

# SCHOOL BASED FACTORS INFLUENCING TRANSITION OF PUPILS FROM LOWER GRADES TO UPPER GRADES IN PUBLIC PRIMARY SCHOOLS IN SOTIK SUB- COUNTY, KENYA

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**Abstract:** The new education system in Kenya requires a child or learner to move from one grade to another. This transition poses new experiences as well as challenges some of which are building up from previous grade. The purpose of this study was to determine the influence of teaching and learning resources on pupil's transition from lower grade to upper grade in public primary schools in Sotik Sub-County. The target population of the study was 165 head teachers, 1178 teachers and 5300 grade five pupils to give a total of 6643 target population. The study randomly selected 377 respondents using Nuausima's (2000) formula for calculating the sample sizes where 9 head teachers were purposely selected for the study while 67 teachers and 301 grade five pupils were randomly chosen. The data was collected using both questionnaires and interview schedule as well as observation checklist. The data was analyzed using both qualitative and quantitative approach. The study concludes that teaching and learning resources influence pupil's transition hence emphasis should be put so that teachers become creative so as to transfer the same knowledge to the learners. The unavailability of teaching and learning resources is a major setback in the teaching of CBC in primary schools which in turn affects learner's acquisition of relevant skills required of them to transition from one grade to another.

**Keywords:** Learning Resources, Teaching resources, Teaching and Learning resources.

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## 1. INTRODUCTION

According to Yara and Otieno (2010), education is a fundamental human right. The pivot to sustainable development, peace, and stability within and among countries is the provision of quality education to their citizens (Oguntuase, Awe, & Ajayi, 2013). Education is an essential ingredient for the development of any society and is seen as a pathway to raising political, social awareness as well as upholding the level of manpower (Onyara, 2013). According to Mwangi and Nyagah (2013), the performance of an individual in the National Examination is a predictor of the person's future. For the betterment and improvement of educational achievement, countries further invest in school facilities for better performance of the pupils (Yichun, Rodney & Lance, 2012).

A study by Bizimana and Orodho (2016) on teaching and learning resource availability and teachers effective classroom management and content delivery in secondary schools in Huye District, in the Republic of Rwanda established that there was a positive and significant correlation between teaching and learning resources and teacher effective classroom management, content delivery and eventual pupils transition with good performance. Access to education in Kenya has not been evenly distributed across sexes, regions and social groups (Orodho, 2002). According to EFA monitoring Report

(2012), Kenya is one of the countries where the school enrollment has significantly increased together with Burkina Faso, Burundi, Chad, Congo, Niger, Tanzania among others. There was need therefore to determine if those enrolled in school transitioned from lower grade to upper grade.

The Competency Based Curriculum (CBC) which is new educational system in Kenya consist of 2-6-3-3-3 education cycle. Every learner shall transition through a minimum of 17 levels, every level has period of 1 year. The KICD has grouped them into 4 general categories: Early Year Education (Pre-Primary & Lower Primary), Middle School (Upper Primary & Lower Secondary), Senior School (Upper Secondary) and Tertiary Education (TVET or University). What used to be called Subjects are now known as Learning Areas (KICD 2017).

Each time he/she moves from one level to the other, transition occurs. Transitions start right from pre-school to early schooling which in some regions start as early as age three or four. Early Childhood Education poses new experiences (such as learning new things, being in a new environment) as well as challenges (such as coping with new friends and environment) to the learners at this level. When these learners move to grade one, which is another level, they are faced with another set of new but different experiences (Republic of Kenya, 2017).

## 2. STATEMENT OF THE PROBLEM

Education is a basic human right provided to all children or citizens of a country. The desire to provide quality education for all children is one of the major objectives of the Ministry of Education who have made an effort to make education accessible to all and improve the quality of education at all levels by revising the curriculum, availing teaching and learning resources and recruiting and staffing of qualified teachers.

As such, the government of Kenya has continuously implemented measures to improve the quality of CBC education. The CBC education systems are sectioned into 3 different structures namely; Early years educations, Middle school education and Senior school education. CBC has divisions such as; Pre-primary education, Lower primary education, Middle school education, Upper primary, Lower secondary and Senior school. Core competencies of CBC are; Communication and collaboration, Critical thinking and problem solving, Imagination and creativity, Citizenship, Learning to learn, Self-efficacy and Digital literacy (KICD, 2021).

