

ENHANCING COMPETENCY-BASED EDUCATION LEARNING MATERIALS FOR
ACCOMMODATING LEARNERS WITH DISABILITIES IN EARLY CHILDHOOD
DEVELOPMENT EDUCATION IN KITUI COUNTY, KENYA

¹ Pius Ilava Kathyaka & ² Jane Njoroge, PhD

^{1,2} Department of Public Policy and Administration, Kenyatta University, Nairobi, Kenya

Accepted: October 5, 2025

ABSTRACT

This study examined the accessibility of CBE learning materials for accommodating LWD in ECDE. It focused on schools with ECDE and SNUs within Kitui county, specifically in Mwingi West, Mwingi Central, and Kitui West sub-counties. The study was guided by the Universal Design for Learning Theory and adopted a descriptive research design. The target population comprised 94 persons, including 40 ECDE Teachers, 25 Head teachers, 25 SNUs Parent Representatives, 1 County Special Needs Education Officer, and 3 Curriculum Support Officers (CSOs). Purposive sampling and stratified random sampling techniques were used to select a sample size of 76 respondents. The instruments for data collection were questionnaires and interview guides. Quantitative data analysis was conducted through descriptive statistics, and presented in frequency tables, while qualitative data was analysed through themes and presented in narrative form. Cronbach's Alpha coefficient, that resulted in $r = 0.76$, was applied to determine the reliability and validity of the research instruments. The study established that the accessibility of CBE learning material was a critical challenge hindering the accommodation of LWD. Half of the participants (50%) suggested that they lacked adequate skills to utilize adapted learning materials, while 48% attributed the lack of access to insufficient assistive technologies. However, 58% of the respondents considered current CBE learning materials to be sufficiently modified to cater to LWD educational requirements. Furthermore, 36% of the respondents rated the state and usefulness of learning materials as somewhat satisfactory. Additionally, 70% moderately agreed that CBE learning materials were frequently used during instruction, while 68% moderately believed that these materials supported the active participation of LWD in classroom activities. The study recommended that the Ministry of Education and County governments, in conjunction with the Kenya Institute of Curriculum Development and the Teachers Service Commission, allocate adequate funds to facilitate the development and provision of adapted CBE learning materials. It should also implement continuous professional development programs to enhance the competencies of educators in the effective utilization of both adapted materials and assistive technologies. Besides, it should establish a feedback system where educators can indicate the usability and effectiveness of CBE learning materials to ensure continuous improvement and facilitate relevant and inclusive materials.

Key Words. Competency-Based Education, Inclusive Learning Materials, Accommodation, Learners With Disabilities, Early Childhood Development Education

INTRODUCTION

Across the globe, education systems strive to ensure equal learning opportunities. Achieving that is possible only with a well-formulated framework flexible enough to accommodate learners' differences (Ruth & Ramadas, 2019). As the world evolves, so should the education system develop to adapt to the changing demands. Most nations are shifting from subject-centered learning to Competency-Based Education (Kilile, Mwalw'a & Nduku, 2019). A Competency-Based Education (CBE) aims to develop learners' abilities to apply what is learnt in real-life situations (Masika, 2020). In this regard, a student is termed competent when he or she possesses specific knowledge and or skills needed to effectively perform real-world tasks or solve complex life situations (Ruth & Ramadas, 2019). It is from this reason and the need to satisfy modern employment requirements, among other factors, that most African nations, including Tanzania, South Africa, and Kenya, have shifted to CBE (Ruth & Ramadas, 2019; Masika, 2020).

Inclusivity is one guiding principle that CBE represents. As such, the system seeks to provide a learning environment that accommodates all learners regardless of their diverse backgrounds (Mwang'ombe, 2021). Such include Learners with Disabilities (LWD) and other special needs. Evidences from nations like the United States and Finland demonstrate that inclusivity is achievable (Muchira, Morris, Wawire, & Oh, 2023). These nations have successfully implemented stringent inclusive practices and policies that facilitate the successful integration of LWD into regular classrooms (Muchira *et al.*, 2023).

