

Teachers' Training in Special Needs Education and Implementation of Competency-Based Curriculum for Early Years Learners with Disabilities in Primary Schools in Nairobi City County, Kenya

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Abstract

A competency-based curriculum has been adopted in the Kenyan education system. However, for learners with disabilities in regular schools, they would be learning using two separate programs, that is an inclusive education program and a competency-based curriculum program. Implementing the two programs simultaneously to this category of learners could be challenging. Therefore, this study focused on the teachers training in Special Needs Education influencing competency-based curriculum implementation for Early Years Learners with disabilities in primary schools. The study was premised on the theory of Complexity and Education by Davis and Sumara (2006), which holds that the fruitfulness and range of systems in which ambiguity and uncertainty occur, should be embraced, and accommodated during evaluation. The researcher employed concurrent embedded design based on the mixed-method approach in gathering data. The study's location was Nairobi City County, Kenya. The target population was 368 participants and from this target, the study sampled 16 heads of schools, 48 teachers, and 2 Educational Officers who were the respondents. The instruments of data collection were semi-structured questionnaires, an observation checklist, and an interview schedule. The piloting of instruments took place in one school with a special unit. The instruments were only accepted as valid and reliable after the results of Cronbach's alpha coefficient of $r=.75$. Data were analyzed through descriptive and inferential statistics. In addition, data were prepared and organized using Statistical Package for Social Sciences into percentages, mean, Skewness, standard deviations, graphs, and tables. The researcher tested the hypothesis by use of the chi-square test at a significant level of $\alpha = .05$. Findings disclosed that teachers with either high or low levels of training in SNE had no significant association with the level of implementation of CBC for learners with disabilities in regular class. Most teachers were trained in primary teacher education and early childhood education and lacked expertise to work with learners with disabilities. Various categories of learners present in schools were: There were no (0%) learners with physical disabilities admitted to private schools. In regards to developmental disabilities, private schools had the least 2(5%) of the children with dyslexia.

Learners with behavioral/emotional disabilities who were present in private schools included: ADHD 3(7.5%), CD 1(2.5%), as compared to public schools, which had ADHD 3(7.5%), ASD 2(5%), CD 2(5%). Regarding sensory impairments, the private schools had the least 1(2.5%), while public 5(12.5%). The Low vision in private was 2(5%), while in public they were 9(22.5%), albinism 2(5%) in private schools, and none(0%) in public schools. Over half (51.28%) of teachers reported that they have trained in Competency-Based Curriculum implementation and could apply the skills in teaching learners with disabilities, while slightly lower than half (48.72%) had not received any training in CBC and were unable to apply the skills. However, the level of training as ether primary teacher, early childhood education teacher or special needs education was not a predictor of competency-based curriculum implementation in classes. The study recommended a mass training of teachers in special needs education in the area of early childhood

education. The study also recommended a study of the similar nature in upper primary schools.

Key words: Teachers' training, Special Needs Education, Competency-Based Curriculum, Early Years Learners with disabilities.

Introduction

A competency involves the efficient routine of a function and the use of knowledge, skills, attitudes, and values (KICD, 2019), while a Competency-Based Curriculum (CBC) is a learning design that provides every learner with the opportunity to identify his/her potential through engaging in hands-on learning at school where the learner's potential is nurtured (Oroszi, 2020; KICD, 2019). By 1965, a design was developed from the generative grammar by Chomsky, to bring forth reforms in teacher training and vocational education (Ford, Vignare, Mulherrin, Davis & Cini, 2014; Butova, 2015). Currently, CBE in the United States as an education system, make programs that are more reputable making students proud of their degree and school (Oroszi, 2020).

Ries, Cabrerab, and González-Carriedo (2016) used a correlation research design to explore the three major predictors of teacher training models including duration, curriculum, and induction process. The study took place in both U.S.A. and Europe. The study findings revealed that upon completion of the study, teachers were able to resolve, reflect and solve a problem in educational settings. This study focused on predictors of teacher training models, while the current study focused on inclusive practices employed during the implementation of CBC. Viviani, Cooley, and Griffin (2020) investigated how The New York City Teaching Fellows (NYCTF) improved the diversity of mathematics teachers. Data was gathered using a longitudinal design and had a target population of 620 mathematics teachers in secondary schools. Findings established that NYCTF failed to address gaps in teacher quality. The study was conducted in secondary schools, while the current study focused on the early years' level of education. Deng, Kiramba, and Viesca (2020) examined factors related to new teachers in general education perceptions of their readiness to teach learners who have multilingual capacities in the classroom. The researcher used a multilevel modeling approach to gather data. The results showed that teacher preparedness was influenced by both teacher education and the support acquired in the first year of working with multilingual learners in their classrooms. The study focused on the teachers' readiness to teach learners with multi-lingual capacity. However, there was a need for a study that focused on the implementation of CBC for LSN in a regular class, a gap that the current study filled. Shulman (1986) reviewed Education reform at Harvard University. Findings distinguished three kinds of content knowledge that teachers needed to have. They included; pedagogical knowledge, subject matter knowledge, and curricular knowledge. The study focused on the evaluation of the education system in the university, and there was a need for a study that focused on the content knowledge areas that teachers have during the implementation of CBC in the early years level of education.

