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# Influence of Primary Schools' Infrastructure on the Implementation of Competency Based Curriculum: A Case of Bomet Central Sub-County, Kenya

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Abstract: Competency-Based Curriculum (CBC) is an educational approach that focuses on developing specific knowledge, skills, and attitudes among learners. The implementation of CBC in Kenya has been a major focus in the country's education sector in recent years. This paper investigated the influence of primary schools' infrastructure in the implementation of CBC in Bomet Central Sub County. The study targeted 124 respondents comprising of teachers, Board of management and curriculum support staff. The sample size of this study was 95 respondents achieved using Yamane (1967) formula. Descriptive survey design was used and data was collected datausing questionnaires and interviews. Quantitative datawas analyzed using descriptive statistics in the form of frequencies and percentages, whereas qualitative data was analyzed using thematic and sub-thematic content analysis. The study found out that 53.7% of the schools had 11 -15 classrooms. In addition, 86.3% of the schools lacked ICT laboratories and had no access to ICT facilities. Similarly, 82.1% of the schools lacked functional libraries hindering the effective implementation of CBC. Furthermore, 70.5% of the schools had playgrounds but lacked play materials and equipment for their learners. It was concluded that most of the schools had partially implemented CBC. It was recommended that the Ministry of Education needs to provide adequate resources and continuously train teachers for effective implementation of CBC. The findings of this study will provide insights into the role of infrastructure in the successful implementation of CBC and inform recommendations for improving the infrastructure in primary schools.

Keywords: Schools, Infrastructure, Implementation, Competency Based Curriculum, Classrooms

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### 1. Introduction

Competency-Based Curriculum (CBC) is an educational approach that focuses on developing specific knowledge, skills, and attitudes (competencies) among learners (Altbach, 2020). The main goal of CBC is to prepare learners for the challenges of the 21st century, by providing them with the competencies they need to succeed in their personal and professional lives (Huang, & Sun, 2020). CBC is designed to be more learner-centered, with a focus on developing competencies that are relevant and applicable to real-world situations. It involves a shift from

a traditional, content-focused curriculum, to one that emphasizes the acquisition of competencies, such as critical thinking, problem-solving, communication, collaboration, and creativity (Kim & Kwon, 2021).

CBC typically involves a process of identifying key competencies and then designing learning experiences and assessments that are aligned with these competencies. It also involves ongoing monitoring and evaluation to ensure that learners are making progress towards developing the desired competencies. CBC is being implemented in several countries around the world, including Kenya, India, China, and Korea (Huang & Sun, 2020). While there are

challenges associated with implementing CBC, such as teacher readiness, curriculum alignment, and assessment, research suggests that it has the potential to improve learning outcomes and better prepare learners for the challenges of the 21st century (McKenzie & Cameron, 2021).

Infrastructure refers to the physical structures and facilities that support the delivery of education services, including classrooms, libraries, laboratories, and playgrounds. A well-equipped and maintained infrastructure is critical in providing an enabling environment for effective learning and implementation of CBC. According to a recent study by Wainaina et al. (2021), the size and design of classrooms can significantly affect the implementation of CBC. The study found that overcrowded classrooms and poorly designed spaces negatively impact the delivery of CBC. Overcrowding limits the ability of teachers to effectively engage with individual learners, while poorly designed spaces limit the ability of learners to interact with learning resources and engage in group activities.

