FACTORS DETERMINING SECONDARY SCHOOL STUDENTS' ENROLMENT FOR COMMERCE AND ECONOMICS IN NAIROBI AND MACHAKOS DISTRICTS- KENYA

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DECLARATION

THIS THESIS IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR AN AWARD IN ANY OTHER UNIVERSITY

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DEDICATION

This research is dedicated to my wife Ndinda and the children, Muendi, Muthenya and Wambua.
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ABSTRACT

The problem was a continued drop in the number of students registering for KCSE economics while the same increased for commerce. The study was a cross sectional survey of the factors that students considered when opting between commerce and economics in secondary schools in Nairobi and Machakos districts. Microsoft excel was used as a tool in data analysis. The general objectives of the study were to find out the possible reasons for this decline while the specific objectives were to establish the role played by students’ career objective, level of abstractness in subject content, performance by past groups of students, availability of instructional resources and the school administration on the students’ option between commerce and economics and make recommendations for improving enrolment for economics and for further research. The study found that career objective was a factor that motivated students in their choice of subject and that the school administration discouraged and removed the economics from the school curriculum while the Level of abstractness of content, availability of instructional resources and performance by past others did not feature as factors that motivated students. The study recommended that simplified economics should be taught as a core subject in secondary schools and teachers should be wholly involved in the acquisition of instructional resources as well as being frequently in-serviced. The government should fund and encourage writers of materials with local references for teaching and learning economics. Further research is recommended to find out the reception accorded business studies in secondary schools and why. Research is also recommended to found out the availability and suitability of resources for teaching business studies at this level.
CHAPTER ONE
INTRODUCTION TO THE STUDY

1.0 INTRODUCTION.

The research was a comparative study that set out to unearth the factors that determine students' enrolment for commerce and economics\(^1\) at the secondary school level in Machakos and Nairobi districts. Reference was made to instructional resources availability, career opportunities after school, level of content abstractness in the subject area, influence by the school administration, and performance by past students. The final sample was selected by use of simple random sampling procedure to ensure that it was representative. The findings are presented in tables and discussed before making conclusions and recommendations on them.

1.1 BACKGROUND TO THE PROBLEM.

Otiende et al (1992) describes education as 'the vehicle through which individuals are integrated into their social group, community and society'. Changes in the socio-economic and technological spheres bring out the need for new education for self-preservation. Through education, the most important beliefs and practices are passed down from one generation to the other as systematically as possible. Education may include counter teachings to eliminate foreign beliefs and behaviours that do not agree with socio-political ideologies and economic reality. For anything to qualify to be called education, it must teach the learner to thrive and subdue obstacles in his/her environment. Pragmatists state

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\(^1\) Commerce, economics, accounting and secretarial studies were combined to form Business Studies. Economics has sixteen of the thirty-two chapters in the syllabus.
that education is that experience that the child needs to solve problems. Thus, education is a tool of problem solving and the educators should set it to be so. A society's culture changes as it interacts with others. Practices and beliefs are discarded and new values are found. In the traditional set-up, the education of the youth was the responsibility of the older generation. The instructors, the type of instruction and the level at which it was given were based on age and sex. The instruction was based on the culture, the livelihood of the society and how to live together with each other. In Kenya, the education system is looked upon to make students integrate. In this manner, and to inculcate values on nationalism, patriotism, work ethics, and self-reliance for employment as well as solving unemployment problems. Swann et al. (2003:6) note that "there is no certain or secure knowledge". Knowledge is provisional and fallible. Thus, subjects that are popular at one time may lose popularity depending on their ability to solve the students' problems or their ability to make them achieve their goals and discarded for others that seem to. Pragmatists believe that true education is not the acquiring of a dead culture, particularly from books but rather the power to do the right thing in a given situation. Ross (1947) exposes pragmatism as a philosophy that believes that education is not so much teaching the child things he ought to know, as encouraging him to learn by himself through experimental creativity. The students' needs and knowledge requirements shift with the socio-economic reality and expectations. The Kenyan student is subject to this presumption. The method of passing down knowledge and its success are the prerogatives of the educator. The teacher has to choose when, where
and how students are made to acquire useful knowledge. Ross (1947) points out that the project method is the pragmatic educational practice that puts in the foreground of the learning process a definite practical problem to be solved. The method of teaching chosen is determined by the level of abstractness of content and the resources availability. More instructional resources are required as the level of abstractness of content increases.

The most critical problem for educators is determining the best way to make students integrate what the teacher presents into their own systems. Wiman (1972) quotes David P. Page as having said that a man who is apt to teach should devise some ingenious method of enlightening the mind of his student so that he shall lay hold of the idea as with a manly grasp and make it his own forever. This entails high teacher ability. Foskett (1965) indicates that the teacher has the role of communicating information and stimulating development of the minds of the student to grasp this information and form new and own ideas from it. This grasp is a key determinant of performance in the subject. Performance may not only determine the rate of students' enrolment for the subject, but is a basis for rating the success of communication and the institution where learning takes place.

The school administration decides the curriculum from which the students are to choose as well the resources allocated for teaching the subjects. Thus, it can influence enrolment, resources availability and performance in the subject.
1.1.1 COMMERCE AND ECONOMICS AS SECONDARY SCHOOL SUBJECTS.

Education in Kenya has gone through major changes over time aimed at achieving a meaningful restructuring to make the graduate self-reliant. Introduced in 1985, the 8-4-4 system of education was viewed as the vehicle for the development of values and skills to encourage self-reliance and self-employment. In the new structure of education, economics was offered as a secondary school subject in Form three and four instead of Form five and six as the case was previously. The economics syllabus was altered to include topics that were not in the “A" level one. The content was also changed to cover less theory and few mathematical expressions and to consider local topical issues. Any school could now offer economics as opposed to previously where the subject was the preserve of schools that had “A" level classes. Many schools took to the discipline since it did not require expensive equipment to teach.

Enrolment was good in the beginning. KNEC (1990) indicates that as many as 25269 and 26130 candidates registered for the KCSE in 1989 and 1990 respectively. However, over the years the enrolment declined significantly.

The KIE (1997) set the objectives of teaching economics as a secondary school discipline as to enable the student to:

- enlarge his/her general business literacy,
- to acquire basic knowledge and skills that will make him/her self-reliant and useful in the business world,
understand and appreciate the importance of business activities in society,

understand the role of producers and consumers in socio-economic activities,

develop skills and attitudes which will encourage him/her to share business knowledge with others and discuss current issues,

develop and demonstrate desirable qualities and habits for efficient business operation,

understand and recognise the role of the government in relation to business activities,

understand and explain what economics is about,

understand basic economic concepts and principles,

understand the structure and functioning of Kenya's economy,

appreciate the role he/she is expected to play in the process of economic development,

understand and interpret national and international economics issues,

apply knowledge and skills of economics in various development activities,

analyse and interpret economic data,

acquire the necessary background for further studies in economics and other related fields.

The objectives are used to justify the topics included in the syllabus, the content and depth of coverage, and overlaps with other subjects.
Commerce has a rather different history. Before the advent of the 8-4-4 system of education, Commerce was an “O” level subject mostly taught in the private and community-sponsored schools. In this system, it was introduced in all secondary schools that wished to offer it. KNEC (1990) indicates that in 1989 and 1990 commerce registered 76274 and 75054 candidates respectively.

The KIE (1997) set almost similar objectives for teaching commerce in secondary school as for economics though precise and measurable. The following are the objectives of teaching commerce at this level:

To provide the learner with:

- knowledge, understanding and awareness of the business environment;
- business knowledge for general use;
- knowledge and skills that will assist him/her to be better prepared for informal (self) and formal employment;
- basic knowledge as a foundation for training in business education,
- to assist the learner to develop an understanding and appreciation of the role of commerce in improving the standards of living in society,
- to enable the student to effectively participate in the development of Kenya.
The objectives, just like in economics, are used to justify the topics included in the syllabus, the content and depth of coverage, and overlaps with other subjects.

The table below presents enrolment for the Kenya Certificate of Secondary Education for both Commerce and Economics for the years ranging from 1998 to 2004.

TABLE 1.1 Candidature and performance for commerce and economics 1998-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Commerce</th>
<th>Mean Score</th>
<th>Economics</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>96266</td>
<td>74.96</td>
<td>2177</td>
<td>73.57</td>
</tr>
<tr>
<td>1999</td>
<td>97052</td>
<td>82.52</td>
<td>2107</td>
<td>83.74</td>
</tr>
<tr>
<td>2000</td>
<td>104626</td>
<td>81.43</td>
<td>1701</td>
<td>75.54</td>
</tr>
<tr>
<td>2001</td>
<td>93526</td>
<td>73.45</td>
<td>1032</td>
<td>75.15</td>
</tr>
<tr>
<td>2002</td>
<td>93044</td>
<td>91.75</td>
<td>625</td>
<td>86.95</td>
</tr>
<tr>
<td>2003</td>
<td>95680</td>
<td>92.34</td>
<td>523</td>
<td>112.45</td>
</tr>
<tr>
<td>2004</td>
<td>98236</td>
<td>90.47</td>
<td>316</td>
<td>115.8</td>
</tr>
</tbody>
</table>

Source: Kenya National Examinations Council Annual Reports

From this table it is clear that commerce registered far more candidates than economics for the KCSE examinations in each of the seven years under consideration. The table above indicates that in the year 2004, Commerce had 98236 candidates while Economics registered only 316. Performance in the two subjects seems comparable but only a test of level of significance can tell.

2 Both subjects constitute two papers in the KCSE and are marked out of two hundred. The data in the table is compiled from various annual reports of the Kenya National Examinations Council.
1.2 STATEMENT OF THE PROBLEM.
Since 1990, the candidature in economics dropped from a high of 26130 to 316 in 2004. Candidature for commerce went up from 75054 in 1990 to 98236 in 2004. The problem was to find out what factors determine students choice between commerce and economics such that their enrolment for economics in the KCSE examinations declines.

1.3 SIGNIFICANCE OF THE STUDY.
The study is significant for policy makers in education, school administrators and educational media specialists. It will help the policy makers in education to appreciate the role played by the level of abstractness of content on students’ enrolment for both commerce and economics. Policy makers in education will appreciate the need to make enrolment for commerce and economics independent of each other. The educational media specialists will also appreciate the need for developing relevant media resources for economics to accommodate changes in the syllabus when they occur. It is important to policy makers so that teachers of economics are not made redundant in a system where it is a requirement that they offer two teaching subjects. The research is also documentation for researchers on factors that determined enrolment for the two competing subjects in the secondary school curriculum.

1.4 OBJECTIVE OF THE STUDY.
The general objectives were to find out the possible reasons for the decline in candidature in economics and increase in the same in commerce. The specific objectives of the study were to:
1. establish if students' career objectives played a role in their option between commerce and economics.
2. establish if the level of abstractness of concepts in commerce and economics played a role in students' options.
3. establish if the KCSE performance of past groups of students' influenced the decisions of succeeding groups in their option between commerce and economics,
4. establish the role played by the availability of instructional resources in students' option between commerce and economics.
5. establish the role the school administration played in the students' option for commerce and economics.
6. make recommendations on how to improve enrolment in economics and
7. make recommendations for further research.

1.5 RESEARCH QUESTIONS.

The research sought to answer the following questions,

1. is career objective a factor that students consider when opting between commerce and economics?
2. is the availability of instructional resources a factor influencing students' options between commerce and economics?
3. is performance in examination by preceding groups of students a factor that influences students' enrolment in the subject in the subsequent year(s)?
4. is the level of abstractness in commerce or economics a factor in the students' subject options?

5. does the school administration play a role in the students' examinations enrolment for commerce and economics?