Lorenza (2018) employed a case study approach to investigate art and music curriculum change in Australia. Results revealed that the curriculum change challenged the teachers' capacity to teach. A case study approach was used to examine the teaching of the Art and Music curriculum, while the current study employed a mixed-method design to investigate the CBC among learners with disabilities in a regular class. Similarly, Smith (2018) investigated the Australian accredited training in the vocational education-training sector. Results indicated that the introduction of CBT was over-hasty and teachers received little development training before its introduction. This study was about vocational training, while the current study was about CBC in implementing basic education to learners with disabilities during the early years in a regular class. Noguera and McCluskey (2016) compared Australian and Spanish teachers' preparedness for their careers through training. Eleven secondary teachers participated. A correlation design was adopted in gathering data. Results found that teachers were unfamiliar with the strategies for conveying the acquired

knowledge to their learners. The study used a sample size of 11 respondents in a correlation design, while the current study had a larger sample of 66 and used a mixed-method research design to investigate teachers' implementation of CBC. Anderson & Boyle (2015) investigated Australian inclusive education. The study drew literature from related educational policies and reports. The findings disclosed that all the eight educational jurisdictions in Australia enacted IE differently, which led to different levels of access to learning that are inconsistent with educational results for students across the jurisdictions. The reported study gathered data from documentary reviews that could be overtaken by events and time, while the current study drew data by use of three instruments including a questionnaire, interview, and observation checklist administered to class teachers and heads of schools who are the primary agents in the teaching-learning process.

Rieckmannstats and Hericks (2016) explored the contribution of CBE to quality enhancement in higher education in South Africa. The data was gathered through document reviews and desk-top-based research. Findings revealed that teachers had a generally positive attitude towards CBE, which contributed to the quality enhancement of higher education as it resulted in explicit definition and interactive communication of the intended learning outcomes. This study focused on enhancing higher education with the implementation of CBE, while the current study focused on the implementation of CBC for EYL. Adewumi, Rembe, Shumba, and Akinyemi (2017)) employed a case study design to conduct a study in the schools in the Fort Beaufort District in South Africa. Curriculum adaptation for LSN was the focus and had a sample size of 8 teachers, 10 principals, 4 district education officials as well as 1 provincial officer. The study established that only a few teachers managed to employ individualized learning, grouping, and extra work. Results of the study further disclosed the majority of teachers were unable to modify the curriculum for LSN. The reported study took place in South Africa, and there was a need for a study conducted in Kenya. Hay, Smith, and Paulsen (2001) focused on teachers' preparedness for a policy of inclusion. A sample of 2 577 Free State teachers from 12 districts filled questionnaire. Results establish a lack of paradigm shift towards inclusion. The study had a large sample of 2 577 which could have replicated information, while the study at hand used a small sample of 66 which was easy to manage and get accurate information. Additionally, Adewumi and Mosito (2019) conducted a study in the selected Beaufort District in South Africa. The study focused on the pockets of good practice for the inclusion of LSNs in primary schools. A total of eight teachers, eight principals, one provincial officer, and three district officials participated. It was found that the majority of teachers were untrained in special needs, but accommodated LSNs in their classes. The study further revealed that teachers faced varied hindrances during the inclusion of LSN. The reported study investigated the pockets of good practices in inclusive education, while the current study investigated inclusive practices in the implementation of CBC.

In Tanzania, Tarmo (2014) investigated Pre-service teachers' preparedness to implement CBC in secondary schools. A total of 16 teachers trained at the University of Dar es Salaam were purposively selected for the study. Findings revealed that teachers had theoretical knowledge of competency methods, and used traditional paper and pencil assessment methods. The study was about preparedness for implementing CBC by pre-service teachers in secondary schools, while the study at hand focused on implementing CBC for early years learners with disabilities. Mwaimu and Swai (2015) employed a qualitative method in gathering data to explore teacher effectiveness on pupils' performance in primary schools. The target population comprised school inspectors, headteachers, educational officers, and teachers. Findings maintained that teachers who were motivated to teach were skilled in the use of learner-centered teaching methodologies. This study focused on learners' performance, while the current study focused on inclusive practices used by teachers in implementing CBC in a regular class. However, Namamba and Rao (2017) investigated educators' preparation and employed document review methods to analyze and review literature. Findings indicated that the preparation of teacher educators focused on undergraduate programs and educators did not get professional development activities. The reported study focused on the teacher trainers, while the current study focused on EYL. Similarly, Kabuta (2014) conducted a study that focused on the problems that

learners with physical disabilities in the higher learning institutions in Tanzania faced. Documentary analysis was used to examine the infrastructure situation in five institutions. Twelve learners with physical disabilities, five heads of institutions, twenty-one tutors, forty parents, and eighty-two students without disabilities participated. Results revealed a high inadequacy in trained staff. This study focused on the learning environment for only learners with physical disabilities, and there was a need for a study focused on the inclusion of EYL with disabilities during the implementation of CBC in a regular class.