In Kenya, the journey towards competency-based approach to education began in 2017 when the Ministry of Education shifted 8-4-4 system into Competency Based Curriculum (CBC). The goal was to implement a learning framework that would emphasize on skills and nature talents instead of content memorization and passing exams (Masika, 2020). Later, in 2024, the government reformed CBC to CBE to accommodate the stakeholders' recommendations and address the issues encountered during the initial stages of CBC implementation (Wanjau, 2025). In contrast to CBC, where the main emphasis was on curriculum content, CBE represents a broader shift towards a more holistic educational system that focuses on instructional approaches, learner support, and competency-based evaluation (Ngure, 2025). However, controversies persist regarding the nation's preparedness and resource capacity for successful CBE implementation (Mwang'ombe, 2021).

Many ECDE centers and SNUs particularly in Kenya rural areas are faced with the challenge of inadequate resources that hinder inclusivity (Murithi, 2016). In Kitui County for instance, Kimanzi (2024) notes that the limited accessibility of learning materials alongside inadequate assistive technologies remains a major constraint affecting Special needs learners accommodation. Inadequate and poorly adapted learning materials according to Cheruiyot, (2024), undermine inclusive educational efforts. Such barriers contribute to low retention and poor transition rates among LWD in Kenyan schools (Kimanzi, 2024). This underscores the central concern of the present study, which investigates extent to which CBE inclusive learning materials are accessible for accommodating LWD at the ECDE level. By focusing on Kitui County as the study area, the study aimed to bring out a clear understanding of challenges prevailing at the local level that limit the accessibility of inclusive CBE learning materials. The findings from this study would inspire interventions to enhance the LWD accommodation under CBE.

Accommodation of Learners with Disabilities in ECDE

Access to education for learners with disabilities (LWD) is a fundamental human right recognized worldwide. It is from this understanding that many nations have established systems and policies that ensure inclusive education. The 1994 Salamanca Statement mandated the same education for all children providing additional assistance to those who require it (Hay, Beamish & Tyler, 2023). Since then, nations have devised unique ways to support LWD in early childhood settings. In the U.S. children with disability benefit from free public education directed by the Individuals with Disabilities Education Act (IDEA) (Voulgarides & Barrio, 2021). Moreover, the act mandate for equitably designed learning spaces and inclusive learning strategies such as

Individualized Education Programs (IEPs) (Voulgarides & Barrio, 2021). The increased enrollment of children with disabilities in the in ECDC demonstrates the nations success in inclusive education. In Australia, policies like The Disability Standards for Education (DSE) 2005 has played a critical role in ensuring inclusivity (Mavropoulou, Mann, & Carrington, 2021). The policy is facilitating adaptable learning atmospheres with most SNUs being equipped with assistive technologies. Teamwork is also emphasized among educators to support diverse learning needs. LWD also benefit from targeted initiatives such as The National Disability Insurance Scheme (NDIS) designed to provide funds to cater for special needs (Cherotich, 2023; D'Aprano, McRae, Dayton, Lloyd-Johnsen & Gilroy, 2024).

In Africa, the African Charter on the Rights and Welfare of the Child directs that every child should have an equal right to access education (Fyssa, Tsakiri, & Mouroutsou, 2022). This policy has widely been implemented through efforts towards equitable and inclusive education. Yet, there have been barriers associated with inadequate resources and poor attitudes towards disability. South Africa is among the African nations that are doing well in inclusive education. The nation is guided by the policy White Paper 6-Building an Inclusive Education and Training System (Fyssa *et al.*,2022). This policy mandates building full-fledged schools able to accommodate both normal and LWD. Such schools for instance should enable the accessibility of wheelchair users to facilities and provide teaching assistants to ensure individualized instruction. Meanwhile, South Africa's dream of achieving inclusive education is yet to be fully realized. Most SNUs are faced with the challenge of inadequate resources and competent teachers (Nel, 2023). According to a 2015 report by Human Rights Watch over 500,000 children with disabilities in S.A fail to start school every year due to insufficient inclusive practices (Nel, 2023). Similar barriers to the inclusion of LWD particularly in the ECDE affect Tanzania. Since the introduction of CBC in 2005, gaps persist in full implementation due to challenges associated with funding, and inadequate resources (Mgaya & Gesase, 2023). Policy revisions such as the Special Needs Education Policy 2018 aim to address these issues although a lot has to be done to address other structural and systemic barriers hindering inclusive education (Ruth & Ramadas, 2019).