According to Education Sector Report (2021), the gross enrolment rate (GER) in primary schools improved from 104.4 % in 2018 to 100.2% in 2019 and then reduced to 99.6% in 2020. A learner who at grade three obtains very low marks which is below expectation in all subjects, if moved (transits) to grade four, will likely to continue performing poorly in academic programmes because the child did not master the content in the previous grades. According to the CBC guideline no pupil is a failure hence pupils who do poorly in their assessment are transitioned to the next grade. The transition of these pupils who perform poorly to the next grade pose a challenge to teachers who teaches them in the next grade and this in turn affect their performance. It is against this background that this study sought to determine the influence of teaching and learning resources on pupil's transition from lower grade to upper grade in public primary schools in Sotik Sub-County.

## 3. LITERATURE REVIEW

Teaching and Learning resources refer to those materials that support or aid the learner in understanding of the concepts or ideas presented to the learner in a learning environment or situation. These are the materials that teachers use to assist learning and also increase interest in learning. Teachers use resources to enhance learner's participation in class activities for effective learning (Klier, 2005).

Kirisikoi, Wachira and Malusu (2008), have aptly argued that teaching and learning resources are all materials and equipment used to enhance effective learning. A teacher selects, develops and reorganizes teaching and learning resources for effective teaching. A teacher is, therefore, the most important teaching and learning resource. Kiruhi, Githua and Mboroki (2009) contend that: the systematic design and selection of learning resources pre-supposes two important criteria, namely; a) That learning resources are appropriate for the purpose and group for which they are intended; b) That they are evaluated to make sure they work effectively.

The teaching and learning resources make a learning environment more realistic and interesting. Resources foster understanding of the content being learned. The teaching and learning resources therefore, enhance pupil performance and hence the transition from one educational level to another, less difficult. Mbithi (2007) says that just as well trained

personnel are important for the success of schools, so are equipment and supplies. An educational curriculum will be meaningless without teaching and learning materials such as textbooks, chalk, visual aids, maps, charts and other supplies. Improving quality of education should be a priority even where enrollment has not reached universal levels.

Filmer, Hassan and Pritchett (2006) note that PROGRESA, an education scheme in Mexico, improved attendance but did not improve school quality, which was low in many schools. Forty percent of fifteen-year old Mexican students fail an internationally comparable reading test passed by all but five percent of students in the average OECD country. The global policy agenda for primary education should no longer be more schools or more learners but quality teaching.

According to Agosiobo (2007), the use of teaching and learning resources is important because they motivate learners to learn as they offer stimulus variation and assist in sustaining learners' attention throughout the lesson. Teaching and Learning resources clarify information, sometimes a concept may be complex and words alone cannot offer a clean explanation. Teaching and Learning resources stimulate lively class discussion after watching a film in a class or listening to a radio. They also challenge independent thinking especially when used individually in an assignment or as a class activity since they increases learning. Teaching and learning resources generate more interest and create a situation where the learner would fully engage in classroom and outdoor activities.

A study by Bizimana and Orodho on teaching and learning resource availability and teachers effective classroom management and content delivery in secondary schools in Huye District, in the Republic of Rwanda established that there was a positive and significant correlation between teaching and learning resources and teacher effective classroom management, content delivery and eventual students academic performance. This finding was in tandem with the findings documented earlier by Orodho, Waweru, Ndichu and Nthinguri (2013) in Kenya which established that the challenges of availability and adequacy of learning resources was found to negatively affect teacher effectiveness in the use of teaching methods as well as focus on individual learner, hence fostering discipline and good attainment of good academic results. The finding also echoed the results of a study by Waweru and Orodho (2014) in secondary schools in Kiambu District, Kenya on management practices and students academic which established that effective resource management is a prerequisite to enhanced students academic performance. There was need therefore to establish the effect of teaching and learning resources in the transition of pupils from lower grade to upper grade.

The adequate use of teaching and learning resources also gives the learner a practical experience which can help selection of learning concepts more easily. Miller and Seller (2006) assert that teaching and learning resources are critical ingredients in learning and the intended programme cannot be easily implemented without them.

Instructional materials provide information and opportunities for pupils to use what they have learnt, without resource materials and facilities, the teacher may not be able to set the objectives that he would like his students to attain. It would mean that pupils cannot be taught using the most suitable methods. Teacher need to be innovative enough to improvise and provide alternatives teaching and learning resources using local materials. The study of Lowe (2009) on effective teaching and learning resources in South Africa, found that, lack of relevant teaching materials caused dismal pupils performance. Teaching and learning activities can be obtained through cultivating students' creativity and motivation by away of linking the classroom with natural and social environment.

