

Availability and Use of Instructional Resources on the Implementation of the Competency-Based Curriculum by Grades 1, 2 and 3 in Public Primary Schools in Migori County, Kenya

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Abstract

The twenty-first century has resulted in many challenges for educational systems. One such challenge is integrating learning experiences in educational institutions with practical realities and requirements. Implementing Competency-Based Curriculum (CBC) models for various disciplines would reduce the gap between theoretical knowledge acquired in the educational system and expenses needed in the labor market. This study, therefore, sought to establish the effect of availability and use of instructional resources on the implementation of the competency-based curriculum by grades 1, 2 and 3 teachers in public primary schools in Migori County. A descriptive survey design methodology was adopted. The study targeted 604 head-teachers, 1812 grade 1-3 teachers, and 8 sub-county quality assurance and standards officers from all the Sub-counties in Migori County. The sample size for the study was 180 head teachers, 8 Sub County Quality Assurance Officers (SQAOs), and 544 grade 1-3 teachers. The researcher used 30 percent to get a sample size for 180 out of 604 head-teachers and grade 1-3 teachers respectively and saturated sampling, 100 percent to include all the 8 SQAOs in the final sample resulting to a sample size of 732 out of the 2424. Questionnaires and interview schedules were used to collect data. The validity of the instrument was subjected to expert opinions; further the questionnaire was pre-tested for coherency and comprehensiveness. Reliability was tested using a questionnaire duly completed in a pilot study. Internal consistency was determined by Cronbach's Alpha Coefficient and it yielded reliability coefficient of 0.704, and 0.690 and 0.671 respectively for teachers and principals respectively. The study applied quantitative analysis techniques using descriptive and inferential statistics to analyze data. The research was carried out ethically. The findings showed a strong positive correlation significant at a 5% level of significance between the adequacy of the Teaching-Learning (T/L) resources and CBC implementation, as indicated by a Pearson's correlation coefficient of 0.593. The study recommended increase of number of CBC in-service training sessions and use more competent facilitators, mandatory training for all teachers. The findings will be used by national education managers, the principles in the county and county education officers, Boards of Management and the community. They will contribute to the existing knowledge on teachers' preparedness to implement a competency-based curriculum.

Keywords: Instructional resources implementation competency-based curriculum Kenya.

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BACKGROUND OF THE STUDY

In a study by Darling-Hammond, Weigel and Abebe (2010), the learners' achievement of knowledge, skills, and attitudes is directly proportional to teachers' preparedness. Teacher preparedness in terms of knowledge, attitude and skills will determine curriculum respectability. As elaborated by Gathin (2009), in the case where a country needs vast expansion and creation of competency-based skilled

human resources and an economy based society, education needs to be skilled-based, and teachers need to prepare well to implement a complex evolutionary and responsive learner-centered approach, teaching is a complex and multidimensional process that requires deep knowledge and understanding in a wide range of areas and the ability of the teacher to synthesize, integrate and apply the knowledge in different situations. The implementers of a curriculum ought to be thoroughly prepared through in-service seminars and

workshops. Sensitization will make teachers own the project and put full focus.

A sentiment supported by Gurney (2007) that teacher quality can be well understood by considering the relationship between teacher productivity and teacher training, including formal pre-service university education, in-service professional development, and informal training acquired through on the job experience, an idea that supports Kopelman, Gardberg and Brandwein (2011) who argue that under CBC teacher preparation impacts teachers with the right teaching skills and styles, materials use, teaching tools. This teacher, as a result, possesses practical knowledge on how to deliver the CBC curriculum. The competency-based curriculum has been significantly adopted by several countries worldwide in their education system. Countries such as the United States of America, Mexico, Australia, New Zealand, France, Hong Kong, and several African countries are some of the countries that have implemented CBC in their education system; each country has developed its learning outcomes and its methods of assessing student achievement to suit its own national needs (Atan, Azli, Rahman & Idrus, 2002). This was done to better prepare learners for the higher education demands and job market requirements in the 21st century, which appears as a worldwide trend in offering relevant skills that match employers' requirements. The desire to build up a scholarly society and the need to expand regional and global competition in the job markets has called for a move to a competency-based curriculum as the leading proclaim for innovation. Both at the system level and the level of the learning environment (Biemans, Nieuwenhuis, Poell, Mulder & Wesselink, 2004).

