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A Paradigm Shift in Pedagogy for Learners with Special Needs in an Inclusive Setting within Competency-Based Classrooms in Kenya

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Abstract
The switch from an 8-4-4 curriculum-based educational system to CBE in Kenya has resulted in changing the perceptions of what is quality teaching for children with special educational needs (SEN) in Kenya. It entails teaching practices based on competency-based education that include teaching in a regular but varied classroom setting where learners are taught through the practice of inclusiveness, personalisation, competency building, and inclusion of everyone. In this study, a mixed-methods approach was used to explore how the primary school teachers in Nairobi and Kiambu counties adjust teaching practices. It examined the ways teachers implement CBE by inclusive practices in regular classrooms with learners. The contrast in urban and peri-urban settings, which are well resourced yet reveal gaps in teacher preparedness, accessible learning resources, and individualised educational support for learners with special educational needs, underscores the need to rethink and strengthen inclusive teaching practices. Data were collected from 15 informants comprising of curriculum support officers (CSOs), and special needs education (SNE) tutors through semi-structured interviews, while 45 teachers from ten purposively sampled inclusive schools completed structured questionnaires. The analysis indicates that teachers championed differentiated instruction, individualised education programmes, and collaborative learning, while underutilisation of Universal Design for Learning (UDL) and assistive technology was an obstacle to a complete transformation of the paradigm. The shift would address the diversity of learners' abilities in varied and meaningful ways that enable every learner to achieve their potential. However, realising the full potential of these approaches depends on flexible and responsive inclusive teaching practices that accommodate individual learning needs.

Introduction

Curriculum designs across the world are moving away from subject content-based and examination-based designs to competency-based and skill-based designs, which are aimed at developing the competencies,

skills, values, and attitudes that learners will apply in practice. The transition officially started in Kenya in 2017 with the introduction of the Competency-Based Curriculum (CBC) by the Kenya Institute of Curriculum Development that later became Competency-Based Education and Training (CBET), as highlighted in Sessional Paper No. 1 of 2019 that focuses on reforms in education and training towards sustainable development (Ministry of Education, 2019; Ministry of Education, 2025). In contrast to the subject-based and examination-based 8-4-4 curriculum design, CBET uses seven core competencies, learner-based teaching and assessments, and promotes equity and inclusion of LSENs (Ministry of Education, 2025).

The policy position has been useful in ensuring that inclusive pedagogy becomes an integral part of the process of curriculum reform in Kenya. As understood from the definition of inclusive education in the Salamanca Statement and other international documents, all children are entitled to be educated in regular schools irrespective of the differences in their physical, intellectual, social, emotional, linguistic or other conditions, and that regular schools with an inclusive approach are the most effective tool for promoting unity and educating the majority of children (UNESCO, 1994). In regard to Kenya, the above-mentioned concept is outlined in the Basic Education Act, 2013, and rephrased in the National Education Sector Strategic Plan, making schools provide inclusive education for learners with disabilities.

The combination of CBE and inclusive education is a naturally occurring phenomenon in theory. While content-based instruction was characterized by a standardised way of demonstrating recall skills, competency-based learning is marked by alternative ways of proving competency and personalised assessment, which fits into UDL and individualised instruction well enough (McKenzie & Dalton, 2020). Thus, it can be argued that CBE is expected to make life easier, not more complicated, for students with learning difficulties. At the same time, empirical research carried out in Kenya shows that there is a certain gap between the ideals of CBE implementation in practice and the realities of teaching learners with special needs, as their instructors lack training, time, and resources to combine the execution of an alternative curriculum with personalised assistance (Andiema,2023; Isaboke et al., 2021)

Indeed, it is the conflict inherent between the vision of an inclusive competency-based approach and its practical underdevelopment that drives this research project. The current paper is motivated by the following three questions: (a) How are the roles of teachers within inclusive classes in Kenya changing through CBE? (b) What approaches to inclusive teaching are being used, and to what degree? and (c) What factors restrict further paradigm shift towards an inclusive competency-based approach to special learners? The paper provides an important contribution to the developing Kenyan literature on inclusion within the CBE framework, providing empirical data on the paradigm shift from the practitioner's perspective.