### 2. Literature Review

The implementation of a competency-based curriculum (CBC) in Kenya has been a major focus in the country's education sector in recent years. While there are many factors that contribute to the success or failure of CBC, the infrastructure of primary schools is an important aspect that cannot be overlooked (Kigwilu, & Akala, 2017). With the introduction of CBC, there was need for more classroom space to accommodate smaller class sizes and to support the use of learner-centered teaching methods (Muriungi & Gachago, 2021). However, many schools in Kenya and particularly Bomet Central Sub-County have limited classroom space, which can affect the quality of learning and teaching. In addition, the implementation of CBC requires adequate learning resources, such as textbooks, reference materials, and technology. However, many schools in the study area lack these resources, which can limit the effectiveness of teaching and learning and create inequality among learners. Furthermore, the availability of clean water and sanitation facilities is critical in ensuring a healthy and conducive learning environment. However, many schools, particularly in Bomet Central Sub-County lack proper sanitation facilities, such as toilets and handwashing stations, which can affect the health and hygiene of learners and teachers. Thus, the current paper investigated the influence of primary schools' infrastructure on the implementation of competency-based curriculum: a case of Bomet Central Sub-County, Kenya.

Kigwilu and Akala (2017) conducted a study on the use of resources in curriculum implementation and found that the instructional materials were poor. These featured classrooms, workshops, and raw supplies for experimental

instruction. Despite being adequate, the reference books were still insufficient. Despite the lack of appropriate libraries, playing fields, and textbooks, local businesses have signed co-sharing agreements with associated educational institutions to share equipment. Ashiono (2018) carried out a study examining the factors that enhanced or hindered teachers' use of ICT in teaching numeracy skills. The findings of this study revealed that 4% of teachers used ICT regularly to teach numeracy concepts. This study concluded that the teachers' use of ICT in teaching numeracy concepts was inadequate in lower primary schools. Similarly, Ngeno, Sang, and Chemosit (2020) carried out a study on selected primary schools on teacher computer literacy in Ainamoi Sub-County, Kericho County, Kenya. It demonstrated that the training of computer teachers that was completed in May 2015 did not appeal to all the teachers in the sector. The explanation was that headteachers and each school had two lower primary teachers who were ICT compliant.

The availability of learning resources such as textbooks, computers, and other digital resources is critical in the implementation of CBC. According to Mwenda and Kihoro (2021), the lack of access to these resources is a major challenge facing many primary schools in Kenya. This lack of access limits the ability of teachers to effectively implement CBC and hinders the ability of learners to acquire the necessary competencies. Sanitation facilities are critical in providing a conducive learning environment. According to a recent study by Ouma et al., (2021), poor sanitation facilities, such as inadequate toilets and poor water supply, negatively impact the implementation of CBC. These facilities are essential in ensuring that learners can remain in school for longer periods and have access to clean water for drinking and washing hands.

The availability of electricity is critical in supporting the use of digital resources such as computers and projectors. However, according to a study by Orodho et al. (2021), many primary schools in Kenya lack access to electricity, which limits the ability of teachers to effectively implement CBC. The quality of school buildings can affect the overall learning environment and the safety of learners. A study by Muchiri et al., (2021) found that poor quality school buildings, such as those with leaking roofs or walls, negatively impact the implementation of CBC. These buildings can pose safety hazards and distract learners from focusing on their studies. CBC under 2.6.3.3, was unveiled in 2017 to replace the 8.4.4, which served Kenya for 32 years. The introduction of 2.6.3.3 has received a lot of attention and provides an opportunity for us to reflect on the end of an era in Kenya's education. When ranking and cutthroat competition has been at the center of the sector.

The anxiety that parents and children experienced in the past was too much. This was due to cheating. There were a

lot of issues that surrounded 8.4.4, which included production of half-baked graduates, cramming of concept rather than understanding. The education became exam based. At this time that is when the stakeholders saw the need of having CBC curriculum which will at least produce a holistic learning in which learners are spared the pressure that comes with national exams which bring about stiff and unhealthy competition. When all these happened, CBC was the only piloted in 2015 and rolled out in 2017.

It was until 2021 when confusion started in terms of hosting of junior secondary and first JSS was supposed to be hosted in secondary schools. The Ministry of Education went ahead and started construction of JSS classes in secondary schools. The Ministry of Education was so fast to even commission some of these classes. The parents and stake holders started having issues due to the age of these pupils proceeding to secondary schools; double intake also in secondary schools was another issue the Ministry of Education was struggling with. This also became an issue until president gave it some attention hence forming a presidential working commission on education among others, to look at where junior secondary school will be hosted is it primary or secondary. The current paper thus, assessed the influence of primary schools' infrastructure on

the implementation of competency-based curriculum in Bomet Central Sub-County, Kenya.