Kenya Institute of Special Education (KISE) employed a cross-sectional research design to survey the population of children with disabilities and special needs in education by type in all the 47 Counties in Kenya. Findings showed that about 11.4% of the total population of children with disabilities was 2,489,252. Out of this number, 1,261,877 were males and 1,227,375 were females, the enrolment from integrated primary schools revealed that children with intellectual disabilities were the highest with an average of 9 boys and 7 girls while the least enrolment recorded was that of learners with deafblindness (KISE, 2018). This study estimated the children with disabilities but did not focus on implementing CBC for them in a regular class. Owino et al., (2019) investigated teachers' preparedness for inclusive education in lower grades primary schools. The study locale was Awendo, Migori County in Kenya. The study employed a descriptive survey design to collect data. Respondents were 37 comprising; one-education officer, 9 school heads, and 27 teachers. Findings indicated that over 70 % of teachers in lower grades primary schools with special units were not trained in SNE, and classes were congested with a combination of learners with different categories of disabilities in addition to 'normal' pupils making class control difficult. Findings further indicated that recently employed teachers (30-34) years (29.6%) were the majority who taught the lower grades and the number was reduced with experience. This study was conducted in Awendo in Migori County and focused on the implementation of IE, while the current study focused on inclusive practices in implementing CBC to EYL with disabilities and was conducted in Nairobi City County.

Hammill Institute on Disabilities (2018) investigated the intervention in schools and clinics in special education. The research involved targeted desktop research for the search for literature about Kenyan special education. Findings revealed a need for adequately trained special education expertise to meet the needs of LSNs. The reported study was desktop-based research that had no location, while the study at hand is specific to Nairobi City County.

Janmohamed (2012) investigated inclusive education challenges in Parklands District, Nairobi. Two public primary schools participated and a purposive sampling technique was employed to select teachers handling LSN in their classes. Findings maintained that about 81% of teachers were inadequately equipped with training and expertise to work with learners with learning disabilities. This study had a small sample of 2 schools and was conducted long before the adoption of the CBC system of education, and there was a need for a current study that would help in the comparison of the status of inclusive education with the CBC dispensation of learning. Similarly, Nyangige (2014) used descriptive research to study IE in regular schools in Kasarani Division in Nairobi County. Forty (40) primary school teachers and their head teachers participated. Findings disclosed that the majority of regular schools had inclusive education and teachers were trained in the provision of resources, facilities, and teaching. However, the majority of teachers were not trained in SNE. The study was conducted a long time ago before the introduction of CBC. The study also employed a descriptive survey design in gathering data. However, the current study took place with the CBC, a new dispensation currently adopted. The current study was also mixed research conducted in the entire Nairobi with LSN. Further, Isaboke, Wambiri, and Mweru (2021) explored the CBC implementation challenges in public pre-primary schools. The study was located in Nairobi City County, where it adopted the Concern-Based Model by Hall, Hord, and Rutherford (2006). The target population was 225 public pre-primary schools. The result showed that CBC implementation was greatly challenged due to inadequate teacher training in the Curriculum implementation, large class sizes, few teachers, inadequate teaching-learning materials, and inadequate cooperation from parents. The reported study focused on pre-primary

schools, while the current study was conducted in lower grades primary schools. Further, the study failed to focus on learners with disabilities, which the current study did.

Statement of problem

Studies that have been conducted and that focused on CBC revealed that it is quite beneficial. The learners are able to acquire the hands-on skills necessary in a changing world. Nonetheless, limited studies were found that combined teacher training for IE and CBC together both internationally, continentally, regionally, and locally. In addition, the studies that focused on early years teacher training in SNE for inclusion of LSNs with disabilities in regular schools were equally understudied and specifically in Nairobi City County which was the location of the study. These gaps prompted the choice of the objective.

Objectives

1. To describe the association between the categories of Disabilities Present in Schools and implementation of CBC for Early Years Learners with disabilities in primary schools.
 2. To describe the association between teachers' Level of Training and implementation of CBC for Early Years Learners with disabilities in primary schools.
- To find out the association between teachers' training in CBC for its implementation to Early Years Learners with disabilities in primary schools.

Methodology

The study employed concurrent embedded design founded on a mixed methodology. The study took place in both public and private primary schools in Nairobi City County. It targeted teachers of lower grades in public and private primary schools as well as headteachers of the respective schools in Nairobi City County. This comprised 50 headteachers, 300 teachers, and 17 sub-county educational officers. This gave a total of 368 target participants.

