

Competency-Based Curricula and Technology: Game Changers for Literature Subjects in Secondary Schools in Arusha City, Tanzania

Guneet Kaur Cheema, Mohd Aarif Rather, Vandana Aggarwal, Showket Ahmad
Mandloo
Chandigarh University, India

Anagrolia Faustino
Glory Research Advisory, Arusha City Council, Tanzania

ABSTRACT

This study examines the impact of competency-based curricula (CBCs) and technology on teaching and learning literature in English among secondary schools in Arusha, Tanzania. Critical thinking, creativity and student participation were not much promoted in the traditional teacher-centered practices of Tanzania's education system. The introduction of CBC addressed this challenge by promoting a learner-centered approach emphasizing skills and competencies required in the twenty-first century. A mixed-methods approach was adopted in the present study to collect data from both instructors and students at various schools through surveys, interviews and classroom observations. The findings reveal that CBCs increases student engagement and participation in English literature by motivating students to develop critical analytical skills through active learning. Thereafter, technology integration including digital resources, online platforms and multimedia tools, significantly enhances the educational curriculum by providing diverse text material and encouraging an interactive learning atmosphere. The study also emphasizes the need for professional development of instructors and adequate technological infrastructure. Overall, the results of this study reveal that when a competency-based curriculum is integrated with technology, it makes the literature in English education more interesting, dynamic, resourceful and successful, preparing students for the globalized digital world.

Keywords: Curricula, competency-based curriculum, literature in English, technology, secondary education, Tanzania

© Author(s), 2026. Published by Star Scholars Press.

This article is distributed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided that the original author and source are credited. <https://creativecommons.org/licenses/by/4.0/>

INTRODUCTION

Learning is among the key aspects of the study's purpose, which is to explore how competency-based curricula (CBCs) impact teaching and learning in secondary schools in Arusha city (Davis and Brown, 2021). Previous studies have shown that with the integration of CBC, there is an increased level of student engagement and participation in English literature because of the ability to develop critical analytical skills through active learning in the context of Arusha city secondary schools. Such findings are helpful for understanding the obstacles linked to educational reform in this specific context.

Across sub-Saharan Africa, several education systems are undergoing curriculum reforms aimed at improving student learning outcomes and preparing learners with relevant skills for the twenty-first century (Mugarura et al., 2026). Competency-based curricula have been introduced in several countries as a way to shift from content-based teaching to skills-based learning (Ruth and Ramadas, 2019). However, the implementation of CBC in literature subjects, especially in secondary schools, presents several challenges related to teacher readiness, resource availability and instructional methods (Majiwa, 2025).

Although CBC and the integration of technology in education are attracting increasing attention, studies on their effects have been limited because of the English literature teaching and learning experience combined with ICT transformation in secondary schools in Arusha city. Existing research is centered primarily on the science and technical domains, with relatively little exploration of literature education. Hence, this study intends to fill that existing gap by investigating the impact of CBC and technology on teaching practices and learning experiences in the literature in English.

LITERATURE REVIEW

This section examines the literature related to competency-based curricula and the integration of technology within education. The review is organized into thematic subsections to provide a structured understanding of relevant studies and gaps in the field as it relates to the subject-center theme of teaching and learning literature in English.

CBC in Language and Literature Education

The modern educational discourse is marked by the introduction of new paradigms and reasonable technology use. Both researchers and specialists are still dedicated to improving pedagogical effectiveness and educating students to be ready to meet the requirements of the twenty-first century. Accordingly, this paper examines the convergence of a competency-based curriculum (CBC) and technology in teaching literature in English at secondary schools in Arusha city, Tanzania; therefore, the transformative nature of competency-based education (CBE) as realized in CBC models is indicated—a major change in time-based instructional models. It is oriented to the concrete illustration of certain skills and knowledge (Darling-Hammond et al., 2020). Recent research has indicated that CBE may become an effective means of more profound learning, empowerment, and better preparation to meet the changing needs of global society (Patrick et al., 2021). The implementation of CBE depends on a paradigm shift in the approach to pedagogy that puts individualized and flexible learning in the center (Imel & Brown, 2023).

The empirical literature has focused on the ability of CBE to improve student engagement and critical-thinking ability, especially in the language arts (Chen and Wang, 2022). However, the effective implementation of competency-based assessment systems, relevant teacher education, and institutional preparedness remain important problems in modern practice (Smith and Jones, 2024). Recent empirical evidence in Tanzania has shown that the adoption of CBC is often limited by practical factors such as a lack of teacher preparation, poor assessment and a lack of resources to implement CBC in classrooms (Kasuga and Kalolo, 2025).

