



Influence of Use of Instructional Resources on Curriculum Implementation in Early Years Education (EYE)

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Abstract: *The quality of education depends on the ability, hard work and competencies of teachers. In Kenya, the degree of teacher competencies on curriculum implementation seems still low despite the Kenya Institute of Curriculum Development putting measures to train teachers on curriculum implementation. It is the competent teachers that a country mainly relies on for an excellent education system. It is at this basis that the researcher sought to establish the influence of use of instructional resources on curriculum implementation in EYE in public primary schools in Kikoneni zone, Kwale County, Kenya. The study adopted a descriptive survey research design and a mixed methods approach. The target population was 467 EYE teachers for Grade 3, 60 head teachers, and 9900 learners. Except for head teachers, from each stratum, 30% of respondents were sampled, giving 140 EYE teachers, 60 head teachers and 2970 learners. Questionnaires and observation schedule were used to collect data. A pilot study was conducted in Lunga Lunga zone of Kwale County. Data was analysed using statistical package for social sciences (SPSS) version 25 and the results presented descriptively. The study found that the instructional resources have an influence on curriculum implementation in public primary schools in Kikoneni zone, Kwale County. The materials needed for digital learning as well as the competency of teachers seems to be a contributing factor. Digital learning gives challenges to the successful implementation of CBC. The study recommends that the EYE school administrators provide sufficient instructional resources for effective classroom instruction.*

Keywords: *Instructional Resources, Curriculum Implementation, EYE, Teacher Competencies, ECDE Centres*

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1. Introduction

The global environment influences Early Years Education through its effects on economy and social conditions within nations. The introduction of technology to everyday life and the globalization of labor market have affected the nature of learning in the teaching process and the need to guarantee every person the achievement of new key competencies for personal and social development (Pamier, 2017). Curriculum is defined by outcomes, basic skills, content delivery and criteria of assessment. Teacher competencies on curriculum implementation is a priority to enable learners engage and interact with knowledge with minimal supervision. This is the education to be given to children in PP1 to grade three.

Globally, early childhood education currently focuses more on the quality of the literacy and numeracy skills. For instances, the personality-orientated model has been advocated for in the Czech Republic and other European countries (Opletalova, 2015). The model is made up of five personality factors to facilitate the understanding of the patterns of behavior, feelings and thoughts. The traits constituting to the personality-oriented model are extraversion, neuroticism, agreeableness, openness to experience and conscientiousness. The personality-oriented model is crucial for the current study as the view comes from the argument that each child is unique as an individual who possess talents, abilities, motivation and means of learning inherent to him or her. Therefore, the model utilizes the individual approach in the edification process and in the rearing of each and every child.

In America, Bristol and Patrick (2021) observed that the competence-based curriculum (CBC) concept moved to Western countries due to the economic recession caused by the widespread unemployment among the young people in the United States and the concern about low student achievement and poor quality of teacher training, which promoted a need to structure the outcome learning in a manner that will encourage teachers to express their teaching objectives in terms of observable student behaviors. The main criticism was the education system, which was blamed for school graduates' low attainment of necessary skills. This has seen commendable progress in the American education system.

In 2009, Mexico began implementing competence-based curriculum approach through several reforms in basic education and national education policies in which competence was described as the application of skills, knowledge, values and attitudes. The competency-based approach was aimed at stimulating students to attain optimum academic performance. The acquired skills, values, attitudes, and knowledge were applied in day-to-day activities, and learners were expected to reflect on their endeavors. Similarly, in Australia, the major key competence standards were introduced to give guidelines to schools and colleges about the skills and competency standards required by a country from the workforce. The intention was to make sure that colleges such as technical and further Education [TAFE] prepare their graduates with the skills needed to get jobs when they have completed their studies (Kopelman, Gardberg, & Bradwein, 2021).

Competence-based curriculum was started in Kenya in 2017 to replace the 8-4-4 system that was introduced in 1985, and it was meant to produce self-reliant individuals, but it failed to meet its objectives. According to ministry of education Republic of Kenya (2017), the CBC approach allows meaningful ties while focusing on skills within and across subject areas. Subjects continue to be taught and core competencies are generated over time. The subjects taught in the lower primary are Literacy, Kenya sign language/Kiswahili language activities purposed for deaf learners' mathematical activities, nutrition, and hygiene activities, indigenous language, environmental, religious education, movement and creative activities. It is expected that by the end of the early years of education (Grades 1-3), the learner will have achieved the following skills: Demonstrate basic academic skills in reading and numeracy; Communicate appropriately in many situations using verbal and/or non-verbal forms; Demonstrate adequate social relationship etiquette; use imagination and logical thought capabilities to overcome problems; Explore the instant learning and entertainment world; Hygiene, diet, hygiene and protection skills are taught to enhance wellbeing and health; Demonstrating the acquisition for healthy living of mental, spiritual, physical, spiritual, aesthetic and moral development; demonstrate the appreciation for harmonious coexistence of the rich and varied cultural

heritage of the country; Apply digital literacy skills for enjoyment and learning.