1.6 THE SCOPE AND LIMITATIONS OF THE STUDY.

1.6.1 SCOPE.
This study was carried out in Nairobi and Machakos districts. These districts were selected because of their proximity as well as differences in that whereas Nairobi is urban, Machakos is rural to make the findings of the research representative. It was limited to finding out factors that determined students' KCSE enrolment for commerce and economics and making recommendations on how enrolment for economics could be improved. The study was to try to determine if resources availability and level of abstractness of ideas/concepts affected examinations enrolment for economics and commerce. It also sought to establish if the school administration influenced students' option and subsequent enrolment for KCSE examinations in commerce and economics, if the performances of former students affected the options of the current ones and if the students were guided by career objectives in their options.

1.6.2 LIMITATIONS.
This study only assessed students' and teachers attitudes that lead to enrolment for KCSE examinations in commerce and economics with reference to career opportunities, instructional resources availability, performance by past students, abstractness of ideas and concepts and
the school administration. Important impediments were the availability of schools offering economics and commerce, preparations for the KCSE examination, the lack of relevant records at the inspectorate and the financial obligation imposed on researchers seeking data from these records. The ultimate limiting factors were funding and time.

1.7 ASSUMPTIONS.

The assumptions of this study were that

1. attitudes could be assessed through the responses to questions in the questionnaire,

2. teachers' ability in commerce and economics was identical and the students are aware of the same.

3. students were rational in their choice of subject presented for KCSE.

4. students could move between commerce and economics in the initial stages of orientation.

5. students have sufficient cognitive capacity to learn either commerce or economics.
1.8 CONCEPTUAL FRAMEWORK.

Figure 1.1 Determinants of enrolment for Economics and Commerce in the KCSE

The diagram above presents independent variables (INDV), namely careers, resources (instructional), performance (by past students), administration (school) and level of abstractness as the factors students were likely to consider when opting between commerce and economics and therefore the same factors that were likely to affect enrolment for the two subjects. When students used the independent factors as the ground...
on which to choose between commerce and economics the result would be the total enrolment for each subject.

The conceptual framework for this research is based on the theory of motivation by Victor Vroom. Human behaviour is a result of underlying motivation. Vroom states that "an individual is motivated to behave in a certain manner because he or see has a strong desire for a certain task outcome and a reasonable expectation of achieving that outcome and because he or she expects that the achievement of the task outcome will result in reward..."\(^3\) Motivation is identified as instrumental or integrative. Fontana (1995) identifies the instrumental aspect of motivation and states that children (students) tend to become interested in those things that help them deal with problems and difficulties in their lives. This aspect of motivation closely relates to the career objective. The cognitive variables and personal causations in motivation combine to determine the individual's attitude that has affective, cognitive and behavioural domains which manifest themselves as emotions, beliefs and observable behaviour respectively and which are measurable through self-ratings, expression and observation. The resultant behaviour observed is geared towards either attaining growth potential or reducing suffering if not satisfying a need deficiency. While personal causations related to the student's ability to understand concepts in an area of study, the cognitive variables affect his perception of issues, real and imaginary. Issues related to cognitive variables in this study are performance by past students, instructional resource availability.

\(^3\) Source is the internet copy right @ 2008 Arina Nikitina
Bruner (1966) argues that instruction should proceed from direct experience through iconic representation to abstract experiences at the top since the sequence in which the learner encounters materials has a direct effect on achieving mastery of the task. Anderton (1984) argues that resources should be geared to the ability of the students because those who find work too difficult lose motivation and concentration and of course learn very little. Bruner and Anderton link abstractness to the availability of instructional resources and subsequent level of learning that determines performance. Performance itself is key to career selections though the subject themselves do not guide the students to particular careers. The school administration brings other external factors through persuasion and coercion. The students experience with these variables creates attitudes in them. The observable behaviour is a manifest of this attitude. In their choices, the students are motivated to reduce affliction or to achieve their potential.

This study applied the theory of motivation to determine how students combined the independent variables; the level of abstractness, availability of instructional resources, influence by the school administration, performance by past students, and career objectives to determine the level of enrolment for commerce and economics in the KCSE. These variables were interdependent and a change in one could lead to indeterminate changes in the others in a variety of ways.

1.9 DEFINITION OF TERMS.

Apathy - a condition of little or no drive or just not caring.
Attitudes – relatively enduring orientations that individuals develop towards various objects and issues encountered in life and which they express verbally.

Business education - a study of the institutions and the environment that enable the exchange of goods and services.

Commerce- a social science that entails the study of trade and aids to trade.

Community-sponsored school- schools which were built through communal effort and without the input of the state.

Economics - the study of how limited resources are allocated to unlimited wants.

Motivation - the willingness to do something conditioned by the action's ability to satisfy some need.

Opting – choosing any one of the clustered subjects in the secondary school curriculum.

Secondary school – an educational institution higher than a primary school that offers academic education.

1.10 DEFINITION OF ABBREVIATIONS

KCSE - Kenya Certificate of Secondary Education. An examination sat in the fourth year of secondary education.

KIE- Kenya Institute of Education


PGDE- Postgraduate Diploma in Education.

PhD - Doctor of Philosophy.
8 – 4 – 4 – System of education in Kenya where 8 years are spent in primary, 4 in secondary and 4 in the university.

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CHAPTER TWO
LITERATURE REVIEW

1.0 INTRODUCTION.

This chapter deals with knowledge that is preliminary to the present situation in the teaching of commerce and economics as well as literature on instructional resources, teacher ability, concepts abstractness, careers and learning. It dwells on changes in the system of education, commerce and economics as subjects in secondary schools curriculum, abstractness of economics, career opportunities commerce and economics, instructional resources and the process of learning, factors the determine academic performance, teacher ability, the role of the school administration, a critical review of major issues and the gaps to be filled by this study.

2.1 CHANGES IN SYSTEM OF EDUCATION

The 1980s saw major changes in the education sector. The advanced school level ('A' level) was eliminated and students were to spend an extra year in primary school, four years in secondary and a minimum of four years in university depending on the degree course taken. The syllabus underwent many changes. Economics hitherto offered in Form five and six was now offered in Form three and four, while commerce was introduced in all secondary schools. This global introduction led teachers who formally taught economics to teaching commerce. Commerce and economics became competitors in the school curriculum.
These changes brought about the need for teachers and instructional materials. A new syllabus was prepared to reflect new content, depth and breadth as well as orientation. The teachers’ instructional and orientation needs likewise changed.

Education is widely viewed as a vehicle of economic development and nationhood. Ochieng (2004) says that the will to build a nation originates from within its people and not from outside. The growth must come out of our own roots and not through grafting onto things that are alien to our society. Thus, we have to revisit our educational philosophies and theories to find out whether we are bringing up young people with the will to be true Africans and the will to develop without relying on western and other patronages. Education is a network of values and is subject to change as time changes. We have to retrain our teachers and professors, so that they can inject the required values into the heads of our youth. It is in this view that the curriculum in the education system has been changing in order to reflect trends in the job market, life styles and emerging issues.

Knowledge is fallible. This makes it provisional depending on when and where it is applied. What is true today may not be so tomorrow. In an effort to make economics useful to the Kenyan students, the new syllabus emphasised on macroeconomics with a special reference to Kenya and other developing economies. Economics in secondary schools in Kenya was modified to include local tangible points of reference. This does not however mean that there are no abstract concepts in the syllabus. The
abstraction of the law of demand and supply and the concept of ceteris paribus is real because a shift in one of the determinants of demand or supply will most likely affect the status of all the others. The assumption that other factors remain constant as one factor changes is purely hypothetical.

A new syllabus definitely requires new instructional resources whose adequacy would be debatable in the short-run unless the changes were made on the strength of their availability. What concerns us however is the fact that teaching methods change just as do textbooks and other instructional materials whenever educational aims and objectives change. This requires both human and financial resources as well as time to develop and implement. Acceptability of new curriculum by the society is a challenge in its implementation because students tend to keep away from unfamiliar grounds. It is from here that we would like to identify the effect of the level abstractness of concepts and instructional resources on enrolment for commerce and economics for the KCSE.

Otiende (1992) states that education is that knowledge that the society deems necessary for holding together and enabling the students to thrive as sub-sets of the larger society. Every formal education has specially stated goals and a well-defined curriculum and it takes place in a definite venue and duration. Education must cater for economic, social, political and technological changes that prevail in the society in the 21st century. The students’ career objective would be one factor that education should address. Formal education details instruction and instructional materials.
One would seemingly be correct to say that history of education is essentially a history of instruction and curriculum. For knowledge to be worth the term ‘education’, it must, of necessity fulfil three functions; namely instrumental, affiliative, and figurative.

The national conference on education and training, November 2003, focused on quality, relevance, and inequalities. In the inaugural speech, President Kibaki noted that Kenya needed a system of education that produced graduates for the global market and at the same time allowed children to grow up naturally. Although education will not solve all the problems in the society, it is expected to equip the learners with relevant knowledge and a strong clear thinking capacity to accommodate present and emerging issues. If a subject does not fulfil this criterion the rationale calls for its dropping from the curriculum. If the policy makers do not drop it then slow destruction will. The curriculum should have a substantive and procedural content sequenced on the basis of research in the fields of psychology of learning and human development and strategies, objectives and learning experiences provided for in the model should be congruent with those of other curricular levels. For each level subjects should be of equal complexity failing which students tend to migrate from areas they consider too complex to less complex ones unless there are restrictions. Should the level of complexity between commerce and economics differ, then one would expect that students would move to the less complex of the two.
2.2 ECONOMICS AS A SECONDARY SCHOOL SUBJECT.

A working definition of economics is necessary at this stage. Kerich (1990) on page 30 defines economics as ‘an attempt to describe, analyse, and explain economic phenomena, relationships between them, changes in them and consequences of these changes’. Fenton (1966) on page 17 defines economics as ‘a body of concepts and working relationships which when intelligently used can help in reaching reasoned judgements about economic issues’. He asserts that economics is a way of thinking and a tool kit to be employed in thinking through problems as they arise whether simple or complex. Abstraction is therefore a paradigm of economics.

Economics owes its origin to early philosophers who did not distinguish between different disciplines. All disciplines were seen as part of philosophy, the master discipline. Plato and Aristotle never talked of economics but only discussed what today falls under it only when it touched on political and ethical problems. With the increase in knowledge, it became inevitable that disciplines split. In the Middle Ages, economic questions fell under theology. During the renaissance period, precious metals such as gold and silver were discovered and economic questions acquired a more notable position.

Renaissance was followed by the mercantilism age, characterised by desire by nations to accumulate vast amounts of wealth under the argument that a favourable balance of trade would lead to an inflow of
gold and silver to the nations thus enhancing their prosperity. Economics became a tool for politics.

The industrial revolution in the 18th century brought with it the factory system of production; a mass production of goods and services that led to increased distribution and monetary problems. Governments began to accept economics as a distinct discipline. Economics was studied under the name political economy.

According to Otiende (1992), in Kenya, economics was offered as a secondary school discipline on experimental basis following the Ominde commission of 1964. It adapted the Cambridge syllabus and examination before the creation of the East African examinations council in 1972. With the collapse of the East African community in 1977, the Kenya National Examination Council was created and bestowed with the responsibility for examining economics while the KIE developed the syllabus.

2.2.1 ABSTRACTNESS IN ECONOMICS.

The current economics syllabus in Kenya emphasises on descriptive economics. This approach to economics is intended to be interesting to the students. Fenton (1966) is persuaded that economics taught to the youngsters in schools should be the minimum that they might reasonably learn in a short period. His opinion is that spending much time teaching detailed facts is a waste. This is so because the human memory is very short for unused facts so most facts are better learnt when they are needed.
Concepts taught should be maintained to a few simple but fundamental ones that can help in understanding economic issues. Fenton seems to be saying that the only relevant economics is that which the youngsters can use in solving their pressing problems.