### 3. Methodology

The study was carried out in Bomet Central Sub-County. This study used descriptive research design; thus, data were collected from the population at a single point in time as pointed out by Wang and Cheng (2020). This approach was considered ideal for this study since it requires direct responses from study participants while studying current phenomena without changing the variables. Participants can also describe and share their ideas on the topics under consideration in greater detail. The target population for this study were teachers, Board of management and curriculum support staff. The study involved respondents who had worked in primary schools for between three months and seven years as they represented the most recent group that was exposed to the implementation of CBC curriculum and were within the study range. The target population was comprised of 124 respondents. The sample size was determined using the Yamane (1967) sample determination formula:

$$n = \frac{N}{K + N(e)}$$

$$Where:$$

$$n = Sample size$$

$$N = Study Population$$

$$K = constant (1)$$

$$e = Margin error (95\% confidence level and 0.05 are assumed).$$

$$n = \frac{124}{1 + 124(0.05)^2}$$

$$= 94.7$$

$$= 95 \text{ respondents}$$

The study employed simple random sampling and purposive sampling techniques to collect samples. The research employed a simple random sampling technique by generating a sampling list of all the respondents. Simple random sampling is a technique that selects samples without bias from a selected accessible population (Oso & Onen, 2011). The study used simple random sampling to ensure that every person in Sub-County had an equal and independent chance of representation (Oso & Onen, 2011). The researcher purposively involved curriculum support staff who had been involved in the implementation of CBC in the county for more than three months and less than seven years. This study used questionnaires and interviews to collect both quantitative and qualitative data. Validity of the instruments was ensured through consulting experts I the field of curriculum implementation while reliability was ensured by calculating Cronbach Alpha coefficient and piloting of the research instruments. Quantitative data was

analyzed using descriptive statistics in the form of percentages, means, and standard deviations, whereas qualitative data was analyzed using thematic and subthematic content analysis. The analyzed data was interpreted and presented in tables and figures.

### 4. Results and Discussion

### **4.1 Influence of Classroom Facilities on the Implementation of CBC**

The first aim of this paper was to determine the influence of classroom facilities in primary schools on the implementation of CBC in Bomet Central Sub-County. To achieve this objective, the study participants were first asked to indicate the number of classrooms available in their schools. Their responses were tabulated and the results are presented in Table 1.

Table 1: Number of classrooms available in Primary schools

Number of classrooms	Frequency	Percentages
1 -5 Classrooms	4	4.2
6-10 classrooms	34	35.8
11 -15 classrooms	51	53.7
More than 15	6	6.3
Total	95	100.0

Table 1 shows that 51(53.7%) respondents indicated that their schools had 11 -15 classrooms, 34(35.8%) respondents indicated that their schools had 6 -10 classrooms and 6(6.3%) respondents reported that their schools had more than 15 classrooms, while 4 (4.2%) respondents indicated that their schools had 1 -5 classrooms. The study found out that majority, (53.7%), of the schools had 11 -15 classrooms. The availability of school resources, including the number of classrooms, is positively associated with the effective implementation of

competency-based curriculum. Schools with more classrooms and better physical resources are more likely to implement the competency-based curriculum effectively (Amouzou & Adekunle, 2021). It is important for schools to ensure that they have sufficient resources to support the implementation of the competency-based curriculum.

In addition, the study participants were asked whether the classrooms in their schools were adequate. The results of the analysed information is presented in Figure 1.