In America, Bristow and Patrick (2014) observed that the CBC concept moved to Western countries due to the economic recession caused by the widespread unemployment among the young people in the United States and the concern about low student achievement and poor quality of teacher training which promoted a need to structure the outcome learning in a manner that will encourage teachers to express their teaching objectives in terms of observable student behaviors. The main criticism was the education system, which was blamed for school graduates' low attainment of necessary skills. This has seen commendable progress in the American education system.

In 2009, Mexico began implementing competence-based curriculum approach through several reforms in basic education and national education policies in which competence was described as the application of skills, knowledge, values and attitudes. The competency-based approach was aimed at stimulating students to attain optimum academic performance. The acquired skills, values, attitudes, and knowledge were applied in day-to-day activities, and

learners were expected to reflect on their endeavors. Similarly, in Australia, the major key competence standards were introduced to give guidelines to schools and colleges about the skills and competency standards required by a country from the workforce. The intention was to make sure that colleges such as technical and further Education [TAFE] prepare their graduates with the skills needed to get jobs when they have completed their studies (Kopelman *et al.*, 2011).

Regarding Africa, when dealing with contribution of age on girl child academic performance in primary schools Achiyo and Yambo (2020) reiterated that adopting new ideas improves academic standards. Similarly, Cheptoo (2019) argues that CBC adoption in most African countries is an adjustment or similar model to developed countries. She explains that the implementation has either been imposed on the countries following government directives or due to the support from Western Non-Governmental Organizations. For instance, in East Africa, they had to sign the East Africa Harmonization policies that require the countries to adopt CBC. The researcher goes on to suggest that for the adoption of CBC to succeed in Africa, there is a need to look into African Communities' actual learning environment, financial ability, human resources, ability, philosophy, job market, needs, visions, the Africans still face diverse challenges ranging from infrastructure, resources, teachers' capabilities leadership and type of teachers' capabilities leadership and type of student's cohorts with classes building with learners' eager to learn. The study employed secondary data as a technique for collecting data. Secondary data through cost-effective and time-saving is usually general and not tailored specifically to meet the researcher's needs, and the data may also not be authentic. However, this study used the primary data collection method to fill the gap. As conceptualized by KICD (2018), competency is the ability to put into practice learning resources and outcomes adequately in education, work, and personal or professional development. A Competency-based curriculum is a curriculum that emphasizes what learners are expected to do rather than mainly emphasizing what they are expected to know. Ideally, such a curriculum is learner-centered and adaptive to the changing needs of the students, teachers, and society. It implies that learners can acquire and apply the knowledge, skills, attitudes, and values to solve situations they encounter in everyday life (IBE-UNESCO 2015). The work of Abebe (2012) outlined, the Competency-based curriculum is one where knowledge is constructed and not transmitted and prior knowledge impacts the learning process. It is a shift from the traditional input-driven learning, whose main focus was acquiring knowledge, to competency-based Education (Yambo 2012).

Instructional Resources Materials and Implementation of the Competency-Based Curriculum

Instructional materials are the basic channel of conveying information in the classroom for effective teaching and learning experience (Al-Awidi & Aldhafeeri 2017). According to Baumert *et al.*, (2010) it is intolerable to teach without teaching and learning resources; the teaching and learning resources help in catching learners' attention as well as sustaining their interest, and they also allow learners to discover themselves and their abilities, an opinion supported by Capper and Jamison (2013) who suggest that the use of instructional resources alongside with teacher's instruction, motivates the learners and makes them think critically during the manipulation and use of the teaching-learning resources, hence yielding success during classroom instruction.

There is a need to emphasize the correct use of multiple materials when describing and explaining a phenomenon during classroom instruction (Chandrasegaran, Treagust and Mocerino, 2007). The benefits of using instructional materials on students are enormous. Genlott and Gronlund (2013) hold that instructional materials, when used appropriately by teachers, enable students to develop a positive attitude, enjoy and appreciate their subject, develop functional knowledge and manipulative skills, visualize or experience something, facilitate different learning styles, stimulate learners' interest and curiosity, reduce verbalism or repetition and possess opportunities for individual study.