The Kenyan CBC is a system of education designed by Kenya Institute of Curriculum Development (KICD) team in 2017 which is different from 8.4.4 (Ongesa, 2020). CBC focuses on a change of emphasis from the tradition of chalk-and-talk teaching to focusing on the learner by learning in groups and not just memorizing facts but developing competencies and understanding core values and important issues. In CBC school is being restructured from 8-4-4 to 2-6-3-3-3. All learners take 2 years of pre-primary, then 6 years of primary, and then 3 years of junior secondary school. If the learner passes the grade 9 exams at the end of junior school, he or she can then go on to take 3 years of senior secondary school. University under CBC will be 3 years instead of 4 years. This CBC is designed to emphasize the significance of developing skills such as communication and collaboration, critical thinking and problem solving, imagination and creativity, citizenship, learning to learn, self-efficacy and digital literacy (Cherotich, Kaptingei, & Rotumoi, 2023). These competencies are to be applied into real life situations.

The quality of education depends on the ability, hard work and Competencies of teachers. The degree of teacher competencies on curriculum implementation is still low despite KICD putting measures to train teachers on curriculum implementation. Teachers are central in curriculum implementation in schools in providing instructional reforms in Early Years Education. It is the competent teachers that a country mainly relies on for an excellent education system. It is at this notion that the researcher sought to answer the research question; What is the influence of use of instructional resources on curriculum implementation in Early Years Education (EYE) in public primary schools in Kikoneni zone, Kwale County?

2. Literature Review

Instructional resources are the basic channel of communication in the classroom for the purpose of effective teaching and learning (Ndethiu, 2019). It is intolerable to do without instructional resources in the curriculum implementation process. Resources catch and sustain learner's interests and allow the learner to discover by themselves. Using instructional resources effectively and digital devices is key in way of making positive strides permanent for learners. This can be achieved by the teacher integrating attention, motivation and preliminary observation at the entrance of teaching period. Integrating methods and techniques in the lesson appropriately arrest learner's attention and finally summarizes, measures and evaluates the lesson (Gagne, 2010). Teaching resources can be of two dimensions: Objects like pictures, drawings, grass, posters and books. They could be real objects, models or audio-visual aids like television and video (Shabiralyani, Hasan, Hamad and Iqbal, 2015). Currently, tools are available and

should be availed in the instructional process. This study supports the findings of Robertson, Gray, Lovegren, Killough and Wenzinger, (2021) which suggest that the level of the use of instructional resources alongside curriculum implementation has yielded success during classroom instructions.

In a study by Darling-Hammond, Weigel and Abebe (2019), the learners' achievement of knowledge, skills, and attitudes is directly proportional to teachers' preparedness. Teacher preparedness in terms of knowledge, attitude and skills will determine curriculum respectability. As elaborated by Gathin (2021), in the case where a country needs vast expansion and creation of competency-based skilled human resources and an economy based society, education needs to be skilled-based, and teachers need to prepare well to implement a complex evolutionary and responsive learner-centered approach, teaching is a complex and multidimensional process that requires deep knowledge and understanding in a wide range of areas and the ability of the teacher to synthesize, integrate and apply the knowledge in different situations. The implementers of a curriculum ought to be thoroughly prepared through in-service seminars and workshops. Sensitization will make teachers own the project and put full focus.

A sentiment supported by Gurney (2022) opines that teacher quality can be well understood by considering the relationship between teacher productivity and teacher training. This may include formal pre-service university education, in- service professional development, and informal training acquired through on-the-job experience. The same idea is supported by Kopelman, *et al.*, (2021) who argue that under CBC, teacher preparation impacts teachers with the right teaching skills and styles, materials use, teaching tools. This teacher, as a result, possesses practical knowledge on how to deliver the CBC curriculum.

