

Resource Preparedness for the Implementation of Competency-Based Education in Public Junior Secondary Schools in Makueni County, Kenya

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ABSTRACT

The purpose of this study was to examine the status of resource preparedness for the implementation of Competence-Based Education (CBE) in public Secondary schools in Makueni County, Kenya. The study examined the teacher preparedness, resources availability and physical infrastructure for the implementation of CBE in Makueni County, Kenya. The study adopted the descriptive survey design. The study targeted a population of 210 public junior secondary schools comprising 600 junior school teachers and 210 heads of institutions and 25 curriculum Support officers (CSOs). Simple random sampling was used to sample 21 public secondary schools. Two teachers were randomly selected from each school. All the heads of institutions and curriculum support officers were purposively selected representing 70 percent and 100 percent respectively. The researcher administered questionnaires to the respondents to collect data. The data was analyzed quantitatively and qualitatively. The analyzed data was presented using pie charts. From the study finding, it was found that 92 percent of the head teachers indicated that junior school teachers are not adequately prepared to implement the competence based education while 8 percent of the head teachers indicated that junior school teachers are adequately prepared to teaching CBE in junior schools. The study findings also indicates that 98.23 of the junior schools teachers revealed that junior schools domiciled in primary schools are do not have adequate resources. . 96 percent of the CSOs indicated that junior schools do not have enough teachers to teach all the learning areas. They also indicated that the junior schools do not have adequate resources to effectively implement the CBE. 4 Percent of the CSOs indicated that few schools had enough resources and enough junior school teachers. To address this issues this study recommends that junior schools should source for the necessary resources like smart phones, computers, laptops, swimming pools, music and art studio, sports materials, chairs and tables, internet connectivity so as to help teacher implement the CBE effectively. The ministry of education and TSC should enhance teacher training through workshops, seminars retooling and CEMASE so as to equip the teachers with the necessary skills and competences required in teaching of CBE. The ministry of education should also train teachers to handle learning areas lacking teachers like creative art, pre-technical, and music. The study also recommends for similar studies to be conducted in other regions in Kenya so as to generalize the findings of the state of teaching and learning resources in junior schools and the teachers preparedness in implementing the competence based education.

Keywords: Competency- Based Education, resource preparedness, junior school, learning resource, Infrastructure resources.

INTRODUCTION

Background to the study

The 21st century drastically evolving calling upon for dramatically radical changes on the role of education (Haug & Mrok, 2021). According to the Organization for Economic Co-operation and Development (OECD) [2020] the whole globe is faced with myriad of unprecedented environmental, political, and economic, health, societal and technological problems. As a result, the skills and competences acquired by the 21st century learners through education is greatly capturing the attention of the entire world. Over the years there has been the need for the

alignment of education systems with the 21st century demands (Zhao et al., 2024). The reforms are based on the fact that the 21st learner cannot be taught the education taught before the 19th century and be expected to meet the demands of the 21st century as well as addressing the challenges of the same century. According to educators and workforce in education, the young generation will not thrive successfully without the 21st century skills demanded in the current global economy and the sustainable development agenda (Begum & Liton, 2018). World economic forum advocated for the need to equip the learners with the skills that are aligned with the ever evolving industries. The forums calls for the need to equip the learners with the 21st century skills which will meet the varied multiple areas irrespective of the future occupations (Ngumbau 2020).

Countries in the whole globe have been revising their curricular time to time so as to align the education with the ever changing times especially to meet the 2030 vision Sustainable Development Goals [SDGs] (OECD, 2020). Countries are shifting from knowledge based curriculum to competence based curriculum which majorly equip learners with the necessary skills and competences needed in the labour market. Countries like England, the United States of America Canada, New Zealand, Indonesia, Finland, Australia, Sweden, Germany, Netherlands and Norway have their own competence based education to equip their youth with the necessary skills needed in the labour market.

African countries such as Zambia, Algeria, South Africa, Zimbabwe, Mozambique, Ghana, Cameroon, Tanzania, Ethiopia and Rwanda have started the competence based education (Ngumbau, 2022). These African states started the CBE in order to deal with security in skills in their education systems with emphasis on science and technology.