The research instruments used were questionnaires, interview schedules, and an observation checklist. Piloting of the study was conducted in one of the primary schools, which had a functional special unit, and aided in the validity and reliability determination. Quantitative data were analyzed using both descriptive and inferential statistics. Qualitative data from education officers and head teachers were transcribed, coded, and analyzed using Thematic Analysis.

Findings

The variables of this objective tested were categories of learners with disabilities for specialization, teachers' levels of training, and training on CBC.

Categories of Disabilities Present in Schools for Specialized Training

In this sub-section, the researcher sought to find out the various categories of learners with disabilities found in regular schools. The result is presented in Table 4.5.

Table 1.1: Categories of Disabilities for Specialized Training

Physical Disorders		Public		Private		Total	
		F	%	F	%	F	%
Cerebral Palsy	Yes	5	12.5	0	0	5	12.5
	No	16	40	19	47.5	35	87.5
Epilepsy	Yes	2	5	0	0	2	5
	No	19	47.5	19	47.5	38	95
Chronic asthma	Yes	2	5	0	0	2	5
	No	19	47.5	19	47.5	38	98
Developmental Disorders							
Downs Syndrome	Yes	5	12.5	0	0	5	12.5
	No	16	40	19	47.5	35	87.5
Autism	Yes	7	17.5	0	0	7	17.5
	No	14	35	19	47.5	33	82.5
Dyslexia	Yes	3	7.5	2	5	5	12.5
	No	18	45	17	42.5	35	87.5
Genetic Disorders	Yes	1	2.5	0	0	1	2.5
	No	20	50	19	47.5	39	97.5
Intellectual Disabilities	Yes	3	7.5	0	0	3	7.5
	No	18	45	19	47.5	37	92.5
Behavioral/ Emotional Disorders							
ADHD	Yes	3	7.5	3	7.5	6	15
	No	18	45	16	40	34	85
ASD	Yes	2	5	0	0	2	5
	No	19	47.5	19	47.5	38	95
	No	15	37.5	16	40	31	77.5
Conduct Disorders	Yes	2	5	1	2.5	3	7.5
	No	19	47.5	18	45	37	92.5
Sensory Impairments							
Low Vision	Yes	9	22.5	2	5	11	27.5
	No	12	30	17	42.5	29	72.5
Hard of Hearing	Yes	5	12.5	1	2.5	6	15
	No	16	40	18	45	34	85
Albinism	Yes	0	0	2	5	2	5
	No	21	52.5	17	42.5	38	95

Table 1.1 shows that there were no (0%) learners with physical disabilities admitted to private schools. In regards to developmental disabilities, private schools had the least 2(5%) of the children with dyslexia.

Concerning children with behavioral/emotional disabilities, quite a good number were present in private schools. They include: ADHD 3(7.5%), CD 1(2.5%), as compared to public schools, which had ADHD 3(7.5%), ASD 2(5%), CD 2(5%).

Similarly, regarding sensory impairments, the private schools had the least 1(2.5%), while public 5(12.5%). The Low vision in private was 2(5%), while in public they were 9(22.5%), albinism 2(5%) in private schools, and none(0%) in public schools.

Data from the observation checklist was in tandem with the findings from the questionnaires. It revealed that there were a large number of learners with disabilities in the regular schools. Learners with different categories of disabilities were also observed sharing classes. However, it was noted that the number of learners with disabilities was high in public schools as compared to private schools. This data contradicts findings by KISE (2018) which showed that children with intellectual disabilities were the highest in integrated schools and the least were learners who were deaf-blind.

When the head teachers were asked whether they had adequate teachers to work with all the categories of learners with disabilities as observed, it emerged that schools had inadequate teachers trained in special needs education as shown in Table 4.6.

Teachers' Level of Training

Here the researcher sought to find out the level of training of teachers in the lower grades primary in terms of professions like special needs education, early childhood education, and primary teacher education.

Early Childhood Education

The researcher sought to find out the levels of qualification for teachers trained in early childhood as certificate, diploma, degree, and postgraduate. The findings for the teachers' qualification in early childhood education is presented in Figure 4.1.

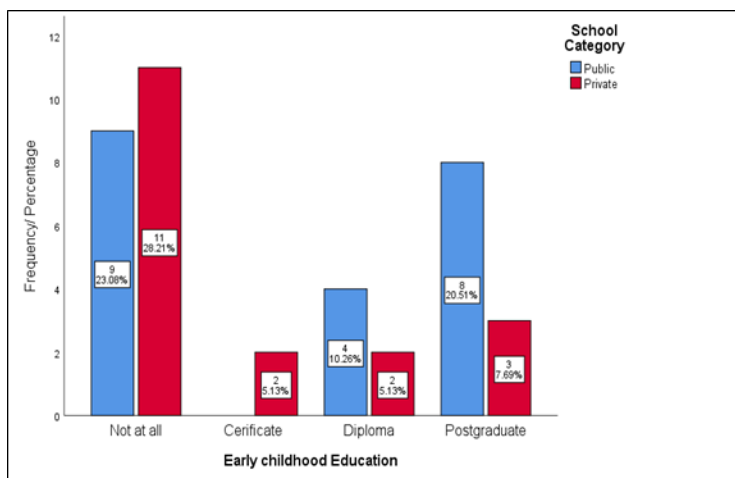


Figure 1.1: Levels of Training in Early Childhood Education

The findings in Figure 1.1 show that about a quarter of the teachers 9(23.08%) in public schools and slightly above a quarter of teachers 11(28.21%) in private schools did not have qualifications in ECE. However, for those trained in ECE, the majority 8(20.51) had postgraduates degree. Similarly, in private schools, the

