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INFLUENCE COMPETENCY BASED CURRICULUM HAS ON LEARNERS' CREATIVE THINKING SKILLS AMONG GRADE THREE LEARNERS IN KISUMU WEST SUB COUNTY

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ABSTRACT

This research investigated the influence of the Competency Based Curriculum on attainment of 21st century competencies among learners in Kisumu West Sub-County. The research problem was based on a growing concern among researchers and educators that the learner centred curriculum had initially been largely flawed, hurried and lacking proper strategies as well as wide consultation. Major education stakeholders such as parents also received the Competency Based Curriculum with a lot of negativity and resistance claiming that the system is financially oppressive and burdensome. Learners too were caught in between and almost lost confidence in the curriculum due to the cynical talks about it from their parents, social media and the general public. The study therefore strived to identify the degree to which the competency-based curriculum has improved learners' creative thinking. The study was guided by the constructivist theories. Mixed research methodology was adopted. A descriptive survey design was used. Purposive sampling was used to identify 32 schools out of 105 primary schools. A total of 133 respondents were involved in various segments of data collection tools; focus group discussion schedules, questionnaires, observation schedules and document analysis schedules, mainly to elicit information from school principals, teachers and parents within public, private, special and integrated schools. The study instruments were found to be reliable with a Cronbach's Alpha 1.0. Collected data was analysed using both descriptive and inferential statistics. The data was presented in tables and figures. The coefficients the independent variable was positive and statistically significant. The study found creative thinking the most significant variable (97.5%). The study findings indicated that the independent variable was the predictor of acquisition of 21st century competencies among learners. The study recommended that supervision in schools should be intensified and appropriate support rendered to ensure effective and efficient implementation of the curriculum in order to help the curriculum fully achieve its objectives.

KEY WORDS: *Competency Based Curriculum, Learners' Creative Thinking Skills, Grade Three Learners, 21st Century Competencies*

INTRODUCTION

The direction and content of primary education in Kenya since independence has been a source of continuous controversy (Indire, 2022). According to Akala (2021), the discriminative nature of the education offered by the colonial government necessitated the first reforms in education in Kenya. As Muricho (2023) clarifies, the Ominde Commission of 1946 recalled for education to serve Kenya's national development and abolish racial segregation that had been championed by the colonial government, following the recommendations of the Frazer commission of 1909, whose aim was for Africans to create skilled labour to the white settlers.

Transformation is a permanent phenomenon that man has to contend with in every aspect of life. To keep up with it, the universal systems of education must adopt certain trends to empower for the 4th Industrial Evolution. The Kenyan education system has not been left out. Since independence, Kenyan education system has been metamorphosing in attempt to take care of the ever- growing needs of the society. As Shah (2020) claims, the changing demographics of students, the society and the more client centred culture in today's society have produced a climate where the use of learner centred teaching is thriving.

The first system of education in Kenya according to Oxford Business Group (2023) was 7-4-2-3, introduced in 1964. Wanjohi (2011), as cited by the Oxford Group (2023), argues that the 7-4-2-3 system did not possess what was required to deal with the emerging needs of Kenya's human resource in terms of new skills, technologies and attitudes to work. Regarded not meeting Kenyans needs, the 7-4-2-3 system was replaced by 8-4-4following the Mackay Commission. Launched in 1985, it was also criticized as being theoretical, and does not focus on the development of the learner's competencies and the pedagogical practices termed as authoritarian, rigid and teacher centred (Inyenga et al 2021). Ongesa (2020) also faults the system which is just being overhauled as the competency-based curriculum will soon be fully rolled out in the entire education cycle, of its assessment which he claims that only tests memorization.

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As policy documents indicated, the system was not adapted to suit into the current constitution of Kenya, some levels were not in accordance with the learners' ages, it as well hindered pursuance of individual interests and development of talents, as the country still lacked manpower with skills to steer it up for vision 2030's economic development, therefore, arousing the desire for globally competitive work force through education reforms. (UNESCO 2017, as cited by Mulenga and Kabombwe 2019) also claims that the gaps in 8-4-4 hindered learner's growth and development as pathways ware not provided for.