Massialas (1966) describes the orientation of high school economics in America as generally descriptive and all often dry and sterile, giving little attention to helping students to learn to think for themselves the economic problems that faced the nation. He added that textbooks were mainly descriptive and economic analysis almost absent. Reasoning was often loose and superficial and they failed to develop an awareness of what the fundamental economics problems were and how rational and objective thinking could contribute effectively to their solution. The advocacy here is for a theoretical framework as the basis for studying economics. Oliver (1973) says that the only worthwhile macroeconomics is that which is informed by theory. Oliver (1973) on page 30 quotes Bentham; “when we have words in our ears we think we have ideas in our heads. It is the technique of thinking that we are after and not the contemporary facts". Oliver stresses that the theory of economics is a method rather than a doctrine. It is an apparatus of the mind, a technique of thinking, which helps the possessor to draw correct conclusions. Kincaid (1996) on the other hand argues that economics is puzzling. It has highly developed mathematical theories and yet it is not obvious that those theories explain any real economy at all because they make violent abstractions from reality.
2.3 COMMERCE AS A SECONDARY SCHOOL SUBJECT.

Commerce is the study of trade and aids to trade. It was introduced in the school curriculum in the course of the 20th century as one of the social studies then. Social studies were a general subject especially for those who did not wish to pursue tertiary education. The social studies got a poor reception from the students and parents because it was associated with poor performers. In the course of the same century, people became gradually more aware of the economic function of education. Commerce, mathematics and science were given more attention than the languages and social studies. Commerce gained the status of a vocational subject.

Otiende et al (1992) state that as early as 1920, commercial subjects were taught in the Asian schools with the aim of developing traders out of Indians students. The National Christian Council of Kenya (NCCK) introduced Commerce in the African education in the late 1960s in the village polytechnics, which they had established, with the aim of curbing increasing unemployment of secondary school leavers that was then evident. In the early 1970s, thirty-five secondary schools were to be provided with equipment for learning commercial courses. In the secondary school section, commerce took off mostly in the community-sponsored and private schools. It was not until the introduction of the 8-4-4 system of education that commerce was introduced in almost all secondary schools in Kenya.
2.4 CAREER OPPORTUNITIES IN COMMERCE AND ECONOMICS.

For a subject to appeal to the student it should relate to his life experiences or seem to provide solutions to his problems which include making grades for admission to institutions of higher learning and formal or informal employment. In the 19th century, great value was placed upon the disciplinary value of economics subject matter that was utilitarian. It was on this basis that its protagonists pressed for its inclusion in the curriculum as a secondary school discipline. In the USA, economics was first introduced in secondary schools at the time of the civil war. Between 1857 and 1898, the Massachusetts law required the teaching of economics in all state larger high schools. By 1890, it was estimated that only 5% of secondary schools offered the subject.

Kerich (1990) states that in England, during the latter part of the 19th century, political economy was considered the prerogative of an educated gentleman, "the Oxbridge man", who applied his philosophy to the problems of politics of wealth. The affairs of the state were the concern of economists. Economics was regarded as a study only necessary for the public administrators and the private capitalists. It took much of the 20th century for this idea to die out. Many jobs existed that required knowledge in business affairs. In England, the affairs of the state were the concern of economists. Meanwhile in the USA, economics became a profession in the period between 1880 and 1900.

The study of commerce prepares the students for personally fruitful and socially useful careers in business and related types of activities. Its
teaching should keep in view the expectations of the business world, which looks towards commerce institutions to give it generalists and specialists if possible embodied in the same person. The perception is that commerce is useful in every job; it is flexible, realistic and makes the person sensitive to the complexities of the work environment.

Commerce and economics are substitutes for some courses requirements at tertiary institutions of learning. Moreover, economics is studied as a unit in many professional courses at these institutions.

In Kenya, we note that in 1997 when the Teachers’ Service Commission gave special increments to teachers of the sciences, mathematics and languages, the teachers of commerce and economics were left out of the scheme. In employment in the early 2000, they were discriminated against in favour of the sciences, mathematics and languages. These events could discourage students from choosing the subjects but the difference in the numbers for each would be unexplained.

2.5 THE PROCESS OF LEARNING.

We should always give careful consideration to the impact an instructional material will have on student’s learning. There should be a clear theoretical basis for the design of instruction whether it involves the use of technologies or not. Instructional planning should consider the student. Anderson in Whitehead (1984) argues that resources should be geared to the ability of the students otherwise students who find work too difficult will lose motivation and concentration and certainly learn very little. Kerich
(1990) found that teachers of economics tended to predominately use the lecture method thus applying very little instructional resources.

Information processing theorists believe that the brain processes information much like a computer in that it only processes what it receives in order to come up with the solution. Romiszowski (1974) appreciates Bloom's taxonomy of learning which has six levels of learning namely, **knowledge, comprehension, application, analysis, synthesis** and **evaluation**. He compares it with Gagné's hierarchy of learning with eight levels noting that while Bloom states observable behaviour he gives no conditions for learning where Gagné gives objectives and learning conditions. Romiszowski (1974) advances two models of learning, one for skills and another for knowledge. Information is received through the **receptors**, sent to the **store** (brain), then to the **processor** and finally to the **effectors**. The effectors produce observable behaviour that he terms as performance. Processed information can be recycled and refined before being stored. The student attitudes, availability of time and memory play a central role at the reception stage. The student has to **pay attention** to the **stimulus**, get its **intensity** and be able to **discriminate** it from others where there is a variety of stimuli. Instructional resources in the learning process are important because they produce the required stimulus. If the students are frustrated due lack of suitable instructional resources they pay little attention, their reception is poor and so is their learning. Consequently, their performance is poor and their ability to get employment in a performance-biased economy is poor. This will lower their interest in the particular area of study.
2.5.1 FACTORS THAT DETERMINE ACADEMIC PERFORMANCE.

In general, there are both extraneous and intrinsic factors that determine academic performance. Fontana (1995) notes that extraneous factors include instructional resources, their application, time and the ability of the teacher to explain ideas or concepts clearly. Intrinsic factors on the other hand include the student’s motivation, attitudes and ability. Ability is both cognitive and physiological. Motivation on itself derives from attitudes. Where motivation is lacking apathy is manifest.

De Cenzo (1996) though writing in management notes that one’s ability to perform is a function of ability and willingness to do the job. De Cenzo’s assertion can be extended to performance in the classroom. Ability as noted earlier on is both cognitive and physiological while willingness is associated with the student’s attitudes towards a subject. Datta (1992) is of the same conviction. On page 153 he asserts that “academic achievement of a pupil is determined by two factors (i) his will to achieve and (ii) his ability to achieve”.

Willingness is in essence motivation and is closely related to attitude which is itself a function of the student’s perception of the particular aspect of schooling-the teacher or the subject- which may be his/her own or gained from interaction with others.

Professor Saitoti, then Minister for Education, while presenting results for the Kenya Certificate of Education in the year 2004, was quoted as saying that, despite the increased enrolment in primary schools in Kenya, the improved performance was because the quality of education was
being maintained through improved teaching and availability of resources. 
Academic performance is used in admission for further studies and 
training. Performance is the basis on which University courses are 
allocated. It could therefore weigh on the student’s decision to select an 
optional subject where performance is likely to jeopardise the chances of 
further studies and career opportunities. A student’s performance is 
consequently subject to his willingness to achieve, his ability to achieve 
and the availability of instructional resources that make learning easier.

2.5.2 TEACHER ABILITY.

The nature of learning brings us to the question of teaching methods and 
technology many of which are specific to the particular subject under 
consideration. Fenton (1966) attributes students’ lack of interest in 
economics on the way teachers handle economics ideas. He argues that 
trying to reach the student while ignoring the teacher training issues is an 
exercise in futility. Kerich (1990) stated that the teaching of economics in 
secondary schools in Kenya was weighed down by teacher training 
influences and professional problems among other reasons. A teacher’s 
knowledge of his material, plan of strategies, students’ preparedness and 
follow-up such that each learning situation builds upon a previous one are 
says that at secondary school level, the teacher’s task is essentially to 
identify the key elements a child needs to recognise. This is so that 
he/she may master a piece of learning. The teacher should identify how 
these elements can be best related to each other and to existing 
knowledge in order to generate meaning. The other thing is the form in
which they can most effectively be stored in memory, and the means by
which they can usefully be selected and retrieved to help in solving new
problems.

Fontana (1995) notes that children tend to become interested in those
things that help them to deal with problems and difficulties in their lives
because they see them as having relevance. Doyle (1973) on page 254
argues that it matters not what we have learnt but what we can do with it
thereby supporting the career concept as reason for learning and subject
choices.

Fontana (1995) in relation to the process of teaching—learning is of the
opinion that a lively and imaginative teacher can do much to make
schoolwork appeal directly to the students' interests. This means starting
from what the students already know, their curiosities, ambitions, their
problems, and showing them how this relates to what is studied in school
and how much study can provide answers that will help them lead
satisfying lives. Fontana (1995) says that when planning learning
experiences consideration should be made of the nature of the student,
the nature of knowledge to be learnt, and the nature of learning process.
The nature of the student has both cognitive and affective domains. The
affective domain, which is of interest to us here, refers to all the values
and attitudes the student derives from the institutions of which he/she is
part. This domain includes such factors as receiving or paying attention to
information, responding or participating in an activity, assigning values to
various aspects of life and worldly affairs, organisation such that one
accepts responsibility and characterisation or creating own philosophy
about life issues and the world around. According to Fontana (1995) when a student's desires are not met, this domain is portrayed through actions like absenteeism, lateness for classes and even sickness. The teacher therefore has the responsibility of making the subject relevant to the students needs in order to capture his attention. This can be done through the accurate application of instructional resources. This study assumes that the teacher the ability to achieve this.

2.6 INSTRUCTIONAL RESOURCES.

Kerich (1990) examined the economics curriculum in an effort to identify the significant problems in its teaching. He found that the economics content was not suitable for the age level found in form four classes in the 8 - 4 - 4 system. The teachers employed a small range of teaching materials and activities, over relying on the lecture method. There were teacher-training influences, professional and administrative problems that did not encourage the teaching of economics. There was also diversity in teaching-learning resources from school to school. This finding has also been noted by Kabetu (1986) in a descriptive research on the problem of teaching economics in Thika district where there was an acute shortage of economics textbooks, up to date economics data and library facilities and little use of visual aids in addition to large classes. Among other things, Kerich (1990) recommended the development of a more appropriate curriculum and use of better teaching methods.

Kimutai (1991) researched on the availability and spread of instructional materials between rural areas and the city represented by Kericho and
Nairobi districts respectively and found that the balance was in favour of Nairobi. Data was collected in Machakos and Nairobi districts in order to bring into account a possible disparity of resources between rural and urban areas in order to make the findings replicable and reliable.

The complex process of learning is made easier by the accurate application of instructional resources. Thus the resources have to be sequenced in such a way that they have a desirable impact on the student. Lack of resources affects learning negatively and results in to a poor performance. This may be a reason for students not to choose to study a subject where instructional resources are inadequate.

2.7 ROLE OF SCHOOL ADMINISTRATION.

It has been noted elsewhere that the school system in Kenya has become emphatic on examinations instead of focusing on knowledge and the holistic growth of the student. The administration decides what to offer in accordance with the recommended subject clusters. Optional subjects where students' performance is poor consequently lowering the school mean score may not be encouraged irrespective of the valuable knowledge they have. Such subjects may therefore be removed from the curriculum to expunge their impact on the school mean score.

2.8 A CRITICAL REVIEW OF MAJOR ISSUES.

The research set out to find out factors that determined enrolment for commerce and economics for the KCSE. Research in the two subjects was justified by their proximity in content, ability to substitute each other
as critical requirements for careers and their clustering in the school curriculum such that the choice of one excludes the other.

The choice of Nairobi and Machakos districts for the proposed research was justified by their proximity and differences in life styles. Their proximity in addition allowed easy movement while their diversity is important for the reliability of the findings.

The literature review identifies some critical details on the nature of the economics taught in the secondary schools in Kenya and the problems that could originate from these content features as has happened elsewhere. The career and mental justifications by various authors for teaching economics and commerce are noted in the subject and career reviews in the preceding section. The researcher further notes the factors that determine academic performance, which are also basic to the students’ choice of a subject. These are the availability of suitable resources, motivation, and teacher ability, the students’ cognitive and physiological ability and the availability and adequacy of instructional resources. Teacher ability was assumed suitable for the teaching of either commerce or economics and so are the students’ cognitive and physiological abilities for learning the same subjects. The research notes the contribution of researchers in the area of economics education, their findings, conclusions and the gaps filled by this research.