Technology Integration in Education

At the same time, technology is being integrated into the sphere of education as the means of delivering content, learning through interaction, and supporting a variety of assessment methods (Pellegrino & Quellmalz, 2010). Technology is tied to be one of the main facilitators of pedagogical practice, especially the one that corresponds to the principles of CBE (Kopcha and Mouza, 2020). Digital tools are also able to customize learning, offer the necessary feedback promptly and offer a plethora of tools needed to develop and demonstrate

competencies (Warschauer & Ware, 2019). In terms of literature in English, technology may be used to increase reading comprehension by providing engaging platforms, enhancing creative writing through the use of digital tools, and providing students with a wider range of literary literature and multimedia materials (Black and Alvermann, 2021). Recent studies suggest that integrating smart technologies can significantly increase students' motivation and engagement during language arts lessons (Lee and Kim, 2023). However, the issues related to technological availability, the need to develop the digital literacy of both educators and learners, and the correspondence of technological tools to curricular goals must be resolved, as they are the essential issues of modern times (Selwyn and Jandrić, 2020).

Systematic review has shown that the use of classroom technologies, such as web platforms, learning management systems, response systems, and mobile applications, always results in positive changes in learner engagement, motivation, participation, and critical thinking, particularly in scenarios where such systems are implemented to facilitate student-centered pedagogies (Swai, 2025). Recent studies caution that the notion of digital equality often turns into access or skill acquisition; a more effective way to consider it in a comprehensive manner is equity across a variety of dimensions, such as access, meaningful use, outcomes, and structural constraints: in an analysis of technology integration in schools, the latter approach is necessary (Luo and Liu, 2025).

The suggestion of CBE technology integration provides a great possibility to redefine and reorganize literature teaching in English. CBE principles can be operationalized with the help of technology through the provision of instruments to facilitate customized teaching, performance-based evaluation, and collaborative education (Means et al., 2019). As an example, learning management systems can track the proficiency of students in certain competencies, and digital portfolios can allow the latter to present their work and prove the mastery of skills (Barrett and Knezek, 2020). Studies have focused on the joint impact of CBE and technology in other fields and have shown positive results in terms of student achievement and the development of critical thinking skills (Johnson et al., 2022). However, there is still a research gap in terms of how synergy can be realized in the context of the literature in English, especially in various contexts, such as in Arusha city.

The focus of the literature education used to be on the analysis of the text, but these inventions can change that paradigm to a more positive one. CBE allows the focus on the memorization of literature facts to be shifted to the development of critical skills, including the interpretation of rather intricate themes and the study of literary devices (Applebee and Langer, 2019). This can be aided by technology via methods such as textual analysis software, the use of online discussion forums where peer feedback is given and multimedia adaptations of the work of literature are available (Mills and Rowsell, 2020). New research has indicated that digital storytelling and multimedia projects have the potential to enhance the

understanding and enjoyment of literary aspects among students (Dalton and Smith, 2021).

CBCs and Technology in Low-Resource Contexts

With respect to the context of the city of Tanzania and Arusha in particular, more information about the existing technological infrastructure, the effectiveness of teacher training programs, and the unique problems that secondary schools in the area face is needed because they influence the interpretation of the findings of the current study (URT, 2020). Studies on curriculum change in less developed settings rely on the same idea of the need to allocate significant resources, provide continuous teacher mentoring, and community presence in bringing change to fruition and keeping it sustainable (O'Donnell and Obura, 2022). The available studies of the Tanzanian schools exploring the use of technology shed some light on the resources offered by improving the connection and the barriers connected to digital literacy, the willingness of the educators, and the availability of culturally relevant digital content (World Bank, 2023). Where the resources are low, the international principles of guidance encourage inclusive technology incorporation on the basis of conscious teacher ICT competency development and practical plans that can be achieved with a constrained infrastructural base, as opposed to assuming that high-technology tools are accessible (UNESCO, 2025).

To conclude, research carried out from 2019–2025 provides a solid theoretical basis and presents persuasive evidence that not only a competency-based curriculum (CBC) but also technology can be used to improve the results of school education. However, there is a strong need for contextual research, especially with respect to teaching literature in English in places such as Arusha city.

This study aims to fill that gap by investigating the impact of the synergistic use of CBC and technology in teaching and learning literature in English in secondary schools. The outcome and findings are expected to shed light on the transformative opportunities of said innovations and could be used to shape educational policies and practices outside Tanzania.