highest qualification in ECE was also post-graduate at 3(7.69%). These results could imply that teachers trained in ECE also taught in primary schools.

Primary Teacher Education

In this section, the researcher sought to find out the levels of training of the primary school teachers in the levels of the certificate, diploma, degree, or postgraduate. Findings are shown in Figure 4.2.

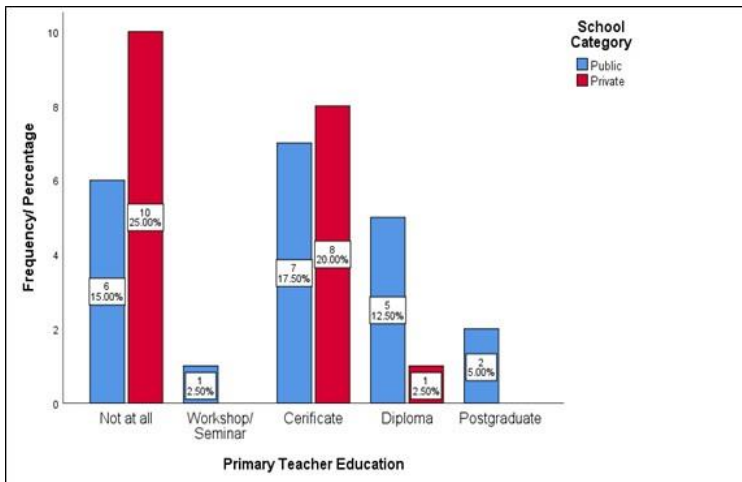


Figure 1.2: Levels of Teacher Training in Primary Teacher Education

Figure 1.2 shows that about a quarter of teachers 10(25%) in private schools were untrained in PTE. It was also noted that private schools had none (0%) of teachers who attended training through workshops and seminars. In Public schools, about 7(17.5%) of the teachers had certificate qualifications in PTE. Similarly, low number 6(15%) in public schools were not trained in PTE. This could imply that majority of the teachers both in public and private schools were trained in PTE.

Special Needs Education

In this sub-section, the researcher sought to find out the teachers’ level of qualifications in special needs education. The findings are shown in Figure 4.3.

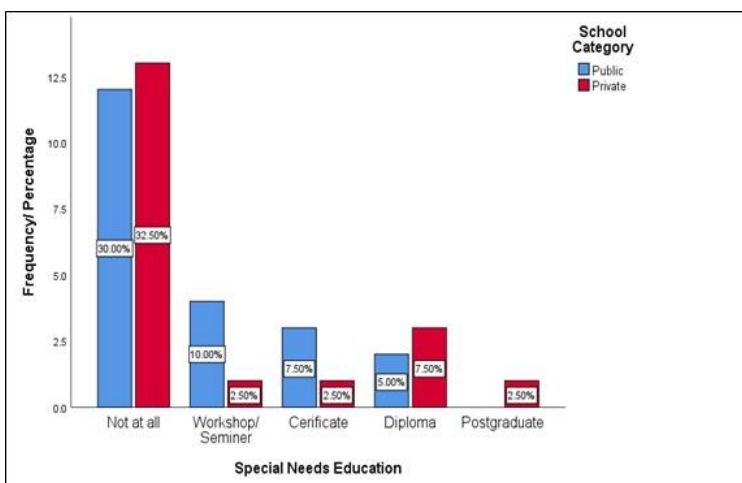


Figure 1.3: Level of Teacher Training in Special Needs Education

The findings in Figure 1.3 show that about (30 %) of teachers in public schools and about a third (32.5%) of

teachers in private schools were not trained in special needs education. However, for those trained in SNE, only about (10%) of teachers in public schools had attended training through workshops/seminars. Similarly, only (7.5%) of teachers in private schools had diploma qualifications in SNE. These results could imply that very few teachers in primary schools had training in SNE and were incompetent to support the LSN in the regular classes.

When head teachers were asked whether they had, a teacher trained in special needs deployed in their schools, it emerged that most the public schools had no teachers deployed to be in charge of the special units and learners with disabilities. For example, one of the head teachers had the following to say,

We do not have a teacher deployed by TSC to be in charge of the learners with disabilities, instead, the learners are learning at the mercies of one of our teachers who had done diploma

Another head teacher observed:

I am specifically trained in special needs but none of my teachers is trained in the same. I have wanted to start the program, but mixing both administration and the special needs program is impossible'

Still, another teacher said:

We have learners with disabilities here though not many, but they just learn in the regular classes as others since we do not have any special considerations'.