In Kenya, the government start the competence based education in 2016 to replace the 8-4-4 system of education which has been there since 1984 (Momanyi & Rop, 2019). The 8-4-4 was coupled with numerous challenges of producing learners with skills which were not demanded in the labour market (Cheptoo & Ramdas, 2020; Isaboke et al., 2021a). The introduction of CBE in Kenya was seen as a strategy to minimize the problem of graduates with no relevant skills. In kenya, the the 2030 vision advocated for correlation between quality education and the labour market, produce innovative skills and competences that will enhance public and private sectors (ministry of education, 2019)

Statement of the problem

The Kenyan government is in the process of winding up of the 8:4:4 system of educations as well as ushering in the implementation of the competence based Education in form of 2:6:3:3:3. The CBE is a very comprehensive education system geared towards preparing the learners for different pathways in the senior secondary schools. The curriculum is too broad and very comprehensive in skills and competences aligned with the 21st Century. At this level of junior school, the learner is expected to identify his or her potential to a certain career. Currently, the pioneer class in undertaking the summative examination the Kenya Junior Secondary Education Assessment (KJSEA).

The Kenyan government has had various attempts to support the implementation of the CBE for instance trainings conducted by the MoE, KICD, TSC, CEMASTEIA and KEMI with the aim of retooling the human resources for the teaching under the CBE. Besides the efforts put in place by the government to support the implementation of the CBE still there is a ill shortage of learners' books, as well as ill trainers. The implementation of the CBE is still unclear to teachers due to limited knowledge on their application at the class room level, usage and adequacy of instructional materials with limited physical resources. Being a new curriculum, junior schools have not yet had enough resources to implement the CBE and hence the need to examine resource preparedness on the implementation CBE in public junior secondary schools in Makueni County, Kenya.

Objective of the Study

To examine the status of resource preparedness for the implementation of CBE in junior secondary schools in Makueni County.

LITERATURE REVIEW

There has been great concern as to whether the implementation of the CBE is prepared in Junior Schools. Just like the explorers prepare for unknown journey, the implementation of CBE should be adequately be prepared for.

Teacher Preparedness

Teachers for part of human resources. Teachers are key stakeholders in the education system. They are the implementers of any given curriculum. Teachers serve as a compass where the learners checks the coordinates. Teachers facilitates the actual teaching and learning. Teachers training, in-service training, seminars and workshops enhances the pedagogy, assessments, methods and use of varied resources Omwala, et al (2021). Various studies have been conducted on the readiness for this system of education. A study done by Mugabo et al. (2021) in Rwanda found out that CBE was not uniformly implemented due to disparities in teachers' professional development and inadequate teacher training. In line with the findings of the study, the current study examines the extent to which the teachers are prepared to implement the CBE in Makuani County. In a study conducted by Makunja (2016) found out that the implementation of CBE was challenged by inadequate in-service teacher training. The study at hand replicated the study in Makuani County Kenya.

In Tanzania, a study done by Kafyulilo, Rugambuka and Ikupa (2013) showed that the CBE is not adequately implemented due to inadequate training of the teachers. The current study replicate the study in Makuani County to establish the effect of teacher preparedness on the implementation of the CBE. The current study focuses on the readiness of teachers in public junior schools implement the CBE.

A study by Chunga (2020) showed wanting preparation of teachers in implementing the competence based education in Nyamira County. The current study was not interested with the implementation of CBE rather the teachers' preparedness in Makuani County.

A study done by Andiemba (2020) revealed that most of the special needs teachers were not adequately prepared for the implementation of the CBE, evaluation and assessment of children with special needs. This study was conducted to fill the knowledge gap of CBE implementation in public junior schools in Makuani County. In a study conducted by Miheo O'Connor (2019) in primary schools revealed that teachers teaching lower primary and early childhood were not adequately prepared to implement the CBE.

Infrastructure and Resources

Teaching fraternity form human resources in schools. In line with Musset (2016), effective implementation of a curriculum requires employment of teachers who are well qualified to effectively deliver content, using adequate teaching and learning resources. Many junior schools in Kenya do not have adequate infrastructure to for effective facilitation of teaching.