Teaching and learning resources help in transition of pupils from lower grade to upper grade in many aspects. Eshiwani (2016) found out that text books are of greater importance to young inexperienced teachers who depend more on textbooks than the experienced teachers. He further stated that, there was a relationship between textbooks and achievement of students where the main activity is problem solving. Eshiwani argues that sharing of textbooks lowers the morale and interest among students. The students need to be given enough books in order to motivate them. Availability of enough and relevant resources contributes to high transition of students from primary to secondary school.

According to Goodland (2014), the reliance by teachers on text books and, to a lesser extent on state guides focuses the conflicts between uniform source of information and varied sources geared to the needs of the individual learners. According to Allyn and Bacon, (2018). Schools and teachers should adjust material to individual learners' needs and that standardization is one way of ensuring equal educational opportunity. It seemed considerably difficult to attain an actual transition of government target of 70 percent by 2015 because the transition cannot be increased without reducing the centralization of the material developments. In many cases the textbook ratio in rural schools can be as bad as 1:5 or more, a situation which worsens that negativity held by students. One of the aspects that would affect transition is the scope and depth of the curriculum. Inability to complete the syllabus is expected to have negatively affected the level of acquisition of skills in the subjects (Mbugua, 2016).

Teachers use teaching and learning resources to enhance learner's participation in class activities for effective learning. Since learners' interest and abilities are varied, the teacher needs to select and use a wide variety of resources in teaching in order to take care of individual differences in class such resources include learners locally made teaching aids such as reading charts, sound charts and toy models of which are crucial in their learning process. Therefore when learners come to school with their own learning materials; it is the responsibility of the teachers to use what the learners come with to effect learning.

Utilization of teaching and learning resources and transition of pupils are closely related because learners are able to master the learning strategies after they are exposed to a number of objects. Lowe (2009) recommends that learners should be allowed to learn in a way which suits the preferred style of learning. Through the use of variety of learning resources, learners are given an opportunity to learn their own learning style.

Interactive displays in the pre-school and collections of carefully selected resources, entice the learners to explore a wide range of ideas. In the year 2002, the Ministry of Education Science and Technology in conjunction with UNICEF launched the child centered interactive approach to teaching and learning. According to Ministry of Education (MOE, 2001) the performance of learners can be affected by utilization of teaching and learning resources.

Laurillard (2013) study on effective teaching, and learning technologies in Botswana found that lack of relevant teaching and learning materials caused dismal pupils' academic performance. Benjamin & Orodho (2014) recommends that learners should be allowed to learn in a way which suits the preferred style of learning. Pupils should be given an opportunity to learn their learning style by using various teaching and learning resources that best suit them.

In Kenya, Oyugi and Nyagah (2010) assessed the influence of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-School Centers in Nyamira North District. The study sampled 134 pre-school teachers and 270 preschool parents through stratified random sampling and 12 Education Officers sampled by census sampling. The study found that teaching/learning resources comprise of community involvement, regular teachers for both special needs pupils and the average pupils which influence pupil performance. A study by Yara and Otieno (2010) on teaching and learning resources and academic performance shows that, stationeries and teaching aids influence pupils' performance. His findings are in agreement with findings of UNESCO (2008) report that teaching and learning resources can influence pupils' academic performance. These studies did not assess how teaching and learning resources influence transition from lower grade to upper grade in Sotik Sub County which this study sought to establish.

#### 4. FINDINGS

The study sought to establish influence of teaching and learning resources on pupil's transition from lower grade to upper grade in public primary schools in Sotik Sub-County. Teachers were asked to responds to the indicators on the teaching and learning resources which enables pupil's transition. The respondents indicated the extent to which they agree with the statements on teaching and learning resources in their school where SA meant Strongly Agree, A meant Agree, UD meant Undecided, D meant Disagree, and SD meant Strongly Disagree. The findings are presented in Table 1