Similar findings took place in private schools. For example, one of the head teachers said,

One of our teachers is trained in special needs, but she is teaching the upper classes'.

Still another head teacher remarked:

'We have some learners with disabilities, but we lack trained teachers and also I have not heard of any seminar/workshop of the same I would automatically send my teachers.

Further, the sub-county educational officers were asked whether they faced challenges in the implementation of inclusive education.

One of the officers (EO2) remarked that they lacked an officer in charge of special education at the sub-county level and this hindered the delivery of quality and equitable education in the sub-county. Here is what the officer said,

'I have no officers to coordinate SNE issues at the sub-county level'.

Similarly, EO2 maintained that inclusive education implementation underwent multiple challenges ranging from inadequate facilities to inadequately trained teachers to attitudes from both the teachers, learners, and even the community.

The findings from the figures (4.1, 4.2, and 4.3), the head teachers and educational officers conform to findings by Viviani, Cooley, and Griffin (2020) which revealed that the New York City Teaching Fellows (NYCTF) failed to address gaps in teacher quality. The findings are also in line with findings by Owino et al., (2019) which revealed that the majority of teachers (56.5%) were O-level (untrained) and employed by the board of management. Still, the findings conform to the findings by Janmohamed (2012) which revealed that teachers were inadequately trained to teach learners with learning disabilities in a regular class. Additionally, the findings support the findings by Kabuta (2014) which indicated that teachers were

untrained in SNE and were inadequately equipped with skills to work with learners with disabilities.

These findings could mean that teachers in different training specializations are all taught in primary schools. It also meant that most schools both public and private had a limited number of teachers trained in special needs education. Similarly, the findings also imply that the Ministry of Education has not come up with strategies to track teachers trained in SNE to oversee inclusive education in the regular schools.

Teachers’ Training in the Implementation of CBC

In this section, teachers were asked about their training in the implementation of CBC. The findings were as shown in Figure 4.4.

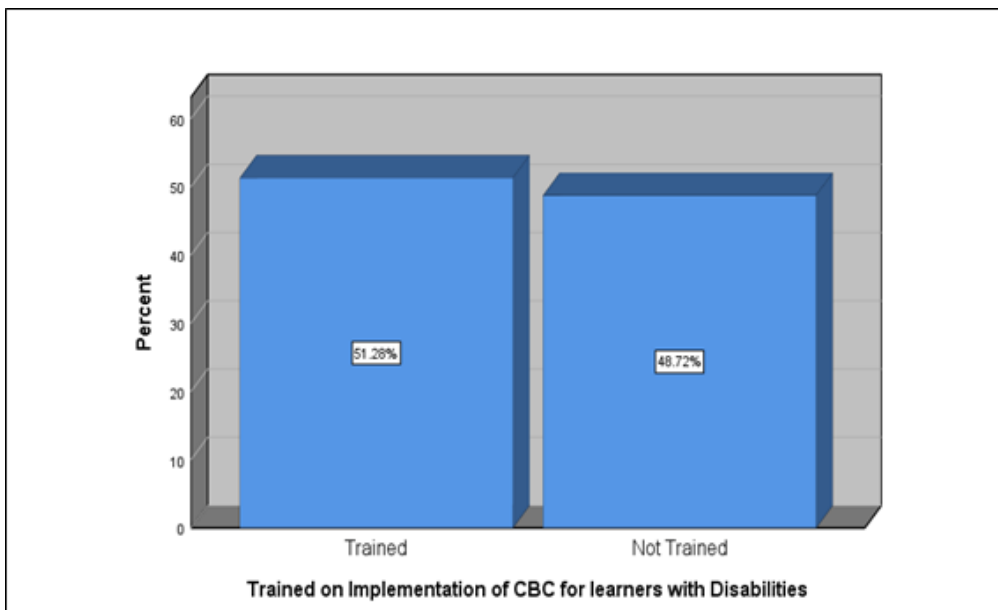


Figure 1.4: Teachers’ Training in the Implementation of CBC

Over half (51.28%) of the respondents reported that they had been trained in the implementation of CBC and could apply the skills in teaching learners with disabilities. Slightly lower than half (48.72%) had not received any training in CBC and were unable to apply the skills to teach learners with disabilities. These findings were not in conformity with the findings by Isaboke, Wambiri, and Mweru (2021) who observed that teachers of pre-primary schools were untrained in CBC and were being challenged in its implementation. These findings further contradicted the findings by Momanyi & Rop (2019); which indicated that teachers had not been trained in CBC and had limited knowledge of CBC. These findings implied that most teachers still had little knowledge about CBC.

