurement to ensure equity, efficiency and cost effectiveness thus, the school as a Procuring Entity should plan and undertake procurement functions as far as the instructional materials such as textbooks are concerned.

Republic of Kenya (2015) noted that procured instructional materials are of quality and relevance to the learner. The schools adhere to the approved book policy when carrying out procurement. The procurer chooses one course book for each subject for each class. For a short term action of procurement, a ratio of 1 book for 3 learners in lower primary that is Grade 1-4 and 1 book for 2 learners in Grade 5-8 is to be used. Funding for instructional materials demands that the funding agency like Counties and others to deposit money via School Instructional Materials Bank Accounts (SIMBA). SIMBA is for teaching and learning materials, while GPA is for other general purposes such as utility bills and support staff. Since the inception of Free Primary Education in Kenya in 2003, the government mandated every primary school to open the SIMBA and GPA as an intervention measure for the provision of instructional materials in public primary schools.

Instructional material provision in schools is vital for teaching/learning in schools, the study sought to establish the instructional material provision on learners' participation in Early Childhood Development and Education in Public Primary Schools in Embu County,

Kenya.

Instructional materials provision

One of the interventions the government is committed to is provision of quality education by availing teaching/learning instructional materials. The objective of provision of the instructional materials by the government is to increase participation beside others such as reduction in dropout rates and low academic achievements, increase in retention rates and attendance. Thus, the EFA Global Monitoring Report (2008) indicated that children's access to textbook determines their level of learning and also is a significant measure of educational internal efficiency. Therefore, appropriate instructional materials and a context where young children have a space to be physically active are important conditions for good quality ECD (UNESCO, 2015). The World Bank (2019), annual report indicates that many developing countries have made tremendous strides in getting children into the classroom but still 260 million children world-wide are still not in school. And for those in school, learning is not guaranteed. Thus, strengthening and aligning education in developing countries is a great need to ensure that all children learn. This can be done through provision of Inputs such as text books which are inadequate in many learning institutions.

Provision of instructional materials has been associated with educational attainment and learning. This has made some countries to implement the programs to improve retention, promotion, participation and completion rates. Psacharopoulos and Woodhall (1985) shows relationship between the provision of books and achievement of learners in schools.

The impact of provision of instructional materials cannot be underestimated for they play a critical role in school participation. Instructional inputs such as textbooks among many others are part of a holistic effort that leads to better learning (World Bank, 2019). A study conducted in Kenya by Tuimur and Chemwei (2015) showed that flip charts teaching tool can be utilized by all teachers in teaching since they link what they teach to everyday life. Also chalkboard and computer could be shared in teaching in all classes. Some of these materials are funded by agencies such as County offices. Teachers become confident, effective and productive when they have adequate and relevant instructional materials. Similarly, teachers in Philippines who were oriented to a special early childhood program were provided with instructional materials such as manipulative toys, blocks, activity sheets, poems, jingles, rhymes and songs. Consequently, the absenteeism rate for children who had been in the summer preschool was 10 percent compared to the 15 percent for those children without the summer class (UNESCO, 2008). Also, the provision of free textbooks for primary school pupils was meant to raise

academic standards and increase internal efficiency of a school system (Psacharopoulos and Woodhall, 1985).

Kang'ethe et al. (2015) study noted that the Save the Children in Bangladesh has its own manual on preparation of the educational toys, and games. It has also developed 20 books on ECD awareness through workshops where traditional storytellers share the stories which form basis for these books. The study also observed that the government of Kenya provided some funds to the schools where head teachers purchase play learning materials for the ECD centres so as to prevent learners from boycotting classes which can lead to low participation with time. Further, the study indicated that many ECD centres in Kenya lacked puzzles, regalia and wooden blocks. Also, the centres had few teachers' books and the ones available belonged to the teachers but not to the centres. The indoor play materials were also inadequate. These hindered effective participation of children in the schools.

From the research there is need to mobilise resources for the acquisition of instructional materials in schools. The World Bank (2019) observed that the amount of money a country spends on learning materials indicates its commitment to providing a quality education for all. Thus, the cost of textbooks is a key barrier that prevents children from having access to the learning materials they need. The Government of Kenya procured instructional materials which were of quality and relevance to the learner. The schools adhere also to the approved book policy when carrying out procurement (Republic of Kenya, 2015). Despite the great effort of purchasing instructional materials for mainstreamed public primary schools, there is still many children and especially in ECD who go without instructional materials hence low participation. The study set out to establish the instructional material provision on learners' participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya.