Theoretical Framework

The study adopted Vygotsky's constructivism school of thoughts whose proponent is that humans construct knowledge and meaning from experiences and Piaget's theory on cognitive development which suggests that intelligence changes as children grow. The focus tends to shift from the teacher to the learner as the central focus of any learning situation (Umida, Dilor & Umar, 2020). Learners are argued to be actively involved in the process of learning. The learners acquire abilities and access their understanding and teachers as facilitator, guide and mentor. Their job has become that of asking questions to prompt learner's curiosity to work with resources and construct meaning out of them. Learning in constructivism environment is hands on where teachers set resources in order and ignites learners' minds by using inquiry methods. As such, they guide learners to create their own understanding of concepts and draw individual conclusions and application of knowledge gained (Hattie and Donoghue, 2016).

According to this theory learners learn by building on previous knowledge and experiences by actively interacting with content and resources instead of receiving knowledge passively through lectures. Pedagogies include guided discovery, discussion on thoughts and ideals as well as activities to help learners learn to learn. (Hayes, 2013). Constructivism has the following strengths: teaching is effective for learners who learn better by doing and helps learners to better make information learnt relevant in classroom to their lives. The method caters for learners' prior knowledge, motivates teachers to spend more time on the learner's favorite areas and allows teachers to focus on important and relevant concepts. Learners work in groups and pairs, hence copying skills, support each other's opinion, input and ideas.

However, constructivism is faced with weaknesses: training is necessary for constructivism, teaching is extensive and often require constantly long-term professional development of the teaching force.

3. Methodology

The study was conducted in Kikoneni zone, Kwale County, Kenya. The study adopted a descriptive survey research design and a mixed methods approach involving both qualitative and quantitative data. The target population was 467 EYE teachers in grade 3, 60 head teachers, 9900 learners from 60 public primary schools totaling 10427. The study used Mugenda and Mugenda's recommendation of 30% of population for sample. Except for head teachers, each stratum sampled 30% of respondents giving 140 EYE teachers, 60 head teachers and 2970 learners. Two pairs of questionnaires (one for EYE head teachers and another for the EYE teachers) and observation schedule (among the learners) were used to collect data. A pilot study was conducted in Lunga Lunga zone. The validity and reliability of the instruments was determined through test – retest technique in piloting at one EYE school in Mombasa County with a few respondents (10%). Data was analysed using statistical package for social sciences (SPSS) version 25 and the results presented descriptively using frequency, percentages, tables and figures.

4. Results and Discussion

From a sample of 162 questionnaires to the EYE teachers and 60 to head teachers in public primary schools in Kikoneni zone Kwale County, the study achieved response rates of 85% (138) and 85% (51) for teachers and head teachers respectively. There were more female EYE teachers (51.4%) but more male head teachers (64.7%). The EYE teachers' holding postgraduate degree were 12.3% (17), undergraduate 29% (40), diploma 30.4% (42), and those with certificates were 28.3% (39). The head teachers holding undergraduate degrees were

3.9% (2), diploma was 43.1% (22) and those holding certificates were 53% (27).

The study determined the influence of instructional resources on curriculum implementation in early years of education in public primary schools in Kikoneni Zone,

Kwale County. Through the questionnaire items, the respondents were required to rate the level of agreement with the statements on a 5-point Likert scale. The collected data was analyzed descriptively using means and standard deviations, and the results are presented in Table 1.

Table 1: Influence of use of instructional resources on curriculum implementation

		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total
There is adequacy of Teaching and learning Materials and Resources in Pre-School Centres.	F	26	32	66	10	4	138
	%	18.84	23.19	47.83	7.25	2.90	100
The centers face many challenges when Acquiring Learning Resources.	F	16	38	52	27	5	138
	%	11.59	27.54	37.68	19.57	3.62	100
There are no SNE teachers to enhance the inclusion process.	F	31	52	40	8	7	138
	%	22.46	37.68	28.99	5.80	5.07	100
The procedures of acquiring the materials for learning is very Rigid.	F	23	34	52	18	11	138
	%	16.67	24.64	37.68	13.04	7.97	100
The centers lack government support hence they are unable to procure the required resources for SNE.	F	32	43	40	18	5	138
	%	23.19	31.16	28.99	13.04	3.62	100
Lack of Teaching and Learning Resources Influence the Implementation of Inclusive Education.	F	41	40	39	15	3	138
	%	29.71	28.99	28.26	10.87	2.17	100