In the current times, there need to equip learners with the 21st century competencies which will enable them adopt to the socio-economic demands of the fourth industrial era, and to embrace post modernism at all levels of education in order to have a society that is able to live up to the innovative needs and cope with the challenges of the era and beyond. As Shkak and Hassan (2022) states, the world around us is changing and we must prepare our children to face the new challenges in the twenty-first century. Haze and Kenyon (2013) as cited by Akyildiz (2019) points out that in this era, learners should take the centre stage in the learning process. Competency Based Curriculum is a student-based system founded on the belief that learning should be related to real life by basing it on the real-life experiences rooted on the knowledge previously acquired (Epher 2022).

The current system of education in Kenya is a competency-based system known as 2-6-6-3 or 2-6-3-3-3. As contained in the basic education curriculum framework, the system is organised into three levels namely early years education; which constitutes of two years in pre-primary and three years in lower primary, the middle school education; which comprises of three years of upper primary and three years of lower secondary; and senior school, tertiary, and university. According to the Ministry of Education report (2018), the system was recommended by a task force chaired by Professor Douglas Odhiambo, tasked to conduct an investigation Kenya's educational status.

Curriculum reform was necessitated by the need to address the gaps created by 8-4-4 system, need to realign to the East African Community harmonization framework and to the global standards (BECF 2017). Kenya therefore adopted the competency-based curriculum to avoid being left behind by the new wave in education that would have otherwise made the county's human resource redundant in the universal job market. Kenya being part of the universal community needs to take part in the production of manpower for universal consumption. Therefore, the education system being the backbone of the social and economic growth of any country should be able to adequately produce a population that is competent to handle the dynamic needs of the society.

The previous education models, 7-4-2-3 and the 8-4-4 were teacher centred, produced social and economic hierarchies, where many parents engaged in malpractices so as to secure their children admission in Maranda, Limuru, Starehe among other national and extra county secondary schools systematically eliminating the children from poor backgrounds, there was an increasing gap in performance of private schools and public schools to an extent that private primary schools were taking almost all slots available in good performing public and private secondary schools, learners and parents were both weighed down by the fact that those who could not do well in examinations were forced to repeat classes (Amutabi 2019). Such are the disparities Competency-Based Curriculum is trying to solve by applying the crucial practical learner centred methods.

According to Amunga et al 2020, CBC focuses on learner's ability to show case competencies acquired from schooling. Pichette (2019) asserts to the above interpretation by pointing out that Competency based Education focuses on what students are able to do. In CBC, schools are also organized to provide timely and differentiated support to ensure equality (vlc.ucdsb.ca 2022). With the needs as the main focus, shifting of pedagogical models from teacher centred to learner centred with more emphasis on competencies rather than content memorization is the key objective of CBC (Rwigema and Andala 2022).

The new curriculum was meant to close the gap created by the previous system (Kabita and Ji 2017, as cited by Amunga et al 2020). The curriculum was meant to improve and guarantee the quality and equitability of education (Kereriet al 2021). However, Mwarari et al (2020) clarifies that lack of time, absence of induction inadequate knowledge and skills, lack of resource are also hampering the implementation of CBC in Kenya.

Statement of the Problem

Akala (2021) argues that CBC implementation report has several issues among them lack of thorough consultation, limited strategies as well as insufficient try-out time. Indire (2022) concurs with the above claim but further explains that the government has made some efforts to reform the quality of instructions. After the release of the recommendations of the presidential working party on education reforms (PWPER), the law makers expressed their anger over poor implementation of CBC and disapproval of the ministry of education implementing the reforms claiming that the recommendations were against several laws as well as the constitution of Kenya. The Teachers Service Commission on the other hand complained that its input on critical matters that involve the teaching service were not put to consideration by the education commission (ministry of education -Kenya)

However, the world bank report in June (2022) indicates that even though the education sector faces ingenuine results and uneven quality problems are being experienced, efforts are being made towards improvement of quality including proper implementation of CBC. The Global Partnership for Education (2023) is in agreement too that Kenya is improving the quality and relevance of education as the organisation claims to have supported the introduction of CBC as well as its assessment, (CBA).

It is therefore of great importance that an investigation to establish the influence of the competency-based curriculum on attainment of 21st century competencies such as digital literacy, critical and creative thinking and soft skills (communication

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skills) among learners be carried out and parents, teachers and administrators' perceptions of CBC be found out to help solve the problem of cynicism towards CBC among education stakeholders.