The Kenya Institute of Special Education (KISE) Act (Cheretich, 2023) and the Special Needs Education Policy Framework (Mwang'ombe, 2021) are some of the policies that demonstrate Kenya dedication to inclusive education and facilitate LWD accommodation. Nevertheless, a number of obstacles hinder LWD access to quality education, especially, at the ECDE level. Inaccessibility of adapted learning materials comprise these obstacles. Research on the ECDE centres in Kitui County reveal lack of sign language materials and audio enhanced learning tools (Kimanzi, 2024). In addition, poor teacher training hinder the capacity of teachers to customize the available materials for LWD to ensure equal access and meaningful participation in learning (Kilile, Mwalw'a, & Nduku, 2019).

Although studies have been conducted on CBE implementation in different levels of education in Kitui County, not many studies have been conducted on the issue of accessibility of inclusive learning materials in ECDE level (Kimanzi, 2024; Murithi, 2016;). This is presents a critical gap, as ECE forms the foundation for future learning. Lack of properly adapted learning resources at this stage results to poor transition to primary school and increased dropout rates among LWD (Kimanzi, 2024). To achieve goals of inclusive education and equitable learning under CBE, the challenge of learning material accessibility must be addressed (Mwita & Onyango, 2022).

Objective of the Study

The objective was to assess the accessibility of CBE learning materials for accommodating learners with disabilities in ECDE Centers in Kitui County, Kenya.

LITERATURE REVIEW

Empirical Review

This phrase “Learning Materials (LM)” is applied in the current study to imply resources that facilitate teaching and the process of learning through teacher’s guidance (Kilile, Mwalw’a, & Nduku, 2019). Such include printables like textbooks and worksheets and assistive technologies like screen readers and hearing aids among others (Muchira et al., 2023). Limited accessibility of learning materials makes it difficult for LWD to participate learning or keep pace with normal students in regular classes. Accessibility of learning materials does not only imply availability but also the ability to apply and tailor them to different learning requirements (Kimanzi, 2024). A school that have speech-to-text software but lacks teacher capability to use such technology can be said to lack accessibility as learners with hearing impairments may not apply it effectively in learning. One solution to the realization of inclusive and equitable learning under CBE system lies in LM accessibility (Mosha, 2012). Studies have shown that without contextually relevant learning resources, competency-based reforms potentially augment education disparities rather than eradicating them (Mosha, 2012; Cheruiyot, 2024; Mwita & Onyango, 2022).

A study by Fernandez-Batanero, Montenegro-Rueda, Fernandez-Cerero, and Garcia-Martinez (2022), sought to establish Assistive technology (AT) for the inclusion of learners with disabilities. Their research employed a systematic review of international studies from 2009 to 2020 addressing inclusion and assistive technology. The findings from the study revealed that AT enhance LWD participation, engagement and academic performance when properly integrated into classroom activities. Yet, application of AT was limited due to lack of teacher training, institution support and lack of affordability by many institutions. Fernandez et al.(2022) investigation focused on developed nations situated in Europe, North America and Asia where education systems and teacher competency is somewhat high. Such a geographical bias reveals a serious knowledge gap on the AT practical application in developing nations like Kenya, where financial and teacher capacity are limited. Besides, the study did not focus on ECDE and LWD in this setting. According to Kimazi (2024) CBE in Kenya has marginalized LWD in ECDE by failure to provide sufficient resources to facilitate inclusion. Fernandez et al. (2022) findings reveal the revolutionary potential of AT in fostering LWD accommodation yet its effectiveness is hinged on adaptation to the context and accessibility. This understanding informs the current study which explores the accessibility of both digital and non-digital learning resources for accommodating LWD.

An investigation by Philip and Kumburu (2023) sought to establish how designed intervention materials affect English language comprehension among learners with hearing-impairments in inclusive secondary schools. The study was conducted in Tanzania and involved a quasi-experimental mixed-methods research design. The experiment and control groups were used in the study, and the pre-tests, post-tests, interviews, and classroom observations were implemented to determine the efficacy of tailored instructional materials. The findings showed that the understanding of students who received adapted resources was better than those who were provided with conventional materials. The authors discovered that learning materials designed for specific disabilities enhance the learning process and reduce educational disparities. The fact that equitable education requires accessibility and adaptation is supported by this study. However, the research is narrow in its scope to a single type of disability and subject area. This makes its applicability to other types of disabilities and contexts of learners limited. It also targeted secondary level leaving a gap in ECDE. The current study builds on Philip and Kumburu (2023) perspectives by investigating Learning material Accessibility with the aim of revealing gaps that hinder inclusion and educational outcomes of LWD in ECDE level.