Njeri et al. 2024 in her study found out that resources are key for the delivery of content in teaching and learning. Implementation of CBE is enhanced by the resources availability (Mackatian et al 2023). Junior schools learners many not learn effectively because teaching and learning largely rely on the learning resources. School s in urban areas have high population. Over-populated classrooms lack adequate teaching resources making leaning ineffective (Amunga et al 2023)

Most of the learning areas offered in CBE require practical learning. Lack of fields and sporting equipment has contributed to ineffective implementation of CBE. Many junior schools lack laboratories a factor making CBE fail. This means that the learning objective and outcomes will fail without adequate resources. The government of Kenya is embarking on building of junior schools classrooms. The State Department for basic Education, Principal Secretary confirms 13,200 classrooms have been put in place against the targeted 16000. Learning is not limited to classrooms but other resources are very vital to facilitate effective teaching and learning.

In line with ROK (2023), the government of Kenya supplied teaching and learning resources that are required for learning. The ration of 1:1 for learning text books was achieved. Transferring of learners from one schools to another is common with the parents leading to insufficient learning resources. The government does not conduct review of learners regularly yearly leading to insufficient learning materials. The government supplied textbooks to junior schools but were not enough for all learning areas. Some textbooks are delayed making it difficult for the implementation of the CBE.

Schools in Kenya lack enough equipment that teachers and learners need for teaching and learning. Facilities such as laboratories, equipment for games, art studios as well as swimming pool are missing. Junior schools lack closed circuit television (CCTV) for security purposes. Teachers in junior schools are innovators to avail the necessary learning resources.

RESEARCH METHODOLOGY

The study used descriptive survey design. The research design was used because it allows for generalization of research findings. . The study targeted a population of 210 public junior secondary schools comprising 600 junior school teachers and 210 heads of institutions. Simple random sampling was used to sample 21 public secondary schools. Two teachers were randomly selected from each school. All the heads of institutions and curriculum support officers were purposively selected representing 70 percent and 100 percent respectively. The researcher administered questionnaires to the respondents to collect data. The data was analyzed quantitatively and qualitatively.

RESEARCH RESULTS

Teacher Preparedness

The study sought to establish teacher preparedness in the implementation of the competence based education in public junior schools in Makueni County by requesting head teachers to indicate how teachers are prepared for the implementation of CBE.

The results are as shown in the figure 1 below

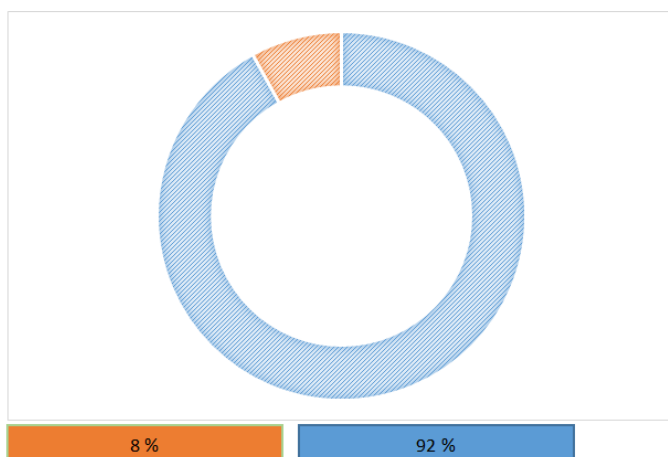


Figure 1: Teachers' preparedness at junior schools

The figure 1 established that 92 percent of the head teachers indicated that junior school teachers are not adequately prepared while 8 percent of the head teachers indicated that junior school teachers are adequately prepared to teaching CBE in junior schools.

Schools Infrastructure and Resources and implementation of the CBE.

The study sought to establish the influence of schools infrastructure and resources and implementation of the CBE in public junior schools.