It is important to examine this paradigm shift in the context of persons with special needs not only within Kenya but also the larger international educational landscape. In sub-Saharan Africa, several countries have embraced the competence-based curriculum, for example, Rwanda, Zambia, and Tanzania, which have implemented competence-based education within the past decade, citing equity and inclusivity as some of the key reasons to push curriculum reform (Ministry of Education, 2025).

Literature Review

This section discusses the literature reviewed and established gaps and also the Theoretical framework supporting the study.

From Content Coverage to Competency Demonstration

Competency-based education (CBE) represents a paradigm shift from traditional behavioural and content-oriented approaches to education, in which knowledge transmission is often regarded as the primary means of learning. Under the traditional curriculum evaluation system, learning success is largely measured by the extent to which learners can recall predetermined content through standardised tests and examinations. In contrast, CBE emphasises the demonstrated ability of learners to apply acquired knowledge, skills, values and attitudes to solve problems and respond to real-life situations (Ministry of Education, 2025). This shift requires a corresponding transformation in pedagogical practices, curriculum delivery and assessment approaches to accommodate learners' diverse abilities, learning needs and developmental trajectories.

According to Adewumi et al. (2017), the reconceptualisation of curriculum and instructional practices is particularly significant for learners with special educational needs and disabilities. Traditional standardised, content-based instructional systems have often disadvantaged these learners by assuming a uniform pace of learning, similar instructional needs and the use of common assessment benchmarks within fixed timeframes. Such assumptions may fail to recognise individual differences in learning abilities, communication, sensory functioning and information processing. Conversely, CBE provides opportunities for flexible pacing, multiple modes of instruction and assessment, and continuous feedback to support progressive mastery of competencies. These principles align with established practices in special needs education, including individualised instruction, task analysis, differentiated teaching and scaffolded learning, which enable learners to access the curriculum and demonstrate their competencies according to their abilities and support needs (Andiema, 2023).

Despite these potential benefits, the successful implementation of CBE depends on the extent to which curriculum content, instructional strategies, learning materials and assessment procedures are appropriately adapted to accommodate learner diversity. Inflexible curriculum delivery and inadequate adaptation of teaching practices may restrict meaningful participation, limit opportunities for demonstrating competencies and reinforce barriers to learning among learners with special educational needs in regular classrooms (Adewumi et al., 2017). Curriculum adaptation is therefore not merely a modification of learning content; it encompasses adjustments to instructional methods, learning activities, resources, learning environments and assessment procedures to ensure equitable access to curriculum competencies. This perspective provides a critical foundation for examining curriculum adaptations within Kenya's CBE framework, particularly in inclusive schools where regular classroom teachers may be required to support learners with disabilities without adequate specialised training or sufficient instructional resources. Although Kenyan policy documents recognise the need for adapted curricula, the practical processes through which teachers translate these provisions into accessible classroom instruction warrant closer examination. Notably, the Basic Education Curriculum Framework acknowledges the need for differentiated curriculum pathways, including Pre-Vocational and Pre-Career pathways designed to address the educational needs of learners with severe disabilities (KICD, 2017).

However, the existence of these policy provisions does not necessarily guarantee effective implementation in inclusive classrooms. It is therefore important to investigate how curriculum adaptations are implemented in practice and the extent to which they enhance learning outcomes among learners with visual impairments in inclusive schools in Kiambu County, Kenya.

Universal Design for Learning and Differentiated Instruction

Universal Design for Learning (UDL) is a relevant framework that can be applied in the alignment of competency-based curricula to inclusive classroom requirements. UDL was developed by CAST and emphasises multiple means of engagement, representation, and action and expression; therefore, UDL allows teachers to address learning barriers upfront, not after the curriculum has been created (CAST, 2018). In the case of South Africa, McKenzie and Dalton (2020) stress the importance of UDL as an approach in the country where curriculum differentiation and learner support form part of inclusive education policy implementation. As noted in the Global Education Monitoring Report, UDL holds promise in low- and middle-income countries, such as those in Africa where inclusive education policies have not yet been developed. Furthermore, the extent to which these adaptations influence learning outcomes, including curriculum access, participation, competency acquisition and academic performance, remains insufficiently established in the context of inclusive schools in Kiambu County. This study therefore seeks to address this contextual and empirical gap by examining the effectiveness of curriculum adaptations in enhancing learning outcomes among learners with visual impairments in inclusive schools in Kiambu County, Kenya.