In their study, Mwita and Onyango (2022) explored CBC instructional resources availability, and CBC implementation in lower primary schools in Migori County, Kenya. The researchers employed a descriptive survey design and gathered data from teachers, headteachers and quality assurance officers through interview guides and questionnaires. The study findings revealed that the availability and sufficiency of Teaching and

Learning resources were below the adequacy threshold. However, there was a strong positive correlation between CBC implementation and resource adequacy and application. This suggested that effective curriculum implementation is linked to the sufficiency of learning material. Schools that had adequate materials and applied them effectively were found more effective in CBC implementation. The importance of appropriate learning resources in fostering inclusivity under CBE was underlined by the study. Nevertheless, the study did not address how the availability of such resources affected the accommodation of LWD. Drawing on this gap, the present study maintains that material adequacy needs to be accompanied by access to promote meaningful inclusion. It goes further to investigate the sufficiency of learning material and how it serves the different needs of the learners.

Kimanzi (2024) conducted a study to investigate how school-based factors affect the implementation of Special Needs Education (SNE) in Kitui West Sub-County, Kenya. The study involved 12 Special Needs Units (SNUs) where 30 specialized teachers were obtained. The research used a descriptive exploratory research approach and collected data through interviews. The study findings revealed that most of the schools had insufficient learning materials, many of them faulty or outdated. Additionally, educators lacked sufficient training on material use, an issue that impacted the quality of learning. The study echoes Mwita and Onyango (2022) findings supporting the idea that learning material accessibility is a critical issue undermining LWD accommodation. Kimanzi's study however concentrated on special units in primary schools, leaving a gap on how SNE principles are applied to mainstream classes in ECDE settings under CBE, which the current study seeks to fill.

Isaboke, Mweru, & Wambiri (2021) investigated how teachers in pre-primary schools in Nairobi City County, Kenya were prepared in implementing CBC and whether their training influenced their capacity to accommodate LWD. A descriptive survey research design facilitated the collection of in-depth information on the levels of preparedness of teachers through the use of questionnaires and interviews. The study results demonstrated lack of specialized skills among the majority of educators with a significant number having not received any training on CBC. The research suggested continuous professional development among and investment in instructional materials to facilitate correct implementation. These findings support the current study's focus on the accessibility of LM for LWD accommodation. Without adequate teacher training, learning material accessibility will remain impossible to achieve as unqualified teachers lack the capacity to modify and use the available materials effectively. Isaboke et al. (2021) examined the general implementation of CBE but did not address how learning materials are adapted to meet the needs of LWD. The current study addressed this gap by specifically investigating the accessibility of learning materials in facilitating the effective accommodation of LWD within ECDE settings.

Theoretical Review

Universal Design for Learning (UDL) theory, introduced by Rose and Meyer (2002) promotes designing education system in a way that it is inclusive from the beginning rather than making accommodations afterwards (Edwards et al., 2022). The theory is grounded on three principles comprising multiple means of representation, action and expression, and engagement, all fostering inclusion (Anastasiou, Wiley, & Kauffman, 2024). The principles ensure that every learner has access to the content, demonstrates understanding, and is motivated to learn through flexible approaches (Priyadharsini & Mary, 2024). This orientation aligns with learner-centered approaches to learning and appreciation of different learner abilities which are emphasized by CBE in Kenya. In this research, UDL provided a way through which the researcher can analyse whether early childhood learning resources in Kitui County are tailored to meet the needs of LWD.

Nonetheless, the application of UDL is faced with significant practical limitations particularly in resource limited context such as in Kenya. According to Kimanzi (2024) teachers often lack professional training and institutional support to modify and apply adapted learning materials. The author also notes that the majority of

ECDE canters in Kenya, especially in rural areas have insufficient learning resources that limit LWD accommodation. Lack of assistive technology and time constraints minimize the impact of UDL even though teachers recognize the model's significance in fostering inclusive learning (Priyadharsini & Mary, 2024). This disconnects between theory and practice raises a concern regarding the assumption that educators can readily implement UDL without sufficient infrastructure (Hartmann, 2015). In Kenya, where a large number of ECDE centres are strained with resources (Kimazi, 2024), the flexibility offered by UDL can be easily reduced to mere theory until it is supported by a clear guideline and investment in inclusive materials.