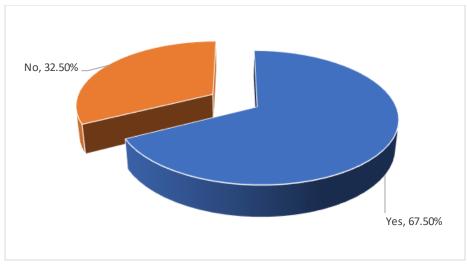


Figure 1: Adequacy of classrooms in Schools

Figure 1 shows that 67.5% of the respondents reported that classrooms were adequate in their schools while 32.5% respondents reported that classrooms were inadequate in their schools. From the responses, it can be deduced that majority (67.5%) of the schools in the study area had adequate classrooms. The adequacy of classrooms, including appropriate facilities, equipment, and size, is positively associated with the effective implementation of competency-based curriculum. Schools with adequate classrooms are more likely to implement the competency-

based curriculum effectively (Musa & Aliyu, 2021). It is important for schools to ensure that they have sufficient and appropriate classroom resources to support the implementation of the competency-based curriculum.

Further, the respondents were asked to indicate the proportion of classrooms which were equipped with adequate furniture for students. Their responses were tabulated and the results are presented in Table 2.

**Table 2: Adequacy of Furniture in Classrooms** 

Proportion	Frequency	Percentages
Less than 50%	16	16.8
50 -75%	57	60.0
More than 75%	22	23.2
Total	95	100.0

Source: Field Data, 2023

Table 2 shows that 57(60.0%) respondents indicated that 50-75% of their classrooms had adequate furniture for students, 23.2% respondents indicated that more than 75% of the classrooms in their schools had adequate furniture while 16.8% respondents indicated that less than 50% of their classrooms had adequate furniture. The study found out that 60% of the classrooms in the study area had adequate furniture for students. The adequacy and appropriateness of classroom furniture, including desks, chairs, and tables, are positively associated with the effective implementation of competency-based curriculum (Mungai & Rotich, 2022). Schools with adequate and appropriate furniture are more likely to implement competency-based curriculum effectively. It is important for schools to ensure that they have sufficient and

appropriate furniture resources to support the implementation of the competency-based curriculum.

## **4.2 Influence of Laboratories and ICT Infrastructure on the Implementation of CBC**

The second aim of this study was to determine the influence of laboratories and ICT infrastructure in primary schools on the implementation of CBC in Bomet Central Sub-County. To achieve this objective, the study participants were first asked to indicate whether they had ICT laboratories in their schools. Their responses are presented in Table 3.

Table 3: Availability of ICT Laboratories in Schools

Availability	Frequency	Percentages
Available	13	13.7
Not Available	82	86.3
Total	95	100.0

Source: Field Data, 2023

Table 3 shows that 86.3% of the schools in the study area lacked ICT laboratories while 13.7% had ICT laboratories. The study therefore deduced that majority (86.3%) of the schools in Bomet Central Sub- County lacked ICT laboratories. The availability of Information and Communication Technology (ICT) laboratories is an important factor in the effective implementation of competency-based curriculum. According to Oluoch, and Odundo, (2022), the availability and adequacy of ICT laboratories are positively associated with the effective implementation of competency-based curriculum. Schools

with adequate and functional ICT facilities, including ICT laboratories, are more likely to implement the competency-based curriculum effectively (Oketch & Mogere, 2021). It is important for schools to ensure that they have sufficient and appropriate ICT resources to support the implementation of the competency-based curriculum.

Further, the study participants were requested to indicate whether their schools had access to ICT facilities such as computers and internet. Their responses are provided in Table 4.

**Table 4: Access to ICT Facilities** 

Access to ICT facilities	Frequency	Percentages
Yes	22	23.2
No	73	76.8
Total	95	100.0

Table 4 shows that 76.8% of the study participants acknowledged that their schools had no access to ICT facilities while 23.2% respondents reported that their schools had access to ICT facilities. The study found out that a majority (76.8%) of the schools in Bomet Central Sub-County had no access to ICT facilities such as computers and internet. Access to ICT facilities is positively associated with the effective implementation of competency-based curriculum (Otieno & Odundo, 2021). Schools with adequate access to ICT facilities, including computers, internet access, and multimedia projectors, are more likely to implement the competency-based curriculum effectively (Alkandari, 2021). It is important for schools to ensure that they have sufficient and

appropriate ICT resources to support the implementation of the competency-based curriculum.