**Table 1 Teaching and learning resources on pupil's transition**

Teaching and learning resources	SA	A	UD	D	SD
Teachers creative lesson aid facilitates transition of pupils	20 (32.3%)	30 (48.4%)	3 (4.8%)	4 (6.4%)	5 (8.1%)
Sound charts enables acquisition of relevant skills required for one to transits	20 (32.3%)	35 (56.4%)	2 (3.2%)	5 (8.1%)	0 (0.0%)
Maps and charts aid enables pupils acquire skills required for them to transits	19 (30.6%)	30 (48.4%)	1 (1.6%)	8 (12.9%)	4 (6.4%)
Models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade	29 (46.7%)	26 (41.9%)	1 (1.6%)	4 (6.4%)	2 (3.2%)
Picture aids enables pupils acquired skills required before they transit to the next grade	22 (35.5%)	35 (56.5%)	0 (0.0%)	3 (4.8%)	2 (3.2%)

Source: Research Data (2023)

Table 1 reveals that majority of respondents who were 30 representing 48.4% agreed and 20 respondents representing 32.3% strongly agreed that teacher's creative lesson aid facilitates transition of pupils. The respondents who were 4 representing 6.4% disagreed together with 5 respondents representing 8.1% who strongly disagreed that that teacher's creative lesson aid facilitates transition of pupils. Respondents who were 3 representing 4.8% were undecided. The findings agree with Ndegwa, (2005) who noted that the teacher co-ordinates the teaching and learning process through appropriate teaching and learning activities.

Majority of respondents who were 35 representing 56.4% agreed so do 20 respondents representing 32.3% who strongly agreed that sound charts enables acquisition of relevant skills required for one to transits. Respondents who were 5 representing 8.1% disagreed that sound charts enables acquisition of relevant skills required for one to transits while 2 respondents representing 3.2% were undecided. Maps and charts aid enables pupils acquire skills required for them to transits. This is true according to majority of the respondents who were 30 representing 48.4% who agreed together with 19 respondents representing 30.6% who strongly agreed. The respondents who were 8 representing 12.9% disagreed as well as 4 respondents representing 6.4% who strongly disagreed that maps and charts aid enables pupils acquire skills required for them to transits. Respondents who were 1 representing 1.6% was undecided.

Sidhu, (2012) who noted that successful teaching experience is a valuable asset. It enables the teacher to acquire certain commendable characteristics such as promptness, adaptability, efficiency, arousing and maintaining interest, adequate command of instructional materials and ability to face the class with confidence. Thus the teachers with successful teaching experience may develop positive attitude towards the subject and hence choose appropriate instructional materials which will arose and sustain interest among students. This will trigger pupil's motivation to study well hence acquire relevant skills, thus high transition. They are able to prepare lesson plans, diagrams, illustrations, exercises, give proper instruction to students and maintain discipline.

Majority of the respondents who were 29 representing 46.7% strongly agreed as well as 26 respondents representing 41.9% who agreed that models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade. Respondents who were 4 representing 6.4% disagreed as well as 2 respondents representing 3.2% who strongly disagreed that models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade while 1 respondent representing 1.6% was undecided. Respondents who were 35 representing 56.5% agreed as well as 22 respondents representing 35.5% who strongly agreed that picture aids enables pupils acquired skills required before they transit to the next grade. Respondents who were 3 representing 4.8% disagreed as well as 2 respondents representing 3.2% strongly disagreed.

The findings as revealed in Table 1 imply that teacher's creativity in development of lesson aid facilitates transition of pupils, sound charts enables acquisition of skills required to transits, maps and charts aid enables pupils to acquire skills required for them to transits, models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade and that picture aids enables pupils acquired skills required before they transit to the next grade. The study findings concurs with Orodho, (2014), who established that teaching is an art that requires those who have the ability, skill, knowledge and the interest which would act as the spring board for success to be realized.

Orlich et al., (2001) state that teacher artistry does not just happen, teachers develop their art by using carefully planned fine-tuned lessons that reflect on an understanding of many different teaching strategies. Each teaching technique is skillfully applied to gain the desired intellectual, social, affective or kinesthetic skills. The best teachers know their tools of the craft, when and how to use them. Teachers' main tools are: schemes of work, lesson plans, progress records, teaching and learning resources and appropriate teaching and learning strategies. Teachers develop artistry by being aware of both what they are doing and how what they do affects their learners. This means that teachers must know their learners as individuals, know their abilities and weaknesses so that they may plan various learning activities that the learners would be able to deal with for maximum achievement in the learning process.

## 5. CONCLUSION

The study conclude that teacher's creativity in development of lesson aid facilitates transition of pupils, sound charts enables acquisition of skills required to transits, maps and charts aid enables pupils to acquire skills required for them to transits, models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade and that picture aids enables pupils acquired skills required before they transit to the next grade.