2.9 GAPS TO BE FILLED BY THIS RESEARCH.

Research in the teaching of economics in Kenya is limited and has mainly been undertaken by postgraduate students. The only other findings have been done outside Africa. The content of economics taught in secondary
schools in Kenya has changed over time. The concept that economics is abstract is therefore disputable and necessitated a fresh research to re-ascertain it. This research tried to find out the students perception of economics on the aspect of abstractness of content.

While research had been done on the availability of instructional resources, performance and methodology for both commerce and economics, none had been done to determine the factors that determine enrolment for the two subjects in the Kenya Certificate of Secondary Education. This research filled that gap in knowledge. It will also serve as documentation for researchers since both commerce and economics have been integrated with accounts and secretarial studies to form business studies in which economics constitutes sixteen of the thirty-two chapters of the syllabus. Despite this integration the findings of this study will remain valid and applicable because the current change is just a policy matter that is subject to review just like the change that brought in the 8-4-4 system in the 1980s introduced economics as an ordinary level ('O' level) secondary school subject.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 INTRODUCTION
In this section, the researcher explains the type of study that was carried out, the population, the sample and sampling procedures, data collection instruments and data collection and analysis procedures. The methodology is designed to collect both primary and secondary data.

3.1. STUDY DESIGN
The research was a cross sectional survey which took place in Nairobi and Machakos districts. The population for the research was secondary schools offering both commerce and economics in the districts. The sample of teachers and students of commerce and economics was randomly taken from the sample of schools picked through purposive sampling. Primary data was generated from questionnaires for commerce and economics teachers and students in secondary schools in the districts. Collaborative secondary data on candidature and performances at a national dimension was taken from KNEC annual reports for 2001 and 2002 and the Ministry of Education.

The respondents were requested to fill-in the questionnaire on the spot. Take home was not allowed to avoid test-wiseness and default. All questionnaires that were distributed were filled and returned to the researcher. A sample such that the two districts, Nairobi and Machakos, were proportionately represented was preferred for this study. Half of the sample was girls and the other boys in secondary schools in the districts.
The respondents were categorised into rural represented by Machakos district and urban, represented by Nairobi district. All commerce and economics teachers in the selected school were asked to respond to the questionnaire.

Figure 3.1 Research design
3.2. POPULATION

The study took place in Nairobi and Machakos districts. The population for this study was secondary schools that offered both commerce and economics. Nairobi as at the time of this research had 147 private and public secondary schools while there were 187 schools in Machakos district. Of these schools, only three offered economics in Machakos district and according to the planning section, ministry of education, and only eight schools offered economics in Nairobi district. The respondents were boys and girls in form four who had already opted for either economics or commerce and teachers in the same subjects.

3.3. SAMPLE AND SAMPLING PROCEDURE

Purposive sampling was used to ensure that only schools offering both commerce and economics in Machakos and Nairobi districts were selected for the study. The small number of schools offering economics necessitates this. All teachers of commerce and economics in the selected schools were asked to participate. All Form four students of commerce and economics in the schools selected were asked to respond. Simple random sampling with replacement to give every unit of the population an equal chance of participating in the research and to get a sample of at least 10% of population in these schools was not necessary owing to the small numbers of schools and students. According to Gupta (1992) a group of objects selected at random tends to have the characteristics of the larger group. Ary et al (1972) observes that in descriptive research a sample of 10-20% of the total population is acceptable.
Sampling is only necessitated by the enormity of the research population. Where the population is small, all can be subjected to treatment provided that exposure does not have the prospects of causing harm to the respondent. Gupta (1992) says that large samples are more stable in their characteristics than small ones. This research does not harm the subjects. On the other hand taking all reduces the Hawthorne effect.

The sampling grids below show the number of schools in Machakos and Nairobi districts that offered both commerce and economics. It also shows the number of teachers and students that were involved in the research.

<table>
<thead>
<tr>
<th>District</th>
<th>No. Schools</th>
<th>Schs. taken</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machakos</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>62</td>
</tr>
<tr>
<td>Nairobi</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: data collected

Only two schools, one from each district, were available for the research being the only ones that offered both commerce and economics in the two districts. Students were from diverse regions in Kenya.

3.4. DATA COLLECTION INSTRUMENTS

The instruments of data collection were three questionnaires - one for economics students, another for commerce students and the third one for teachers in both subjects. The questionnaires had questions related to commerce and economics in order to detect reality as well as perceptions. They applied a Likert scale of three points for students and teachers. Reliability of responses is assured by including open ended questions that act as control for questions in the likert scale. Validity was
assured by asking precise and relevant questions only. These questions presented in the ordinal scale were supposed to assess the same underlying idea. Research ethics were adhered to such that respondents’ confidentiality and right to privacy is respected.

3.5. PILOTING

The questionnaire was piloted in one school randomly selected from those already purposively selected. Reliability was tested using the split-half method to ensure that the results obtained from the research are the same irrespective of the respondents. The respondents were given the questionnaire to fill. Filled questionnaires were then collected, numbered and split into even and odd numbers. The two batches were then scored, and analysed to detect consistence, cumbersomeness, difficulty, and ambiguity of language in order to determine validity. The questionnaires were corrected based on the results of the analysis. Minor alterations were made to arrive at the questionnaires used for this research.

3.6. DATA COLLECTION PROCEDURES

Secondary data was collected from the KNEC annual performance reports. Primary data was collected using questionnaires for teachers and students in schools in Nairobi and Machakos districts. The researcher collected an introductory letter from the registrar academic that was presented to the Ministry of Education for a permit to undertake research in the schools in the districts. The letter was in turn presented to the Provincial Commissioners (PC) and Provincial Directors of Education (PDE) where the districts located for permission to undertake research.
The introductory letters from the PC and the PDE were presented to the principals of the schools where the research was intended, for permission to administer the questionnaire. The respondents were requested to respond on the spot.

3.7. DATA ANALYSIS TECHNIQUE

Secondary data was used to corroborate primary data in the discussion. The data collected was coded, tabulated, and analysed to produce descriptive statistics; mean, frequencies, percentages, and the results presented in tables. These results were used for interpretation, discussion and recommendations.

For section A, data analysis of the questionnaires entailed computing the number of each variable. A table was drawn to present the variables in terms of frequencies, means and percentages.

For section B, the data analysis procedure required scoring each question and calculating a mean and then combining the scores to arrive at a mean for the coded category in the questionnaire. A score ranging from 2.5 to 3.0 was taken to indicate agreement, while a score ranging from 1.5 to 2.4 indicated indecision. Anything between 1.0 and 1.4 denoted disagreement with the statements. The likert scale is however not a continuum and points lying in between the points after the mean has been calculated are rounded to the nearest point. Open-ended questions in section C of the students’ questionnaire and section D of the teachers’ were arranged to produce quantifiable qualitative data and presented in tables. Items reported in Section C of the teachers’ questionnaire were
counted and the data presented in frequencies, and percentages. Microsoft excel was used as the tool of data analysis.

4.0 INTRODUCTION

The data collected were counted, tabulated, and presented in the forms of frequencies, percentages in the form of tables below. These results are used to make recommendations. Secondary data are used in the discussion.

Data analysis for section 4 of the questionnaire, each item. A table is drawn by putting together data, means and percentages. For each question, the respondents are scoring the questions, adding up and average number of respondents to give a question mean score. Then are added up for each closed category of each respondent, divided by the number of students to get the category mean. The rest is for percentages and percentages.

Open-ended-questions in section five showed D of the teachers' opinions rendered as their selected answer, the qualitative data. These are in the form of their thoughts, life-experiences. Section C item is a checklist used to analyze the data presented in responses, which are counted and
CHAPTER FOUR

FINDINGS OF THE STUDY

4.0 INTRODUCTION

The data collected was coded and analysed to produce descriptive statistics; mean, frequencies, percentages. The results are presented in the tables below. These results are used for interpretation, discussion and recommendations. Secondary data is used to corroborate primary data in the discussion.

Data analysis for section A of the questionnaires entailed a tally taken on each item. A table is drawn to present the occurrence of items in frequencies, means and percentages. For section B, the data analysis procedure entailed scoring the questions; adding up the scores and dividing the total by the number of respondents to get a question mean (Qmean). The question means are added up for each coded category and divided by the number of respondent multiplied by the number of questions per category to get the category mean. The results are presented as frequencies, means and percentages.

Open-ended questions in section C of the student questionnaire and section D of the teachers’ questionnaire were arranged to produce quantifiable qualitative data. These are in turn presented in tables and are referred to in the discussion. Section C of the teachers’ questionnaire was tallied and the data presented in frequencies, means and percentages just like in section A.
4.1 SECONDARY DATA

Data was collected from the Ministry of Education, KNEC annual reports and school records. The table below presents the enrolment for both commerce and economics in the year 2004 and the performance in terms of means and standard deviations at the national level.

<table>
<thead>
<tr>
<th>Boys</th>
<th>Commerce</th>
<th>Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Mean</td>
<td>Stdev</td>
</tr>
<tr>
<td>52765</td>
<td>95.42</td>
<td>31.12</td>
</tr>
<tr>
<td>Girls</td>
<td>45471</td>
<td>84.74</td>
</tr>
<tr>
<td>Total</td>
<td>98236</td>
<td>90.47</td>
</tr>
</tbody>
</table>


From the data above, economics had a better mean score at 115.88 compared to the mean score of 90.47 marks in commerce in the year 2004. The standard deviation in economics was 24.93 while commerce had 31.66 meaning that commerce had a higher variation from the mean than economics. Girls performed better than boys did in economics. The standard deviation was also better for girls than for boys at 22.24 for the former against 25.49 for the latter. Generally economics students performed better than commerce students.

In commerce, the boys performed better than the girls, attaining a mean score of 95.42 and a standard deviation of 31.66 against a mean of 84.74 and a standard deviation of 35.31 for the girls. On a province-to-province basis, the following data was collected for Eastern (E) and Nairobi (N).
Table 4.2 Provincial enrolments and performances (2004)

<table>
<thead>
<tr>
<th>Province</th>
<th>Subject</th>
<th>Number.</th>
<th>Mean</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>Com</td>
<td>17270</td>
<td>93.58</td>
<td>31.24</td>
</tr>
<tr>
<td></td>
<td>Econ</td>
<td>37</td>
<td>111.78</td>
<td>21.69</td>
</tr>
<tr>
<td>Nairobi</td>
<td>Com</td>
<td>4541</td>
<td>86.84</td>
<td>35.71</td>
</tr>
<tr>
<td></td>
<td>Econ</td>
<td>15</td>
<td>132.00</td>
<td>11.59</td>
</tr>
</tbody>
</table>


From the table 4.2 above it was observed that students performed better in economics in both provinces and that the standard deviation was less than that for commerce.

From table 4.2.1 below it was observed that girls did not enrol for economics in Nairobi and Eastern provinces. The mean score was however better for economics than for commerce. In enrolment, the candidature for commerce outstripped that for economics.

Table 4.2.1 Provincial enrolment by gender (2004).

<table>
<thead>
<tr>
<th>Area</th>
<th>Subject</th>
<th>Girls</th>
<th>Mean</th>
<th>Stdev</th>
<th>Boys</th>
<th>Mean</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>Com</td>
<td>8563</td>
<td>89.96</td>
<td>31.29</td>
<td>8707</td>
<td>97.15</td>
<td>30.74</td>
</tr>
<tr>
<td></td>
<td>Econ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>37</td>
<td>111.78</td>
<td>21.69</td>
</tr>
<tr>
<td>Nairobi</td>
<td>Com</td>
<td>1844</td>
<td>83.49</td>
<td>37.29</td>
<td>2697</td>
<td>89.13</td>
<td>34.41</td>
</tr>
<tr>
<td></td>
<td>Econ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>132.00</td>
<td>11.59</td>
</tr>
</tbody>
</table>


4.2 PRIMARY DATA
Primary data was collected by the use of three questionnaires, one for teachers and one each for the commerce and economics groups of students.
Data gathered is presented in tables and statistical calculations made where necessary. There were 119 students and 7 teacher respondents.

