

## **Influence of Instructional Media on Quality Teaching and Learning in Selected Primary Schools in Eldoret, Kenya**

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**Abstract** – Conventional instructional resources are not generally available in many primary schools in Kenya. Where such resources are available, some primary school teachers lack the requisite skills and creativity to use them effectively in their teaching. Some teachers also lack innovation in finding suitable local substitutes to help their pupils understand their lessons. This leads to the teaching of abstract lessons, misunderstanding of concepts and skills, and ineffective learning that negatively affect learner performance and teacher output in terms of what is taught and learned by means of instructional media. Based on this background, the study was to investigate the influence of instructional media on quality teaching and learning in selected primary schools in Eldoret. Qualitative Research Method was used with questionnaire, observation and personal interviews to collect data on how instructional media available in the sampled schools are used in teaching primary school subjects and their impact on pupils' learning. It was realized that, instructional media are generally not available in the primary school in the Eldoret municipality. While few teachers have visited the Teachers Resources Centre, environmental resources such as internet café, chief's palace, found objects or farms are not considered as instructional media for classroom use. Lack of wall charts, models, and other conventional media to complement the use of chalkboards and textbooks in the schools is making it difficult for teachers to offer quality teaching to promote high academic achievement for primary school pupils.

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### **1. INTRODUCTION**

Most likely the Stone Age man started scratching figures and images on surfaces of rocks to serve as media to communicate his expressions. According to World Encyclopedia (2001) the use of instructional media started somewhere from the Stone Age period. The Egyptians for example used hieroglyphics for visual communication of ideas. As man's march towards finding new ways of doing things continued, the back of trees and textiles were used as materials to communicate information which included principal materials such as the papyrus, parchment and paper.

Instructional media, according to Romiszowski (1988), refers to devices and materials employed in teaching and learning. Scanlan (2003) indicates that instructional media encompasses all the materials and physical means an instructor might use to implement instruction and facilitate students' achievement of instructional objectives. This may include traditional materials such as chalkboards, handouts, charts, slides, overheads, real objects, and videotape or film, as well newer materials and methods such as computers, DVDs, CD-

ROMs, the Internet, and interactive video conferencing. Talabi (2001) asserts that instructional media are generally designed to provide realistic images and substitute experience to reach curriculum experiences. The media are considered the most efficient facilitators in the education set up. They are not substitutes for the teacher. Their use however, calls for an imaginative approach by the teacher who needs to constantly be on the alert for new ideas and techniques to make the lessons presented with different instructional media achieve effective outcomes. Nkuuhe (1995) holds the view that instructional media are all devices and materials used in the teaching and learning process. Ogunmilade (1984) also identifies instructional media as devices of hardware (equipment) and software (consumables) through which the learning process may be ensured and carried out.

In other words, they are the collection of materials and equipment that can be used effectively for communication. These materials are used in the planning process of giving instruction. Instructional media with its various types affect different senses and act as an integral part of teaching and learning process, and thus helping to bring about meaningful experiences. Literature reviewed in this study noted various instructional media identified by other scholars that have been used in teacher training. Such media include chalkboards, flip charts, computers, slides, real objects, print media including books and charts (Aila, 2005; Begi 2007; Blythe – Lord, 1991; Kadzera, 2006; Mwololo, 2009; Ngaroga, 1996; Onasanya, 2008; Wankat and Oreovicz, 2001).

The study reveals that interest and use of instructional media such as real objects, models in addition to the use of the chalkboard, and textbooks was based on the subject taught and level of qualification obtained by the teachers. It is against this background that the paper examines the influence of instructional media on quality teaching and learning in selected primary schools in Eldoret municipality, Kenya.

### **1.1. Statement of the Problem**

Instructional media include a wide range of instructional devices designed to provide realistic imagery. The types include chalkboard, photographs, computer, real objects, and models (Talabi, 2001). Instructional media provide the sound basis on which concepts and ideas can be concretized. Moreover, the more interactive the teaching and learning process the more effective the creation of meaning in whatever is taught.