Problem of the research

The fourth Sustainable Development Goal on Education (SDG4) which is in line with Agenda 2063 of the African Union calls for inclusive and equitable quality education that promotes lifelong learning for all. Access to appropriate learning materials in schools is listed as a key strategy for achieving the first means for implementation of this agenda (UNESCO, 2016). Sessional Paper No. 11 of 2014 on National Education for sustainable Development Policy calls for nationwide stakeholder's engagement in provision of education in Kenya. Over the last decade many countries have made effort to increase participation in education with commendable success. Despite this effort, high dropout and low enrolment persist hence low participation remains a challenge to school going children (Republic of Kenya,

2015). According to EFA Global Monitoring Report (GMR) Policy Paper 23, (2016) many countries students at all levels either lack books or are required to share them extensively with others. Thus, without textbooks, children can spend many of their school hours copying content from the blackboard, which severely reduces time for engaged learning. According to the Annual Report of the Ministry of Education, Science, Technology and ICT year 2013-2014 of Embu County Government, majority of the ECD schools textbooks which was purchased from Kenya Literature Bureau (KLB) (Alpha ECD book series) totalled to 8 100 books. Thus, the schools realised book/pupil ratio of 9:1 which was quite high for ECDE (Ministry of Education, Science, Technology and ICT, 2014) of Embu County. It is in this early part of development for the young ones that forms the basis for strong foundations in primary level of education and if not taken care of can lead to total failure of children in their basic education. This occurs especially when confronted by among many challenges high book/pupil ratio hence the necessity of embarking on the study of instructional material provision on learner participation in early childhood development and education in public primary schools in Embu County, Kenya.

MATERIALS AND METHODS

The study adopted descriptive survey design to assess the instructional material provision on learner participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya. Orodho (2002) noted that in descriptive survey, information is collected by interviewing or administering of questionnaires to a sample of individuals. This research employed descriptive survey design, which enabled the provision of insight into intensive, descriptive and holistic analysis of a single entity. This increased the reliability of the research findings which was generalized to the entire population. Survey research was used since it quantified information that was used for statistical inference on target population through the data analysis. It was also helpful in survey of demographic traits in certain group like the age, gender, academic level, professional qualification and work experience among others. The study targeted the head teachers, primary teachers and ECD teachers in 381 public primary schools and 380 ECD schools from Mbeere North, Mbeere South, Embu East, Embu West and Embu North sub-counties of Embu County, Kenya.

Sample of research

The study used the sample size taken from the five Sub Counties for study from 381 public primary schools in Embu County. Ten percent of the total population of

primary and pre-schools was considered for the study which is recommended by research scholars such as Gay (2000). Stratified random sampling procedure was used to select schools for the study from the five sub counties namely Mbeere North, Embu West, Embu East, Mbeere South and Embu North. The study used the sample size taken from these Sub Counties for study from 381 public primary schools with 380 ECDE schools. Ten percent of the schools from each sub county was considered for the study hence 10 percent of 96 schools in Mbeere North translate to 10 schools, 10% of 37 schools in Embu West are 4 schools, 10% of 71 schools in 4 Embu East comes to 7 schools, 10% of 140 schools in Mbeere South are 14 schools, 10% of 37 Schools in Embu North comes to 4 schools for the study. Thus, a purposive random sampling procedure was used to arrive at the sample of primary school teachers and head teachers. Therefore, 39 head teachers were selected from each sampled primary schools. Two primary teachers were selected too from each sampled schools. One primary teacher from upper and one from lower primary school were selected for the study. ECDE teachers too were purposively selected from each sampled ECDE schools. Those who participated in the study were a total of forty two (42) ECDE teachers. Thus, a total of 39 head teachers, 76 primary teachers and 42 ECD teachers were used for the study.