Differentiated instruction, which entails varying the content, process, product, and environment based on the students' readiness, interest, and profile, is very closely associated with UDL. The differentiation models that are provided by Tomlinson (2017), specifically, provide the foundation for CBE curriculum designers in Kenya in terms of formative pedagogies. The empirical evidence from South Africa shows that teachers trained in UDL and differentiation programmes for a relatively short time are much more confident in dealing with diverse learning needs in the class, although this confidence should be turned into action (McKenzie & Dalton, 2020). Although the literature establishes the pedagogical relevance of differentiated instruction and UDL, the extent to which these approaches are implemented through specific curriculum adaptations for learners with visual impairments in Kenyan inclusive schools remains insufficiently established in the literature reviewed. Moreover, teacher confidence and the availability of differentiated teaching strategies do not, in themselves, demonstrate that curriculum adaptations improve learners' participation, competency acquisition and academic performance. There is therefore a need for context-specific empirical evidence examining the curriculum adaptations used by teachers, the challenges affecting their implementation and their effectiveness in enhancing learning outcomes among learners with visual impairments in inclusive schools in Kiambu County, Kenya. This study seeks to address this gap by examining the relationship between curriculum adaptations and the learning outcomes of these learners within the Kenyan CBE context.

The difference between the UDL-as-accommodation approach and the UDL-as-design approach is crucial in understanding the difficulties experienced by teachers who have an overall positive attitude towards inclusivity, as the former does not require any planning or pedagogical content knowledge on the part of the teachers. Inversely, Booth and Ainscow (2011) put forward the concept of the Index for Inclusion by taking into account a broader school perspective because they believe that inclusive pedagogy cannot be achieved by the teachers' efforts alone, but needs school cultures and policies as well.

Assistive Technology, Individualised Support and Collaborative Teaching

The use of assistive technologies such as Braille, large prints, screen readers, and communication boards helps to achieve competencies in learners with sensory, physical, and communication disabilities (Kenya Institute of Special Education [KISE], 2021). Individualised Education Programmes (IEP) which involve collaborative planning between the teacher and the parent ensure that competencies match with learner's needs (Andiema, 2023). The process of co-teaching whereby general education and special education teachers combine their knowledge is an effective strategy in competency-based learning.

Theoretical Framework

This research is based on the Social Model of Disability developed by Andiema, (2023) which views disability as a consequence of environmental, institutional, and attitudinal barriers as opposed to just individual impairments. It explains the way the classroom environment and instructional strategies can create possibilities and/or barriers for SNE learners. In the traditional 8-4-4 education system in Kenya, which was heavily reliant on content coverage and examinations, challenges experienced by learners were always explained in a deficit or medical model where the problem lay with the learner where as the Social Model perceives these challenges as systemic barriers such as rigid teaching strategies, inaccessible classroom environments, rigid assessment, and poor learning supports. The new initiative of Competency-Based Education provides an opportunity to move to an enablement model of learning that is characterised by learner-centred instruction and assessment of competencies.

Methodology

Research Design

For the purpose of exploring the perceptions and experiences of teachers regarding changes in teaching methods to cater to diversity among learners, a mixed-method research design was employed. The research design allowed the collection of qualitative information from the semi-structured interviews together with quantitative information collected from the structured teacher questionnaires in order to allow an extensive exploration of teachers' experiences as professionals and provide a general description of their inclusive classroom practices (Creswell & Plano Clark, 2018). The analysis of both forms of data was conducted independently before being integrated during the process of interpretation and used to support, expand upon, and contextualise the qualitative information on differentiated instruction, individualised educational interventions, cooperative learning, formative assessment, universal design for learning, and assistive technology.

Study Population and Sampling

The study employed purposive sampling to select ten public primary schools in Nairobi and Kiambu counties. The selected schools had either established Special Needs Education (SNE) units or enrolled

learners with special educational needs in regular classrooms, making them suitable settings for examining inclusive pedagogical practices within competency-based education (CBE). The study involved 60 participants, comprising 15 Curriculum Support Officers (CSOs) and 45 class teachers. The 15 CSOs, drawn from the two counties, provided professional insights into curriculum implementation, teacher preparedness and the provision of inclusive education support. The 45 class teachers, selected from the participating schools, provided information on their experiences, instructional practices and challenges in accommodating learners with special educational needs in regular classrooms. Specifically, the participants comprised five CSOs and 45 class teachers. Participants were assigned anonymous identification codes to protect their identities and facilitate systematic reporting of qualitative findings. CSOs were coded CSO1–CSO5, while class teachers were coded CT1–CT45.