From all indications, pupils taught with instructional media such as models, and real objects in addition to the chalkboard, absorbs more knowledge from such demonstrations they see and the exercises they do with the resources. Pupils thus understand what they are taught better and faster than where teachers use textbooks and chalkboards in classrooms, as well as teaching by the lecture method.

Enormous benefits can be derived from the use of instructional media at all educational levels. Charts, models, real objects, textbooks and other illustrations can help to bridge the gap between teaching and learning. Conventional instructional resources are not generally available in many primary Schools in Kenya. Even where such resources are available, some primary Schools teachers lack the requisite skills and creativity to use them

effectively in their teaching. Some teachers also lack innovation in finding suitable local substitutes to help their students to understand their lessons.

Lack of pictorial support for class discussions lead to the teaching of abstract lessons, misunderstanding of concepts and skills, and ineffective learning that negatively affects learner performance and output in terms of what is taught and learned by means of instructional materials. This research was carried out to understand what and how instructional media are used by primary schools teachers in the Eldoret municipality.

## **1.2. Purpose of the Study**

The purpose of the study was to investigate the influence of instructional media on quality teaching and learning in selected primary schools in Eldoret.

## **2. RESEARCH METHODOLOGY**

The study employed the qualitative research method with questionnaire administration, observation and personal interviews to collect data on the use and impact of identified instructional materials on the learning of pupils in 5 selected public primary Schools in the Eldoret municipality. Three data collection techniques - observation, interviews and questionnaire were used. The population studied for this research comprised of teachers in 5 selected public primary Schools in the Eldoret municipality. The cluster sampling technique was used to select 5 public primary Schools.

The schools selected for the study differed in size, type, location, catchment area and were coded as Schools A, B, C, D and E. With respect to much qualitative research (Frankel and Wallen, 2006), the sampled schools are identified only as public schools A, B, C, D and E, respectively. The rationale was to obtain data that reflected the diverse range of schools in Kenya. Summaries of the data collected were prepared immediately after transcribing the field notes from the interviews, Questionnaire administration and classroom observation procedures are organized into individual reports reflecting the schools. . Statistical Package for Social Sciences (SPSS) was used to analyze data from the interviews, Questionnaire and classroom observation. Data collected were analyzed and descriptively presented with frequencies and percentages, while tables were used to enhance vivid illustrations.

The reliability of instrument was determined using the test-retest reliability techniques (Fraenkel and Wallen, 2000). In doing this, the questionnaire was administered to ten respondents outside the study area. After period of two weeks, the instruments were re-administered to the same respondents. The data collected on the two tests were collated and analyzed using the Pearson Product Moment Correlation analysis. A reliability coefficient of 0.76 was obtained indicating that, the instrument was reliable for the study.

### 3. RESEARCH FINDINGS

In order to meet the objective of the study, a survey and field observations were conducted to analyze and determine the influence of instructional media on quality teaching and learning in selected primary schools in Eldoret, Kenya. The findings were clear and discussed below one by one.

#### 3.1. Teachers’ Knowledge of Instructional Media

Information deduced from the questionnaire indicate that 46 or 57.5% of the 80 respondents understood instructional media as “teaching and learning materials” while 34 or 42% explained them as textbooks and chalkboards. This suggests that the respondents generally know what instructional media are. In their explanation, 40 or 50% of the respondents said teaching and learning materials consist of real objects, models, photographs, globes and maps that are appropriate for use in the classroom. While 30% said they are illustrations and cut-out objects, 14% said they are simple laboratory apparatus and textbooks.

**Table 1: Teachers’ knowledge of instructional media**

<b>Knowledge of instructional media</b>	<b>Frequency</b>	<b>% of total respondents</b>
Understood instructional media as “teaching and learning materials	46	57.5%
Explained them as textbooks and chalkboards	34	42%
Teaching and learning materials consist of real objects, models, photographs, globes and maps that are appropriate for use in the classroom	40	50%
Illustrations and cut-out objects	24	30%
They are simple laboratory apparatus and textbooks.	11	14%

The teachers certainly have an idea of what instructional media are but only half of them know the variety and range of resources that are classified under instructional media. However, the teachers who do not regard or classify any materials brought into the classroom to illustrate a lesson as instructional media are not likely to use them but teach abstract lessons mainly because these are not provided by schools and therefore have to be deliberately searched for and carried to school. Not all primary schools teachers will be willing to carry things to school by public transport but the pupils may be willing to bring them if they are told to do so for the sake of being taught lessons with the items.