## **4.3 Influence of Libraries on the Implementation of CBC**

The third aim of this study was to establish the influence of libraries in primary schools towards the implementation of CBC in Bomet Central Sub-County. The study participants were thus asked to indicate the availability of functional libraries in their schools. Their responses were tabulated and the results are presented in Table 5

**Table 5: Availability of Functional Libraries** 

Availability of Libraries	Frequencies	Percentages
Available	17	17.9
Not Available	78	82.1
Total	95	100

Source: Field Data, 2023

Table 5 shows that 82.1% of the study participants acknowledged that their schools did not have functional libraries while only 17.9% of the study participants reported that their schools had functional libraries. From the responses it emerged that majority (82.1%) of the schools in Bomet central sub-county lacked functional libraries hindering the effective implementation of CBC. The availability of functional libraries in schools is an important factor in the effective implementation of competency-based curriculum. The availability of functional libraries in schools is positively associated with the effective implementation of competency-based curriculum (Ahmed, 2021). Schools with adequate and

functional library resources, including books, journals, and internet access, are more likely to implement the competency-based curriculum effectively (Kahoro, 2021). It is therefore important for schools to ensure that they have sufficient and appropriate library resources to support the implementation of the competency-based curriculum.

Further, the respondents were asked to indicate the adequacy of textbooks to learners in their schools. Their responses were tabulated and the results are presented in Figure 2.

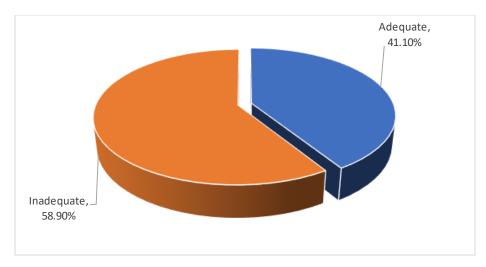


Figure 2: Adequacy of Textbooks to Pupils in Schools

Figure 2 shows that 58.9% of the respondents reported that their schools had inadequate textbooks for their pupils while 41.1% respondents acknowledged that their schools had adequate textbooks for their learners. The study found out that a majority (58.9%) of the schools in the study area had inadequate textbooks for their learners. The adequacy and appropriateness of textbooks, including up-to-date and relevant content, and sufficient copies, are positively associated with the effective implementation of competency-based curriculum. Schools with adequate and appropriate textbooks are more likely to implement the competency-based curriculum effectively (Wambua, 2021). It is important for schools to ensure that they have

sufficient and appropriate textbook resources to support the implementation of the competency-based curriculum.

## **4.4 Influence of Sporting Facilities on the Implementation of CBC**

The study also determined the influence of sporting facilities in primary schools towards the implementation of CBC in Bomet Central Sub-County. To achieve this objective, the study participants were requested to indicate whether their schools had playgrounds. The results of the analysed data is presented in Table 6.

Table 6: Availability of playgrounds in Schools

Availability of Playgrounds	Frequency	Percentages
Available	67	70.5
Not Available	28	29.5
Total	95	100.0

Source: Field Data, 2023

Table 6 shows that 70.5% of the schools in Bomet Central Sub County had playgrounds while 29.5% did not have any playgrounds. The study shows that majority (70.5%) of the schools in Bomet Central Sub-County had playgrounds for their learners. According to studies such as those of Nwosu, & Nweke (2021) and Olamijulo, & Sadiq, (2021) amongst other researchers, the availability of playgrounds in schools is positively associated with the effective implementation of competency-based curriculum. Schools with adequate and functional playgrounds are more likely to implement a

competency-based curriculum effectively. It is important for schools to ensure that they have sufficient and appropriate playgrounds to support the implementation of the competency-based curriculum.