The results are as shown in figure 2 below

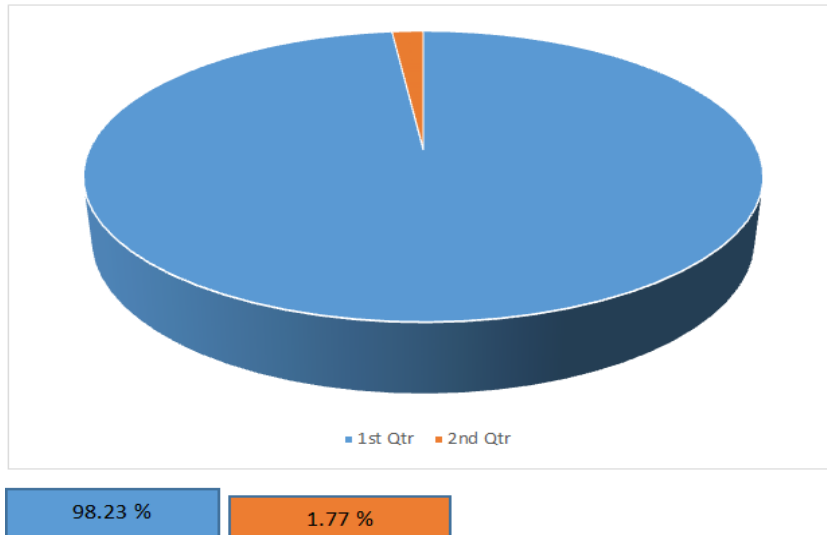


Figure 2: Schools Infrastructure and Resources and implementation of the CBE

Figure 2 indicates that 98.23 of the junior schools teachers revealed that junior schools do not have adequate resources.

DISCUSSION OF RESEARCH FINDINGS

The findings indicated by graph 1.1 from the research study reveals that 92 percent of the head teachers indicated that schools had inadequate resources while 8 percent of the head teachers indicated that schools had adequate resources required for teaching and learning. The findings were in agreement with the findings of Kafyulilo, Rugambuka and Ikupa (2013) which revealed that schools lack enough teaching resources in Tanzania. It was also found out that teachers are never supported in enhancing their professional growth through in-service training, workshops and seminars making it difficult to effectively implement the CBE. The study also found that established in figure 2 from the junior school teachers that 98.23 percent of schools do not have adequate resources for teaching and learning. The study findings are consistent with the findings of Njeri et al. 2024. It was also found out that junior schools lack facilities like revision materials, laboratories, adequate classes, lab chemicals, projectors, computers, internet routers and many other resources that enhance teaching and learning. 96 percent of the CSOs indicated that junior schools do not have enough teachers to teach all the learning areas. They also indicated that the junior schools do not have adequate resources to effectively implement the CBE. 4 Percent of the CSOs indicated that few schools had enough resources and enough junior school teachers.

CONCLUSIONS

From the findings of this study, it can be concluded that most of the public junior schools in Makueni County have inadequate resources which include science laboratories, chairs, tables, internet connectivity, swimming pools, music and art studio, laptops, computers, revision materials and printers to help teachers effectively implement the competence based education.

Study recommendations and Suggestions

1. Schools should be provided with essential infrastructure and learning resources including smartphones, projectors, laptops, computers, science labs and reliable internet connections to enable teachers to implement CBE curriculum effectively.
2. The ministry of Education and Teachers Service Commission should ensure regular in-service training, workshops and seminars for teachers to enhance their pedagogical skills, competences and knowledge in areas like ICT integration, assessment and creative art/sports activities.

3. The government and the Teachers Service Commission need to recruit more teachers to address existing staffing shortages and manage large class sizes, ensuring an appropriate teacher-to-pupil ratio for effective, learner-centered instruction.
4. The ministry of education in collaboration with other stakeholders should work towards a more equitable distribution of resources and infrastructure across all public school, particularly those in rural areas which were found to be more disadvantaged.
5. Awareness campaigns should be conducted to sensitize all stakeholders, including parents and school management bodies, about the importance of their participation and contribution to providing adequate resources and infrastructure for the successful implementation of CBE.
6. School heads should use available funds to develop and upgrade educational facilities, including classrooms, laboratories and sanitary facilities, to create conducive and safe learning environment for all learners.
7. The study recommends that similar research to replicate in other regions of Kenya to allow for the generalization of the findings and to better understand the national status of CBE implementation preparedness.

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