Table 1 shows that almost half of the teachers 66(47%) ratings were neutral with the statement that there is adequacy of Teaching and learning Materials and Resources in Pre-School Centres. This was followed by a portion that agreed 32(23%) and another one that strongly agreed 26(18%) that the centers had sufficient instructional materials. The statement that the centers face many challenges when acquiring learning resources was rated neutral by the largest portion of the teachers 52(37%), followed by agree 38(27%) and then disagree 27(19%). The statement that there are no SNE teachers to enhance the inclusion process had the highest rating at agree 52(37%) followed by neutral 40(28.9%). The statement had the least rating at strongly disagree 7(5%) implying that majority of the teachers agreed that there were no SNE teachers that would enhance implementation of inclusive education.

The statement that the procedures of acquiring the materials for learning is very rigid was rated highest at neutral by largest portion 52(37.68%) followed by agree at 34(24.64%). The statement that the centres lack government support hence they are unable to procure the required resources for SNE had a rating at 43(31.16%) as agree. The statement that lack of teaching and Learning Resources Influence the Implementation of Inclusive Education had a highest rating at strongly agree by largest portion of the teachers 41(29.7%) followed by agree at 40(28.9%).

This was illustrated by the Head teachers who indicated that while resources were available, they were insufficient (Figure 1).

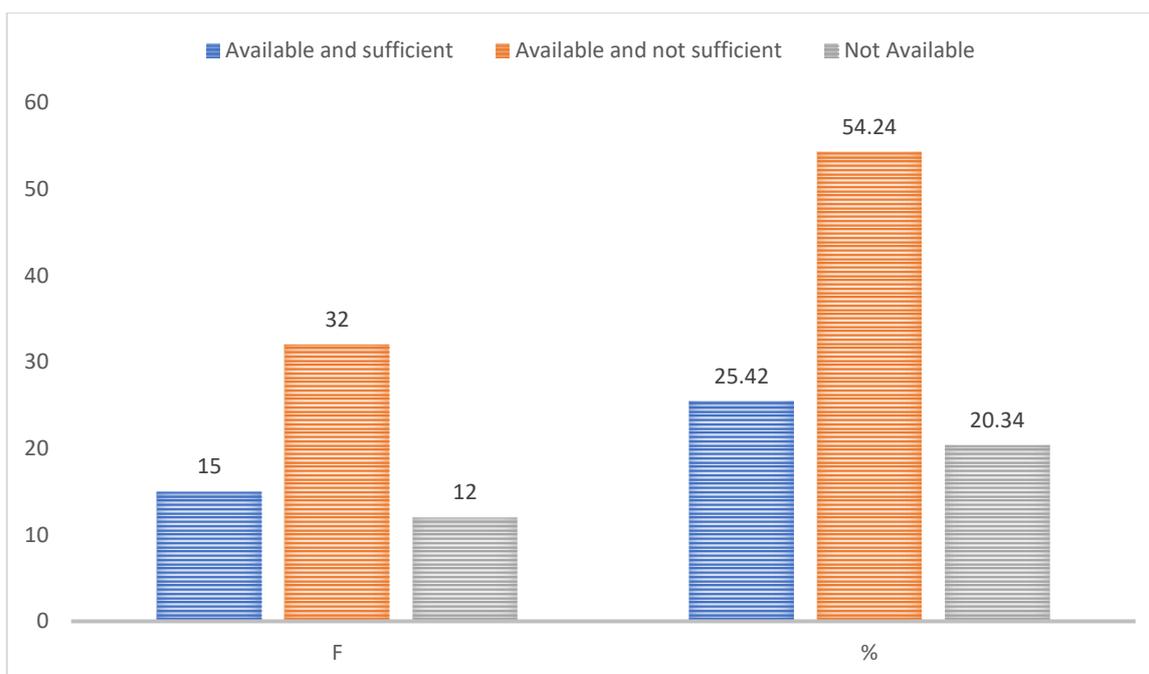


Figure 1: Availability of instructional resources (Head Teachers' Perspective)

Perhaps in the upcoming years, as information literacy, instruction becomes part of more institutions; further resources will be made available. Through the head teachers' questionnaires, the study found that CBC books were the most instructional material being used by to a very large extent (28.1%) and to a large extent (41.4%)

with an overall rating of 76.46 percent. Teaching and learning aids were used at an overall rating of 69.14%, while digital devices were 55.86%, teachers facilitating learning at 71.62% and learners interacting with instructional material resources at 71.36% as shown in Table 2.