Further, the study participants were requested to indicate the adequacy of play materials and equipment in their schools. The result of the analysed information is presented in Table 7.

Table 7: Adequacy of play materials and equipment in schools

Adequacy	Frequency	Percent
Adequate	9	9.5
Inadequate	86	90.5
Total	95	100.0

Source: Field Data, 2023

Table 7 shows that 90.5% respondents acknowledged that their schools had inadequate play materials and equipment while 9.5% respondents reported that their schools had adequate play materials and equipment. From the responses, it emerged that a majority (90.5%) of the schools in Bomet Central Sub-County had inadequate play materials and equipment for their learners. The inadequacy of play materials and equipment hinders the effective implementation of competency-based curriculum in schools since play is an important component in CBC. According to Ondieki, and Masese (2021) the availability of play materials and equipment in schools positively influences the effective implementation of competencybased curriculum. Thus, schools with sufficient and appropriate play materials and equipment are more likely implement the competency-based curriculum effectively. It is important for schools to ensure that they have a variety of play materials and equipment, such as blocks, puzzles, and sensory materials, to support the implementation of the competency-based curriculum.

### 5. Conclusion and Recommendations

### 5.1 Conclusions

The following are the conclusions of this paper:

- The study concluded that most of the schools in Bomet Central sub-county had adequate number of classrooms and furniture for their students but had partially implemented CBC due to lack of lack of resources, lack of parental awareness, lack of training for teachers and limited time for effective implementation.
- It was further concluded that majority of the schools in Bomet Central Sub-county lacked ICT laboratories and had no access to ICT facilities such as computers and internet.
- 3. The study also concluded that majority of the schools in Bomet central sub-county lacked functional libraries and adequate textbooks hindering the effective implementation of CBC.
- 4. In addition, it was concluded that majority of the schools in Bomet Central Sub-County had playgrounds for their learners but lacked adequate play materials and equipment for their learners.

The inadequacy of play materials and equipment hinders the effective implementation of competency-based curriculum in schools since play is an important component in CBC.

### 5.2 Recommendations

The following are the recommendations of this study:

- The study recommended the Ministry of Education needs to provide schools with sufficient and appropriate ICT resources to support the implementation of the competencybased curriculum.
- The study further recommended that there is need for the Ministry of Education and other education stakeholders to ensure that schools have functional libraries with sufficient and appropriate textbook resources to support the implementation of the competency-based curriculum.
- 3. There is need for schools to acquire adequate play materials for effective implementation of CBC since play is an important component in CBC.
- The Ministry of Education needs to provide continuous professional development to teachers to ensure effective implementation of the program.

### References

Ahmed, A. (2021). Role of school libraries in the implementation of competency-based curriculum in secondary schools in Somalia. *International Journal of Information Science and Education*, 11(1), 17-26.

Akpomi, M.E. & Raji, T.M. (2022). Influence of school facilities provision on students 'academic performance in senior secondary schools in Port-Harcourt Metropolis. *International Journal of Social Sciences and Management studies 1*(1),97-113

Alkandari, A. A. (2021). The role of access to ICT facilities in implementing the competency-based curriculum in Kuwaiti public schools. *Journal of* 