RESEARCH METHOD

The present study employed a mixed-methods approach to investigate the influence of a competency-based curriculum (CBC) when it was integrated with technology on the teaching and learning of literature in English in the context of secondary schools in Arusha city, Tanzania. A mixed-methods approach was adopted to provide a detailed understanding of the phenomenon through quantitative and qualitative data. This allows us to explore both broad trends and in-depth perspectives. The study was examined in a pragmatic philosophical

framework, as suitable methods should be used to conduct research and address the relevant research questions.

Research Design

In the present study, the data collected are quantitative in nature, followed by the collection and evaluation of qualitative data. The qualitative data collected explained and interpreted the quantitative findings. It identified the general pattern and relationships. This research focused on secondary schools located in Arusha city, Tanzania. A secondary school, in Arusha city; thus, Tanzania was used to conduct this study. It reflects what urban education looks like in Tanzania. Additionally, these schools are likely at different points in terms of implementing a competency-based curriculum (CBC) and using technology in the classroom. The focus was on literature among English teachers and their students in these schools. The quantitative phase was used to examine general trends and relationships around CBC and technology use. A qualitative phase was then conducted to better elucidate the quantitative results and better understand the experiences of the participants.

Sample and Sampling Techniques

A multistage sampling technique was employed to select the participants for the study. First, a purposive sampling approach was used to select a few secondary schools in Arusha that were known to have implemented the CBC and had some level of technology integration in their teaching practices. This initial selection aimed for schools that represented different types (e.g., public, private) and resource levels to capture a range of experiences. Within the selected schools, a convenience sampling approach was used to recruit literature from English teachers who were currently teaching the subject under the CBC framework. A target sample size of 25 teachers was sought on the basis of the total number of English teachers available in the selected schools to ensure sufficient participation for both quantitative and qualitative data collection. For the student participants, a cluster sampling approach was used within the selected literature in English classes. All the students present in the selected classes were invited to participate in the survey. A target sample size of 120 students was selected on the basis of the average class enrollment across the selected schools to allow meaningful quantitative analysis. A smaller, purposively selected group of students from the survey participants was invited to participate in focus group discussions on the basis of their willingness and availability.

Data Collection Instruments

The primary data collection instruments were as follows:

1. Teacher Survey: A self-administered questionnaire was developed to collect quantitative data from English teachers. The survey included sections on the following:
 - Demographic information (e.g., age, sex, teaching experience).
 - Experience and understanding of the CBC framework in Literature in English.
 - Frequency and types of technology used in their literature in English teaching.
 - Perceived impact of CBC and technology on their teaching practices.
 - Perceived impact of CBC and technology on student engagement and learning outcomes.
 - Challenges and opportunities related to CBC and technology integration.

The survey used a mix of closed-ended questions (e.g., Likert scales, multiple-choice) and a few open-ended questions to capture initial qualitative insights.

2. Student Survey: A self-administered questionnaire was designed to collect quantitative English student data from the literature. The survey included sections on the following:
 - Demographic information.
 - Understanding of the CBC approach in the literature in English.
 - Frequency and types of technology they encountered and used in Literature in English lessons.
 - Perceived impact of CBC and technology engagement separately on engagement and learning in the subject.
 - Preferences and challenges related to technology use in literature in English.

Like the teacher survey, it included both closed-ended and open-ended questions.

3. **Teacher Focus Group Discussions:** Semi-structured focus group discussions were conducted with English teachers in groups of 5–8 Literature. The focus groups delved deeper into the teachers' experiences with implementing CBC and integrating technology and explored their perspectives on the benefits, challenges, and strategies employed. Discussion topics were guided by the findings from the teacher surveys and the research questions.
4. **Classroom Observations:** Non-participant classroom observations were conducted in a subset of the participating teachers' Literature in English lessons. Observation protocols were developed to document the pedagogical approaches used, the extent and nature of technology integration, student engagement levels, and how CBC principles were reflected in classroom activities. These observations provided direct evidence of the implementation of CBC and technology in practice.

Data Collection Procedure

Ethical approval was obtained from the relevant authorities, the Ministry of Education, and the school administration, before the data were collected. Teachers and students were informed about the purpose of the study, their rights to participate voluntarily, and the confidentiality of their responses. Informed consent was obtained from all the participants, and parental consent was obtained from the student participants who were minors. Surveys were administered to teachers and students during a scheduled time at their respective schools. Research assistants were trained to ensure consistent administration and to address any participant questions. Focus group discussions were scheduled at a convenient time and location for the participating teachers. Classroom observations were scheduled in advance with the participating teachers, minimizing disruption to their teaching schedule. All qualitative data (focus group discussions and observations) were audio-recorded with permission and transcribed verbatim.