Table 1.2: Training in CBC Implementation According to School Category

			School Category		Total
			Public	Private	
Trained on Implementation of CBC for learners with Disabilities	Trained	Frequency	6	13	19
		% of Total	16.70%	36.10%	52.80%

Not Trained	Frequency	13	6	17
	% of Total	33.30%	13.90%	47.20%
Total	Count	18	18	36
	% of Total	50.00%	50.00%	100.00%

About a third of teachers 13(36.1%) in private schools reported having been trained compared to 6(16.7%) of the trained respondents from public schools. Therefore, these findings implied that the majority of teachers in public schools had inadequate training in CBC compared to private schools. Therefore, private schools highly embraced CBC compared to public schools.

However, data from the interviews with the head teachers revealed that teachers had been sent for CBC training. For example one of the head teachers’ remarked:

All our teachers do attend the seminars on CBC every holiday and so all of them are competent including the upper classes

From the findings, it was clear that information given by the head teachers contradicted those by teachers. The findings could therefore imply that most of the head teachers were unaware of the levels of CBC training among their teachers. The result meant that private schools could have positively embraced CBC compared to public schools. However, it could also imply that the untrained teachers were also teaching in the lower grades using CBC design.

Descriptive Analysis of Respondents’ scores on Implementation of CBC

When trained teachers in CBC were asked the extent to which they had employed the CBC co-competencies in teaching learners with disabilities in their class, the following were the responses as shown in Table 4.9.

Table 4.9: The Extent to which Trained Teachers in CBC Employ the CBC co-Competencies in Teaching

	N	Min	Max	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
ICBCS	44	20	77	49.41	21.54	-0.18	0.36
Valid N (listwise)	44						

The distribution of the teachers’ scores on implementation of CBC was negatively skewed (SK = -0.18) with M= 49.41 (SD= 21.54). This meant that the majority of the teachers rated themselves highly in the implementation of CBC co-competencies for learners with disabilities. These findings further contradicted findings by Isaboke et al., (2021) which showed that CBC in Kenya was greatly challenged. The finding similarly did not support findings by Momanyi & Rop (2019) which revealed that teachers were less prepared for the CBC system of education. Finally, it was not in line with findings by Koskei (2020) which revealed that teachers were challenged in the implementation of CBC due to a lack of training. These findings demonstrated that training in CBC helps the majority of teachers to apply the basic curriculum co-competencies. However, it also showed that a good number of teachers were still unable to apply the co-competencies in teaching LSN and therefore rated themselves lowly in the skill.

A summary of the level of the extent to which teachers implemented CBC in teaching learners with

disabilities was sought, and the results were as indicated in Figure 4.6.

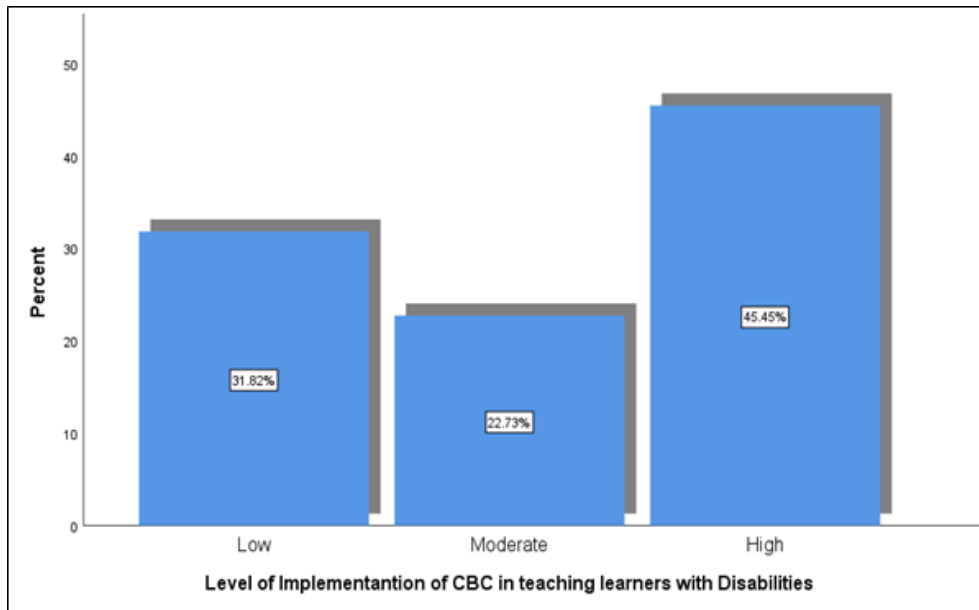


Figure 1.5: Level of Implementation of CBC in Teaching Learners with Disabilities

From figure 1.5, it was observed that close to half (45.45%) have a high implementation of CBC in teaching learners with disabilities while about a third (31.82%) had a low implementation of CBC in teaching learners with disabilities.