- Educational and Psychological Sciences, 22(78), 30-44.
- Alqurashi, E. (2021). Gender differences in the implementation of competency-based education: a systematic review. *Journal of Education and Learning*, 10(1), 181-193.
- Altbach, P. G. (2020). Competency-Based Curriculum and the Future of Higher Education. *International Higher Education*, (99), 21-23.
- Amouzou, K., & Adekunle, A. A. (2021). The impact of school resources on the implementation of competency-based curriculum in Togo. *Journal of Education and Practice*, 12(2), 1-11.
- Ashiono, B. (2018). Determinants of Information and Communication Technology Integration in Learning of Numeracy Concepts in Lower Primary Schools in Mombasa County, Kenya. Unpublished thesis, Kenyatta University.
- Chepkoech, M., Chepkwony, M., &Mugo, J. (2021). Influence of school infrastructure on teachers' job satisfaction in primary schools in Kenya. *International Journal of Research and Innovation in Social Science*, 5(1), 103-108.
- Chuang, T. Y., Lin, Y. Y., & Wu, Y. T. (2020). Social learning and the development of competencies in the digital age. *Journal of Educational Technology & Society*, 23(3), 36-46.
- Hossain, M. M., & Zaman, R. (2021). The impact of teaching experience on the implementation of competency-based curriculum in Bangladesh. *International Journal of Education and Research*, 9(4), 119-128.
- Huang, R., & Sun, Y. (2020). A Comparative Study of Competency-Based Curriculum in China and the United States. *Journal of Higher Education Policy and Management*, 42(1), 34-47.
- Jadhav, M. S., & Patankar, P. (2013). Role of Teachers in Curriculum Development for Teacher Education. Paper Presented on the National Conference, Challenges in Teacher Education, Physical Education and Sports: Teachers as Curriculum Developers
- Jato, M., Ogunniyi, S.O. & Olubiyo, P.O. (2014) Study habits, use of school libraries and students' academic performance in selected secondary schools in Ondo West Local Government Area of

- Ondo State. *International Journal of Library and Information Science*, 6(4), 57-64
- Kagiri, E. (2021). Challenges Facing the Competency-Based Curriculum (CBC) Implementation in Kenya. Retrieved from https://educationnewshub.co.ke/challengesfacing-the-competency-based-curriculum-cbcimplementation-in-kenya/
- Kahoro, G. W. (2021). The influence of library resources on the implementation of competency-based curriculum in public secondary schools in Thika, Kenya. *International Journal of Information Science and Education*, 11(1), 27-36.
- Kigwilu, P. C., & Akala, W. J. (2017). Resource utilisation and curriculum implementation in community colleges in Kenya. *International Journal for Research in Vocational Education and Training (IJRVET)*, 4(4), 369-381.
- Kigwilu, P. C., & Akala, W. J. (2017). Resource utilisation and curriculum implementation in community colleges in Kenya. *International Journal for Research in Vocational Education and Training* (*IJRVET*), 4(4), 369-381.
- Kim, M. K., Lee, K. H., & Lee, M. H. (2020). The effect of teacher age and teaching experience on the implementation of the competency-based curriculum in South Korea. *Education Sciences*, 10(5), 114.
- Kim, S. H., & Kwon, S. H. (2021). Understanding Teachers' Perspectives on the Implementation of Competency-Based Curriculum in Korea. Asia Pacific. *Education Review*, 22(1), 91-100.
- McKenzie, S., & Cameron, M. (2021). Shaping a Competency-Based Curriculum for Problem-Based Learning in Health Professions Education: A Scoping Review. *Medical Teacher*, 43(6), 633-644.
- Ministry of Education. (2022). *The Basic Education Curriculum Framework*. Nairobi: Government Printer.
- Muchiri, J. W., Kithinji, E. G., & Mwangi, L. (2021). Effect of school facilities on academic performance of pupils in Kenya. *Journal of Education and Practice*, 12(5), 123-129.