As Williams (2014) observed, a teacher who cannot communicate well cannot teach well. Teaching has to do with proper communication between students and teachers and is made concrete with teaching materials. Instructional materials compress and express information and make them more vivid to learners. According to Bogliaccini (2007), teachers in many countries experience many hurdles if there is a shortage of resources like textbooks, furniture and study materials. Learners' progress is hindered, and teachers struggle when changes are made to the curriculum without sufficient resources.

As Cohen, McCabe, Michelli and Pickeral, (2009) points out, there is a need to ensure that curriculum and assessment are aligned. Educators must consider developing appropriate instructional materials to support learning activities, including textbooks, workbooks, charts, three-dimensional models, simulations, puzzles, games, and many other items to achieve the alignment. In addition, teachers will need to be trained on how to use the new materials since the methodology of a competency-based curriculum requires shifting from teacher-centered to student-centered approaches.

Scholars like Okafor and Edet (2008) concurred that extensive use of texts, media, real-life materials, and others adapted to targeted competencies should be implored in teaching. In addition, he advocates using a variety of instructional techniques and group work. The CBC advocates the use of various methods in teaching. The central focus during teaching is the active participation of the learner. Therefore, learner-centered approaches should be implored by teachers.

Overall, the learner-centered approach is activity-based pedagogy that demands many instructional materials. Clerk (2003) agrees that teaching and learning materials are needed for an effective education system; they provide an easy way to help learners easily understand what they learn in class. The selection or development of any instructional resource should consider a given number of variables in the teaching/learning situations. The instructional objectives, content, evaluation instruments, the age, level, interest, background, learning style, physical skills, size of the target audience, the classroom social climate, sitting arrangement, viewing and listening arrangement, available time, and space are amongst other issues that should be seriously considered in the selection and development of instructional materials for use in lesson delivery (Oguntuase, Awe & Ajayi, 2013). The work of Yambo (2022a) emphasized that inadequate teaching and learning resources harm teacher success using sustainable instruction approaches.

Educational resource utilization is very important in curriculum implementation. Learning would be difficult to lead to a permanent change of behavior without adequate instructional materials in the teaching process. According to Musset (2016), implementing a curriculum requires trained teachers capable of delivering content with relevant and adequate educational materials. Instructional materials assist in this regard by engaging students in learning by doing as one of the best teaching methods. Students easily remember what they do and easily forget what they are told. Using teaching material during teaching appeals to more than one learner's sense. Hence learning is more meaningful with the use of multiple senses by the learner. Musset (2016) also observed that all lessons require good instructional materials to enhance student recall.

Furthermore, the absence of any material facility can constitute a big barrier to learning. Instructional materials can make communication effective and lead to a good performance of students. Eleweke and Rodda (2007) concurred that extensive use of textbooks, media and real-life materials and others adapted to targeted competencies should be implored in teaching. In addition, he advocates for using various instructional methods and group-work since a

competency-based curriculum requires multiple teaching methods.

Systematic integration of various resources in a teaching-learning process produces appropriate learning experiences, resulting in effective and meaningful learning. In line with this view, Igwe, Uzoka, and Ekwerike (2015) hold that curriculum materials are indispensable in the teaching-learning process. Unfortunately, he regrets the lack of instructional materials in most Nigerian secondary schools. As a result, teachers use the talk and chalk method. The scenario of talk and chalk seems to be the most prevalent method of teaching adopted by chemistry teachers, as observed by the researcher.

Despite the numerous benefits of using instructional materials, Okeke and Okoye (2013) hold that some problems inhibit the use of instructional materials. Some of the problems highlighted by these researchers include: inadequate teachers' professional knowledge and technical know-how, low teacher competence in the area of effective instructional resource utilization, insufficient awareness of types of instructional materials for use in teaching different contents, insufficient time allocation to accommodate effective instructional materials utilization, lack of finance to acquire or improvise needed instructional materials, no availability of equipped library, laboratories, workshops, water supply, electricity and personnel also affect effective utilization of instructional materials, lack of opportunities for in-service training/refresher course for serving teachers to update their knowledge periodically in the light of new research findings and resource development.