Data Collection Instruments

Two methods were used for collecting data. The first method included conducting semi-structured interviews, which aimed to gain insights into the participants' knowledge of CBE, perception of inclusive teaching, its techniques, and implementation difficulties. These interviews lasted from 40 to 60 minutes and were conducted either in English or Kiswahili. Also, a structured questionnaire with Likert scales was used.

Data Analysis

Interview data were analysed through thematic analysis based on the six steps proposed by Braun and Clarke (2006), while another person coded the data to enhance the validity of the results. Questionnaire data was analysed with use of frequency and percentages and then combined with qualitative themes. To increase trustworthiness, triangulation, member validation, and an audit trail were used. Ethical clearance, permission, and consent were sought.

Findings

Teachers' Conceptualisation of the Paradigm Shift

45 class teachers (CT1–CT45) reported that the implementation of Competency-Based Education (CBE) required a fundamental shift in their professional roles from conventional content delivery to facilitating learner-centred learning. For instance, CT3, CT8, CT14, CT21, CT29 and CT37 emphasised the need for teachers to design differentiated learning experiences, monitor individual learner progress and provide appropriate support according to learners' diverse abilities. Similarly, CT11, CT18, CT26, CT33 and CT42 highlighted the importance of identifying individual learning needs and adapting instructional approaches. However, CT6, CT16, CT24, CT35 and CT44 observed that translating these expectations into classroom practice remained challenging, particularly when catering for learners with diverse educational needs. These findings reflect the Ministry of Education's (2025) vision of teachers as facilitators of competency development, while illustrating the implementation challenges reported by Isaboke et al. (2021).

Pedagogical Strategies in Use

The 45 class teachers (CT1–CT45) reported varying levels of adoption of inclusive teaching practices in implementing Competency-Based Education (CBE). Peer-assisted learning was widely practised, with CT2, CT7, CT13, CT19, CT25, CT31 and CT40 highlighting the value of peer collaboration in supporting learners with diverse educational needs. Formative assessment was also commonly used, as reported by CT4, CT10, CT16, CT22, CT28 and CT36, who emphasised the importance of continuous assessment in monitoring individual learner progress. Individualised Education Programmes (IEPs) were reported by CT5, CT12, CT18, CT27 and CT34, while CT8, CT15, CT23, CT30 and CT39 described the use of differentiated instruction to address learners' varying abilities. However, CT6, CT14, CT21, CT33 and CT43 identified limited access to assistive technology, inadequate specialised training, large class sizes and insufficient collaborative planning as major barriers to effective implementation. These findings are consistent with the quantitative results in Table 1, which indicate that peer-assisted learning (78%) and formative assessment (71%) were the most widely adopted practices, followed by individualised education programmes (64%) and differentiated instruction (58%).

Table 1: Qualitative Themes and Reported Use of Inclusive Pedagogical Strategies

Pedagogical strategy	**Description and illustrative practice**	**Reported use (%)**
Differentiated instruction (DI)	Diverse content, tasks, questioning, and grouping based on learners' needs	58
Individualised Education Programmes (IEPs)	Personalised goals, accommodations, and alternative assessments designed with specialist assistance	64
Peer-supported and collaborative learning	Reading partners, peer note taking, and heterogeneous group activities	78
Continuous formative assessment	Oral responses, demonstration, portfolio and rubric-based assessment of competency	71
Assistive technology (AT)	Braille, large print, audio recording of lessons, and tactile materials	41
Universal Design for Learning (UDL)	Multiple means of engagement, representation, and action and expression	33

The results in Table 1 indicate that teachers prefer methods that are fairly practical within the given context of the classroom. Some teachers referred to UDL as a theory that came up in in-service classes rather than an approach to lesson planning. It therefore follows that the adaptations made were reactive, based on the challenges encountered while learning. The working relationship between regular and SNE teachers was also evident, but it was mainly individualised.

Barriers to a Fuller Paradigm Shift

The obstacles were determined by teachers at the level of classroom, profession, institution, resources, and socio-attitudinal.