Instruments and procedures

This study used questionnaires for the head teachers, primary school teachers and pre-school teachers to get information on Instructional Material Provision on Learner Participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya. Mugenda and Mugenda (2003), assert that a questionnaire is a written set of questions to which the subjects respond in writing. The study used unstructured open-ended, structured closed ended, partly contingency (closed and open-ended) and the matrix questions. The questionnaires were administered to 42 ECD teachers, 49 head teachers and 76 upper and lower primary teachers to fill in. The filled up questionnaires were collected after two weeks. Questionnaires were used because they are convenient to administer to literate respondents and for collecting information within a short span of time.

Validity is the accuracy and meaningfulness of inferences, which are based on the research results. Thus, validity is the degree to which results obtained from the analysis of the data actually represents the phenomena under study. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept (Mugenda and Mugenda, 2003). Borg and Gall (1989) define validity as the degree

to which a test measures what it purports to measure.

To establish validity of the instrument in this study, the researcher prepared the questionnaires to solicit information of Instructional Material Provision on Learner Participation in Early Childhood Development and Education in Public Primary Schools in Embu County, Kenya in close consultation with the supervisors in order to ensure that the items in the questionnaire covered all the areas under study. Best and Kahn (2002) observed that, content validity of the research instruments could be enhanced through expert judgment. The researcher's supervisors, as experts, helped to assess the validity of the instruments.

Reliability, according to Orodho (2005), refers to the degree to which a particular measuring procedure gives similar results over a number of repeated trials. According to Mugenda and Mugenda (2003), test-retest reliability of data involves administering the same instrument twice to the same group of subjects. The researcher gave questionnaires to the pilot respondents to fill in, and then after a week, the researcher gave the same questionnaire to the same respondents again. (Mugenda and Mugenda, 2003) asserts that instruments and the data are said to be reliable, if there is a high coefficient of reliability or stability from the test re-test technique. The researcher used Spearman's formula to compute the correlation co-efficient of the instruments. The result yielded a correlation co-efficient of 0.91, which is considered appropriate as recommended by Orodho (2009) and Kombo and Tromp (2006) who argued that a correlation coefficient of 0.7 is considered good.

Qualitative and quantitative information was analyzed using the Statistical Package for Social Sciences (SPSS) - version 19 to increase accuracy of results so as to bring order structure and interpretation to the mass of collected data (Sarantakos, 2013). In regard to quantitative data, after the researcher administered questionnaires, the mass of raw data collected was quantitatively analyzed whereby close-ended and open-ended responses were assigned codes. Responses were placed into given categories. The researcher converted collected data into numerical codes representing attributes of variables to permit quantitative analysis. The researcher used one code to assign each response category (Sarantakos, 2013). The researcher further used Frequency tables.

As recommended by Mertens (2010), the researcher coded the collected data and gave themes: Teacher's responses on sources of instructional materials, head teachers' response on relevance of instructional materials, primary teachers' response of availability of instructional materials, ECDE teachers responses on adequacy of instructional materials, ECDE teachers' highlight on mechanisms of dealing with inadequate instructional materials, ECDE teachers response on quality of available materials, ECDE teachers response on reasons for high quality of instructional materials, ECDE teachers' response on whether teachers handling

class one borrow ECD instructional materials to use in their classes and primary teachers response on how pupil-book ratio affects progression. The researcher further described and summarized data using descriptive statistics so as to meaningfully describe a distribution of scores using statistics. The researcher also used frequencies and percentages in table form. The researcher summarized the written information in form of a report with application to implication of findings and recommendations.

RESULTS AND DISCUSSION

This section presents data and discussions on instructional material provision on learner's participation in Early Childhood Development and Education in public primary schools in Embu County, Kenya.

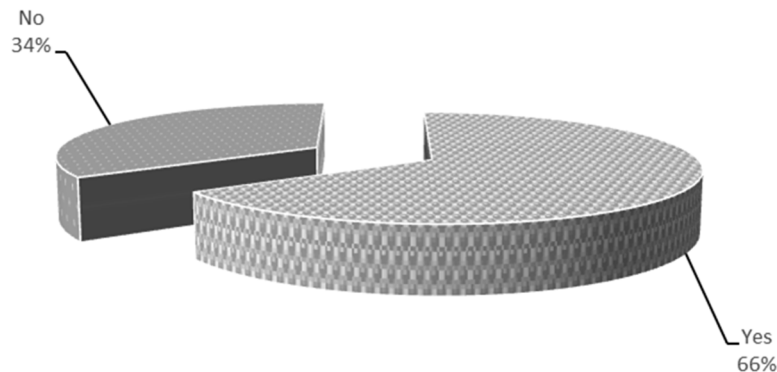
The study sought to establish instructional material provision on learners' participation in public primary schools in Embu County, Kenya. Teachers were asked to show sources of instructional materials. The respondents were asked to select responses as: County government provides instructional materials; most of instructional materials are improvised by teachers, requesting parents to buy and by purchasing. The results are as presented in Table 1.