#### 3.2. Availability of Media in the Schools

Answers to the questionnaire revealed that 72.5% of the 80 respondents reported that their schools have inadequate supply of the media needed for teaching and learning, while 27.5% said they have adequate supplies of the resources. It can be said that the large majority of

teachers do not have instructional media in the required quantities for effective use in teaching the subjects comprising the primary schools curriculum.

**Table 2: Availability of media in the schools**

<b>Availability of media in the schools</b>	<b>Frequency</b>	<b>% of total respondents</b>
Schools have inadequate supply of the media needed for teaching and learning	58	72.5%
Schools didn't have adequate supplies of the resources.	22	27.5%

This implies that teachers who do not have the resources they need may teach abstract lessons if they are not willing to look for whatever they can use to make their lessons more vivid to their pupils.

### **3.3. Providers of Instructional Materials**

On the issue of who provides instructional materials for use in the schools, the study respondents identified the ministry of education, the schools, teachers, school heads and pupils as those who have the responsibility to provide the resources needed for effective teaching. However, 62 or 77.5% of the teachers said they provide their own resources while 10 or 12.5% said the MOE supplies the materials found in the schools.

**Table 3: Providers of instructional materials**

<b>Providers of instructional materials</b>	<b>Frequency</b>	<b>% of total respondents</b>
provide their own resources	62	77.5%
MOE supplies the materials found in the schools	10	12.5%

This suggests that other than the chalkboard and textbooks supplied by the MOE, it is the primary schools teachers themselves who provide their own instructional material needs. It means it is only those teachers who know the advantages of using such materials and those who believe in their use who would go the extra mile to search for what they need for classroom use. Teachers who only use chalkboard and textbooks in lessons can therefore not be blamed much for what they do in the classroom.

Fortunately, some teachers accept the fact that they are liable for any low performance recorded among their pupils and so do well to locate appropriate materials to meet the academic needs of their pupils. Perhaps it is those who went through training that included the use of instructional resources who acquired this habit of usage. In this case, it can be said that those teachers who depend on MOE supplies did not have the requisite training with

instructional materials or they do not know their importance in children’s education? These are questions that were not investigated but which are of further research interest.

### **3.4. Knowledge and Use of Community Resources**

Table 4 shows the level of knowledge of other environmental resources that teachers could tap to facilitate teaching and learning in schools.

**Table 4: *Understanding of community resources***

<b>Meaning</b>	<b>Frequency of response</b>	<b>% of total respondents</b>
Things in the community that can be adapted for teaching and learning	12	15.0
Libraries, stores and markets	4	5.0
Not known	64	80.0

As indicated by the figures in Table 4, 80% of the respondents had no idea what community resources are. To find that only 15% of the 80 respondents see community resources as things in the community that can be adapted for teaching and learning implies that majority of teachers in the sample schools hold the view that the odds and ends available in their localities do not fit into the mould of instructional media and may not regard the cutlass, cup, and cutlery that their colleagues use to teach lessons as worthy of the name “instructional media”. This suggests lack of recognition for the efforts of teachers who use instructional media except when they use charts, textbooks and chalkboards.

### **3.5. Teachers Resources Centre**

The study found that 54 or 67.5% of the 80 respondents were aware that the MOE operates a Teachers’ Resources Centre where all categories of teachers could go and learn to make teaching and learning materials for their lessons. Besides, 82.5% of them had never paid visits to the nearest centre.