Based on the articles by many scholars, it is evident that competency-based curriculum was negatively received in Kenya by various education stakeholders including teachers' unions which constantly criticized the system over media channels, parents were not supportive of the system as they complained of it being too expensive, educators too lamenting of being left out and not actively involved in evaluation, the general public relied on the rumours from the mass media and teachers were rigid to the curriculum change. The negativity may have been caused by lack of awareness or simply the fear of the unknown almost causing stagnation of its implementation, thus necessitating a review even before giving it time for full implementation in order to see how the whole system would unfold.

However, the competency-based curriculum is slowly but steadily getting rooted into the education system with the pioneers being in junior school at the moment. In order to tackle the myriad of problems mentioned, the study strived to find out the influence of competency-based curriculum in enhancing digital literacy, identify the degree to which the competency-based curriculum has improved learners' creative thinking, establish how competency-based curriculum has improved learners' communication skills by the end of grade three and to establish the trend in the stakeholders' perception towards the competency-based curriculum.

Objective of the study

1. To establish the influence Competency Based Curriculum has on learners' creative thinking skills.

LITERATURE REVIEW

Theoretical Literature Review: Constructivist learning theory

Theories underpinning the competency-based the constructivist theories. Constructivist learning theory has historical roots in the work of Brunner (1961) and Vygotsky (1962) as claimed by Pande and Bharathi (2020). Brau (2022) reflection and active structuring of knowledge in the process of learning is a constituent of constructivism. As explained by Driscoll (2005) as cited by Merve (2019), it is until a learner gets a personal experience with knowledge that the sense will be made from the experiences leading to construction of knowledge. Stanley (2007) as cited by Mulenga and Kabombwe (2019), claims that this approach requires that within or outside classrooms, learners should be given opportunities to work together with others and be provided with models to prepare them for taking active roles in the society.

Relationships created between already existing ideas (blue dots) to come up with new knowledge (red dot). The socio-cultural theory (SCT) according to Vygotsky (1896-1934) As explained by Ameri (2020) argued that social interactions have an upper hand in the formation of a learner's way of thinking as culture forms the basis of a child's behaviour. Vygotsky's socio-cultural theory According to Rahmatirad (2020), is a theory stresses the socio-cultural main role in human intellectual development through integration of biological, social together with cultural elements in the process of learning. Vygotsky's greatest contribution according to Brau (2020) is when self-organisation, emergence and interaction results from learning when development of competencies occur the ZPD. Group work during learning is encourages to enable time takers to learn from those who have mastered the required competencies. This theory supports competency-based education in terms of creating rich learning environments through formation of groups to make learners benefit from various abilities amongst them. The concept of scaffolding and zone of proximal development are salient in designing the pedagogical shifts for teachers to facilitate CBC in basic education

Empirical Literature Review

Creative thinking is a pertinent skill in the global market today. It helps learners to invent new learning ideologies by, being analytical organized, and having open minds. With the current dynamism in almost every aspect of life, the school curriculum needs to equip learners with the abilities to handle the ever-changing needs of the 21st century. Suherman and Vidakovich (2020) support this by explaining that creative thinking is important in improving the formation and discovery of learning ideas in the 21st century.

The nature of CBC being learner centred enables the learner to explore their learning environment as they directly interact with the learning materials which brings out the cognitive abilities of every learner in terms of problem solving as they create new ideas or improve the already existing ones as they also develop fluency, flexibility and originality. Hence Ndiung et.al (2019), agrees that learners would have opportunities to ask unique questions and provide relevant responses which would enable them come up with appropriate solutions as well as new ideas. Thus, promoting national as well as individual development and self-fulfilment.

The rigid and academic oriented nature of 8-4-4 which put much emphasis of memorization of content and scoring high in the summative assessments rather than considering hands on learning to identify special abilities of various learners denied many learners opportunities to express and develop their talents as learner who could not pass the examinations which only tested ability to memorize were condemned and could not find a chance to further their education within the system. Thus, with CBC learners will be enabled to interact among themselves with ease and understand lessons and develop liking towards learning as well as creativity as stated by Sumarni and Kadarwati (2020). Even so customised creativity needs to be stressed on.