According to Uiseb (2007), the process of changing must be well resourced. The shortage of resources hurts teaching. Teachers cannot dispense information to learners if they do not have enough support materials to offer. The opinion put forward by Mulaudzi (2009) and Raselabe (2006), without appropriate resources like teachers' guides and learning materials, the anxiety and stress level of the teachers' increases. Due to that, teachers cannot implement the curriculum successfully in the classroom. Teachers who cannot access the necessary resources and materials feel completely ill-equipped, and they do not have the motivation to implement the newly introduced curriculum.

Researchers like Nyagiati and Yambo (2018) supported the work of Rwezaura (2016) who conducted a study on the challenges of implementing a competency-based curriculum in primary schools in

Kinondoni Municipality in Dar es Salaam, Tanzania. The study employed a descriptive research design and qualitative and quantitative research approach. The findings from this study revealed a lot of challenges in CBC implementation, including most teachers applying the traditional teacher-centered approach in teaching and learning like using lecture methods contrary to the competence-based curriculum, the persistence of inadequate textbooks to suit the learner centeredness approach and others. Teachers need to fully comprehend the curriculum as echoed by Yambo (2022b); Those challenges, among others, include limited understanding of CBC by teachers, limited participation of teachers in curriculum design, lack of quality textbooks and lack of motivation for teachers to implement the CBC. The study adopted a subjective philosophical outlook in selecting the research instruments. The current study filled the gap using both subjective and objective philosophical outlooks.

In their report, HakiElimu (2012) argued that there was a regular curriculum change without adequate preparations in terms of the teaching and learning process. According to most curriculum developers and the teachers, the implementers of the curriculum were rarely involved in the whole process. Moreover, frequent changes in the type of books students were supposed to read and the frequency of change in examination formats also affect students. The frequent change in curriculum hindered the Competence-based approach from being implemented.

RESEARCH METHODOLOGY

This study employed a descriptive survey research design. According to Kothari and Garg (2014), a research is descriptive when it is concerned with why and how a variable influence another variable and a survey if it uses questionnaires, interview guides, and checklists to collect data. Migori County has 604 primary schools. The target population of the study was 2,424 respondents consisting of 604 head teachers, 1812 grade 1-3 teachers and 8 Sub County Quality Assurance Officers (SQASO) in Migori County.

A sample design is a framework that serves as the base from which a researcher might be able to select a sample and other vital aspects of the study. According to Kothari (2004), sampling is when a relatively small number of individuals, objects, or events are selected and analyzed to determine description of the entire population from which it is selected. It usually is not possible to question every member of the target group, hence the need for sampling (Salkind, 2009).

Table 1: Target population, sampling technique, and respondents' Sample Size

Respondents	Target Population Size	Technique	Sample
Head teachers	604	30%	180
Grade 1-3 Teachers	1,812	30%	544
SQAOs	08	100%	08
Total	2,424		732

Source: Authors Data (2021)

The work of Best and Khan (2006); Bloomerge and Volpe (2008) agree that 30 percent is considerable and convenient; as represented in table 1, the researcher, therefore, used 30 percent to get a sample size for 180 out of 604 head-teachers and grade 1-3 teachers respectively and saturated sampling to include all the 8 SQASOs in the final sample resulting to a sample size of 732 out of the 2424.

Validity of the study was done by soliciting the experts' opinions, who were the supervisors from the department of curriculum, instruction and media in the school of education of Kisii University. Reliability of the instruments was addressed through piloting and test-retest in 5 schools and reliability coefficients obtained was 0.721 which indicated that the instruments were reliable. For social science research purposes, tests with reliability score of 0.7 and above are accepted as an indication of reliability (Kurpius & Stafford, 2006). Data was analyzed using both qualitative and quantitative methods. Qualitative data was analyzed using an ongoing process as themes and sub-themes

emerged. Quantitative data was analyzed using descriptive statistics.

RESULTS AND DISCUSSIONS

Availability and Adequacy of T/L Resources and Effective use of the T/L Resources

Responses on the availability and adequacy of T/L resources and effective use of T/L resources were collapsed to obtain a single index for each latent variable. The index for availability and adequacy of T/L resources ranged from 10 to 50, implying that a mean index of more than 30 would be taken to mean that the resources were available and adequate. In contrast, a mean index of less than 30 would imply that the resources available were inadequate, while a mean index of 10 would imply the resources were not available. The index for effective use of T/L resources ranged from 8 to 40. A mean index of more than 24 would imply that the grades 1, 2 and 3 teachers effectively used the available T/L resources. A mean index of less than 24 would imply that the teachers were not using the T/L resources effectively. Tables 2 present the results.