Table 2: Barriers to Inclusive Pedagogy under CBE

System Level	Barrier Identified	Illustrative Participant Concern	Reported Prevalence (%)
Classroom	Large Classes and Problems with the Implementation of IEPs	"It Is Difficult to Provide Individual Attention for Each Student in A Class of Fifty." — Class Teacher	82
Teacher Preparation	Not Enough Specialised Training	"CBC Training and SNE Training Were Not Conducted at the Same Time." — Class Teacher	76
School Resources	Not Enough Specialised Materials and Assistive Devices	"There Is Only One Braille Set for The Whole SNE Programmes." — SNE Teacher	69
Institutional Collaboration	Lack of Cooperation Between the Regular and SNE Teachers	"I May Ask the SNE Teacher To Help Me When He/She is Free." — Class Teacher	38
Socio-Attitudinal	Prejudices Towards Inclusion	"Some Parents Believe That Inclusion Will Hold Back the Whole Class." — Curriculum Support Officer	47
Policy And Organisation	Not Enough Time for Co-Planning Of Lessons	"There is No Time Allocated to Teach with The SNE Teacher." — Class Teacher	44

Table 2 illustrates the findings from 45 teachers (CT1–CT45) that the largest numbers of the reported barriers were large class sizes (82%), lack of appropriate specialised training (76%), and lack of learning materials (69%). The participants highlighted that a class size ranging from 45-60 students makes it hard for differentiated instruction and personalised support. Additionally, it was noted that the training provided during the pre-service stage did not effectively combine CBE teaching approach and SNE methods, hence the need for developing the said skills through practice in the workplace and peer support.

Negative attitudes (47%), too, were barriers to inclusion, especially when parents felt that the presence of children with disabilities caused delays in classroom activities. Further it was established that lack of adequate time for collaboration (44%), lack of formal cooperation (38%) hindered access to specialists' knowledge and expertise. While teachers improvised creative solutions to the problem at a relatively low cost, they understood that this would not be enough.

Qualitative Findings: Changing Teacher Roles and Professional Identity

The interviews with the 45 class teachers (CT1–CT45) revealed a growing understanding of the changing professional roles required under Competency-Based Education (CBE). Several teachers described their transition from being primary sources of information to facilitators who guide, monitor and support individual learner development. CT3, CT8, CT14, CT21 and CT37 emphasised that effective teaching under CBE requires understanding learners' abilities, identifying individual learning needs and providing appropriate support. Similarly, CT11, CT18, CT26 and CT42 observed that teachers were increasingly expected to engage learners through practical activities, continuous assessment and individualised support rather than relying exclusively on content delivery. However, CT6, CT16, CT24, CT35 and CT44 indicated that translating these expectations into practice was difficult, particularly where teachers handled large classes with limited specialised resources and inadequate professional preparation. These accounts suggest that although teachers increasingly embraced the philosophy of inclusive CBE, their capacity to operationalise the expected changes remained constrained by institutional and professional challenges.

The interviews further revealed variations in the inclusive pedagogical approaches adopted by teachers. CT2, CT7, CT13, CT19 and CT40 reported using peer-assisted learning through mixed-ability grouping, peer tutoring and collaborative classroom activities to encourage participation among learners with diverse abilities. CT4, CT10, CT16 and CT28 highlighted the use of oral questioning, classroom exercises and continuous feedback to monitor learner progress. Regarding individualised support, CT5, CT12, CT18 and CT34 described developing or implementing Individualised Education Programmes (IEPs), while CT8, CT15, CT23 and CT39 reported adjusting learning activities and instructional materials to accommodate individual differences. Nevertheless, CT6, CT14, CT21, CT33 and CT43 identified inadequate assistive technology, limited specialised training, large class sizes and insufficient collaboration with specialists as significant barriers. Some teachers also indicated that adaptations were often introduced after learners experienced difficulties rather than being incorporated during initial lesson planning. The findings suggest that inclusive practices requiring fewer resources and less specialised preparation were more readily adopted, whereas proactive differentiation, Universal Design for Learning (UDL) and assistive technology remained less established.

Discussion

This study intended to investigate the nature of teachers' roles in the context of CBE, the inclusive approaches to teaching employed and to what extent, and finally, what constraints are encountered with regard to adopting an inclusive competency-based teaching paradigm for children with SNE. The results indicate partial and incomplete change, where the change in perceptions about teachers' roles is greater and more rapid than the creation of conditions necessary to implement these perceptions into practice. This section attempts to interpret the results in the light of the three research questions and existing literature as well as the Social Model of Disability on which this study is based.