RESEARCH METHODOLOY

Mixed method of both qualitative and quantitative research was used. Descriptive survey was used to solicit information on the learner centred strategies employed in the competency-based curriculum. The study was carried out in selected private and public primary schools Kisumu County: Kisumu west Sub County. The study took place in each of the zones including

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Chulaimbo, Nyahera, Ojolla, Otonglo and Sianda. The study was done among 105 grade three teachers, 500 grade three parents and headteachers 105, the target population was drawn from the following categories of schools; 80 public, 25 private, (special, regular and integrated) schools. According to Kregie and Morgan (1970),12.774122807% or 13% to the nearest whole number is a representative sample by showing that 133 out of 710 (18.73% and 19% to the nearest whole number) was adequate representation. Mugenda and Mugenda (2003), approves of as a representative sample, a threshold of 30%. The researcher ensured that the variance sample of the key informants adequately represented the target population. The study used a population of 49 parents, 32 teachers, 32 head teachers, within Kisumu West sub-county.

Closed ended questionnaires which were in form of Likert scale were administered to the head teachers to give them freedom of response and also enable them respond to the same questions in a defined manner. Direct Observation of grade three instructional sessions was done and recorded in the observation schedule to enable involve grade three learners in the research due to the directness of the tool. Past documents belonging to grade three learners were also analysed to identify the deviations on the performance of learners. Focus group discussions were held with parents to identify their perception and attitudes concerning the Competency Based Curriculum.

A pilot test was carried out before the main data collection exercise. Since the research used a descriptive research design approach, the findings can be generalized through all the primary schools in Kenya, hence have external validity. The face validity was brought out by the sensible appearance in measuring the variables. Content validity index was used to establish whether the research tools measured what was intended. A Cronbach's alpha of 0.7 or more indicates good correlation between the test and retest. Reliability statistics from the current study findings revealed a Cronbach's alpha of 1.000, indicating that the questionnaire was very fit for the study

The instruments Errors were checked after data had been collected from the field. Thereafter, coding was done and Scientific Package for Social Sciences (SPSS) used to analyse the data and presentation done through tables, histograms and column charts. The qualitative data was then entered and analysed quantitatively using descriptive analysis. The qualitative data collected was used to explain the quantitative results. The qualitative data was then analysed to determine the trends and relationships between the twenty first century skills and learners' competencies.

FINDINGS AND DISCUSSION

The researcher sought **to establish the influence competency-based curriculum has on learners' creative thinking skills**. The collected data was coded into five categories (strongly disagree, disagree, neutral, agree and strongly agree). The data was analyzed and the results presented using a frequency distribution table and stacked column chart (Table 1 and Figure 1 respectively).

Table 1: Impact of Competency Based Curriculum on learners' creative thinking skills

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
CBC encourages learner innovation	1	1.2%	0	0.0%	1	1.2%	47	58.0%	32	39.5%	81	100%
Learners can come up with solutions to new problems	0	0.0%	2	2.5%	8	10.0 %	56	70.0%	14	17.5%	80	100%
Learners can improvise locally available materials	1	1.3%	0	0%	1	1.3%	41	51.2%	37	46.3%	80	100%
Learners can adequately solve their problems	0	0.0%	1	1.3%	1 8	22.5 %	54	67.5%	7	8.8%	80	100%

Source: Author (2024)