In spite of these issues, UDL is still applicable in inclusive education due to its flexibility and emphasis on equity. It does not dictate the use of particular technologies or expensive tools but promotes inventive solutions so long as they respond to various diverse learners' requirements (Hartmann, 2015). Barriers that restrict the involvement in the classroom can be eliminated even by simple technologies like, like tactile charts or large prints (Edwards et al., 2022). Through UDL model, this paper explores how instructional resources in the ECDE under CBE address the diverse needs of children with physical, sensory, or cognitive disabilities. The theory also helps to determine whether inclusion under CBE in Kenya is planned initially or incorporated as a remedy. By applying UDL, the study seeks to identify the design gaps that restrict access and to suggest practical ways which schools in Kenya can embrace to create fair and supportive learning conditions for every child.

METHODOLOGY

This study utilized a descriptive research design. The study took place in Kitui County, Kenya, in Mwingi West, Kitui West, and Mwingi Central subcounties. The target population was 94 participants, involving 40 ECDE teachers, 25 Head Teachers, 25 SNUs Parent Representatives, 1 County Special Needs Education Officer, and 3 Curriculum Support Officers (CSOs). The sample size was calculated through Yamane's (1967) formula at a 95% confidence level (Mugenda & Mugenda, 2003). The resultant sample was 76 participants selected through a stratified random sampling approach applied to choose 20 Parent Representatives, 20 Head teachers, and 32 ECDE teachers, and a purposive random sampling technique was used to select 1 County Special Needs Education Officer and 3 CSOs.

The research instruments used comprised a questionnaire applied to ECDE educators and interview schedules administered to all categories of participants. Piloting of the study was conducted in one randomly selected SNU center from the Masinga sub-county in Machakos County. The pilot test helped to determine the reliability and validity of the research instruments (Mugenda & Mugenda, 2003). Descriptive statistics were applied to analyze quantitative data, while qualitative data were transcribed, coded, and analyzed through themes. Quantitative data were analyzed using Fequency tables were utilized to quantitative data, while qualitative data were analyzed thematically and presented in narrative form.

RESULTS AND DISCUSSIONS

The study sought to investigate the accessibility of inclusive CBE learning materials for accommdation LWD in ECDE . Five statements were presented to the respondents to collect their level of agreement with the accessibility of learning materials in their respective Centers. The responses ranged from Not at All (1) to Very Much (4). The weighted average (Mean) and standard deviations (SD) were used to summarise respondents' overall perception and show consistency in item ratings across centres. The weighted average of 1.00-1.74 indicates Not at All (NA), 1.75-2.49 suggests Slightly (SL), 2.50-3.24 specifies Moderately (MD), and 3.25-4.00 represents Very Much (VM). Descriptive analysis results are captured in Table 1 below.

Table 1: Descriptive Statistics on Accessibility of CBE Learning Materials

Statement	NA		SL		MD		VM		Mean	SD
	N	%	N	%	N	%	N	%		
CBE learning materials are adapted for LWD	1	2.0	10	20.0	29	58.0	10	2.0	2.96	0.34
Condition and usability of inclusive CBE learning materials	7	14.0	18	36.0	16	32.0	9	18.0	2.54	0.91
Frequency of using adapted CBE materials during instruction	0	0.0	0	0.0	35	70.0	15	30.0	3.3	0.27
Teachers' preparedness and confidence in using inclusive CBE learning materials	4	0.0	5	10.0	38	76.0	3	14.0	2.8	0.26
Extent to which CBE materials promote participation for LWD	0	0.0	2	4.0	34	68.0	14	28.0	3.2	0.19

From table 9 results, 2% of the respondents indicated Not at all, 20% Slightly, 58% Moderately and 2% Very much when asked whether CBE learning materials were adapted for LWD. The resulting mean was 2.96, showing an average level of adaptation. A low Standard Deviation (SD) of 0.34 realized demonstrates consistency in respondents' perceptions across centers. These results indicate that inclusivity in ECDE in Kitui County is yet to be fully realized. Although there is some effort, the adaptations are inconsistent and insufficient, making it difficult for LWD to fully participate in learning. In their study Philip and Kumburu (2023) underlines the significance of adapted resources in reduce educational disparities. The reserchers found the understanding of students who received adapted resources better than those who were provided with conventional materials. Isaboke (2021) observes that limited access and learners' participation are negatively affected by poor material adaptation. These findings call for targeted adaptation strategies, teacher training, and stronger policy implementation for meaningful inclusion.