Table 2: Descriptive Statistics of Aggregated Variables (N=576)

	N	Min.	Max.	Mean		Std. Dev
				Statistics	SE	
Availability and adequacy of T/L resources (TLR1)	576	10.00	41.00	27.6372	.34207	8.20977
Effective use of T/L resources (TLR2)	576	8.00	32.00	24.3611	.33946	8.14701

The results presented in Table 2 show that availability and adequacy of T/L resources had a mean index of 27.6372 with a standard deviation of 8.20977. The mean was below 30 but above 20; hence, the resources available for use in grades 1, 2 and 3 in primary schools in Migori County were not adequate. Teachers' effective use of the available T/L resources had a mean index of 24.3611 with a standard deviation of 8.14701, indicating that the teachers were fairly effective in using the available T/L resources in advancing the key tenets of the competency-based curriculum. Sossion (2009), raises concern with such a

situation and affirms that is prudent to develop and improve the teaching learning materials to suit the teaching points.

Correlation Analysis of the Relationship between Teaching/Learning Resources and Implementation of CBC

The Pearson's Correlation analysis results between the implementation of the CBC curriculum, availability of T/L resources, adequacy of the T/L resources, and use of T/L resources are illustrated in Table 3.

Table 3: Pearson correlations between teaching/Learning Resources and Implementation of CBC (N=576)

	CBC IMPLEMENTATION	TLR1	TLR2
CBC IMPLEMENTATION	1		
TLR1	0.593**	1	
TLR2	0.690**	0.642**	1

** Correlation is significant at the 0.01 level (2-tailed).

The findings displayed in Table 3 show a strong positive correlation significant at a 5% level of significance between the adequacy of the T/L resources and CBC implementation, as indicated by a Pearson's correlation coefficient of 0.593. This indicated that the more adequate the T/L resources were, the better the teachers could implement the CBC curriculum. This finding concurs with those of Chemangosi (2020) who affirms that relevant teaching materials are a requisite for effective implementation of any curriculum, this is also supported by Urunana (2018). Who agrees that resources for teaching and learning are essential because they encourage students to actively participate in learning activities?

A strong positive correlation between the use of the available T/L resources and CBC implementation among the Grade 1,2 and 3 teachers was established as indicated by the positive Pearson's correlation coefficient value of 0.690 significant at a 5% level of significance. The positive correlation indicates that teachers who use available T/L resources were better placed to implement the varieties effectively than effective ones who did not put the available T/L resources to use. Hayes (2006) confirms that schools that have good and adequate instructional resources perform well, he agrees that availability of teaching and learning materials and effective use reflects on quality of teaching, because most of the resources play an important role in understanding of concepts and importing skills to the learner.

CONCLUSION

The objective of the study sought to establish the effect of T/L resources on implementing the competency-based curriculum in public primary schools in Migori County. Based on the study findings that showed that indicated that availability and use of the T/L resources had a significant effect on CBC implementation, the study found that primary schools in which the available T/L resources are adequate and are well used are in a better position to effectively carry out the CBC implementation activities than those in which the available T/L resources are not adequate and are not being put into use. This implies that the grades 1, 2 and 3 teachers who often used the available T/L resources were more effective in implementing the various CBC implementation activities than those who did not.

RECOMMENDATION

It is recommended that the TSC revise its CBC training policies to ensure more training sessions on integrating ICT into the CBC curriculum. These will equip the teachers with current ICT skills and techniques and how to incorporate them into teaching.

REFERENCES

- Abebe, M. G. (2012). Assessment of nutrition competency of graduating agriculture students in

Ethiopia: A cross-sectional study. *Journal of nutrition education and behavior*, 49(4), 312-320.