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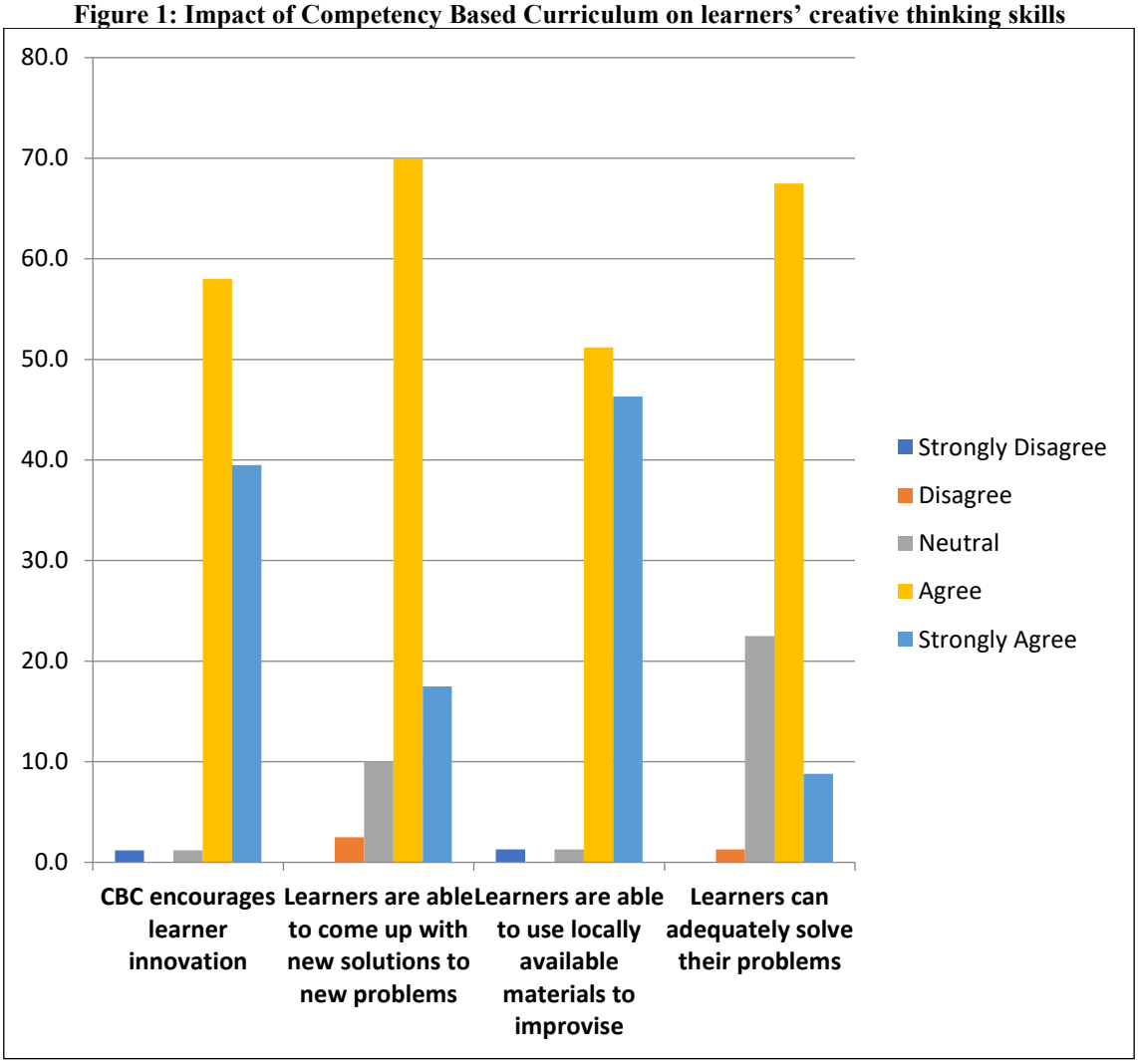
Figure 1: Impact of Competency Based Curriculum on learners' creative thinking skills



Source: Author (2024)

Of the 81 respondents who were asked this question, all (100%) responded to this question.1 respondent (1.2%) strongly disagreed, no respondent disagreed, 1 respondent (1.2%) was neutral, 47 respondents (58.0%) agreed while 32 respondents (39.5%) strongly agreed. The findings indicate that this is the leading claim under this variable with 97.5%) respondents in agreement to the claim that competency-based curriculum encourages innovation among learner. This variable scored a very good rating. The researcher also investigated if through inquiry learning, learners are able to break new ground and come up with new solutions to new problems. The collected data was coded into five categories (strongly disagree, disagree, neutral, agree and strongly agree). The data was analyzed and the results presented using a frequency distribution table and stacked column chart (Table 1 and Figure 1 respectively).

Of the 81 respondents who were asked this question, 80 (98.77%) responded to this question. No respondent strongly disagreed, 2 respondents (2.5%) disagreed, 8 respondents (10%) were neutral, 56 respondents (70%) agreed while 14 respondents (17.5%) strongly agreed. The findings indicate that 87.5% of the respondents supported the claim that through inquiry learning, learners are able to break new ground and come up with new solutions to new problems. The respondents were asked if learners are able to make use of locally available materials to improvise. The collected data was coded into five categories (strongly disagree, disagree, neutral, agree and strongly agree). The data was analyzed and the results presented using a frequency distribution table and stacked column chart (Table 1 and Figure 1 respectively).