**Table 5: *Teacher’s resources centre***

<b>Meaning</b>	<b>Frequency of response</b>	<b>% of total respondents</b>
Aware that the MOE operates a Teachers’ Resources Centre	54	67.5
Had never paid visits to the nearest centre.	4	82.5%

They had no reasons for this. This implies lack of knowledge of the benefits that these teachers and their pupils could derive from the expertise at the centre and no desire to research or find innovative ways to induce effective learning among their pupils. It is important that the MOE creates awareness of what the centre could offer teachers in the so that they could seek help to solve educational problems to increase the chances of their students to attain higher educational heights. The heads of the sample schools should also use their “I-have-been-there-before” experience to direct their teachers to resources that could help them enhance their professional practice.

### **3.6. Appropriateness of Observed Media in Use**

When questioned on the appropriateness of the materials that teachers who taught the observed lessons used, 72.5% of them responded that what they used were appropriate for classroom use. This suggests that if the requisite instructional materials suit the teaching methodologies applied by the teachers, the pupils in those classrooms did assimilate much information in all the lessons observed. Because the materials used were not assessed as part of the observation, it is possible that the teachers only assumed they were appropriate just because they found their use helped them meet the objectives of the lessons. Indeed, the cutlery and plate were the most appropriate resources for the Home Economics lesson, likewise the computer and farm implements.

When the issue of whether primary schools pupils should be taught with the resources that were observed came up, 95% of the respondents held the view that the pupils are young and so it is important that such materials are used in addition to the chalkboard and textbooks. They intimated that without these “non-conventional” teaching materials, concepts which need reinforcement to generate firm understanding cannot be effectively addressed during lessons. This, they also said, would make the pupils perform poorly in class evaluation and examinations.

The study found that 82.5% of the respondents had used models, real objects and such odds and ends for teaching lessons before, suggesting some level of training in the use of such resources had been provided previously and the teachers also see the need to use them. On the importance of instructional media to teaching and learning, the large majority of the respondents (87.5%) reported that their use make teaching and learning easier than without them. This suggests that the teachers are aware of the benefits to be derived from whatever is used to illustrate lessons and that both teachers and pupils gain from their use. This reflects the use of such materials in all the 51 lessons observed. It can be stated that some illustrations were used in lessons which were not observed by the researcher.

### **3.7. Impact of Instructional Media Usage on Pupils**

Except for use of a chart for teaching synonyms and antonyms in public School D, there is no significant evidence from the observed lessons to suggest that where instructional materials of any kind were used in a lesson, they were a disincentive to pupils’ learning.

## **4. CONCLUSIONS**

During the course of this study relevant information was obtained and explained by means of descriptive statistics. The study makes the following findings very clear:

- Lack of wall charts, models, and other conventional media to complement the use of chalkboards and textbooks in the schools is making it difficult for teachers to offer quality teaching to promote high academic achievements for primary school pupils.
- There is lack of financial and logistics support for teachers to put in more effort and help their pupils gain more knowledge from their lessons.
- Lack of supervision by the Heads of the schools is making it easy for teachers to teach abstract lessons even where the topics demand usage of some instructional media.
- Lack of research into the designing and production of instructional media by teachers is negatively affecting teacher performance and learner output.
- Resources such as plants, furniture, buildings, and resource persons in the local communities, and others that are available in the various school environments should be tapped to enhance teaching and learning.

### **4.1. Recommendations**

In view of the above mentioned discussions, implications and conclusions highlighted above, to increase the use of basic instructional materials in the schools and promote higher academic achievement for primary school pupils, the following recommendations are being put forward for consideration and implementation:

1. Ministry of Education should ensure the supply of instructional media for use by teachers for effective teaching and learning. Such media could include locally produced materials generated by teachers and resource experts for better lesson delivery.
2. Ministry of Education should provide funds to support local production of instructional media to train and encourage more teachers to produce and use them.
3. Teachers should encourage their pupils to bring such items as empty cans and plastic containers that the teachers could use to help their pupils to visualize abstract concepts to help them understand the relevant issues.
4. In-Service training, workshops and seminars should be organized to orient primary school teachers to improvise alternative instructional resources and the right ways to use them during lessons. This will encourage appropriate use to achieve the lesson objectives and encourage the pupils to use them as learning resources.
5. Excursions and field trips can serve as a major means of exposing primary school pupils to the environment as a learning resource for firsthand information and experiential learning.

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