

Availability and Use of Instructional Materials and Facilities towards Enhancing Students' Performance in Economics in Secondary Schools: A Case of Rift Valley Province, Kenya

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Abstract

Performance in economics has been relatively unsatisfactory despite the national efforts made in developing a syllabus that is appropriate to the needs of Kenyans. Since the inception of the 8-4-4 system of education, there has been a persistent decline in enrolment of economics students and the subject has been characterized by poor performance in the national examinations. This annual decline in enrolment implies that the subject is likely to be phased out in the secondary school curriculum. The Ministry of Education inspectorate unit has echoed this fear. The authoritative reports reviewed showed that the students' performance over the years has not been satisfactory. This observation compelled the author to carry out this study on the availability and use of instructional resources for the teaching and learning of economics to enhance academic performance. Simple purposive sampling method was used to select twenty-four schools teaching economics in the fourth form. Questionnaires for district inspectors of secondary school, teachers and students of economics were used to collect the required data. The collected data was tabulated and analyzed using the Excel software program. The study established that Schools equipped with adequate and relevant learning resources are likely to have students performing well in examinations. In this case, National schools perform better than Provincial and District schools because they are well equipped with text-books. The study also established that other resources like periodicals and audio-visuals such as television, radio and computers were under-utilized. It is expected that teachers of economics will benefit from the findings, of this study, in their selection of instructional resources to use hence improve the performance of the subject in the Kenya Certificate of Secondary Education (KCSE) examinations which are administered by the Kenya National Examination Council (KNEC). Furthermore, the findings will form a basis of needs analysis for the Kenya Institute of Curriculum Development (KICD) which manages the production and provision of instructional materials for schools. KNEC too will benefit especially in organizing examination materials and conducting the KCSE. The study recommends that the government and the school administration should make an effort to provide physical facilities and teaching resources to Provincial and District schools.

Keywords: Instructional materials, Facilities, Economics subject, Enhancing performance, Students' performance

1. Introduction

1.1 Economics as a subject

Economics is one of the thirty-five examinable subjects in the Kenyan secondary school curriculum. Its importance is evidenced by its inclusion in the secondary school curriculum by the Ministry of Education. Economics like any of the business education subjects has vocational syllabus content. That is, it prepares an individual to be potentially employable in the job market. According to the syllabus requirements, the major aim of teaching the subject is;

To give the learners basic economic knowledge and skill so as to enable them understand, appreciate and participate in the economic environment in which they live. Emphasis should be on developing the ability of the learner to appreciate and solve economic problems, which confront them in the real world situation (Business Education syllabuses, 1985, p 20).

From the systems theory, economics can be taken as a system, which has aims, objectives and goals to be achieved. Endogenous variables including teaching strategies, school facilities, and teaching learning environment, school administration, and the availability of text-books and other resources, play an important role in achievement of these goals. These factors affect the learner in the learning process in one way or another.

1.2 School facilities

School facilities have been shown to be important contributors to academic success in developing countries (Heyneman & Jamison, 1981). Among the crucial facilities that promote student achievement in the Kenya Certificate of Secondary Examinations (KCSE), is the availability and efficient use of a library. Eshiwani et. al., (1988), asserted that schools with (good) libraries should have good examination performance as compared to those possessing none. The present study investigates a school library as a learning facility for that reason. Economics is an empirical science, which deals with daily economic problems of life. It relies on statistics and is applicable in real world situations. Teachers and students of economics are, therefore, required to be conversant with what is happening in the economic world around them. However, introduction of economics in many schools has not been matched with the development of library facilities. This development of the library facilities should include the stocking of economics periodicals like journals, economic surveys, financial reports, development plans, newspapers and magazines.

Kabetu (1986) also investigated both the print and non-print media. Audio-visuals investigated included the overhead projector (ORP), Cine-projector and tape recorders. The print media included the text-books and the periodicals. The study established that the visual aids were not available at all. According to Kabetu (1986) such a problem could have been solved if students were going out for academic visits and field studies. But this was not the case due to the shortage of time and funds. Recommended text-books and reference materials were hardly available. The researcher further reported that the few students who had the recommended text-books complained that they were all western-oriented and were, therefore, of little help, especially when they needed information based on local statistical data. It was also established in Kabetu's (1986) study that students also faced a lot of difficulty trying to interpret the language used in those books. In conclusion, Kabetu's study established that virtually all the learning resources applicable to economics instruction were not available.