Of the 81 respondents who were asked this question, 80 (98.77%) responded to this question.1 respondent (1.3%) strongly disagreed, none disagreed, 1 respondent (1.3%) was neutral, 41 respondents (51.2%) agreed while 37 respondents (46.3%) strongly agreed. The findings indicate that this claim is also leading under this variable with 97.5% of the respondents agreed to the claim that learners are able to make use of locally available materials to improvise. This as score a very good rating as well.

The researcher sought to find out if learners are able to adequately solve their problems. The collected data was coded into five categories (strongly disagree, disagree, neutral, agree and strongly agree). The data was analyzed and the results presented using a frequency distribution table and stacked column chart (Table 1 and Figure 1 respectively). Of the 81 respondents who were asked this question, 80 (98.77%) responded to this question. None strongly disagreed, 1

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respondent (1.3%) disagreed, 18 respondents (22.5%) were neutral, 54 respondents (67.5%) agreed while 7 respondents (8.8%) strongly agreed. The findings indicate 76.3% of the respondents agreed to the statement that learners are able to adequately solve their problems. Which is a good rating as well.

On the influence the system has on learners' creative thinking skills, the study found competency-based curriculum has significant effect on development of creative thinking abilities among learners. From the analysis this is the most significant variable. The claim that Competency based curriculum led to increase in acquisition of creative thinking skills was supported by 97.5% of respondents. The descriptive analysis indicated the significance of competency-based curriculum in enhancing creativity among learners through practical learning which leads to innovativeness, ability to come up with new solutions to new problems, improvisation of learning materials from their environment and being able to solve interpersonal problems between them. This is in line with John Dewey's theory of social constructivism.

One of the respondents in the FGD also commented that the rate at which competency-based curriculum fosters creativity in learners is in comparable to the traditional method she displayed one of the items made by a grade three learners: a skipping rope made out of plastic bottle tops Hence in agreement with Thummaphan et.al (2022), that competency-based curriculum aims to develop high order thinking. In agreement with the above findings the question as to whether CBC has any impact on learners' creativity recorded 51.7% from the analysed records and 72.7% from the observation of lessons. This is an indicator that the curriculum is in line with Vygotsky (1896-1934) as explained by Ameri (2020) that social interactions have an upper hand in the formation of a learner's way of thinking as culture forms the basis of a child's behaviour.

CONCLUSIONS

Based on the findings from the study, it is evident that competency-based curriculum (CBC) significantly enhances learners' creativity and problem-solving abilities. The majority of respondents, agreed that CBC encourages innovation and the use of locally available materials for improvisation. Moreover, majority acknowledged that learners can effectively solve their problems, indicating the curriculum's practical effectiveness. These results align with social constructivist theories like John Dewey's, emphasizing practical learning and interaction for fostering creativity. The study supports CBC's role in developing higher-order thinking skills, reinforcing Vygotsky's notion that social interactions and cultural contexts shape cognitive development.

RECCOMMENDATIONS

Practically, it is recommended to prioritize comprehensive teacher training programs that equip educators with the skills and knowledge to effectively implement CBC. These programs should emphasize innovative teaching methods and strategies that encourage practical learning experiences and foster creativity among students. Additionally, promoting project-based learning approaches within schools can provide learners with opportunities to explore real-world problems, innovate solutions, and utilize locally available materials for improvisation, thereby enhancing their critical thinking and problem-solving abilities. Ensuring adequate access to learning materials is crucial. This includes STEM kits, arts supplies, and tools necessary for practical experiments, which can facilitate hands-on learning and creativity in CBC classrooms. Creating collaborative learning environments where students engage in group projects and collective problem-solving activities also promotes peer interaction and idea exchange, further enhancing their learning experience.

From a policy perspective, integrating CBC into national or regional curriculum standards is essential. This ensures consistency and quality in educational outcomes across different schools and regions. Adequate funding allocation for CBC implementation is crucial to support teacher training, develop learning materials, and improve infrastructure necessary for effective educational delivery. Furthermore, supporting research and development initiatives that explore the long-term impacts of CBC on learners' cognitive development and preparedness for future challenges is recommended. This includes investing in studies that evaluate the effectiveness of CBC in fostering creativity and problem-solving skills, which can inform evidence-based educational policies and practices.

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