Data Analysis

Quantitative data from the teacher and student surveys were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics (e.g., frequencies, percentages, means, and standard deviations) were used to summarize participants' demographic characteristics and describe patterns of CBC implementation and technology use. Inferential statistics (e.g., t-tests, ANOVA, correlation analysis) were employed to examine relationships between variables, such as the relationship between technology use and perceived student engagement, and differences in perceived learning outcomes by level of technology integration. Qualitative data from the focus group discussions and

classroom observation transcripts were analyzed using thematic analysis (Braun & Clarke, 2006). Transcripts were read and re-read to gain a thorough understanding of the data. Initial codes were generated based on the research questions and emerging themes. For example, statements referring to the limited availability of computers and the internet were coded as “resource constraints,” whereas responses related to a lack of teacher training were coded as “professional development needs.” These codes were later grouped into broader themes. These codes were then organized into broader themes and subthemes that captured the key experiences, perspectives, and observations related to the implementation of CBC and technology in the literature in English education. The analysis was iterative, moving back and forth between the data and the emerging themes. The qualitative themes were informed by patterns observed in the quantitative results and were used to explain key statistical trends, such as the relationship between technology use and student engagement. This approach ensured meaningful integration of both data strands.

Ethical Considerations

The study adhered to strict ethical guidelines. Informed consent was obtained from all participants. Participation was voluntary, and participants had the right to withdraw at any time without penalty. Confidentiality and anonymity were maintained by assigning codes to participants and schools and storing data securely. The data were used solely for research purposes.

Trustworthiness and Rigor

To ensure the study’s trustworthiness and rigor, several measures were implemented. For the quantitative data, the reliability of the survey instruments was assessed through pilot testing and by calculating internal consistency (e.g., Cronbach's alpha). Validity was addressed through careful development of survey items on the basis of the relevant literature and expert review. For the qualitative data, trustworthiness was enhanced through techniques such as triangulation (using multiple data sources - surveys, focus groups, observations), member checking (sharing findings with participants for validation), and maintaining an audit trail of the research process (Lincoln & Guba, 1985). Additionally, coding decisions were reviewed repeatedly to ensure consistency across themes. Reflective notes were maintained throughout the analysis process to minimize researcher bias and strengthen the credibility of the findings.

The education system in Tanzania, much like it is in other parts of the world, is currently undergoing significant changes. Traditionally, the systems of instruction have been rather conservative, and most of them have been teacher-centered discourse. This approach did not help students develop critical thinking or creativity. (Ministry of Education and Vocational Training, 2018). Therefore, there is the need for a change. That’s where the competency-based curricula (CBC)

come in. This reform was all about putting the students at the center of learning, encouraging them to pick up essential skills and apply them in real life instead of just memorizing facts and figures (Tanzania Institute of Education, 2019). Now, while this CBC rollout occurred across the country, it is important to dig deeper. How does it affect specific subjects, say English Literature? What about in particular areas, such as secondary schools in Arusha city? Understanding these nuances is key to understanding how effective the changes have been and determining what still needs work.

Moreover, technology has been involved. How technology can transform the process of teaching and learning is thus seen as very interesting. The optimal balance and successful utilization of these tools are the keys to improving educational practices. Digital resources, multimedia tools, and online platforms offered new avenues for accessing information, fostering interactive learning environments, and personalizing instruction (Brown & Green, 2022). For subjects such as literature in English, technology could provide access to diverse textual materials, facilitate multimedia analysis, and enable collaborative learning activities (Miller & White, 2021). The convergence of competency-based approaches and technology presented a compelling opportunity to make literature education more engaging, relevant, and effective. However, the practical application of these transformative technologies at the secondary level, particularly in the urban context of Arusha, necessitated thorough research to determine their effects on pedagogical processes, student performance, and existing issues and opportunities in the local educational system.

RESULTS

This section presents the key findings from the data collection and analysis, followed by a discussion that interprets these results in light of the research questions and literature. The findings are presented separately for the quantitative and qualitative data and then integrated to provide a comprehensive understanding of the phenomenon under investigation.

Quantitative Findings

The quantitative data collected through the teacher and student surveys provided insights into the perceived impact of CBC and technology integration on the teaching and learning of literature in English.

Teacher Survey Results

A total of 25 English teachers participated in the survey. The demographic data revealed that the majority of the teachers had more than five years of teaching experience ($M=8.2$, $SD=3.5$), indicating a level of experience with the education system. With respect to their understanding of the CBC framework, most teachers

reported a moderate to high level of understanding ($M=3.8$, $SD=0.7$) on a 5-point Likert scale, suggesting a general awareness of the curriculum's principles.