The present study was conducted to find out the availability and use of those learning resources and whether those resources have any effect on the performance in the Economic subject. Teachers' perception towards the suitability of these learning resources III syllabus coverage was also sought. On the other hand, Kimutai's (1991) study investigated the availability, acquisition and utilisation of learning resources in the teaching and learning of economics in Kenyan secondary schools in Kericho and Nairobi districts.

2. Materials and Methods

This was a field survey study conducted in secondary schools offering economics in the Rift Valley Province of Kenya. Rift Valley Province covers approximately 30 per cent of Kenya's total area.

Simple purposive sampling was used to get the representative sample for the study. Data for the study was collected from the following individuals; teachers and students of economics in the schools teaching the subject and the district inspectors of schools in each district in the Province.

The representative sample, therefore, constituted all the fourth form students of economics in all the secondary schools in the Rift Valley Province of Kenya, Inspectors of schools in districts where economics was being offered and teachers from the schools where the subject was offered. A total of 187 students, 32 teachers and 4 district inspectors took part.

Data was collected from the sample using the questionnaires. The data collected was analysed using the Excel software program. Basic statistical techniques were used to analyse various items in the questionnaire. These include calculating the averages, frequencies, percentages and totals. These statistical techniques were used to make comparisons in the various data collected. Conclusions on the variables analysed were finally drawn from these comparisons.

3. Results and Discussion

3.1 Influence of Instructional Materials and Facilities

Among the instructional materials and facilities investigated concerning the teaching of economics were the text-books, reference books, periodicals, charts, posters, and audio-visuals such as television, videos, radios and the libraries. Of special interest were the availability, adequacy and use of these learning resources in the teaching of economics and their respective influence on students' performance in KCSE economics examinations.

3.2 Availability, adequacy and use of economics text-books

The reviewed literature indicates that text-books are some of the most important factors in students' achievement in KCSE economics. Therefore, the availability, adequacy and use of the relevant learning resources tend to have great impact on the, teaching of economics. To determine the availability of books for teaching economics,

teacher opinions were sought. The obtained data is presented in table 1. The analysis of this data was conducted on the basis of the three school categories used in the present study namely, National, Provincial and District schools. The collected data presented in this table shows that the majority, 24 (75%), of the teachers felt that their schools were adequately equipped with relevant economics text-books. While only 8 (25%) of them indicated that economics text-books were in short supply. National schools were found to be better equipped with the relevant economics text-books than some, 6 (19%) of the Provincial schools and 2 (6%) the district schools. Given the fact that the supply of economics text-books is expected to bring about improved performance in the subject, the short supply of these items in these two school categories may partly explain the poor performance noted in the secondary school system.

Table 1: Teacher opinions on the availability of books for teaching Economics

School type	National schools	Provincial schools	District school	Totals (%)
Adequacy				
Adequate	4(13)	18(56)	2(6)	24(75)
Inadequate	0	6(19)	2(6)	8(25)
Totals	4(13)	24(75)	4(12)	32(100)

3.3. The adequacy of economics text-books in secondary schools

Teachers of economics reported the titles and authors of economics textbooks used and gave various lists of Economic text-books. Most of the books listed by teachers were relevant for teaching secondary school economics. The most dominant text-books listed by teachers were *Certificate Economics* by R. U Akampuriria, *Economics for Eastern Africa* by Livingstone and Ord, *Simplified Economics* by NA. Saleemi, *Economics textbook* by Ashiq Hussein, *Simplified Economics* by D. Dewett, *Economics for East Africa* by Bradley, *Secondary Economics Books 3 and 4* by Kenya Institute of Education, *Economics: A student guide* by Beardshow, *Economics Textbook* by Barry Harrison, *introductory Economics* by F. Stan lake, *Economics Textbook* by Mature (et. al.) and *Economics for the developing World* by M Todaro.