As presented in Table 1, the results show that most (70.3%) of the schools get materials from the county government while 21.6% indicated that they are improvised by the teachers. Another 5.4% stated that they purchase the materials and 2.7% request parents to buy them. This finding concurs with a study by Republic of Kenya (2015) which showed schools adhered to the approved book policy whenever they procured instructional materials. Funding for instructional material by Counties and other funding agencies were advised to deposit money via School Instructional Materials Bank Accounts (SIMBA) to every school they funded. The procurer chose one course book for each subject per class. For a short term action of procurement, a 1:3 book-learners ratio in Grade 1-4 and 1:2 book-learners' ratio in Grade 5-8 were recommended.

The respondents were also asked to indicate the relevance of curriculum support materials. On the relevance of the curriculum support materials, the results are as presented in Figure 1. The results on Figure 1 show that 66% of the head teachers said that the materials were relevant and adequate while 34% indicated that the instructional materials were not adequate. This finding concurs with research by Glenn (2018) who noted that an efficient curriculum availed the educators, learners, administrators, and stakeholders with concrete plan and structure thus imparting quality education. Moreover, it outlined the learning outcomes, standards and competencies that learners must portray before entry into the next level of education.

Table 1. Teachers' responses on sources of instructional materials.

	Frequency	Percent
County government provides materials	26	70.3
Most are improvised by teachers	8	21.6
Requesting parents to buy	1	2.7
By purchasing	2	5.4
Total	37	100.0

**Figure 1.** Head teachers' response on relevance of instructional materials.

In line with specific instructional materials available, the primary school teachers were asked to indicate the availability of such books which are shared between ECD and Grade 1. This is as presented in Table 2.

Table 2 shows that 100% of the teachers state that English, Kiswahili and Mathematics textbooks are available. 96% of the participants indicated that science textbooks were available. 95% of the teachers stated that CRE and social text books were available while 54 and 31% indicated that Art/Music and P.E text books were available. Only 16% stated home science text books were available. With regards to unavailability, the table shows that most of schools have inadequate book. For instance, 84% of the teachers indicated that there are no textbooks of home science. Another 63% said that P.E text books are not available while 47% indicated that Art/music text book were not available. 5% of the respondents stated that CRE text books were not available and another 5% also said social text books were not available. A few (4%) show that science textbooks were not available.

The ECDE teachers were asked to indicate whether they have adequate instructional materials in classes. This is as presented in Figure 2.

As presented in Figure 2 the result shows that 69% of the ECD teachers said that there were adequate instructional materials in their ECD classes. 31% of the ECD teachers indicated that there were no adequate instructional materials in their ECD classes. For those who indicated that they have adequate instructional