- Achiyo E. O. & Yambo, J M O. (2020). Contribution of age on girl child academic performance in Primary schools in Nyatike Sub-County, Migori County, Kenya. ISSN Print: 2708-5112 |ISSN Online : 2708-5120. *International Academic Journal of Education & Literature*, 1(5), 175-180.
- Al-Awidi, H., & Aldhafeeri, F. (2017). Teachers 'readiness to Implement Digital Curriculum In Kuwaiti Schools. *Journal of Information Technology Education*, 16(1), 67-78.
- Atan, H., Azli, N. A., Rahman, Z. A., & Idrus, R. M. (2002). Computers in Distance Education: gender differences in self-perceived computer competencies. *Journal of Educational Media*, 27(3), 123-135.
- Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., ... & Tsai, Y. M. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American educational research journal*, 47(1), 133-180.
- Best, W. J., & Kahn, V. J. (2006). *Research in Education*. Tenth Edit. Prentice-Hall. London
- Biemans, H., Nieuwenhuis, L., Poell, R., Mulder, M., & Wesselink, R. (2004). Competence-based VET in the Netherlands: Background and pitfalls. *Journal of vocational education and training*, 56(4), 523-538.
- Bloomberge L. D., & Volpe, M. (2008). *Completing Your Qualitative Dissertation: A Roadmap from beginning to end*. Sage Publishers, Thousand Oaks, California.
- Bogliaccini, J. A. (2007). *Primary education: changing mainstay of Uruguay*. In *International Handbook of Urban Education* (pp. 685-703). Springer, Dordrecht.
- Bristow, S., & Patrick, S. (2014). *An International Study in Competency Education: Postcards from Abroad* INACOL.
- Capper, C. & Jamison, M. (2013). Outcomes-Based Education Re-examined: from Structural Functionalism to Poststructuralism. *School Management and Organization*, 7(4), 427-447.
- Chemangosi, M. J. (2020). Teachers' preparedness on Implementation of Competency Based Curriculum in Lower Primary Schools in Kilifi and Nandi Counties, Kenya. *Journal of Scientific Research and Management*, 8(4), 1292-1309.
- Cheptoo, R. (2019). The 'Africanized' Competency Based Curriculum: The twenty-first Century Strides, *International Journal of Education*, 7(4), 17-18.
- Clerk, H. (2003). A realistic approach to the revitalization of teacher education. *Journal of Teacher Education*, 60(5), 234-261.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers college record*, 111(1), 180-213.
- Cohen, L. (2007). *Research Methods in Education*. London, Routledge.