Most of these publications are foreign, mainly from the west (Europe and America). This makes these publications rather difficult for students to use because of differences in culture, language used in preparing them and strange examples provided. No wonder, reviewed literature pointed out the same deficiencies. Students claimed that the language used in these economics text-books was difficult for them. Perhaps, the written language used in these text-books is not comprehensible to secondary school economics learners in Kenya. This could partly explain students' difficulties in economics learning let alone understanding KCSE economics questions.

To alleviate this problem, teachers of economics recommended text-books, which they perceived as simple to understand, and guided the students in a manner that they never despaired in their struggle to understanding economics. Teachers' recommended text- books such as *Secondary Economics Books 3 and 4* by KIE, *Economics for Eastern Africa* by Livingstone and Ord, *Economics Text-book* by Ashiq Hussein, *Certificate of Economics* by R. U Akampuriria, *Economics for the Developing World* by M P. Todaro and *Simplified Economics* by D. Dewett.

However, the recommended KIE textbooks were not fully supported by teachers of economics for teaching this subject. To them, these were not the best materials to use as class reference. This information is presented in table 2. The analysis of the collected data is instructive and shows that, nearly half the number, 16(50%), of teachers said they were satisfied with the KIE text-books while 13 (40%) of them felt that the books were fairly suitable and only 3 (10%) had no idea. The 13(40%) teachers who felt the text-books were fairly suitable for teaching agreed that these publications failed to express in detail economics content. Also these books failed to relate concepts to real life situations as required by the objectives of economics syllabus. If these text-books were elaborated using relevant illustrations and life-oriented examples, then most students would find them helpful in the learning of economics. This finding concurs with Too's (1996) study of secondary school mathematics which stated that KIE secondary mathematics text-book were shallow. These text-books were deemed shallow for the learners to be able to apply that knowledge practically as required by the objectives of the mathematics syllabus. The only remedy to this problem of shallowness in subject matter/content is for the KIE to incorporate the teachers of economics in the writing of the relevant text-books.

Table 2: The suitability of the recommended economics text-books

Suitability	Number of teachers (%)
Suitable	16 (50)
Fairly suitable	13 (40)
No idea	3 (10)
Total	32 (100)

In conclusion, it can be inferred from the above analysis that the language used and the depth of content in the economics text-books is a significant factor in the students' performance in KCSE examinations. Use of simple language in economics text-books influences the students' performance in KCSE examinations since they are able to comprehend the economics concepts being presented to them. This involves use of relevant illustrations and real life examples. The use of simple language together with real life examples makes students grasp the apparently difficult economics concepts and, thus enjoy learning the subject. Hence facilitating students' learning of the subject and, consequently, enabling them to pass examinations.

3.4 Influence of the Projected and Non-projected Media in the Teaching-Learning of Economics

Among other instructional materials investigated were the wide range of audio-visuals and non-projected media. Non-projected media included periodicals such as magazines, newspapers, journals, development plans, financial reports and economic reviews while graphics included charts, maps, photographs, drawings, syllabuses, student's assessment guides, pictures, posters and chalkboards. Audio-visuals included radio, television, video and computers. The reason for investigating the availability of periodicals, graphics, and audio-visuals in schools is that, these items have been found to facilitate students' learning of economics. Specifically the interest was on the influence of these resources on students' performance in the KCSE economics examination. Teachers' responses regarding the availability and use of these materials were analysed and presented in table 3.

Table 3: The adequacy of economics teaching materials

School type / no. of teachers	Number of Teachers in each school type			
Media Type	National Schools (%)	Provincial Schools (%)	District Schools (%)	Totals (%)
Periodicals	4 (100)	18 (71)	2 (50)	24(75)
Audio-visuals.	4 (100)	16 (67)	2 (50)	22(69)
Non-Projected Media	4 (100)	18 (71)	2 (50)	24(75)

It should be noted however, that the percentage calculations reflected in this table are based on the totals of each school type. For instance, all the four national schools are presented as 100%. The same was used in the presentation of the other categories of schools. Also, only schools with more than half of the media said to be available were considered in the table and the rest below half were assumed to have inadequate supply of these instructional materials. From table 18, a large number, 24 (75%), of the teachers indicated that their schools had all or most of the periodicals such as newspapers, magazines, and journals in the library. This view was verified by the students' responses.