The survey explored the frequency and types of technology used by teachers in their literature in English lessons. Descriptive statistics are presented in Table 1. Projectors and basic computer applications (e.g., Microsoft Word and PowerPoint) were the most frequently used technologies, whereas access to reliable internet and specialized educational software was reported less frequently.

Table 1: *Frequencies and Types of Technology used by Teachers in Literature in English Lessons (N = 25)*

Technology Used	M	SD
Projectors	3.5	1.2
Computer Applications (e.g., Microsoft Word, PowerPoint)	3.2	1.0
Reliable internet Access	2.1	1.4
Specialized Educational Software	1.8	1.1

Note. Responses were measured on a 5-point frequency scale ranging from 1 (Never) to 5 (Very Frequently).

Teachers' perceptions of the impact of CBC and technology on their teaching practices were assessed. On a 5-point agreement scale (1 = Strongly Disagree, 5 = Strongly Agree), the teachers generally agreed that CBC encouraged more student-centered activities ($M = 4.1$, $SD = 0.6$) and promoted the development of skills over rote learning ($M = 4.3$, $SD = 0.5$). The integration of technology was perceived to enhance lesson engagement ($M = 3.9$, $SD = 0.8$) and provide access to diverse resources ($M = 4.0$, $SD = 0.7$). However, teachers also reported challenges related to inadequate technological infrastructure ($M = 4.5$, $SD = 0.6$) and a lack of sufficient training on integrating technology effectively ($M = 4.2$, $SD = 0.7$).

Correlational analysis revealed a significant positive correlation between the frequency of technology use and teachers' perceived impact of technology on student engagement ($r = .62$, $p < .01$). This suggests that teachers who used technology more frequently in their lessons were more likely to perceive a positive impact on student engagement. There was also a significant positive correlation between teachers' understanding of CBC and their perceived ability to implement student-centered activities ($r = .55$, $p < .05$).

Student Survey Results

A total of 120 English students participated in the survey. The student demographics reflected a mix of age groups and genders within the secondary school setting. Students reported varying levels of understanding of the CBC

approach, with a slightly lower average than that reported by teachers ($M = 3.5$, $SD = 0.9$) on a 5-point Likert scale.

With respect to technology use in the literature in English lessons, the students' responses aligned with those of the teachers, indicating that projectors and basic computer use were the most common forms of technology encountered. Descriptive statistics are presented in Table 2. Access to internet-based resources and more interactive technologies in the classroom was less frequently reported.

Table 2: *Frequency and Types of Technology Used by Students in Literature in English Lessons (N = 120)*

Technology Used	M	SD
Projectors	3.7	1.1
Computer Use	3.3	1.0
Internet-Based Resources	2.3	1.3
Interactive Technologies	2.0	1.2

Note. Responses were measured on a 5-point frequency scale ranging from 1 (Never) to 5 (Very Frequently).

Students' perceptions of the impact of CBC and technology on their learning were also assessed. On a 5-point agreement scale, the students generally agreed that CBC made learning more interesting ($M = 3.9$, $SD = 0.8$) and helped them develop practical skills ($M = 4.0$, $SD = 0.7$). The use of technology was perceived to make lessons more engaging ($M = 4.1$, $SD = 0.6$) and easier to understand ($M = 3.8$, $SD = 0.9$). However, students also highlighted challenges such as limited access to technology outside of school ($M = 4.3$, $SD = 0.7$) and technical issues during lessons ($M = 4.1$, $SD = 0.8$).

A t-test was conducted to compare perceived engagement levels between students who reported frequent technology use in English lessons, as reported in the literature, and those who reported infrequent use. The results showed a significant difference, with students reporting frequent technology use reporting higher levels of engagement ($t(118) = 3.15$, $p < .01$).

Qualitative Findings

The qualitative data from the teacher focus group discussions and classroom observations provided richer, more in-depth perspectives on the implementation of CBC and technology integration. The thematic analysis revealed several key themes:

Theme 1: Shifting Pedagogical Approaches under CBC

Teachers in the focus groups discussed the noticeable shift in their teaching approaches since the introduction of CBC. They described moving away from purely lecture-based methods toward more interactive and student-centered activities. One teacher commented, "Before CBC, it was mostly me talking at the front. Now, I try to help students work in groups, discuss, and present their ideas. It is more about them doing the learning" (Teacher Focus Group 1). Classroom observations corroborated this, showing instances of group work, student presentations, and debates, reflecting the emphasis on active learning and competency development as intended by CBC (Tanzania Institute of Education, 2019). However, some teachers also expressed challenges in managing larger class sizes while implementing these student-centered approaches.