Table 4.3 Teachers qualifications and gender.

<table>
<thead>
<tr>
<th>Subject/gender</th>
<th>Experience</th>
<th>Bed</th>
<th>Dip</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-5</td>
<td>6-10</td>
<td>11-15</td>
<td>16+</td>
</tr>
<tr>
<td>Commerce</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Analysis of questionnaires

All the teachers who responded were qualified with the Bachelor of Education degree. Teacher qualification was not an issue for either subject. Only one teacher was qualified to teach both commerce and economics. The others were qualified to teach economics and another non-business subject like geography, history, Christian Religious Education, and mathematics. They nevertheless taught commerce. One teacher did not return the questionnaire.

The students were asked to indicate their age ranges. The table below shows their age distribution.

Table 4.4 students age distribution.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Age</th>
<th>%</th>
<th>Age</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15-18</td>
<td>96</td>
<td>19-21</td>
<td>93.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Commerce</td>
<td>96</td>
<td>93.2</td>
<td>7</td>
<td>6.8</td>
<td>103</td>
</tr>
<tr>
<td>Economics</td>
<td>12</td>
<td>75</td>
<td>4</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>90.7</td>
<td>11</td>
<td>9.3</td>
<td>119</td>
</tr>
</tbody>
</table>

Source: Analysis of questionnaires

The table above shows that the student respondents were aged between 15 and 21 years. 90.7% were in the age bracket of 15-18 years and only 9.3%
fell in the bracket 19-21 years. The majority were in the age bracket where abstraction would not be coherent.

The students were asked what factors they considered when opting between commerce and economics. The questionnaires gave them such options as performance by past students (PPS), career opportunities (CO), Level of abstractness (LA), resource availability, (RA) and influence of the school administration here in referred as the role of the school administration (ROSA). The questionnaires were scored and the mean of all the scores for the questions asked for each factor in the subject area were calculated.

The following results were obtained from the data analysis on the data collected in part B of the questionnaires. The number of respondents in the categories Agree, Undecided and Disagree is presented as an interval and percentage for comparison. The percentages are rounded to the nearest whole number and are therefore approximates. The mean for each question is presented adjacent as question mean (Qmean) while the mean for the category is presented as category coded mean.

Commerce students who responded to the questionnaire were 102. Two questionnaires, which were spoilt, were eliminated to reduce data presentation errors. The category mean and schemata for interpretation are presented in table 4.5 below.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Code</th>
<th>Mean</th>
<th>1-1.4</th>
<th>1.5-2.4</th>
<th>2.5-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM</td>
<td>CPPS</td>
<td>1.90</td>
<td>Not considered</td>
<td>Undecided</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td>CCO</td>
<td>2.62</td>
<td>Not considered</td>
<td>Undecided</td>
<td>Considered</td>
</tr>
<tr>
<td></td>
<td>CLA</td>
<td>2.92</td>
<td>Abstract</td>
<td>Undecided</td>
<td>Concrete</td>
</tr>
<tr>
<td></td>
<td>CRA</td>
<td>2.39</td>
<td>Lacking</td>
<td>Undecided</td>
<td>Available</td>
</tr>
<tr>
<td></td>
<td>ROSA</td>
<td>2.45</td>
<td>Restricted</td>
<td>Undecided</td>
<td>No restriction</td>
</tr>
</tbody>
</table>

Source: Data analysis
Questions asked to elicit responses as to whether commerce students considered other students performances before making a choice of subject, produced the responses presented in Table 4.5.1-Performance by Past Students (CPPS)-below. Results indicate that performance was not a major consideration.

### Table 4.5.1 Performance by Past Students (CPPS)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>CPPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reason for choosing commerce is that earlier students had done well.</td>
<td>26</td>
<td>70</td>
<td>1.56</td>
<td>1.90</td>
</tr>
<tr>
<td>I did not consider the performance in past commerce examinations.</td>
<td>55</td>
<td>44</td>
<td>1.87</td>
<td></td>
</tr>
<tr>
<td>A poor KCSE performance in commerce would discourage other students from choosing the subject.</td>
<td>52</td>
<td>39</td>
<td>2.13</td>
<td></td>
</tr>
<tr>
<td>Students consider past performance before opting for commerce.</td>
<td>47</td>
<td>43</td>
<td>2.04</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis

Questions asked to elicit responses as to whether commerce students considered career opportunities before making a choice of subject, produced the responses presented in Table 4.5.2 Commerce: Career Opportunities (CCO)-below. This allows for a conclusion that students considered career prospects in the options.

### Table 4.5.2 Commerce: Career Opportunities (CCO)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>CCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>College courses do not require KCSE commerce.</td>
<td>12</td>
<td>74</td>
<td>2.62</td>
<td>2.62</td>
</tr>
<tr>
<td>Employers seek people with commerce.</td>
<td>57</td>
<td>21</td>
<td>2.36</td>
<td></td>
</tr>
<tr>
<td>Commerce is useful in a small-scale business.</td>
<td>89</td>
<td>9</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>I would like to study business studies after school.</td>
<td>68</td>
<td>11</td>
<td>2.56</td>
<td></td>
</tr>
<tr>
<td>Good performance in commerce would boost chances of admission for further studies.</td>
<td>89</td>
<td>5</td>
<td>2.78</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis
Questions asked to draw out responses as to whether commerce students considered the level of abstractness before making a choice of subject, produced the responses presented in Table 4.5.3 Commerce: Level of Abstractness (CLA)-below. The score of 2.92 is a strong indication that commerce students considered abstractness in their options.

Table 4.5.3 Commerce: Level of Abstractness (CLA)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean CLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas in commerce are applicable in earning a living.</td>
<td>98</td>
<td>0</td>
<td>2</td>
<td>2.96</td>
</tr>
<tr>
<td>Commerce is everywhere in real life.</td>
<td>92</td>
<td>4</td>
<td>4</td>
<td>2.91</td>
</tr>
<tr>
<td>Commerce applies to present business situations.</td>
<td>95</td>
<td>2</td>
<td>33%</td>
<td>2.94</td>
</tr>
<tr>
<td>Ideas in commerce are not applicable in real life issues.</td>
<td>3</td>
<td>4</td>
<td>93%</td>
<td>2.88</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to draw responses as to whether commerce students considered resource availability before making a choice of subject, produced the responses presented in Table 4.5.4 Commerce: Resource Availability, (CRA)-below. Resource availability was not a major consideration. The likert scale is not a continuum and a verdict of indecision is drawn on a predetermined score interpretation scale.

Table 4.5.4 Commerce: Resource Availability, (CRA)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean CRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The school library has suitable books for the commerce syllabus.</td>
<td>47</td>
<td>7</td>
<td>46</td>
<td>2.01</td>
</tr>
<tr>
<td>There are no commerce books suitable for the syllabus.</td>
<td>13</td>
<td>14</td>
<td>73</td>
<td>2.60</td>
</tr>
<tr>
<td>We can cover the commerce syllabus in the Time allocated.</td>
<td>98</td>
<td>2</td>
<td>0</td>
<td>2.98</td>
</tr>
<tr>
<td>The school has a specially equipped room for commerce.</td>
<td>30</td>
<td>22</td>
<td>68</td>
<td>1.63</td>
</tr>
<tr>
<td>Suitable commerce books are available in the bookshops.</td>
<td>83</td>
<td>7</td>
<td>10</td>
<td>2.73</td>
</tr>
</tbody>
</table>

Source: Data analysis.
Questions seeking responses as to whether commerce students were influenced by the school administration to choose between commerce and economics produced the responses presented in Table 4.5.5 Role of the School Administration (CROSA)-below. The students were undecided on whether the school administration really influenced their options.

Table 4.5.5 Role of the School Administration (CROSA)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>CROSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The size of the commerce class is limited to reduce failures.</td>
<td>27</td>
<td>3</td>
<td>70</td>
<td>2.43</td>
<td>2.42</td>
</tr>
<tr>
<td>Students can take commerce without restrictions.</td>
<td>74</td>
<td>4</td>
<td>22</td>
<td>2.52</td>
<td></td>
</tr>
<tr>
<td>Commerce performance in the KCSE is blamed for poor school mean score</td>
<td>21</td>
<td>14</td>
<td>65</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>Commerce is encouraged to boost the school mean score</td>
<td>65</td>
<td>16</td>
<td>19</td>
<td>2.46</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis.

The questionnaire was responded to by 12 students of economics in the schools in the two districts. None of them was spoilt. The category mean and schemata for interpretation are presented in table 4.6 below.

Table 4.6 Scores and Interpretation Summary. (Economics)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Code</th>
<th>Mean</th>
<th>1-1.4</th>
<th>1.5-2.4</th>
<th>2.5-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON</td>
<td>EPPS</td>
<td>1.87</td>
<td>Not considered</td>
<td>Undecided</td>
<td>Considered</td>
</tr>
<tr>
<td>ECO</td>
<td>2.74</td>
<td>Not considered</td>
<td>Undecided</td>
<td>Considered</td>
<td></td>
</tr>
<tr>
<td>ELA</td>
<td>1.23</td>
<td>Concrete</td>
<td>Undecided</td>
<td>Abstract</td>
<td></td>
</tr>
<tr>
<td>ERA</td>
<td>2.08</td>
<td>Lacking</td>
<td>Undecided</td>
<td>Available</td>
<td></td>
</tr>
<tr>
<td>EROSA</td>
<td>1.55</td>
<td>No restriction</td>
<td>Undecided</td>
<td>Restricted</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to elicit responses as to whether Economics students considered other students performances before making a choice of subject, produced the responses presented in Table 4.6.1-Performance by Past Students (EPPS)-below. The magnitude of denial that students consider the performance of earlier groups of students was comparably the same at 1.87 for economics' students against 1.90 for commerce.
Table 4.6.1 Performance by Past Students (EPPS)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>EPPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reason for choosing economics is that Earlier students had done well.</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Students' performance in past examinations was not reason for choosing for economics.</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>1.17</td>
<td>1.87</td>
</tr>
<tr>
<td>A poor KCSE performance would discourage students from</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Students consider past performance before opting for economics.</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>2.41</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis

Questions asked to obtain responses as to whether Economics students considered career opportunities before making a choice of subject, produced the responses presented in Table 4.6.2 Economics: Career Opportunities (ECO)-below. The mean of 2.74 strongly indicates that students did indeed consider careers in their options.

Table 4.6.2 Economics: Career Opportunities (ECO)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>ECO</th>
</tr>
</thead>
<tbody>
<tr>
<td>College courses do not require KCSE economics At all.</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>Employers seek people with economics.</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2.40</td>
<td>2.74</td>
</tr>
<tr>
<td>Economics is useful for self-employment in a Small business.</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I would like to become an economist.</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Performance in economics would boost chances Of admission for further studies.</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data analysis

Questions asked to educe responses as to whether students of economics considered the level of abstractness before making a choice of subject, produced the responses presented in Table 4.6.3 Economics: Level of Abstractness (ELA)-below. The level of abstractness was denied as factor in students' options.
Table 4.6.3 Economics: Level of Abstractness (ELA)

<table>
<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean ELA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can apply ideas in economics to real life situations.</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>1.08</td>
</tr>
<tr>
<td>When I look around, I see human activity that relates to economics.</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>1.16</td>
</tr>
<tr>
<td>Economics relates to real life situations I know.</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Ideas in Economics relate to real issues I have experienced.</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Questions asked to draw responses as to whether Economics students considered resource availability before making a choice of subject, produced the responses presented in Table 4.6.4 (ERA)-below.