When asked about the condition and usability of inclusive CBE learning materials, 14% of participants indicated Not at all, 36% Slightly, 32% Moderate, and 18% Very much. The resulting mean of 2.54 underlines an average level of agreement, while a high SD of 0.91 suggests varied perceptions of the material usability across centres, supposedly due to differences in the type of materials available across centres. These results agrees with Kimanzi's (2024) findings on school-based factors affecting the implementation of SNE in Kitui West Sub-County, Kenya. She found that most schools lack sufficient adapted learning materials, and the available ones were either faulty or outdated. These findings were also echoed by open ended responses from most respondents who cited their disastifaction with the quality of available learning materials, especially in fostering practical and inclusive teaching. One parent noted, *"Things like beads and shaving machines that our children use for vocational lessons are few or not functioning. It forces teachers to concentrate on theories more than on practical."* This disconnect was further echoed by another teacher who complained, *"The sewing machines offered during the CBE rollout are now broken, and no technician has been provided to repair them. This makes it almost impossible to provide more practical lessons to children with special needs."* These statements suggest that the implementation of Competency-Based Education is

severely limited by the shortage and poor maintenance of learning materials. This issue undermines the hands-on learning approach required for both inclusive education and competency development.

When asked about how frequently inclusive CBE learning materials are applied during instruction, 0% of the respondents suggested Not at all, 0% Slightly, 70% Moderately, and 30% Very Much. The resulting mean of 3.3 and an S.D. of 0.27 show that the materials are moderately implemented during instruction, and this trend is consistent across centres. The moderate use of inclusive CBE learning resources implies partial material implementation. According to Mwita and Onyango (2022), the availability and sufficiency of learning resources in Migori County lower primary schools were below the adequacy threshold. Fernandez et al (2022) identifies limited teacher training and educational material insufficiency as impediments that limit inclusive material application in learning. These findings provide reasons why inclusive material application is limited most ECD centers in Kenya.

When asked about how teachers were prepared and confident in using inclusive CBE learning materials, 0% suggested Not at all, 10% Slightly, 76% Moderately, and 14% Very much. The mean of 2.8 reveals a moderate level of preparedness, and the standard deviation of 0.26 reflects consistent perceptions regarding the material application across centres. Kimanzi's (2024) findings revealed gaps in teacher training on the use of adapted learning materials supporting the current study findings. Similarly, Isaboke, Mweru, & Wambiri, (2021) study that investigated how teachers in pre-primary schools in Nairobi City County, Kenya were prepared in implementing CBC support the current study findings. Their study findings demonstrated lack of specialized skills among the majority of educators with a significant number having not received any training on CBC. Many respondents interviewed cited the importance of professional development in updating teacher skills. One educator stated, *"Even though we have had initial training in Special Needs Education, refresher training is rare."* This brings out the necessity of a more lasting and accessible model of professional development to increase teachers capacity in applying assistive technology and other inclusive learning materials.

When asked about the extent to which inclusive CBE learning materials promoted participation for LWD, 0% indicated Not at all, 4% Slightly, 68% Moderately, and 28% Very Much. The mean score of 3.2 indicates that most respondents view the materials as effective in promoting participation. The low SD of 0.19 points to strong agreement across all centers. by Fernandez et al (2022) findings on the impact of assistive technology in fostering inclusion among students with disabilities, demonstrated its application enhance participation, engagement and academic performance. Their findings echoes the current study findings, where most respondents viewed the materials effective in promoting participation. These findings affirms the importance of accessible CBE materials in fostering inclusion. They sensitize the Kitui county government to scale up access across more ECDE centers. Additionally, they imply that efforts to improve resource allocation, teacher training, and policy enforcement around inclusive materials could significantly improve LWD educational outcomes.