When head teachers were interrogated about the implementation of CBC for learners with disabilities, they stated that CBC implementation for learners with disabilities faced myriads of challenges. Some of the responses from teachers were as presented:

One of the head teachers said:

‘CBC is new and not well familiarized with’.

Another head teacher said:

‘Became a challenge when we get several special learners yet they need individualized attention.’

Yet another head teacher said:

‘No one to handle the special learners’

Still, a head teacher said:

‘Mean score issue for regular learners’ makes it difficult to concentrate on this category of learners.’

These findings were in line with findings by Andiema (2021) which indicated that the majority of special needs teachers were inadequately prepared to undertake evaluation and assessment of children with disabilities in line with the new curriculum design. These findings revealed that primary school teachers only received general training in CBC for ‘regular’ learners and not specialized training in CBC for learners with disabilities.

These findings implied that most of the head teachers could be overwhelmed by the presence of learners

with disabilities in their schools because they had a limited number of teachers trained in SNE.

When the teachers who had been trained in CBC were asked to give their opinion on how their training in CBC and the extent to which they applied the co-competencies have influenced their implementation of inclusive education, the common theme that emerged was that it has contributed to the development of teachers competencies in the teaching using the design, as in the following responses:

T1 said:

'I have learned self-efficacy which helps me identify learners' self-esteem and encourage them'

Yet, T3 had this to say:

I have been able to implement creativity and imagination through activities involving CBC'

T1 said, *'I have learned to incorporate the learners with disabilities in doing activities that are done by others'*

Still, T2 had the following to say:

'I have undergone training and I have been able to help them identify their talents'

This was a response by T2 :

'It has borne fruits for most learners I have felt encouraged'

Still, T1 said:

'The CBC curriculum design is inclusive and hence helps a great deal in the education'

These findings were parallel to findings by Tarmo (2014) which revealed that teachers' knowledge of competency methods was still theoretical and continued using traditional paper and pencil assessment methods. The findings implied that teachers who had acquired training in CBC were competent and supported the learners during the early years level of education.

At this point, the hypothesis was tested using a Chi-square at a significant level of $P < .05$. The null hypothesis stated H_{01} : There is no association between teachers' training in SNE and competency-based curriculum in primary schools. The results of a chi-square test are given in Table 1.3.

Table 1.3: An Association between Teachers' Training in SNE and Competency-Based Curriculum

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.033 ^a	2	0.133
Likelihood Ratio	4.182	2	0.124
Linear-by-Linear Association	3.928	1	0.047
N of Valid Cases	39		

a. 3 cells (50.0%) have an expected count of less than 5. The minimum expected count is 2.82.

The output in Table 1.3 shows there was no significant association between teachers trained in SNE and implementation of CBC strategies among learners with disability ($\chi^2 = 4.033$, $df = 2$, $P > 0.05$). The

researcher, therefore, failed to reject the null hypothesis which stated, ' H_{01} ': There is no association between teachers' training in SNE and competency-based curriculum implementation for early years learners with disabilities in primary schools.

These results implied that other variables explained the successful implementation of a competency-based curriculum for LSNs in primary schools. In this case, the association was not statistically significant because the association was explained by a third variable, which was either training in ECE or training in PTE, and equally sought treatment. Therefore, it meant that not only does training in SNE influence the successful teaching of early year learners with disabilities in primary schools, but also training in early childhood education and training in primary teacher education equally explains it.

Conclusions

The main objective was to find out the association between teachers' training in SNE and CBC implementation. After looking at the levels of scores of teachers training in SNE and CBC implementation in primary schools, output disclosed that teachers with either high or low levels of training in SNE had no significant association with the level of CBC implementation in the early years level of education for learners with disabilities in a regular class. Most teachers had inadequate training in SNE and hence were incompetent in working with learners with disabilities. However, regardless of teacher training, they were able to implement CBC. Additionally, the majority of teachers in primary schools were trained in primary teacher education and early childhood education, while a few were trained in SNE. Therefore, the conclusion could be logically made that the teachers' with a high level of training in SNE had a high level of CBC implementation to early years learners with disabilities in their regular class. On the other hand, teachers who recorded a low level of training in SNE were less motivated to teach learners with disabilities in the regular class and were also less successful in accommodating them since their training was in PTE and ECE areas of specializations.

Recommendation

1. The negative correlation between teachers' training in SNE and CBC in primary schools was a result of a low number of teachers trained in SNE. Based on this finding, the results of this study may be of significance to three institutions. They include:

First, the Ministry of Education (National and County levels in liaison with TSC could ensure that enough teachers are trained in SNE and posted in regular primary schools to oversee the implementation of both IE and CBC together in regular schools. A mass training of all teachers in regular schools could also be conducted through compulsory seminars and workshops on special needs education. The Ministry of Education could also direct that all the courses offered in the colleges and Universities have special needs units embedded and that they form part of core units/subjects that a student must do before graduation. The Ministry of education could task colleges and universities to come up with short courses in special needs education that can be covered within holiday breaks for teachers to register.

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