Changing Teacher Roles: Conception Ahead of Practice

Teachers are now more likely to see themselves as facilitators, designers and monitors of the individual learning journey as opposed to conveyers of one-size-fits-all content. This attitude is aligned with the Ministry of Education's (2025) view of the role of the CBE teacher as well as the fundamental assumption

of inclusive pedagogy that teachers need to go beyond what is already available to all children to cater for those with SNE instead of making SNE students an entirely different category of learners requiring something "different. This is quite different from the deficit orientation associated with the 8-4-4 era.

However, the modification in teachers' perception of themselves is not equivalent to a modification in their practices. Low utilisation rates of Universal Design for Learning (UDL) and assistive technologies, coupled with the reactive nature of adaptations employed by teachers, reveal that the development of professional identity is only partially supported by practices. It is known that there is often a disparity between what teachers say about inclusion and their practices. In particular, as revealed by Avramidis and Norwich (2002), despite a generally favourable attitude towards inclusion, teachers are concerned about a lack of resources, training and support, and a similar gap between intentions and practices was shown by Isaboke et al. (2021) for the Kenyan competency-based curriculum. According to Forlin (2010), such discrepancies emerge as long as reforms redefine the expected identity of teachers without redesigning teacher education programmes. Thus, it appears that the current situation in Kenya corresponds to this description.

Patterns of Pedagogical Practice: What Teachers Use and Why

The order of the first table is worth consideration. Collaborative and peer learning (78%) and formative assessment (71%) were the methods that were most frequently used. The use of IEPs was observed in 64% of cases, while differentiated instruction was used in 58%. Lastly, assistive technology (41%) and UDL (33%) were the least applied methods in classwork. The significant point is that the adoption order corresponds to the resource requirements for implementing each method. Collaboration and formative assessment can be used in class without changing the schedule, and additional equipment is not required; no specialists are required; assistive technology requires special materials that cannot be found in schools, while UDL implies reorganising the lesson planning process.

It is comforting to know how much peer tutoring is valued today due to extensive empirical evidence supporting the benefits of collaborative learning and the methodology of such practice correlates well with social mediation in learning (Vygotsky, 1978). Mixed-ability group activities, reading buddies, and peer note-taking serve as sources of daily participation that, according to a synthesis literature review, is a crucial element of the inclusive education environment (Hehir et al., 2016). Moreover, the stress laid on formative assessment aligns well with the idea of continuous evidence-based assessments in CBE. Kinyua (2025) found out that constant formative assessment not only improves academic achievement but benefits underperformers the most, which makes it a great way of evaluating competence of the learners with SNE because of the self-reported nature of the data, there is a chance that the teachers were mistaken regarding the use of constant oral questions as formative assessment, and portfolio assessment, demonstrations, and rubrics described in the first table required much more effort.

However, the results concerning the use of IEPs and differentiated instruction highlight the contradiction in teachers' perceptions. Almost two-thirds of the teachers (64%) claimed to use IEPs, while 82% indicated large classes and challenges in implementing the IEPs as barriers. This means that the implementation of IEPs can only be used for students who have been identified and assisted by specialists. The same situation can be seen in differentiation. According to Tomlinson (2017), differentiation can be viewed as a proactive approach based on learners' readiness, interests, and learning profiles, while participants identified adaptations that had been implemented reactively when the learner had started to have difficulties. This

situation reflects the accommodations made rather than the proactive design essential for inclusive CBE. This interpretation can be justified by Andiema's (2023) research findings.

Universal Design for Learning (UDL): The Weakest Link

UDL was also the least used strategy (33%), and the teachers mentioned that they got to know about it through workshops and in-service courses. The importance of UDL lies in its nature, as it aims at anticipating learner variability in designing the objectives, methodology, materials, and evaluation. This means that barriers are eliminated in anticipation rather than accommodation of individual learners (CAST, 2018; Rose & Meyer, 2002). In other words, UDL becomes mere accommodation when it is used in a reactive manner. This is the differentiation between "UDL-as-accommodation" and "UDL-as-design" made in the literature review. Similar findings were obtained by McKenzie and Dalton (2020), who showed that short training sessions increased teachers' confidence in dealing with diversity but did not necessarily lead to change in practice. This issue is also emphasized in reviews of professional development for inclusion: one-time or conceptual training rarely leads to behavioural change in classrooms as Waitoller and Artiles, 2013) articulates, while good professional development is long-lasting, focuses on content and practice, and includes modelling and coaching (Darling-Hammond et al., 2017).