Table 4.6.4 Economics: Resource Availability (ERA)

<table>
<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean ERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The school library has suitable books for the economics syllabus.</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2.08</td>
</tr>
<tr>
<td>Economics books in the library are not suitable for the syllabus.</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>1.66</td>
</tr>
<tr>
<td>We can cover the economics syllabus in the time allocated.</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>2.83</td>
</tr>
<tr>
<td>The school has a specially equipped room for Economics.</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>1.08</td>
</tr>
<tr>
<td>Economics books are available in bookshops.</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>2.75</td>
</tr>
</tbody>
</table>

Source: Data analysis

Questions seeking responses as to whether Economics students were influenced by the school administration in their option had the responses presented in Table 4.6.5 Role of the School Administration (EROSA)-below.

Table 4.6.5 Role of the School Administration (EROSA)

<table>
<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean EROSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of students in the Economics class is limited to reduce failures.</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>Students can take Economics without restrictions.</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>1.17</td>
</tr>
<tr>
<td>Performance in economics is blamed for poor mean score.</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>1.50</td>
</tr>
<tr>
<td>Economics is encouraged to boost the School mean score.</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Source: Data analysis.
The teacher respondents were asked to report on ‘the factors students considered when opting between commerce and economics’. The factors were classified as performance by past students (TPPS), Commerce Career Opportunities (TCCO) and Economics Career Opportunities (TECO), Commerce Level of abstractness (TCLA) and Economics Level of abstractness (TELA). Others were Commerce resource availability (TCRA) and Economics resource availability (TERA) and role of the school administration (TROSA).

The teachers' questionnaire contained questions meant to elicit answers to either corroborate or contradict the students' answers and to include any existent diversity in the findings. Seven teachers were available for the research. None of the questionnaires returned was spoilt or incomplete. Their responses are presented in tables together with the category mean and schemata for interpretation in table 4.7 below.

Table 4.7 Teachers' scores and interpretation Summary. (commerce and economics)

<table>
<thead>
<tr>
<th>CODE</th>
<th>Mean</th>
<th>1-1.4</th>
<th>1.5-2.4</th>
<th>2.5-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPPS</td>
<td>2.79</td>
<td>Not influenced</td>
<td>Undecided</td>
<td>Influenced</td>
</tr>
<tr>
<td>TROSA</td>
<td>2.28</td>
<td>No restriction</td>
<td>Undecided</td>
<td>Restricted</td>
</tr>
<tr>
<td>TCCO</td>
<td>2.61</td>
<td>None career based</td>
<td>Undecided</td>
<td>Career based</td>
</tr>
<tr>
<td>TCO</td>
<td>1.71</td>
<td>Career based</td>
<td>Undecided</td>
<td>None career based</td>
</tr>
<tr>
<td>TCLA</td>
<td>2.93</td>
<td>Abstract</td>
<td>Undecided</td>
<td>Concrete</td>
</tr>
<tr>
<td>TELA</td>
<td>1.82</td>
<td>Concrete</td>
<td>Undecided</td>
<td>Abstract</td>
</tr>
<tr>
<td>TERA</td>
<td>2.14</td>
<td>Unavailable</td>
<td>Undecided</td>
<td>Available</td>
</tr>
<tr>
<td>TERA</td>
<td>2.57</td>
<td>Available</td>
<td>Undecided</td>
<td>Unavailable</td>
</tr>
</tbody>
</table>

Source: Preconceived mode of data analysis

On questions seeking to establish whether students considered performances by earlier students before making a choice of subject, the teachers gave the responses presented in Table 4.7.1 Influence by Performance of Past...
Students (TPPS) below. Teachers were convinced that student did indeed consider others performances in their options.

Table 4.7.1 Influence by Performance of Past Students (TPPS)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TPPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A subject’s KCSE results in one year affect enrolment for the same in subsequent years.</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>2.86</td>
</tr>
<tr>
<td>A subject’s KCSE results in one year do not affect enrolment for the same in subsequent years.</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>2.71</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to bring out responses as to whether Economics students considered career opportunities before making a choice of subject, produced the responses presented in Table 4.7.2 Economics: Career Opportunities (TECO)-below. The teachers were undecided as to whether students had career considerations in their choices.

Table 4.7.2 Economics: Career Opportunities (TECO)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TECO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics students can self-employ after school.</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1.28</td>
</tr>
<tr>
<td>Economics is not the only requirement for business Related studies.</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>A poor grade in economics lowers the student’s prospects of admission for further studies.</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2.57</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to elicit responses as to whether commerce students considered career opportunities before making a choice of subject, produced the responses presented in table 4.7.3 Commerce: Career Opportunities
Here the teachers were convinced that career considerations influenced students' choice of these subjects.

Table 4.7.3 Commerce: Career Opportunities (TCCO)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TCCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce students have an advantage in admission for further studies because of their high pass rate.</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2.42</td>
</tr>
<tr>
<td>Commerce students can self-employ after school.</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Commerce is a requirement for some business related studies at college level.</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2.42</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to elicit responses as to whether economics students considered the level of abstractness before making a choice of subject, produced the responses presented in Table 4.7.4 Economics: Level of Abstractness (TELA)-below. The teachers were undecided.

Table 4.7.4 Economics: Level of Abstractness (TELA)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students can relate ideas in economics to real life.</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Students have difficult relating economics to real life situations.</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to elicit responses as to whether commerce students considered the level of abstractness before making a choice of subject, produced the responses presented in Table 4.7.5 Commerce: Level of Abstractness (TCLA)-below. Teachers were sure that commerce students considered the level of abstractness when opting.
Table 4.7.5 Commerce: Level of Abstractness (TCLA)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TCLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concepts in commerce closely relate to situations familiar to the students.</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Commerce does not relate to real situations familiar to the students.</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions seeking responses to establish whether students were influenced by the school administration to choose between commerce and economics produced the responses presented in Table 4.7.6 Role of the School Administration.

4.7.6 Role of the School Administration (TROSA)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TROSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment for economics is limited to reduce failures.</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Performance in economics is blamed for lowering the school mean score.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1.43</td>
</tr>
<tr>
<td>Commerce is encouraged to better the school mean score.</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>2.14</td>
</tr>
<tr>
<td>Teachers choose students for commerce and economics.</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1.71</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Questions asked to draw responses as to whether Economics students considered resource availability before making a choice of subject, produced the responses presented in Table 4.7.7 Economics: Resource Availability.

Table 4.7.7 Economics: Resource Availability. (TERA)

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
<th>QMean</th>
<th>TERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no books that cover the economics syllabus adequately.</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2.71</td>
</tr>
<tr>
<td>Other than the textbook, there is a general lack of suitable learning resources for economics.</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Source: Data analysis.
Asked to say whether Commerce students considered resource availability before making a choice of subject, the responses presented in Table 4.7.8 Commerce: Resource Availability (TCRA) below were obtained. The teachers indicated that commerce students regarded resource availability in their options.

Table 4.7.8 Commerce: Resource Availability (TCRA)

<table>
<thead>
<tr>
<th>Resource Availability</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>Q</th>
<th>Mean</th>
<th>TCRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no books that cover the commerce syllabus adequately.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2.57</td>
<td></td>
</tr>
<tr>
<td>There are adequately suitable learning resources for Commerce.</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>57%</td>
<td>0%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Source: Data analysis.

A comparison of commerce and economics students’ responses is presented in the table 4.8 below. The students tended to agree that their choices were based on career objective and that the subjects related well to their life experiences and were not abstract. They disagree with the view that performance by past students contributed to their choice. They were however undecided on whether the school administration and the availability of instructional resources had influenced them.

Table 4.8 Factors considered when opting between commerce and economics.

<table>
<thead>
<tr>
<th></th>
<th>PPS</th>
<th>CO</th>
<th>LA</th>
<th>RA</th>
<th>ROSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Com Mean</td>
<td>1.90</td>
<td>2.62</td>
<td>2.92</td>
<td>2.39</td>
<td>2.46</td>
</tr>
<tr>
<td>Eco Mean</td>
<td>1.87</td>
<td>2.74</td>
<td>2.85</td>
<td>2.08</td>
<td>1.55</td>
</tr>
</tbody>
</table>

Source: Data analysis.
Table 4.9 presents a comparison of teachers and commerce students’ scores on the likert scale. Both groups agreed that commerce was not abstract and that students were guided by the career objective in their choices. They however differed on the resource availability, performance by past students and the role of the school administration. Teachers thought that students chose subjects based on performance of past groups of students. The students disagreed.

Table 4.9. A comparison of teachers’ and commerce students’ response scores.

<table>
<thead>
<tr>
<th>Code</th>
<th>Teachers</th>
<th>Commerce Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPPS</td>
<td>2.78</td>
<td>1.90</td>
</tr>
<tr>
<td>CCO</td>
<td>2.61</td>
<td>2.62</td>
</tr>
<tr>
<td>CLA</td>
<td>2.93</td>
<td>2.92</td>
</tr>
<tr>
<td>CRA</td>
<td>2.57</td>
<td>2.39</td>
</tr>
<tr>
<td>CROSA</td>
<td>1.82</td>
<td>2.42</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Table 4.9.1 presents a comparison between teachers and economics students’ responses to questions in the likert scales questionnaire. Teachers and students differed on all points. The students in particular found that economics related to their daily encounters and was hence not abstract. While the students indicated that they made their choices based on the career objective the teachers were undecided. Students and teachers were undecided on the role played by instructional resource availability as a factor on options.

Table 4.9.1 A comparison of teachers and economics students’ response scores

<table>
<thead>
<tr>
<th>Code</th>
<th>Teachers</th>
<th>Economics Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPPS</td>
<td>2.78</td>
<td>1.87</td>
</tr>
<tr>
<td>ECO</td>
<td>2.28</td>
<td>2.74</td>
</tr>
<tr>
<td>ELA</td>
<td>1.71</td>
<td>2.76</td>
</tr>
<tr>
<td>ERA</td>
<td>2.14</td>
<td>2.08</td>
</tr>
<tr>
<td>EROSA</td>
<td>1.82</td>
<td>1.55</td>
</tr>
</tbody>
</table>

Source: Data analysis.
When the students were asked to indicate, what they considered most important when choosing a subject for their studies the data in the table 4.9.2 below was obtained. The number of students’ respondents in each category and the percentage indicates the importance of the factor in their options. The most important factor again was the career objective. It was chosen by 83% of commerce students and 62.5% of economics students.

Table 4.9.2 What students value most when choosing a subject.

<table>
<thead>
<tr>
<th>Availability of Textbooks</th>
<th>Career opportunities</th>
<th>Closeness of ideas to reality</th>
<th>Subject Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Com</td>
<td>3</td>
<td>86</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>2.9%</td>
<td>83%</td>
<td>31%</td>
</tr>
<tr>
<td>Econ</td>
<td>0</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>62.5%</td>
<td>31.5%</td>
</tr>
</tbody>
</table>

Source: Data analysis.

Asked to indicate which of the resources indicated in the table were available for teaching in their subject areas, the teachers responded as in the table 4.9.3 below. A percentage is included for the responses based on the number of teachers. Textbooks were the most available resources followed by journals while the overhead projector was not available in any of the schools under consideration. All the instructional resources for all the subjects in the schools visited were kept in a common pool. The table below therefore indicates the variety of resources available in the schools as well as those applied for teaching commerce and economics. Responses from teachers differed even when they were from the same school.

Table 4.9.3 Materials available for teaching Commerce and Economics in schools.

<table>
<thead>
<tr>
<th>Textbooks</th>
<th>OHP</th>
<th>Charts</th>
<th>TV</th>
<th>Radio</th>
<th>Journals</th>
<th>Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>100%</td>
<td>0%</td>
<td>43%</td>
<td>14%</td>
<td>14%</td>
<td>86%</td>
<td>28.5%</td>
</tr>
</tbody>
</table>

Source: Data analysis.
4.3 OPEN ENDED QUESTIONS
The open-ended question in section D of the teachers' questionnaire required them to indicate why they thought students preferred commerce to economics. One out of seven indicated that the students had formed a negative attitude towards economics while three said that economics was difficult and taxing. Two said that commerce was taken to improve their mean scores in a competitive university entrance examination. Three said that abstractness in Economics required more critical thinking than in commerce.