CONCLUSION AND RECOMMENDATIONS

The study sought to investigate the ccessibility of Learning materials in Competency-Based Education (CBE) for accommodating learners with disabilities (LWD) in Early Childhood Development Education (ECDE) in Kitui County, Kenya. The study found the accessibility of adapted learning materials to be moderate with a significant number of ECDE centers materials outdated, worn out, or irreverent. Although teachers used the available materials to a large extent during instruction, learners' participation and engagement were negatively impacted due to their insufficiency. Educators were found insufficiently prepared to apply Assistive Technology and novel material as well as tailor material to accomodate different needs. The study concluded that learning material accessibility is limited in Kitui County, which hindered the accomodation of LWD at the ECE level.

The study recommended the Ministry of Education and County governments to allocate adequate funds to facilitate the development and provision of adapted CBE learning materials. It should also implement initiatives where educators receive and regularly update their skills on their use. Besides, it should provide a feedback system where educators constantly update material usability and effectiveness. Such a mechanism will ensure continuous improvement and facilitate learning materials that are relevant and inclusive.

Acknowledgement

I acknowledge my supervisor, Dr. Jane Njoroge, whose guidance, expertise, and dedication greatly helped develop this study. May God bless her abundantly. To the Ministry of Education, Kitui County, thank you for streamlining the data collection process by providing the required facilitation and approvals. My heartfelt gratitude is also directed to all the respondents, especially the ECDE teachers and headteachers, who offered time and insights on which the findings herein are based. I also appreciate my colleagues' collaboration and advice, especially in establishing the appropriate study methodology. Your effort has significantly contributed to the quality of this work.

REFERENCES

- Anastasiou, D., Wiley, A. L., & Kauffman, J. M. (2024). A Critical Analysis of Theoretical Underpinnings of Universal Design for Learning. *Exceptionality*, 1-18. <https://doi.org/10.1080/09362835.2024.2426801>
- Cherotich, M. G. (2023). Influence of Head Teachers' Administrative Strategies on Implementation of Inclusive Education in Integrated Public Primary Schools in South Rift Region, Kenya (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke/handle/11295/164248>
- Cheruiyot, B. (2024). Challenges faced in the implementation of competency-based curriculum (CBC) in Junior Schools in Kenya. <https://orcid.org/0009-0006-5935-1915>
- D'Aprano, A., McRae, K., Dayton, S., Lloyd-Johnsen, C., & Gilroy, J. (2024). A scoping review of early childhood support for Aboriginal and Torres Strait Islander children. <https://doi.org/10.1111/ajr.13164>
- Edwards, M., Poed, S., Al-Nawab, H., & Penna, O. (2022). Academic accommodations for university students living with disability and the potential of universal design to address their needs. *Higher education*, 84(4), 779-799.
- Fernández-Batanero, J. M., Montenegro-Rueda, M., Fernández-Cerero, J., & García-Martínez, I. (2022). Assistive technology for the inclusion of students with disabilities: a systematic review. *Educational technology research and development*, 70(5), 1911-1930.
- Fyssa, A., Tsakiri, M., & Mouroutsou, S. (2022). Pursuing early childhood inclusion through reinforcing partnerships with parents of disabled children: beliefs of Greek pre-service early childhood educators. *European Early Childhood Education Research Journal*, 31(1), 34–50. <https://doi.org/10.1080/1350293X.2022.2153258>
- Hartmann, E. (2015). Universal design for learning (UDL) and learners with severe support needs. *International Journal of Whole Schooling*, 11(1), 54-67.
- Hay, S., Beamish, W., & Tyler, M. (2023). Inclusive and Quality Education in Australia: The Need for Coordinated Policy Action. In *Progress Toward Agenda 2030* (Vol. 21, pp. 229-244). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-363620230000021015>
- Isaboke, H., Mweru, M., & Wambiri, G. (2021). Teacher preparedness and implementation of the Competency Based Curriculum in public pre-primary schools in Nairobi City County, Kenya. *International journal of current aspects*, 5(3), 32-53.