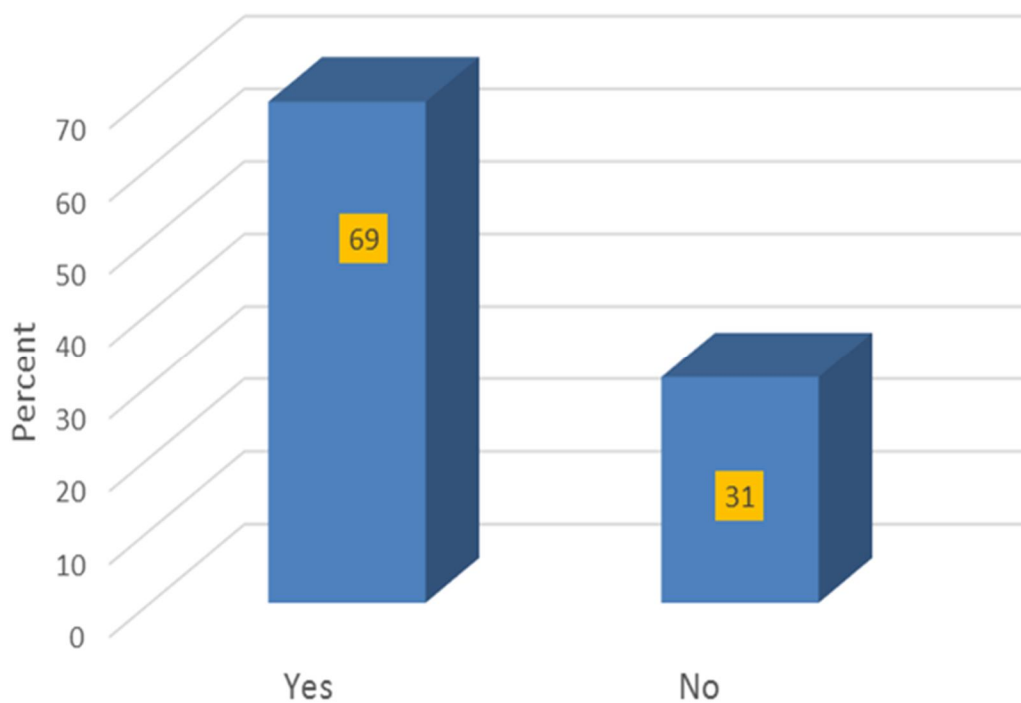
materials, they attributed this to the support they get from the parents who buy instructional materials from the parents. 31% who indicated they have no instructional materials said they improvise. This concurs with Fabian and Danlop (2007) who observed that teachers in Uganda were taught how to make use of locally available materials to make up for what the schools could not manage to buy.

The teachers who said they had inadequate instructional materials highlighted the mechanisms of dealing with inadequacy. This is presented in Table 3.

Table 3 shows that 64% of the ECD teachers indicated that they improvised instructional materials, 16% stated that parents provide them, 12% indicated there were inadequate finances to buy while a few (8%) said they were provided by the County Government. Thus, most of the ECD teachers indicated that they improvised instructional materials. This finding from the study mirrors research by Fabian and Dunlop (2007) who observed that in order to meet the high demand of instructional materials in Uganda; teachers prepared locally made materials which supplemented the expensive ones in the bookshops which the schools were not able to purchase. Further, this finding was supported by Afoma and Omotuyole (2013) who observed that the usage of locally made instructional materials was a great challenge to teachers who were not trained on how to make and use them. This made children not have effective learning. They recommended that ECD teachers to be retrained on the utilization of locally made learning materials for the

Table 2. Availability of instructional materials.

	Available		Not available	
	F	Percent	F	Percent
Availability of P.E text books	25	31	42	63
Availability of English text books	81	100	0	0
Availability of Kiswahili text books	81	100	0	0
Availability of mathematics text books	81	100	0	0
Availability of science text books	78	96	3	4
Availability of social text books	77	95	4	5
Availability of CRE text books	76	95	4	5
Availability of Arts/Music text books	38	54	33	47
Availability of Home science text books	10	16	53	84

**Figure 2.** Teachers' responses on adequacy of instructional materials.**Table 3.** Mechanisms of dealing with inadequate instructional materials.

	Frequency	Percent
We improvise materials themselves	16	64.0
Some are provided by county government	2	8.0
Inadequate resources	3	12.0
Parents provide them materials	4	16.0
Total	25	100.0

effective teaching and learning which eased transition to the next grade.

For the materials available, the study sought to

establish the quality of the instructional materials. This is as presented in Table 4.

Table 4 shows that the quality of instructional materials

Table 4. Teachers' responses on quality of instructional materials available.

	Frequency	Percent
Very high	2	4.8
High	23	54.8
Low	15	35.7
Very low	2	4.8
Total	42	100.0

was high. This was attested by 55% of the ECD teachers. This finding differs from Jacques and Vidya (2013) who noted that 23% of Grade six learners had no access to instructional materials in year 2007. This implied that most of the time, they had to have extra copying of notes from the blackboard. The rest said that the instructional materials were of low quality which posed worrying trend because all the instructional materials used in schools were supposed to be of high quality.

The respondents were asked to select the reasons instructional materials available were of high quality. Four reasons were given for them to choose from which included: ECD teachers prepare materials themselves, Relevant to ECD children, they help us to handle the pupils and parents advised on materials to buy. This is presented in Table 5.