Theme 2: Technology as an Enabler and a Challenge

The teachers acknowledged the potential of technology to enhance the literature in English lessons. They described using projectors to display texts, images, and videos, which they felt made the content more accessible and engaging for students. One teacher shared, "Showing a film adaptation or images related to the historical context of a novel brings the story to life for the students" (Teacher Focus Group 2). Observations confirmed the use of projectors, primarily for displaying static content. However, the limited availability of functional computers, unreliable internet access, and a lack of technical support were frequently cited as significant barriers to more innovative technology integration. "We have a computer lab, but half the computers do not work, and the internet is so slow that it is frustrating to even try and use online resources," a teacher lamented (Teacher Focus Group 3). This aligns with the quantitative findings regarding the infrequent use of the internet and specialized software.

Theme 3: Perceived Impact on Student Engagement and Understanding

Both teachers and students in the focus groups perceived a positive impact of the combined approach on student engagement. Students expressed that these interactive activities under CBC and the use of technology made literature lessons "more interesting" and "less boring". One student stated, "When we use the projector or watch a video related to the story, I pay more attention. It helps me understand better" (Student Focus Group 1). Teachers observed that students were more motivated to participate in discussions and activities when technology was incorporated, even in simple ways. This finding supports the quantitative finding of a positive correlation between technology use and perceived student engagement. However, some students also noted that the effectiveness of technology depended heavily on the teacher's ability to integrate it meaningfully into the lesson.

Theme 4: Challenges and Opportunities for Improvement

The qualitative data highlight key challenges and opportunities. Beyond infrastructure and training gaps, teachers discussed the need for more relevant and accessible digital resources specifically designed for the literature in English CBC curricula. They also expressed a need for professional development that focused on pedagogical strategies for integrating technology effectively to achieve CBC competencies, not just basic technology skills. "We know how to turn on the computer, but how do we use it to help students analyze a poem or critically evaluate a character?" a teacher asked (Teacher Focus Group 2). Students suggested that more interactive technology, such as educational apps or online platforms for collaborative writing and discussion, would further enhance their learning experience.

DISCUSSION AND CONCLUSIONS

According to the findings of this mixed-method investigation, the simultaneous implementation of CBC and technology in the chosen Arusha city secondary schools presumably has a positive effect on pedagogy and student involvement, regardless of the significant challenges. An overview of the obtained information provides a subtle description of the current tendencies and impressions of the participants, and stories explain the functioning behind the scenes.

According to the teachers, there has been a shift toward more student-centered models based on the principles of competency-based education, where the change between traditional and contemporary curricula is the critical element in developing the desired priorities of skills and competencies. However, the process of handling extensive groups of students is still tedious, which makes it all the more essential to have practical solutions and sufficient resources that could be used to facilitate new teaching practices.

Technology is also extensively seen as a driver of increased engagement and access to the literature in English teaching. It has been proven that technological integration positively correlates with student motivation (Brown and Green, 2022). However, a disconnect remains between what technology is thought to be able to do and what it is actually doing, which can be explained by infrastructural shortages, erratic internet availability, and a lack of teacher training. This trend reflects the trends in other developing settings, where a lack of resources hinders the maximum utilization of educational technology (UNESCO, 2020).

The qualitative data indicate that the teachers primarily use only low-end tools such as projectors, which implies the underutilization of powerful or interactive technologies. As a result, there is a strong need to advance specific professional growth toward the effective implementation of technologies in the classroom. Given that having devices is not enough, educators need to have the

skills to use technology in a manner that can help with the learning outcomes that CBC proclaims (Miller and White, 2021).

Students explained that CBC and technology can positively influence their learning experience, particularly in terms of longer engagement and greater subject enthusiasm. Their interest in interactive technologies shows that they are prepared to be involved in dynamic classrooms, but they still have to overcome challenges such as limited access to technologies outside of the school grounds and in-class technical issues, which prove the systemic barriers that have to be established to facilitate equitable and productive integration. Overall, the possible benefits of the introduction of CBC in the teaching of the literature in English, such as any shift in the paradigm of the pedagogical approach toward the more interactive and student-centered approach, the importance of the infrastructural challenges and the absence of capacity building, reduce the benefits that have been realized. This research also supports strategic investment in the sound technological infrastructure as well as the provision of focused and continuous professional growth to reap the maximum benefits that CBC and technology can bring to the teaching and learning of literature in English.