- Mungai, L. N., & Rotich, J. K. (2022). Effect of classroom furniture adequacy on implementation of competency-based curriculum in public primary schools in Kenya. *International Journal of Education and Research*, 10(1), 1-14.
- Muriungi, P., & Gachago, D. (2021). Implementation of Competency-Based Curriculum (CBC) in Kenya: Challenges and Prospects. *Journal of Education* and Practice, 12(4), 128-136.
- Musa, A. B., & Aliyu, A. (2021). Classroom adequacy and the implementation of competency-based curriculum in Nigeria. *International Journal of Education and Research*, 9(4), 93-100.
- Mwenda, A., & Kihoro, J. M. (2021). Challenges facing implementation of the competency-based curriculum in Kenyan primary schools: a review of literature. *Journal of Education and Practice*, 12(10), 19-24.
- Ngeno, B. C., Sang, H. C., & Chemosit, C. (2020). Teachers' Computer Literacy in Selected Public Primary Schools in Ainamoi Sub-County in Kericho County, Kenya. East African Journal of Education Studies, 2(1), 1-7.
- Nturibi, P. R. (2015). Influence of School Infrastructure on Academic Performance in Public Primary Schools in Ruiri Location-Meru County, Kenya. Unpublished Master Thesis. University of Nairobi
- Nwosu, C. L., & Nweke, F. N. (2021). Role of playgrounds in the implementation of competency-based curriculum in primary schools in Anambra State, Nigeria. *Journal of Education and Practice*, 12(25), 118-125.
- Oketch, B. O., & Mogere, J. W. (2021). Availability and utilization of ICT facilities and the implementation of competency-based curriculum in public primary schools in Kenya. *International Journal of Education and Research*, 9(3), 193-208.
- Olamijulo, S. K., & Sadiq, A. S. (2021). The role of playgrounds in the implementation of competency-based curriculum in public primary schools in Lagos, Nigeria. *Journal of Education and Practice*, 12(24), 112-118.
- Oluoch, C. B., & Odundo, P. A. (2022). Effect of ICT laboratory availability on implementation of competency-based curriculum in public

- secondary schools in Kenya. *Journal of Education and Practice*, 13(1), 1-9.
- Ondieki, J. M., & Masese, M. N. (2021). The influence of play materials and equipment on the implementation of competency-based curriculum in early childhood development centers in Kenya. *International Journal of Education and Practice*, 11(4), 1-11.
- Ondimu, S.M. (2015). Teacher preparedness for implementation of competence-based curriculum in private pre-schools in Dagoreti North Sub-County, Nairobi County, Kenya. Unpublished Master's Thesis, University of Nairobi, Kenya.
- Onuoah, P. (2013). The use of school library resources in Ogun State secondary schools: A study of selected secondary schools in Ijebu North LGA, Nigeria. *Journal of Research in Education and Society*, 2(1), 113 121.
- Orodho, J. A., Langat, J. K., &Kimutai, C. K. (2021). Effects of the digital literacy programme on teachers' competency in the implementation of the competency-based curriculum in Kenya. *Journal of Education and Practice*, 12(10), 74-81.
- Oso, W. Y., & Onen, D. (2011). Writing Research Proposal and Report: A Handbook for Beginning Researchers, Rsvd edn. *Nairobi-Kenya: The Jomo Kenyatta Foundation*.
- Otieno, F. O., & Odundo, P. A. (2021). Access to ICT facilities and implementation of competency-based curriculum in public secondary schools in Kisumu County, Kenya. *Journal of Education and Practice*, 12(23), 59-66.
- Ouma, J. A., Okere, M. I., Oduma, E. B., & Ombaba, K. (2021). Assessment of infrastructure and sanitation facilities and their effect on pupils' academic performance in public primary schools in Mbita Sub-County, Homa Bay County, Kenya. *International Journal of Education and Research*, 9(2), 185-196.
- Rehman, S. U., & Rahman, S. U. (2021). Parental and teacher support for the implementation of competency-based curriculum in Pakistan. *Journal of Education and Practice*, 12(17), 81-89.
- Sharma, R. (2021). The impact of teacher education level on the implementation of competency-based

- curriculum in Nepal. *Journal of Education and Practice*, 12(6), 10-17.
- Wainaina, M. G., Wanjohi, J. N., &Njiru, J. N. (2021). Influence of classroom design and space on implementation of competency-based curriculum in public primary schools in Kenya. *Journal of Education and Practice*, *12*(11), 11-19.
- Wambua, P. M. (2021). The impact of textbook adequacy on the implementation of competency-based curriculum in public primary schools in Kenya. *International Journal of Education and Research*, 9(3), 37-50.