These periodicals were meant to supplement the text-books in the teaching of economics. The available periodicals were found to be relevant to the teaching of this subject. These learning resources were adequately available in national schools. But only 18(71%) of the Provincial and 2(50%) of the district schools had sufficient periodicals. However, there was a problem regarding their use. For instance, periodicals found in the library were under-utilised by the students who only visited the library whenever there was need. The large proportion, 18(71%), of the teachers from the Provincial schools also indicated that their schools have adequate materials as were, 2 (50%), teachers from the district schools.

Regarding the information on audio-visuals, 22 (69%) of the total schools surveyed reported to have had all the audio-visuals surveyed. These were distributed as follow, 16 (67%) were Provincial schools, 2 (50%), were district schools and all the rest were national schools.

Apparently, very few television programmes are said to be relevant to economics instruction and sometimes these programmes are broadcast to schools but out-side school schedules. Therefore, teachers said that, may times students never watch these programmes or rather miss the programmes altogether. Regarding the use of video machines, most economics teachers reported less use of these materials because the appropriate software such as video-tapes or radio cassettes were not available. These include all tapes or films that present the current economic structures such as market operations. Relevant video-tapes were hardly found and supplied to the schools.

The teachers of economics more often than not utilized comparatively non-projected media than the projected ones. This is because these items are easily available and easy to use in teaching. It can, therefore, be inferred from this presentation that the media available were under-utilised. But this -does not mean that these materials are not important in the teaching of economics. It can be concluded that under-utilization of the various instructional media is partly responsible for poor students' performance in KCSE economics examinations. These finding on the inadequate use of non-projected media is consistent with Kafu's (1976) and Kimutai's (1991) studies. No significant change has taken place in this aspect of teaching since 1976 and 1991 respectively.

4. Conclusion

Regarding the supply of text-books, this study found that national schools are better- equipped with text-books than Provincial and district schools. Text-books have been found to be one of the major determinants of students' achievement in school work. Adequacy in the supply of text-books and suitability of these items influence students learning out-comes. The available books in this present study were not quite suitable for students use in economics at the secondary school level. Most students' of economics cannot comprehend fully the subject matter of economics due to the difficult language used in these books. Those written in simple language were the Kenya Institute of Education series Secondary Economics books 3 and 4, which were recommended by the Ministry of Education.

Apart from the text-books, the other instructional materials including the audio-visuals and non-projected media such as periodicals were also studied. A greater percentage of teachers, 24 (75%), said that their schools had all these learning resources. As regards periodicals, these resources were under-utilized by students. This was because students rarely visited the libraries. Periodicals tend to contribute significantly in the understanding of economics because their content is from the real life situations. Similarly, the audio-visuals such as television, radio and computer were found in many schools but were also under-utilized. Teachers of economics had reported that the under- utilization was due to lack of the software that goes with those machines such as relevant tapes. The non- projected media that were properly utilized by the teachers of economics were the charts and posters. These media had been utilized fully because of the ease with which they can be procured and developed by teachers.

Schools equipped with adequate and relevant learning resources are likely to have students performing well in these examinations. In this case, the national and a few Provincial schools that provided a rich learning environment have been found to register good results in KCSE economics examination. Therefore, the teaching and learning of economics in secondary schools in Rift-Valley province requires the availability of all the essential learning resources.

5. Recommendation

The Kenya government in general and the school administration in particular should make an effort to provide physical facilities and teaching resources to Provincial and district schools. Unless, the situation is redressed, difference in performance in KCSE economics in the three school types will persist. That is, the national and some of the Provincial schools will continue receiving good students and consequently perform better in KCSE economics examinations. Further studies involving the use of participatory observation and interviews in a similar area should be carried out in order to supplement the information obtained from using questionnaires.

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