Table 2: Availability and use of instructional resources (Head Teachers' Perspective)

	A very large extent (%)	a large extent (%)	Moderate (%)	Low extent (%)	Very Low extent (%)	Never (%)	Total (%)	Overall Use rate (%)
CBC Books	28.1	41.4	13	10.9	5	1.6	100	76.46
Teaching Aids	20.5	16	21	28.8	11.2	2.5	100	69.14
Digital Devices	27	24.5	22	10.2	4.3	12	100	55.8
Teachers facilitating learning	26	16	12	11	23	12	100	71.62
Learners interacting with instructional material resources	13.3	43	35.2	4.2	4.3	0	100	71.36

Teacher facilitated learning seems to be preferred choice for most teachers with 35.2%, using it to some extent, 43.0% using to large extent, 13.3% using it at a very large extent and 0% to never. Results from Table 2 show that teachers were not using competency-based approaches of teaching and learning.

A correlation analysis between the instructional resources and implementation of curriculum was conducted. The results were presented in Table 3.

Table 3: Correlation between instructional resources and curriculum implementation in early years education

	1	1	2
1. Instructional Resources	Pearson Correlation		+0.594*
	Sig. (2 Tailed)		.000
	N		189
2. Curriculum Implementation	Pearson Correlation	+0.594*	
	Sig. (2 Tailed)	.000	
	N	189	

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

**. Correlation is significant at the 0.05 level (2-tailed).*

Table 3 presents the Pearson r correlation of the influence of instructional resources on the curriculum implementation. The analysis reported $r=+0.594$ with a significance level of 0.00.

Discussions

The study found that almost half of the teachers 66(47%) rated were neutral with the statement that there is adequacy of Teaching and learning Materials and Resources in Pre-School Centres. In a different statement, the study showed that the centres lack government support hence they are unable to procure the required resources for SNE had a rating at 43(31.16%) as agree. This implied that the majority of the teachers agreed that there was insufficient government support in provision for SNE resources. The findings implied that the majority of the teachers agreed that schools lacked learning resources that would inform implementation of curriculum for SNE. These results agree with the findings of Wolven (2021) Resources for curriculum development for both teachers and librarians are abundant, with resources being offered both electronically and in print, freely available and for purchase. There are many resources for both teachers and librarians; however, teacher resources outnumber those for librarians.

The findings indicate that teachers should be given in-service training for competency-based approaches for teaching and learning. CBC curriculum insists on a learner – centered approach that is different from traditionally known methods (Akala, 2021).

The study showed that instructor competence had no major impact on the success of students. It also concurs with the research undertaken by Ngeno (2023) on factors affecting methods of curriculum creation in secondary education in Mogadishu, Somalia. This study showed that in-service or pre-service teacher preparation is a central phase in the introduction of modern curricula. It coincides with the research by Mwoma, *et al.*, (2022) on the study on experience of implementing early childhood development assistance in rural Kenya’s Baby Friendly

Neighborhood Initiative. The study showed that more realistic educational opportunities and an organized approach to training, refresher training be appropriate. The availability of materials to facilitate the programme would contribute to more support to CBC curriculum in Kenya.

The study found a moderate positive influence based on the interpretation given by Leedy and Ormrod (2013). With a significance level of .000, the correlation between the use of instructional resources and curriculum implementation was significant. Thus, the use of instructional resources among the EYE teachers had a moderate positive relationship with the curriculum implementation. A unit increase in the use of instructional resources among the EYE teachers would lead to an increase in the curriculum implementation. This change would be significant at sig. level 0.05 (2-tailed).

5. Conclusion and Recommendations

5.1 Conclusion

The study concluded that the instructional resources have an influence on curriculum implementation in public primary schools in Kikoneni zone, Kwale County. The materials needed for digital learning as well as the competency of teachers seems to be a contributing factor. Digital learning gives challenges to the successful implementation of CBC. The study found that there was adequacy of teaching and learning materials and resources in pre-school centres. This was, however, characterized by the rigid procedures of acquiring the materials for learning. This affected the curriculum implementation in the centres.

5.2 Recommendations

The study recommends that:

1. The EYE school administrators provide sufficient instructional resources for effective classroom instruction. Available resources

require an understanding of the role of evaluation in planning and delivering instruction.

2. the collection and interpretation of a wide range of information, familiarity with a variety of different methods of assessment and for competence in using these methods creatively, careful and systematic record keeping and judgment.

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