The findings showed that teaching and learning resources influence pupil's transition hence emphasis should be put so that teachers can be encourage being creative and transferring the same knowledge to their pupils. Teaching and learning resources help in transition of pupils from lower grade to upper grade in many aspects and as recommended by Eshiwani (2016), availability of enough and relevant resources contributes to high transition of students from primary to secondary school. Goodland (2014), further proposed that reliance by teachers on text books and, to a lesser extent on state guides focuses the conflicts between uniform source of information and varied sources geared to the needs of the individual learners. Schools and teachers should adjust material to individual learners' needs and that standardization is one way of ensuring equal educational opportunity (Allyn and Bacon, 2018).

Nuhu et al. (2021) lamented that mastery of skills might not be fully achieved without the use of instructional materials. Relevant and appropriate instructional materials help to arouse and sustain interest and help to concretize ideas and stimulate the imaginations of the students, thus enhances achievement of students in a subject (Mustapha et al., 2022). According to Olatunde-Aiyedun (2021), instructional materials include, modern textbooks, equipment, consumables like chemicals and reagents, models, charts etc. and the physical learning environments, which include the science classrooms and laboratories. Similarly, Adesola et al. (2022) gave examples of some instructional materials to include, cardboard paper, real objects, CD ROM, CD ROMs, charts, radio, DVDs, test tube holders, clinostat, reptile hook, models, diagrams, and pictures.

The study concludes that teacher's creativity in development of lesson aid facilitates transition of pupils, sound chats enables acquisition of skills required to transits, maps and charts aid enables pupils to acquire skills required for them to transits, models and creative visual materials are key resources required for acquisition of skills required for one to transit to the next grade and that picture aids enables pupils acquired skills required before they transit to the next grade. The study concludes that teaching and learning resources influence pupil's transition hence emphasis should be put so that teachers becomes creative so as to transfer the same knowledge to the learners.

The unavailability of teaching and learning resources is a major setback in the teaching of CBC in primary schools which interns affects learner's acquisition of relevant skills required of them to transits from one grade to another.

#### REFERENCES

- [1] Adesola, M. O., Olorode, G. B., & Aranmolate, T. R. (2022). Effect of instructional materials on biology instructions among high achieving secondary school students in SPED international secondary school, Oyo, Nigeria. *Journal of Educational Research in Developing Areas*, 3(2), 237-245.
- [2] Agosiobo, C. (2007). *Effective Teaching in Schools: Theory and Practice* 2nd Edition. Deltal Place: Stanley Thornes Ltd.
- [3] Allyn and Bacon, (2018) Supervision And Instructional Leadership A Developmental Approach 9th Edition. *The Wiley Handbook of Educational Supervision* <https://pusdataspm.kemendiknas.go.id>
- [4] Benjamin, B. I., & Orodho, J. A. (2014). Teaching and Learning Resource Availability and Teachers' Effective Classroom Management and Content Delivery in Secondary Schools in Huye District, Rwanda. *Journal of Education and Practice*, 5(9).
- [5] Bizimana B. & Orodho J. (2016). Teaching and Learning Resource Availability and Teachers' Effective Classroom Management and Content Delivery in Secondary Schools in Huye District Ruanda. *Journal of Education and Practice*, 5(2), 111-122
- [6] Education Sector Report (2021) Medium Term Expenditure Framework 2022/23 – 2024/25. *Government Printers*. Nairobi, Kenya
- [7] EFA monitoring Report (2012) Global Monitoring Report 2012 - Youth and skills: Putting education to work. UNESCO
- [8] Eshwani, P. (2016). *The Regular Classroom as Battle for Inclusive Special Needs Education*. An assessment of options of special needs education in the commonwealth Caribbean.