The relatively low availability of assistive technology (41%) points to a tangible, not a philosophical or attitude-related issue. It is crucial for individuals with sensory, physical, and communication impairments to prove their competences on par with others through the use of Braille, large print material, screen readers, and communication boards, according to KISE (2021). However, the participants have mentioned cases where one set of Braille sufficed to serve an entire programme. According to Borg et al. (2011), assistive technology availability depends on the systems that deliver, finance, and maintain the resource and not on the user and his/her teacher. The World Health Organisation (2022) cites significantly lower levels of access in LMICs than in HICs. Teachers' low-cost modifications must be acknowledged as evidence of their dedication, but they will not suffice as a substitute for a systematic supply of the resources. If learners cannot gain access to the resource needed to express themselves, the whole system of competency-based assessment risks being flawed.

Structural and Institutional Barriers to a Fuller Paradigm Shift

The obstacles listed in the second table are multi-faceted, and the top three that include large class sizes (82%), lack of specialised training (76%) and lack of resources (69%) all fall into the category of structural factors which no single teacher can fix independently. The fact that there are 45 to 60 learners in one class makes it very difficult for any trained and well-meaning teacher to plan and track the individual goals of each learner, and that is why approaches which use the whole class setting, like peer learning, are more common than those which involve individualisation. This finding lends credence to the arguments of Booth and Ainscow (2011) as well as Ainscow et al. (2006) on school improvement.

The finding that 76% of teachers found their education inadequate and that preparation for CBE and SNE has not been done simultaneously shows that there is a disconnect between two areas of education that need to be connected in order to have an inclusive CBE system. While teachers are supposed to adopt a learner-centred curriculum and support learners with varied needs, they are trained separately and not together. This supports the notion of the need for teacher education programmes that integrate inclusion

as part of all teaching instead of it being an afterthought and this is supported by other Kenyan research on teachers' readiness (Andiema, 2023; Isaboke et al., 2021).

The results regarding collaboration are also significant. While co-teaching and collaborative planning among regular and SNE teachers were observed, this was done through personal initiative and reliance on individual specialists, with 44% of teachers citing lack of planning time as one of the challenges faced. Studies that have synthesized research on co-teaching indicate that the effective implementation of co-teaching is based on shared planning time, administration support, and teacher compatibility (Friend et al., 2010; Scruggs et al., 2007). Without timetabled co-planning, the specializations noted by Muthomi and Wambugu (2022) as resources in inclusive settings will be ineffectively distributed.

While attitudinal barriers (47%) were relatively rare compared to structural barriers, they have significant implications for the implementation process. Parental fear that inclusion will hamper the entire class' learning process was mentioned in the study and correlates with Kinyua's (2025) research into difficulties in implementing the competency-based curriculum in learners with special needs due to problems in teacher–parent cooperation. The priority of the barriers reflects the current situation, where many teachers find structural and financial constraints to be more limiting factors than their attitudes to inclusion, which is a positive sign for further reforms. Indeed, it is much easier to change resource allocation and provide necessary training and support than to change deeply embedded attitudes. The results are also consistent with Ainscow's (2020) statement about the fact that the presence of learners with SNE in mainstream classes does not guarantee effective inclusion.

Interpreting the Findings through the Social Model of Disability

According to the social model of disability, the disabling factors are in the barriers of the environment, institutions, and attitudes and not the disabilities themselves (Oliver, 1990). Through such a view, the data indicate that the major barriers to the participation of persons with learning disabilities in CBE classes in Kenya include barriers in the environment – congested classroom settings, lack of materials that are easily accessible, inadequate teacher training, rigid time management, and wrong perceptions in the larger community. The CBE system, which is based on flexible pace, varied means of demonstrating competence, and feedback, can be viewed as a real chance of moving from a deficit model to an enabling one. But this can happen only when the barriers mentioned are addressed; otherwise, the learners will be physically present in regular classrooms but still excluded.