As shown in Table 5, 40% of the ECD teachers indicated that materials are of high quality because they prepared them by themselves, 24% stated that they advised parents before buying the best materials, 20% related high quality to their relevance to ECD while 16% said that they are of high quality as they help in handling pupils. The finding of the study mirrors Fabian and Dunlop (2007), who observed that in Uganda, teachers being driven by the demand, engaged themselves in making materials from the locality to supplement what the school could purchase from the bookshop.

In order to establish the link between class one and ECD classes, the ECD teachers were asked to indicate whether teachers handling class one borrow ECD instructional material to use in their class. This is as presented in Table 6.

Table 6 indicates that 67.5% of the ECD teachers agreed that primary school teachers who teach Grade 1

borrow instructional materials from the ECD section while 32.5% did not agree to the statement. The study finding mirrors research by Tuimur and Chemwei (2015) who in their study on availability and use of instructional materials in the teaching of conflict and conflict resolution in Primary schools in Nandi North District, Kenya found that flip charts teaching tool can be utilized by all teachers in teaching since they link what they teach to everyday life. Also they noted that chalkboard and computer could be shared in teaching in all classes. On pupils'-book ratio, the primary school teachers were asked to indicate how student sharing of books affects their classes. This is shown in Table 7.

As shown in Table 7 in line with how the pupil-book ratio affects progression, 33.3% stated that it negatively affects students' ability to do homework, 25.9% indicated that the students' book ratio makes learning difficult while 17.3% the teachers said that it negatively affects progression because the pupils are forced to share books in groups. 12.3% indicated that it negatively affects teaching and learning while 11.1% highlighted lack of enough books as the effect of the students' book ratio. These findings align with a research by Republic of Kenya (2015) which noted that the procured instructional materials were of quality and relevance to the learners and that they adhered to the approved book policy when carrying out procurement. The procurer chose one course book for each subject for each class. For a short term action of procurement, a ratio of 1 book for 3 learners in lower primary that is Grade 1-4 and 1 book for 2 learners in Grade 5-8 was recommended.

In order to establish whether there was concurrence of head teachers, class teachers and ECDE teachers on their responses about instructional material provision on learners' participation rate in ECD, a one-way between groups analysis of variance was conducted. The results are as presented in Table 8.

The results in Table 8 show that there was no statistical significance difference at the $p < 0.36$ pupils progression score for the three category of respondents (Teachers, Head teacher and ECDE teachers) $F(2,139) = 7.14$, $P < 0.36$. This implies that the head teachers, teachers and ECDE teachers affirmed that provision of instructional materials in schools influence pupil's progression from one class to another.

Table 5. ECD teachers' responses on high quality materials.

	Frequency	Percent
ECD teachers prepare materials themselves	10	40.0
Relevant to ECD children	5	20.0
They help us to handle the pupils	4	16.0
Parents advised on materials to buy	6	24.0
Total	25	100.0

Table 6. Responses on teachers borrowing instructional materials.

	Frequency	Percent
Yes	27	67.5
No	13	32.5
Total	40	100.0

Table 7. Teachers' responses on effect of pupils' book ratio and progression

	Frequency	Percent
They share in groups	14	17.3
It negatively affects students' ability to do homework	27	33.3
Learning is difficult	21	25.9
Negatively affect teaching and learning	10	12.3
They are not enough	9	11.1
Total	81	100.0

Table 8. Concurrence of head teachers, class teachers and ECDE teachers on their responses about learners' participation rates in ECD.

	Sum of squares	df	Mean square	F	Sig
Between groups	36.5	2	18.25	7.24	0.36
Within groups	351.3	139	2.52		
Total	387.8	141			

CONCLUSIONS

From the research, provision of instructional materials is of great importance to learners' participation. The head teachers have a vital role in the provision of instructional materials to schools although most of schools have inadequate textbooks which forces teachers to improvise most of the instructional materials and borrowing of instructional materials between ECD and Grade 1 teachers does not exist. Provision of instructional materials in schools influences pupils' progression from one class to another. All these factors affect transition of pupils from ECD classes to class one hence leading to low progression rates, low participation rates and low graduation rates which are all indicators of internal inefficiency. In line with the relevance of instructional materials, the study established that they are not adequate. It is recommended therefore that the County Government of Embu in partnership with other stakeholders should provide adequate instructional materials in ECD schools.

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