- [9] Filmer, Hassan and Pritchett (2006). Schooling Is Not Education! Using Assessment to Change the Politics of Non-Learning. A Report of the Center for Global Development Study Group on Measuring Learning Outcomes. *Center for Global Development*
- [10] KICD (2017). Basic Education Curriculum Framework. Nurturing Every Learner's Potential. Government Printers, Nairobi, Kenya
- [11] Kisirikoi, F; Wachira, L; Malusu, J, (2008). Distinction education, for primary teacher education. Nairobi: Kenya Literature Bureau
- [12] Klier, Thomas. (2005). Determinants of supplier plant location: evidence from the auto industry. *Economic Perspectives*. 2-15.
- [13] Laurillard, D. (2013). *Rethinking university teaching: A Conversational Framework for the Effective use of Learning Technologies*. Routledge.
- [14] Lowe W.T, (2009). *Structure and social studies*. Ithaca. Lrudon.Cornell University press.
- [15] Mbithi, D.M.(2007). Foundations of solid administration. Nairobi: Oxford Press.
- [16] Mbugua, G. (2016) A Study on Effective Building Material Management by Kenyan Local Contractors: Emphasis on Procurement, A Case Study of Nairobi County. The University of Nairobi, Nairobi.
- [17] Miller. D. & Seller, M. (2007). *School Facilities and Pupils' Academic Achievements*. Transkei University Research Study, South Africa: Unpublished.
- [18] Ministry of Education (MOE, 2001) Children Education Act, Government printers, Nairobi, Kenya
- [19] MOEST, (2010). *Sectional Paper No 1 2010 Policy Framework for Education, Training and Research*. Meeting the Challenges of Education Training and Research in Kenya in the 21st Century, Nairobi.
- [20] Mwangi, N. I. & Nyagah, G. (2013). *Determinants of Academic Performance in Kenya Certificate of Secondary Education in Public Secondary Schools in Kiambu County, Kenya*. *Journal of Education & Practice*, 4(12).
- [21] Ndegwa, M. W. (2005). Factors influencing pre-school teacher's attitude towards child-centre and teacher-centre teaching methods in Nairobi Kenya. *Unpublished M.Ed. Thesis*, Kenyatta University.
- [22] Nuhu, A., Jelsma, J., Dunleavy, K., & Burgess, T. (2021). Effect of the FIFA 11+ soccer specific warm up programme on the incidence of injuries: A cluster-randomised controlled trial. *PloS one*, 16(5), e0251839. <https://doi.org/10.1371/journal.pone.0251839>
- [23] Oguntuase, D. M., Awe, O. O., & Ajayi, I. A. (2013). *Empirical Nexus between Teaching/Learning Resources and Academic Performance in Mathematics among Pre-University Pupils in Ile-Ife, South-West Nigeria*. Sage publications.
- [24] Onyara, B.N. (2013). *School Based factors influencing pupils' academic performance at Kenya certificate of secondary education in Teso South District*. Unpublished Thesis, University of Nairobi
- [25] Orlich, H., Callahan, G., & Gibson, C. (2001). *Teaching strategies*. Boston, MA: Houghton Mifflin Company.
- [26] Orodho, A.J. ., Ampofo S.Y., Bizimana. & Ndayambaje, I. (2016). Quantitative data management: A step by step data analysis using statistical package for social sciences (SPSS) for Windows computer programme. Kanezja publisher, Kenya.
- [27] Orodho, J. A. (2009). Techniques of writing research proposals and reports in education and social sciences. Nairobi. Kanezja publishers.
- [28] Orodho ,A.J. ,Waweru ,N.P., Ndichu.,M.,&Nthinguri,R.(2013).Basic education in Kenya: Focus on strategies applied to cope with school-based challenges inhibiting effective implementation of curriculum. *International Journal of Education and Research*. 1(11)

- [29] Oyugi, N. L. & Nyaga, M. M. (2010). Introduction to Contemporary Issues Affecting Education. Kenya Institute of Special Needs. *Journal of Education and Practice*, 6(35), 132-141.
- [30] Republic of Kenya (2017). National Education Sector Strategic Plan for the Period 2018-2022. Government printers, Nairobi Kenya.
- [31] Sidhu, D. and Naugler, C. (2012) Fasting Time and Lipid Levels in a Community-Based Population: A Cross-Sectional Study. *Archives of Internal Medicine*, 172, 1707-1710.<http://dx.doi.org/10.1001/archinternmed.2012.3708>
- [32] UNESCO (2008) Annual report: UNESCO Institute for Lifelong Learning
- [33] Waweru .P, N& Orodho, A.J.(2014).Management practices and students academic performance in national examinations in public secondary schools in Kiambu County. *International Journal of Scientific Research*. 5 (2), 472-479
- [34] Yara, P. O. & Otieno, K. O. (2010). Teaching and Learning Resources and Academic Performance in Mathematics in Secondary Schools in Bondo District of Kenya. *Asian social Science* 6(12).
- [35] Yichun, W., Rodney, A.C. & Lance, W. R. (2012). School Resources & Academic Achievement of Canadian pupils.*Alberta Journal of Educational Research*, 57, (4).