The students on the other hand were asked to indicate their reason for choosing commerce or economics. One economics student said that he preferred economics because of the high teacher-student contact. Seven said that they wanted to develop critical thinking skills that could not be replaced by technology. Seven had career considerations while seven others were interested in knowing how the economy works and the challenge it presented.

Ten Commerce students in turn said that they preferred commerce because it was easier compared to economics, twenty-two found it enjoyable and applicable. Four cited teacher experience and a positive attitude towards the students. One cited parents, peer influence, and the fear of being eliminated for university entrance due to a poor performance in one subject. Sixty-seven had career considerations while seven had nothing to say.

4.4 FOCUSED GROUP DISCUSSION (FGD)
The data collected under the focused group discussion (FGD) category was unintended. However, a group of twenty-seven business studies teachers converging under the auspice of the Kenya Institute of Education (KIE) provided the researcher with an opportunity to engage them in a discussion.
They were all teachers of economics with a second subject. The second subjects were Mathematics, Geography, History, Accounting and French. The researcher suggested that teachers of economics had discouraged the subject in secondary schools in favour of commerce in which students performed better in order to appear among schools with high mean scores in the national examinations.

The teachers argued that contrary to the suggestion, the principals discouraged economics after the first few lots of students performed poorly. The principals both engaged the teachers in unending scolding for ineffectiveness and required the teachers to explain why students were not doing well or declined to provide resources for the teaching of economics. On the other hand, they provided for commerce that boosted the school mean score. The mean score had become a quasi measure of the effectiveness of the school and its management. Consensus was arrived at that students in most secondary schools did not have the ability to effectively study economics where the ideas were far to abstract for them to grasp.

In summary the views of the teachers are entirely different from those of economics students on the issue of career objective, instructional resource availability, performance by past students, and level of abstractness and the role of the school administration on students 'choices. Teachers agree with commerce students on only two grounds, the career objective and the absence of abstractness in commerce. Both groups of students indicate that they are guided by the career objective and rather than any other factor in their choices. They also agree that both subjects are not abstract. Commerce
students agree to having been influenced by the school administration to choose commerce but economics students disagree that they were influenced to choose economics. The focused group discussion indicates that the school administration was responsible for removing economics from the school

curriculum.

would be factors only five were considered. The performance by past students taken the disadvantage of students and the influence by the choice of subject choices.

Data collected sought to improve the taking these choices. Data on the field investigation produce means; median and semi interquartile

secondary data are compared. Secondary data can be at the level of disapprove the findings of primary data.

unpublished, primary data was considered to be coincidental data that was received in the field.

2.1 DISCUSSIONS

Secondary data on performance in commerce contained in the year 2007 to 2011 is the study.

that commerce selected 9623 students while economics 11566 compared to the mean of 4, 1,127.74 students to-province basis. Eastern and performance in commerce.
CHAPTER FIVE
ANALYSIS AND DISCUSSION OF FINDINGS

5.0 INTRODUCTION

In this chapter, we discuss the findings as per the data analysis in the previous chapter. The data collected related to factors that students considered when opting between commerce and economics such that finally there were more students taking commerce than economics. Among many would be factors only five were considered for this research. These were; performance by past students, career opportunities, resource availability, level of abstractness and the influence by the school administration on students' subject choices.

Data collected sought to establish the motivation, intrinsic and extrinsic behind these choices. Data on the likert scale scores was processed to produce means, modes and where necessary a percentage. Primary and secondary data are compared. Secondary data was used to corroborate or disapprove the findings of primary data. Where secondary data was unavailable, primary data was taken as the authority. Primary data included coincidental data that was relevant in this research.

5.1 DISCUSSIONS.

Secondary data on performances in both commerce and economics contained in the year 2004 as reported in the year 2005 in table 4.1 indicated that commerce enrolled 98236 students for the KCSE compared to only 316 for economics. This was notwithstanding that economics scored a mean of 115.88 compared to the mean of 90.47 scored in commerce. On a province-to-province basis, Eastern had a mean score of 93.58 and an enrolment of
17270 in Commerce compared to the mean score of 111.78 and an enrolment of 37 in Economics. Only six of the 37 students were in Machakos district. Nairobi similarly had a mean of 132.00 but only 15 students enrolled for economics, while commerce had a mean score of 86.84 and 4541 students. The standard deviation in economics was lower than in commerce meaning that commerce had a higher variation from the mean than economics. Table 4.2 shows that the Eastern province had a higher enrolment at 17270 and 37 in commerce and economics respectively than Nairobi with 4541 and 15 in commerce and economics in that order. Performance in economics was 111.78 in Eastern and 132.00 in Nairobi better than in commerce that had 93.58 in Eastern and 86.84 in Nairobi. Table 4.2.1 shows that boys scored 97.15 while the girls scored 89.96 in Commerce in Eastern province. The standard deviation was 30.74 for girls and 31.29 for boys in the same province. In Nairobi, the scores were 89.13 with a standard deviation of 34.41 for the boys while the girls scored 83.49 and a standard deviation of 37.29. The boys had a better mean score and a lower standard deviation. Girls did not enrol for economics in either of the districts under consideration.

On the role of the school administration in students' subject choice, the teachers scored 1.82 commerce students 2.42 while economics students scored 1.55 on the Likert scale. These scores indicated all three groups were undecided.

From the primary data, teachers indicated that students' choices were based on performance by past students while the students were undecided as to whether they might have considered others performances before taking their
options. The students scored 1.90 and 1.87 for commerce and economics respectively against the teachers' score of 2.78 on the likert scale of 3 points. Secondary data indicated that despite higher mean scores in Economics, students seemed to prefer commerce thereby disputing the teachers' indication on the likert scale.

Asked to indicate whether careers were factors they considered in their choices, Commerce students scored 2.62 while their teachers scored 2.61. On the other hand, economics students scored 2.74 while their teachers scoured 2.28. This indicated that students in both subjects considered careers in their options. The teacher respondents thought the same for commerce students but were undecided when it came to economics students. Available data indicated that commerce and economics substituted each other for career and college admissions requirements. A choice based on careers may therefore indicate that the students are not very well oriented.

Asked to indicate whether the subjects related well to issues they encountered in their daily life, commerce students scored 2.92 indicating that the subject related to issues in their environment and was not abstract. The teachers concurred with commerce students scoring 2.93 but scored 1.71 to indicate indecision as to whether economics related to issues in students' daily lives. Economics students scored 2.76 indicating that they did not find the subject abstract. Although the likert scale is not a continuum it would be reasonable to deduce that economics has a relatively high level of abstractness compared to commerce. The higher score for commerce students indicates that a higher percentage than that for economics had indicated that commerce was not abstract.
Scores indicated indecision as to whether students were aware of the availability of resources in order to opt for the subjects. Commerce students scored 2.39 while economics students scored 2.08. The teachers scored 2.57 indicating availability of teaching-learning resources as a factor for commerce students and 2.14 indicating indecision on the same for economics students. The students did not have this factor as a point of reference for their options. Students were expected to have learnt of resources availability from past groups of students in the schools and from teacher statements in reference to the subject at introduction. Freedom of movement was assumed.

In the open ended question, three and zero, students in commerce and economics respectively indicated that they considered the availability of resources as the basis for their option between commerce and economics.

From FGD it emerged that the principals discouraged economics after the first few lots of students performed poorly by either scolding teachers for ineffectiveness or declining to provide resources for the teaching of economics while they provided for commerce. It could be concluded that resource unavailability and censure could have led to low registration for economics. A lot of time has passed since the first form four class sat for economics in 1989. What transpired thereafter may not be discernible since there are no records available.

The open-ended question indicated that the students had formed a negative attitude towards economics while others found it difficult, abstract, taxing and requiring more critical thinking than commerce. The variety of terms used to describe economics indicated a formed negative opinion. Still others
suggested that commerce was taken to enhance the students mean scores in a competitive examination that was also used for entrance to universities and other tertiary institutions. 83% commerce and 62.5% economics students indicated that they based their choices on career objective. Another reason they chose economics was that there was a high teacher student contact. others wanted to develop critical thinking skills that could not be replaced by technology.

Commerce students in turn said that they preferred commerce because it was easier compared to economics, enjoyable, applicable and the teachers were experienced and had a positive attitude towards the students. They also cited parents, peer influence, and the fear of being eliminated for university entrance as the result of a poor performance in one subject.

5.2 CONCLUSIONS
The data collected indicates that the teachers were not in touch with the economics students’ expectations. It also indicates that the e students were not encouraged to take the subject. It is therefore easy to judge that the school administration acted deliberately to dissuade too many students from taking economics and eventually lowering the school mean score. The fact that only a few school offered economics may not tell exactly why it is so but the finding that teachers did not know the students’ expectations is a sign of lack of dedication to the subject. The teachers may be responsible for not making the subject relevant to the students’ life issues. The teacher ability is therefore brought to question.
In section D of the teachers' questionnaire it also emerged that some teachers were not aware of the instructional resources available within their school. This is an indicator of lack of concern on their part. The issue may originate from the school administration. It is hard to believe that the teachers are well oriented on reporting to the schools. The mode of acquiring the instructional resources is also questionable because the teachers do not seem to be aware of what is available.

The school administration is responsible for the absence of the subject in the school curriculum. It could be concluded that the decline of the number of students for the KCSE economics is due to the desire of most school administration to get rid of the subject in the school curriculum due to the initial miserable performance. This was brought to the forefront in the FGD.

The fact that students appear to have been performing better in the last few years before economics was merged into business studies may mean that the groups of students taking the subject were of above average ability since the subject persisted only in some of the schools classified as provincial and national were the best primary school graduates are admitted. It may be concluded that abstractness in economics was above the ability of the majority of secondary school students. The sentiments of the teachers in the focused group discussion cannot be ignored.

5.3 RECOMMENDATIONS

In the view that economics was initially well received in the secondary school curriculum under the 8-4-4 systems before its popularity declined mainly due the perception that it was hard and difficult to pass in and in consideration of
its value to the whole society, simplified economics should have been taught as a core subject just like Mathematics, Kiswahili and English in secondary schools. This would enable the students to understand the way the economy works and the interdependence of the various economics units in Kenya. Students would grow into informed citizens and there would be better prospects of achieving the national goals for teaching economics in secondary schools.

Teachers should be wholly involved in the acquisition of instructional resources to avoid a situation were they are not aware of the resources available and the resultant waste. They should be involved in frequent in-service training to ensure they retained high morale and are not left behind when new issues emerge. The government should fund and encourage writers of materials with local references for teaching and learning economics in order to ensure lower costs of resources, local availability and suitability.

5.4 RECOMMENDATIONS FOR FURTHER RESEARCH
We recommend that a research be carried to found out the reception business studies has in secondary schools and why. This recommendation is made in the view that economics constitutes sixteen of the thirty-two chapters in the syllabus. Research should also be carried to found out the availability and suitability of resources for teaching business studies at the secondary school level.
BIBLIOGRAPHY


APPENDIX A

QUESTIONNAIRE FOR COMMERCE STUDENTS

Dear respondent;

This research is for writing a thesis for the degree of Master of Education.

You are requested to answer all the questions as correctly as you know.

Your answers will be treated confidentially.

SECTION A

BIO-DATA

Please indicate the applicable details. Tick (✓) as appropriate.

1. Gender.

F ✓ M

2. Age bracket

YEARS  15-18  19-21  22-25

3. Form

4

4. Subject

ECONOMICS

COMMERCE

5. School ______________________________

6. District  Nairobi  Machakos
SECTION B

Please tick (✓) the correct box to indicate whether you; A-Agree, U-undecided, D-disagree. Please use a ruler to see that your answer is in the correct box.