- Karisa, A., Samuels, C., Watermeyer, B., McKenzie, J., & Vergunst, R. (2022). Priorities for access to early childhood development services for children with disabilities in South Africa. *South African Journal of Childhood Education*, 12(1), 1119.
- Kilile, J. M., Mwalw'a, S. N., & Nduku, E. (2019). Challenges facing early childhood development education centres in the implementation of the competency based curriculum in mwingi west sub-county, kitui county. *International Journal of Educational Theory and Practice*, 2(3), 36-37.
- Kimanzi, V. (2024). *School based factors influencing implementation of special needs education curriculum in special needs units in public primary schools in Kitui west sub-county, Kenya* (Doctoral dissertation). Retrieved from: <http://repository.seku.ac.ke/xmlui/handle/123456789/7721>
- Masika, S. J. (2020). *Competence based curriculum implementation: Assessing Kenya's readiness and preparedness*.
- Mavropoulou, S., Mann, G., & Carrington, S. (2021). The divide between inclusive education policy and practice in Australia and the way forward. *Journal of Policy and Practice in Intellectual Disabilities*, 18(1), 44-52. <https://doi.org/10.1111/jppi.12373>
- Mgaya, a. j., & Gesase, y. r. (2023). Exploring The Challenges on The Implementation of Inclusive Education in Early Childhood Education: A Case of Children with Disabilities. *Journal Of Early Childhood Education (Jece)*, 5(1), 1-13. <http://dx.doi.org/10.15408/jece.v5i1.25831>
- Mosha, H. J. (2012). A case study of learning materials used to deliver knowledge and skills or competency-based curricula (in Tanzania). *ADEA Triennale on Education and Training in Africa*.
- Muchira, J. M., Morris, R. J., Wawire, B. A., & Oh, C. (2023). Implementing competency-based curriculum (CBC) in Kenya: challenges and lessons from South Korea and USA. *Journal of Education and Learning*, 62-77. <https://doi.org/doi:10.5539/jel.v12n3p62>
- Mugenda, O., & Mugenda, A. (2003). *Research methods: Quantitative and qualitative approaches*, Nairobi, Kenya: Acts Press.
- Murithi, T. (2016). *Integration of the national goals of education in early childhood development and education in Kenya a case study of Kalundu zone Kitui County* (Doctoral dissertation). <http://repository.seku.ac.ke/handle/123456789/1917>
- Mwang'ombe, A. M. (2021). Competency Based Curriculum (CBC) in Kenya: Teachers understanding and skills, reality on the ground, successes, challenges and recommendations on the implementation of Competency-Based Curriculum (CBC) in the Kenyan schools. [10.13140/RG.2.2.35914.49605](https://doi.org/10.13140/RG.2.2.35914.49605)
- Mwita, E., & Onyango, Y. J. M. (2022). 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. *J Adv Educ Philos*, 6(9), 484-491.
- Nel, M. (2023). Inclusive Education Working Towards a Humane Society: A Perspective on Reality*. In *Interdisciplinary Perspectives on Special and Inclusive Education in a Volatile, Uncertain, Complex & Ambiguous (Vuca) World* (pp. 157-169). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-363620230000020010>
- Ngure, J. (2025). From compliance to curiosity: How Kenya's shift to CBE can redefine learning. WERK. <https://shorturl.at/QvUFN>
- Philip, E. M., & Kumburu, S. (2023). The efficacy of the designed intervention learning materials for improving english language comprehension ability to students with hearing impairment in selected tanzania inclusive secondary schools. *European Journal of Special Education Research*, 9(3)

- Priyadharsini, V., & Mary, R. S. (2024). Universal Design for Learning (UDL) in Inclusive Education: Accelerating Learning for All. *Shanlax International Journal of Arts, Science and Humanities*, 11(4), 145-150.
- Ruth, C., & Ramadas, V. (2019). The "Africanized" Competency-Based Curriculum: The Twenty-First Century Strides. *Shanlax International Journal of Education*, 7(4), 46-51. <https://doi.org/10.34293/education.v7i4.640>
- Voulgarides, C. K., & Barrio, B. L. (2021). The Individuals with Disabilities Education Act (IDEA) and the equity imperative: Examining early childhood transitions to special education. *Multiple Voices*, 21(1), 40-54. <https://doi.org/10.56829/2158-396X-21.1.40>
- Wanjau, I. J. (2025). *Contextualization of the constraints affecting Competency based curriculum implementation Among pre-primary schools in Embu County, Kenya* (Doctoral dissertation, Kenyatta University).