- Darling-Hammond, L., Weigel, R. C., & Abebe, A. (2010). *How high-achieving countries develop great teachers*. Stanford Center for Opportunity Policy in Education.
- Eleweke, J., & Rodda, M. (2007). The Challenge of Enhancing Inclusive Education in Developing Countries. *International Journal on Inclusive Education*, 6(2), 113-126. Engelbrecht.
- Gathin. D. (2009). A pluralistic approach to the revitalization of teacher Education. *Journal of Teaching Education*, 60(5), 469-477.
- Genlott, A. A., & Gronlund, A. (2013). Improving Literary Skills Through Learning, Reading and Writing: The IWTR Method Presented and Tested, *Journal of Computer and Education* 6(7), 98-104.
- Gunby, J. D., & Schutz, P.A. (2016). Developing a mixed-method proposal. A practical guide for researchers. *American Educational Research Journal*. Sage Publications, Nov, 2016.
- Gurney, P. (2007). Five factors for effective teaching. *New Zealand Journal of teachers works*, 4(2), 89-98.
- HakiElimu. (2012). *Reflections on the implementation of the competence-based curriculum in Tanzanian secondary schools*. Moe:Tanzania
- Hasan, A., Khan, A. A., Mannan, M. A., Hipolito, C. N., Mohamed Sultan, N., Othman, A. K. H., ... & Abdul Wahab, N. (2017). *EDP Sciences: Les Ulis*, Pakistan.
- Hatmanto, E. D. (2011). Challenges in the Implementation of Competency –Based Curriculum in the English Language Teaching. In; *proceedings of TEFL conference, Seoul, South Korea*, 15 April, 2011. 10-13pp. IPPTN.
- Hayes, W. (2006). *The Progressive Education Movement. Is it a factor in today's schools?* Rowman & Littlefield Education.
- Hennessy, S., Harrison, D., &Wamakote, L. (2010). Teacher factors influencing classroom use of ICT in Sub-Saharan Africa. *Its pale online journal of African studies*, 2(1), 39-54.
- Heward, W. L. (2003). Ten faulty notions about teaching and learning that hinder the effectiveness of special education. *The journal of special education*, 36(4), 186-205.
- Higgins, J., & Moseley, D. (2011). Tumour regression and positional changes in non-small cell lung cancer during radical radiotherapy. *Journal of Thoracic Oncology*, 6(3), 531-536. [https:// en.m.wikipedia.org > wiki](https://en.m.wikipedia.org/wiki)
- Holden, M. T., & Lynch, P. (2004). Choosing the appropriate Methodology: Understanding research Philosophy. *The marketing review*, 4(4), 347-409.
- Hossain, D. (2004). Inclusive education: context Bangladesh. *Journal of the Faculty of Arts*, 6(1), 22-31.
- IBE- UNESCO (2015). *Re-positioning and Reconceptualising the curriculum to effectively realize SDG4, holistic development*, and sustainable ways of living. Geneva, Switzerland, IBE- UNESCO.
- IBE- UNESCO (2015). *What makes a good quality curriculum? In progress reflections No 2*. Geneva, Switzerland, IBE-UNESCO.
- IBE-UNESCO. (2010). *Training tools for curriculum Development, A research pack*, Geneva, Switzerland.
- Igwe, R. O., Uzoka, N. E., & Ekwerike, C. I. (2015). *Discourse: a modern strategy for effective teaching/learning in Lagos State*, Lagos, Nigeria.
- Isaboke, H., Mweru, M., & Wambiri, G. (2021). Teacher preparedness and implementation of CBC in public Pre-primary schools in Nairobi City County, Kenya. *International journal of current aspects*, 5(3), 32-53.
- K. I. C. D. (2018). *Report of Competency-Based Curriculum activities presented to the National steering committee*. K. I. C. D, Nairobi.
- K. I. C. D. (2018). *Factors Influencing Employees Job Satisfaction at the Kenya Institute of Curriculum Development*, Doctoral dissertation, University of Nairobi.
- Kafyulilo, A. C., Moses, I., & Rugambuka, I. B. (2012). The implementation of competency-based teaching approaches in Tanzania: The case of pre-service teachers at Morogoro teacher training college. *Journal of Education and General Studies*, 1(11), 339-347.
- Kaviti, L. (2018) The New Curriculum of Education in Kenya: A linguistic and Education Paradigm Shift. *Journal of Human and Social Sciences*, 23(10), 84-95.
- Kemboi, M., & Nabwire, V. (2017). Assessment Of Teacher Competence in Pedagogical Knowledge in The Implementation of Secondary School Curriculum in North Rift Region, Kenya. *International journal of education, learning and development*, 5(7), 31-43.
- Kenya National Bureau of Statistics. (2019). *Kenya Population and Housing Census Results. Government Printers*, Nairobi, Kenya.
- Kibria, G. (2005). Inclusion education and the developing countries: The case of Bangladesh. *The Journal of the International Association of Special Education*, 6(1), 43-47.
- KICD. (2017). *Facilitators Training Manual for Early Years Education (EYE) curriculum*. Nairobi Kenya.
- Kimosop, H. (2019). *Teacher Preparedness in the Implementation of Early Childhood Education Development Curriculum in Kenya: A Case of Baringo North Sub County*, Nairobi, Kenya.
- Kind, V. (2009). Pedagogical content knowledge in science education: perspectives and potential for progress. *Studies in science education*, 45(2), 169-204.
- Kochung, E. J. (2011). Role of Higher Education in Promoting Inclusive Education: Kenyan Perspective. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(3), 144-149.
- Komba, S. C., & Mwandangi, M. (2015). *Reflections on the implementation of the competence-based curriculum in Tanzanian secondary schools*. Mwanza, Tanzania
- Kombo, D., & Tromp, D. L. (2010). *Proposal and thesis writing; an introduction; 2nd reprint; Pauline Publication Africa*; Kenya.