Performance by Past Students (CPPS)

7. The reason for choosing commerce is that earlier students had done well. [A U D]

8. I did not consider the performance in past commerce examinations. [A U D]

9. A poor KCSE performance in commerce would discourage other students from choosing the subject. [A U D]

10. Students consider past performance before opting for commerce. [A U D]

Commerce: Career Opportunities (CCO)

11. College courses do not require KCSE commerce. [A U D]

12. Employers seek people with commerce. [A U D]

13. Commerce is useful in a small-scale business. [A U D]

14. I would like to study business studies after school. [A U D]
15. Good performance in commerce would boost chances of admission for further studies.

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<tbody>
<tr>
<td>A</td>
<td>U</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Commerce: Abstractness (CA)**

16. Ideas in commerce are applicable in earning a living.

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<tbody>
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<tr>
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</table>

17. Commerce is everywhere in real life.

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<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

18. Commerce applies to present business situations.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<td>1</td>
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</tbody>
</table>

19. Ideas in commerce are not applicable in real life issues.

<p>| | | | |</p>
<table>
<thead>
<tr>
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<th></th>
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<tr>
<td>A</td>
<td>U</td>
<td>D</td>
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</tr>
<tr>
<td>1</td>
<td>2</td>
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</table>

**Commerce: Resource Availability (CRA)**

20. The school library has suitable books for the commerce syllabus.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>U</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

21. There are no commerce books suitable for the syllabus.

<p>| | | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>U</td>
<td>D</td>
<td></td>
</tr>
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<td>2</td>
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<td></td>
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</tbody>
</table>

22. We can cover the commerce syllabus in the time allocated.

<p>| | | | |</p>
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</thead>
<tbody>
<tr>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

23. The school has a specially equipped room for commerce.

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<thead>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>U</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

24. Suitable commerce books are available in the bookshops.

<p>| | | | |</p>
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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>U</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Role of the School Administration (ROSA)**

25. The size of the commerce class is limited to reduce failures.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>U</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
26. Students can take commerce without restrictions.

27. Commerce performance in the KCSE is blamed for poor School mean score.

28. Commerce is encouraged to boost the school mean score.

SECTION C

The section consists of tick (\(\checkmark\)) and open-ended questions. Please give complete answers were required.

29. What do you value most when choosing a subject for your studies?

<table>
<thead>
<tr>
<th>Availability of Textbooks</th>
<th>career opportunities</th>
<th>closeness of ideas to reality</th>
<th>performance in the subject</th>
</tr>
</thead>
</table>

30. State any other reason for choosing commerce.

_________________________
_________________________
_________________________
_________________________
_________________________
_________________________

Thank you for your cooperation in this exercise.
APPENDIX B

QUESTIONNAIRE FOR ECONOMICS STUDENTS

Dear respondent;

This research is for writing a thesis for the degree of Master of Education.

You are requested to answer all the questions as correctly as you know.

Your answers will be treated confidentially.

SECTION A

BIO-DATA

Please indicate the applicable details. Tick (✓) as appropriate.

3. Gender.
   
<table>
<thead>
<tr>
<th>F</th>
<th>M</th>
</tr>
</thead>
</table>

4. Age bracket
   
<table>
<thead>
<tr>
<th>YEARS</th>
<th>15-18</th>
<th>19-21</th>
<th>22-25</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Form 4

4. Subject
   
<table>
<thead>
<tr>
<th>ECONOMICS</th>
<th>COMMERCE</th>
</tr>
</thead>
</table>

5. School ____________________________

6. District
   
<table>
<thead>
<tr>
<th>Nairobi</th>
<th>Machakos</th>
</tr>
</thead>
</table>
SECTION B

Please tick (✓) the correct box to indicate whether you; A-Agree, U-undecided
D-disagree. Please use a ruler to see that your answer is in the correct box.

Performance by Past Students (EPPS)

7. The reason for choosing economics is that earlier students had done well.

8. Students' performance in past examinations was not reason for choosing for economics.

9. A poor KCSE performance would discourage students from choosing economics.

10. Students consider past performance before opting for economics.

Economics: Career Opportunities (ECO)

11. College courses do not require KCSE economics at all.

12. Employers seek people with economics.


14. I would like to become an economist.

15. Performance in economics would boost my chances of
admission for further studies.

**Economics: Abstractness (EA)**

16. I can apply ideas in economics to real life situations.  

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<thead>
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<tbody>
<tr>
<td>A</td>
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<td>D</td>
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<td>1</td>
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<td>3</td>
</tr>
</tbody>
</table>

17. When I look around, I see human activity that relates to economics.

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<tbody>
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<td>D</td>
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</table>

18. Economics relates to real life situations I know.

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</thead>
<tbody>
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</tbody>
</table>

19. Ideas in Economics relate to real issues I have experienced.

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<tbody>
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<td>1</td>
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</table>

**Economics: Resource Availability, (ERA)**

20. The school library has suitable books for the economics syllabus.

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</tbody>
</table>

21. Economics books in the library are not suitable for the syllabus.

<p>| | | |</p>
<table>
<thead>
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<tbody>
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<td>A</td>
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22. We can cover the economics syllabus in the time allocated.

<p>| | | |</p>
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<tbody>
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<td>3</td>
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</tbody>
</table>

23. The school has a specially equipped room for Economics.

<p>| | | |</p>
<table>
<thead>
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</thead>
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<td>1</td>
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<td>3</td>
</tr>
</tbody>
</table>

24. Economics books are available in bookshops.

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>I</td>
<td>D</td>
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<tr>
<td>1</td>
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<td>3</td>
</tr>
</tbody>
</table>

**Role of the School Administration (ROSA)**

25. The number of students in the Economics class is limited to reduce failures.

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<thead>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>I</td>
<td>D</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
26. Students can take Economics without restrictions.

27. Performance in economics is blamed for poor mean score.

28. Economics is encouraged to boost the school mean score.

SECTION C

The section consists of tick (✓) and open-ended questions. Please give complete answers were required.

29. What do you value most when choosing a subject for your studies?

<table>
<thead>
<tr>
<th>Availability of textbooks</th>
<th>Career opportunities</th>
<th>Closeness of ideas to reality</th>
<th>Performance in the subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

30. State any other reason for choosing economics.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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Thank you for your cooperation in this exercise.
APPENDIX C
QUESTIONNAIRE FOR TEACHERS

Dear respondent;

This research is for writing a thesis for the degree of Master of Education.

You are requested to answer all the questions as correctly as you know.

Your answers will be treated confidentially.

SECTION A

Please indicate the applicable details.

1. Gender.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Teaching subjects

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
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<tbody>
<tr>
<td>ECON</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Highest qualifications

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>DipEd</td>
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<tr>
<td>BA</td>
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<tr>
<td>Bed</td>
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<tr>
<td>MA</td>
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<td>Med</td>
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<td>OTHER</td>
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</tbody>
</table>

Specify any other ____________________________

4. Teaching experience years

<table>
<thead>
<tr>
<th></th>
<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

5. Period in the present School

<table>
<thead>
<tr>
<th></th>
<th>2-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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<td>3</td>
<td>4</td>
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</tbody>
</table>

Months/Years

6. District

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machakos</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION B

In this section you are requested to tick (√) the correct box to indicate whether you A-Agree, U- are undecided, D- disagree.

Performance of Past Students (PPS)

6. A subject's KCSE results in one year affect enrolment for the same in subsequent years.
   - A: 1, U: 2, D: 3

7. A subject's KCSE results in one year do not affect enrolment for the same in subsequent years.
   - A: 1, U: 2, D: 3

Economics: Career Opportunities (ECO)

9. Economics students can self-employ after school.
   - A: 1, U: 2, D: 3

10. Economics is not the only requirement for business related studies.
    - A: 1, U: 2, D: 3

11. A poor grade in economics lowers the student's prospects of admission for further studies.
    - A: 1, U: 2, D: 3

Commerce: Career Opportunities (CCO)

12. Commerce students have an advantage in admission for further studies because of their high pass rate.
    - A: 1, U: 2, D: 3

13. Commerce students can self-employ after school.
    - A: 1, U: 2, D: 3

14. Commerce is a requirement for some business related studies at college level.
    - A: 1, U: 2, D: 3
Economics: Level Of Abstractness (ELA)

15. Students can relate ideas in economics to real life. 
   
   1 2 3

16. Students have difficult relating economics to real life situations. 
   
   1 2 3

Commerce: Level Of Abstractness (CLA)

17. Concepts in commerce closely relate to situations familiar to the students. 
   
   1 2 3

18. Commerce does not relate to real situations familiar to the students. 
   
   1 2 3

Role of the School Administration (ROSA)

19. Enrolment for economics is limited to reduce failures. 
   
   1 2 3

20. Performance in economics is blamed for lowering the school mean score. 
   
   1 2 3

21. Commerce is encouraged to better the school mean score. 
   
   1 2 3

22. Teachers choose students for commerce and economics. 
   
   1 2 3

Economics: Resource Availability (ERA)

23. There are no books that cover the economics syllabus adequately. 
   
   1 2 3
24. Other than the textbook there is a general lack of suitable learning resources for economics.

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

**Commerce: Resource Availability (CRA)**

25. There are no books that cover the commerce syllabus adequately.

<table>
<thead>
<tr>
<th>A</th>
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<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

26. There are adequately suitable learning resources for Commerce.

<table>
<thead>
<tr>
<th>A</th>
<th>U</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**SECTION D**

27. Please indicate which of the following resources are available for teaching in your subject area by ticking (√).

<table>
<thead>
<tr>
<th>Textbook</th>
<th>OHP</th>
<th>Charts</th>
<th>TV</th>
<th>Radio</th>
<th>Journals/Magazines</th>
<th>Computer (CAL)</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

28. Why do students in secondary schools prefer Commerce to Economics?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you very much for your cooperation in this exercise.
APPENDIX D

QUESTIONS ASKED TO THE FOCUS GROUP DISCUSSION

The researcher is a post graduate student of the department of educational, communication and technology, Kenyatta University. You are requested to answer the questions as candidly as you can. Note that you are free not to answer the questions at all or to withdraw from the discussion at any level you wish. All responses will be treated with utmost confidentiality. No compensation will be given for the time spent in this exercise.

Thank you.

QUESTIONS

1) Despite the fact that economics is one of your teaching subjects you do not teach it. Why?

2) It is generally believed that teachers of economics use teaching methods that discourage students’ participation. Do you agree with this finding?
The Education Secretary,
Ministry of Education Science & Technology
P. O. Box 30040
NAIROBI

Dear Sir,

RE: REQUEST FOR RESEARCH PERMIT

This is to introduce Mr. Paul Mulli Kilonzo to you. Mr. Kilonzo is an M.Ed. student (Registration No. E55/6069/03) in this department.

He would like to collect data for his research project entitled “Factors Considered by Students When Opting Between Secondary School Commerce and Economics in Nairobi and Machakos Districts, Kenya.”

Please assist him.

Yours faithfully,

PROF. TED GROENEWEGEN
AG. CHAIRMAN, DEPARTMENT OF EDUC. COMMUNICATION & TECHNOLOGY
This is to certify that:
Prof./Dr./Mr./Mrs./Miss PAUL MULI KILONZO

of (Address) KENYATTA UNIVERSITY
P.O. BOX 43844, NAIROBI

has been permitted to conduct research in

LOCATION

NAIROBI & MACHAKOS District,
NAIROBI AND EASTERN Province,

on the topic FACTORS CONSIDERED BY STUDENTS WHEN OPTING BETWEEN SECONDARY SCHOOL, COMMERCE AND ECONOMICS IN NAIROBI & MACHAKOS

for a period ending 31st December 2005

Research Permit No. MOEST 13/001/35C 85
Date of issue 11th March, 2005
Fee received Shs 500

Applicant's Signature

For: Permanent Secretary
Ministry of Education
Science and Technology

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do so may lead to the cancellation of your permit.

2. Government Officers will not be interviewed without prior appointment.

3. No questionnaire will be used unless it has been approved.

4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.

5. You are required to submit at least two (2)/four (4) bound copies of your final report for Kenyans and non-Kenyans respectively.

6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

(REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

(CONDITIONS—see back page)