In addition, the model accounts for the notion of incompleteness of the paradigm shift on one hand while there has been a change of curriculum and change in the language used by teachers; however, the factors of disablement mentioned in the social model have been dealt with in part on the other hand. The findings should be considered in the context of an understanding of the limitations of the social model as put forward by Kinyua (2025). He claims that the social model does not address the needs related to the impairment which exist even when the environment has been designed appropriately. It is obvious that the importance placed by the participants on IEPs, specialists, braille and other assistive devices corresponds to this claim and indicates that environmental redesigning and assistance have to go together. Such an approach is also compatible with the right to inclusive education and reasonable accommodation guaranteed by the United Nations Convention on the Rights of Persons with Disabilities.

Implications for Policy, Practice and Teacher Education

Implications can be drawn from this reading. Firstly, professional development needs to evolve past the introduction of ideas related to inclusive education to include ongoing learning about accessible lesson design, differentiated instruction, and use of assistive technology, which preferably takes place in the form of school-based coaching and collaborative lesson study and not in isolation from practice (Darling-Hammond et al., 2017; Waitoller and Artiles, 2013). Secondly, the curricula of teacher preparation programmes need to combine CBE teaching and SNE competence, so that newly minted teachers will not have to align both on the job. Thirdly, schools and education authorities need to consider availability of co-planning time, common assistive technology, and reasonable class sizes as the sine qua non of inclusive CBE. Finally, implementation of CBE reform needs to include measures that will allow assessing its inclusiveness, such as accessibility of materials, accommodations during the assessment process, and involvement of SNE learners.

The above interpretations must be considered within the limitations of the research. Ten selected schools were studied in two counties and the data obtained is self-report data that is subject to social desirability bias and therefore the results indicate analytical and not statistical generalisation. This implies that the reported percentages are indicative of what the teachers state they do and not what an independent observer would document. Despite this, the similarity of findings from the interviews and the questionnaires increases confidence in the core finding.

Overall, the study results point out the necessity to reconsider inclusive teaching techniques in terms of professional responsibility that is common for teachers and schools in general. The success of such inclusive competency-based learning depends on investment in teacher training, availability of relevant resources, appropriate assessment, collaboration among teachers, and a positive attitude towards learner diversity. Absence of such investment means that the new paradigm will be seen in policy more than in the life of learners with special educational needs.

Challenges to Implementation

The synthesis of the findings above reveals that four interconnected issues stand between the full realisation of CBE pedagogy as an inclusive model of instruction in Kenya. Firstly, teacher training – be it pre-service or in-service – has not sufficiently been redesigned to equip teachers with CBE pedagogy skills and special needs education competencies as a comprehensive professional competence. Secondly, limited resources such as inadequate provision of assistive technology and appropriate learning materials restrict teachers from advancing from cheap alternatives of accommodation to the full implementation of UDL.

Thirdly, large class sizes limit the availability of time for personalised planning and delivery of instruction, even for those teachers who may possess the required skills and motivation. Lastly, although discrimination through stigmatization seems to have been reduced, low expectations and dependency on the goodwill of individual teachers instead of collaborative efforts still limit the development of inclusive pedagogy. There is need for sensitisation of schools and communities with regard to expectations of special needs learners still requires additional efforts (Kinyua, 2025)

Conclusion

This study sought to investigate the impact that the shift from content-based learning to CBE has had on inclusive teaching methods for SNE in Kenya. The results of this study reveal some level of success in terms of differentiated instruction, individualised learning, collaboration among peers, and formative assessment. Nevertheless, there are still certain barriers that prevent the full realisation of the potential of inclusive CBE.

Such a realisation calls for comprehensive reforms in the system. Teacher training during both pre-service and in-service levels must incorporate CBE instructional methodology and SNE competencies. There must be provision for appropriate learning resources and assistive devices by the Ministry of Education as well as county governments. There must also be appropriate class size and teacher-pupil ratio to cater for different instructions and individual needs. Additionally, there should be co-teaching of SNE and regular classes through collaboration and appropriate timetabling. There must also be continued sensitization of the school community to foster positive attitudes.

Future studies need to adopt longitudinal, large-scale, mixed-method designs including observation and teacher and learner perceptions in order to understand the impact of inclusive instructional methods on participation and competency. Involving learners with special needs education (SNE) and their guardians could lead to a better understanding of how inclusive instructional methods affect participation and competency levels of the learners.

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