- Kopelman, R. E., Gardberg, N. A., & Brandwein, A. C. (2011). Using a recognition and reward initiative to improve service quality: A quasi-experimental field study in a public higher education institution. *Public Personnel Management*, 40(2), 133-149.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International. London. New Delhi. India.
- Kothari, C., & Garg, G. (2014). *Research Methodology; Methods and strategy*. New Age International. New Delhi.
- Kurpius, S. E. R., & Stafford, M. E. (2006). *Testing and Measurement*. Thousand Oaks, Sage Publishers, New York. A case study of Uganda.
- Migori County Education Office. (2021). *Statistics of Primary School teachers in Migori County*. Migori, Kenya.
- Mulaudzi, N. O. (2009). *Implementation of the South African national curriculum: The educators' perspective*. In Deta 2009 Conference, Cape Coast, Ghana, August (pp. 3-6).
- Musset, P. (2010). *Initial Teacher Education and Continuing Training Policies in a comparative Perspective: Current practices in OECD Countries and a Literature Revision Potential Effects*. OECD Education Working Papers, No. 48, Paris: OECD Publishing.
- National Curriculum Development Commission. (2020). Kampala. Uganda.
- Nyagiati, N. A., & Yambo, J. M. O. (2018). Examination of Teachers' Attitude towards Open Performance Appraisal on Pupils' Academic Achievement in Public Primary Schools in Serengeti District, Tanzania. *Journal of Advances in Education and Philosophy*, 2(5) 358-366. ISSN 2523-2665 (Print) ISSN 2523-2223 (Online).
- OGUNTUASE, D. M, AWE, O. O., & AJAYI, I. A. (2013). EMPIRICAL NEXUS BETWEEN TEACHING/LEARNING RESOURCES AND ACADEMIC PERFORMANCE IN MATHEMATICS AMONG PRE-UNIVERSITY STUDENTS IN ILE-IFE, SOUTH-WEST NIGERIA. INTERNATIONAL. *JOURNAL OF SCIENTIFIC AND RESEARCH PUBLICATIONS*, 3(3), 1-6.
- OKAFOR, N., & EDET, I. (2008). TOWARDS ENHANCING INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) COMPLIANCE OF PRIMARY SCHOOL TEACHERS FOR EFFECTIVE TEACHING. *MSTA JOURNAL*, 1(1), 35-39.
- Okeke, S. O., & Okoye, N. E. (2013). Effective resource utilization: A better approach to teaching and learning Physics. *Academic Journal of Interdisciplinary Studies*, 2(6), 35-35.
- Raselabe, M. J. (2006). *Foundation phase educators' perception of curriculum 2005 in the Nzhelele West circuit*. (Doctoral dissertation, Stellenbosch: University of Stellenbosch).
- Rwezaura, P. P. (2016). *The Implementation of Competence-Based English Curriculum in Kinondoni Municipal Primary Schools*. (Doctoral dissertation, The Open University of Tanzania).
- Salkind, N. J. (2009). *Exploring Research*. London: Person Education International.
- Sifuna, D. N., & Obonyo, M. M. (2019). Competency-Based Curriculum in Primary Schools in Kenya- Prospects and Challenges of Implementation. *Journal of Popular Education in Africa*, 3(7), 39-50.
- Sossion, W. (2018). *The Daily Nation 22nd February 2018*, page 5 Nation Media House, Nairobi.
- UISEB, I. (2007). STRENGTHS AND WEAKNESSES OF THE PREVIOUS CENTURY INFLUENCING THE CURRICULUM REFORMS OF THE 21ST CENTURY. *PROGRESSIO*, 29(1-2), 69-82.
- URUNANA, R. W. (2018). *IMPLEMENTING COMPETENCY-BASED CURRICULUM. SUCCESS AND CHALLENGES*. KIGALI, RWANDA. ISSUE 006 JULY 2018.
- Williams, J. (2014). Teacher educator professional learning in the third space: Implications for identity and practice. *Journal of Teacher Education*, 65(4), 315-326.
- Yambo, J. M. O. (2012) *Determinants of KCSE Examination Performance in SDA Sponsored Schools: A Key to Academic Promotion to the next Level of Learning*. Lambert Academic Publishing. Saarbrücken, Germany.
- Yambo, J. M. O. (2022a). Involvement of Government and Non-Governmental Organisations' Teamwork in the Advancement of Quality Education in Kisumu West Sub County, Kenya. *Journal of Advances in Education and Philosophy*, 6(4), 194-202. DOI: 10.36348/jaep.2022.v06i04.001
- Yambo, J. M. O. (2022b). Influence of the Principals' Decision Making Skills on Students' Academic Outcome in Public Teacher Training Colleges in Nyanza Region, Kenya. *Journal of Research Innovation and Implementation in Education*, 6(3) 136-144. ISSN 2520-7504 (Online).