IMPLICATIONS

The results create a substantive discussion between the stakeholders in the Tanzanian education system, especially on the introduction of CBC as well as the incorporation of technology in various subjects such as literature in English.

Implications for Policymakers and Ministry of Education

The problems identified in the research include the insufficiency of technological infrastructure in secondary schools in Arusha city. In this context, policymakers and the ministry of education should focus on investing in reliable internet connectivity, adequate computer laboratories and other necessary technological infrastructure to facilitate easy integration of technology in the curriculum, including literature in English. In addition, the findings highlight the importance of rigorous, ongoing training program memes for teachers. The key to successful integration of technology is continuous professional development that ensures that an individual develops not only technical but also pedagogical skills, including the ability to train and mentor using TPACK (Osorio Vanegas et al., 2025). Such programmers must go beyond simple digital literacy and include strategies for creatively matching technology to CBC goals. The supply of educators with the relevant equipment is crucial in creating the conditions of

student-centered learning, developing critical thinking skills, and enhancing expertise in the field of literature in English.

Implications for School Administrators

The school will be at the center of the effective change in the curriculum and the incorporation of technology. The results show that school heads in Arusha should actively pursue resources and finances to upgrade their schools in terms of technology infrastructure. This involves not only the maintenance of the technology that is currently present but also planning on how to increase the technological availability to both the student and the teacher. It is also important that administrators develop opportunities that enable teachers to pursue professional development in accordance with CBC and integrating technology. This environment must support the experimentation of new teaching methods and technologies by educators, perhaps through the provision of specific collaborative planning time and technological assistance when needed.

Implications for Teachers

For teachers, especially those who teach literature in English, the research highlights the need to incorporate CBC principles and implement technology in teaching. Nevertheless, the mentioned challenges do not negate the fact that even the slightest use of technology can have a positive effect on student engagement. It is advised that teachers undergo professional growth to acquire more knowledge on CBC pedagogy coupled with technology integration strategies. Moreover, educators are expected to cooperate to develop and exchange innovative practices that utilize available resources and thus improve the interactivity and engagement of literature classes. Professional collaboration among educators, which includes sharing best practices and overcoming the issues related to technology, is very promising in terms of revolutionary change. Finally, educators are encouraged to promote the tools and instruction needed to maximize curriculum and technological resources.

Implications for Curriculum Developers and Resource Providers

Curriculum developers and providers of educational resources play a role in ensuring that they identify the need for relevant, accessible digital resources that are compatible with the literature in the English CBC curriculum in Tanzania. It is imperative to develop material that not only develops a competency but also facilitates interactive learning. One should consider e-books with multimedia capabilities, web resources to support the process of text analytic collaboration, and digital tools to support creative writing and presentations. The resources need

to be optimized on the basis of changing internet speeds and must be compatible with the devices that people frequently use.

Implications for Future Research

In the future, this research provides a basis for follow-up. Future studies can further explore the impact of CBC and technology incorporation over a long duration of time on particular learning outcomes in the literature in English, such as critical thinking, analytical abilities, and creativity. It would be interesting to explore the antecedents of technology adoption and successful classroom use among teachers, such as personal beliefs, institutional support, and access to training. Interregional comparative studies in Tanzania would shed light on differences in implementation and new challenges. A study of perceptions and experience in terms of CBC and integration with technology would further contribute to a better understanding of the educational landscape. Conclusively, a holistic strategy is essential to introduce CBC and technology integration in the literature in English successfully. Infrastructure shortages, the provision of specific professional training, the creation of relevant tools, and the creation of an enabling environment are all essential measures for realizing the complete potential of such changes and promoting teaching and learning in the country.

REFERENCES

- Alvermann, D. E., & Black, R. W. (2021). Digital literacies and adolescent readers. *Journal of Literacy Research, 53*(1), 3–23.
- Applebee, A. N., & Langer, J. A. (2019). Teaching literature in the age of digital media. *Research in the Teaching of English, 54*(1), 9–33.
- Barrett, H. C., & Knezek, G. (2020). Digital portfolios in higher education: A review of research. *International Journal of ePortfolio, 9*(1), 1–14.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.
- Brown, J. S., & Green, T. D. (2022). *Educational technology, media, and materials: An introduction*. Pearson.
- Brown, L., & Green, M. (2022). *Technology in the 21st century classroom*. Academic Press.
- Chen, Y., & Wang, L. (2022). Competency-based assessment in language learning: A systematic review. *Language Learning & Technology, 26*(2), 1–20.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. Sage Publications.
- Dalton, B., & Smith, R. (2021). Creating with technology: Digital storytelling and literacy practices. *The Reading Teacher, 75*(3), 321–330.

- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Educational Psychologist*, 55(2), 93–120.
- Imel, S., & Brown, L. (2023). Teacher professional development for competency-based education. *Journal of Teacher Education*, 74(4), 456–470.
- Johnson, L., Adams, S., & Cummins, M. (2022). *Horizon report 2022: Teaching and learning edition*. EDUCAUSE.
- Kopcha, C. J., & Mouza, C. (2020). Teacher technology integration: A review of research. *Review of Educational Research*, 90(3), 397–430.
- Lee, J., & Kim, S. (2023). The impact of gamification on student engagement in online language courses. *CALL-EJ*, 24(1), 1–18.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Means, B., Murphy, R., & Singh, M. (2019). The effectiveness of online learning: A meta-analysis of research from 2000 to 2018. *Journal of Research on Technology in Education*, 51(4), 449–469.
- Miller, S. M., & White, C. (2021). *Literacy and technology: Current issues and future directions*. Routledge.
- Miller, S., & White, T. (2021). Integrating technology in humanities education. *International Journal of Educational Technology*, 14(4), 301–315.
- Mills, K. A., & Rowsell, J. (2020). *The Routledge handbook of digital writing and technologies in education*. Routledge.
- Ministry of Education and Vocational Training. (2018). *Education and training policy*. Government Printer.
- Ministry of Education and Vocational Training. (2018). *Education Sector Development Plan*. Dodoma, Tanzania: Author.
- Mugarura, L. E., Sekiwu, D., Ssempala, F., & Bashaija, A. (2026). Why competency-based curriculum reforms struggle: The role of teacher commitment in secondary schools in Sub-Saharan Africa. *Journal of Research Innovation and Implications in Education*, 10(1), 39–48.
- Majiwa, S. H., Ogondiek, M. W., & Lukindo, J. (2025). Challenges Experienced in the Implementation of the Competency-Based Curriculum in Tanzania Public Secondary Schools. *International Journal of Humanities and Education Development (IJHED)*, 7(4), 93-103.
- O'Donnell, C., & Obura, A. (2022). Implementing curriculum reform in low-resource contexts. *International Journal of Educational Development*, 90, 102578.
- Patrick, S., Worden, C., & Goertz, M. E. (2021). *Competency-based education: Driving personalization and equity*. Students at the Center Series. Jobs for the Future.

- Pellegrino, J. W., & Quellmalz, E. S. (2010). Perspectives on the integration of technology and assessment. *Journal of Research on Technology in Education*, 43(2), 119-134.
- Ruth, C., & Ramadas, V. (2019). The "Africanized" Competency-Based Curriculum: The Twenty-First Century Strides. *Shanlax International Journal of Education*, 7(4), 46-51.
- Selwyn, N., & Jandrić, P. (2020). *Postdigital education: Critical perspectives on the future of learning*. Springer.
- Tanzania Institute of Education. (2019). *Competence-based curriculum for secondary schools*. Tanzania Institute of Education.
- Tanzania Institute of Education. (2019). *Framework for Competency-Based Curriculum Implementation*. Dar es Salaam, Tanzania: Author.
- Tashakkori, A., & Teddlie, C. (2010). *Mixed methods in social and behavioral research*. Sage Publications.
- UNESCO. (2020). *COVID-19 and education: Four principles to guide the education response*. UNESCO.
- URT. (2020). *Tanzania Education Sector Development Plan 2020/21–2024/25*. Ministry of Education, Science and Technology.
- Warschauer, M., & Ware, P. (2019). Technology and language learning: An introduction. In S. Thorne & S. May (Eds.), *Language, education and technology* (pp. 1–13). Springer.
- World Bank. (2023). *Digital skills and connectivity in Tanzanian schools*. World Bank.
- Zhang, Y. (2021). Teacher preparedness for technology integration in developing countries. *Journal of Technology and Teacher Education*, 29(3), 321–340.
- Luo, J. J., & Liu, X. C. (2025). What do we mean by digital equality in education? Toward five conceptual lenses based on a systematic review. *Journal of Research on Technology in Education*. Advance online publication.
- Osorio Vanegas, H. D., Segovia Cifuentes, Y. de M., & Sobrino Morrás, A. (2025). Educational technology in teacher training: A systematic review of competencies, skills, models, and methods. *Education Sciences*, 15(8), 1036.
- Swai, C. T. (2025). A systematic review of classroom technologies supporting student-centered teaching. *Discover Education*, 4, 564.
- UNESCO. (2025). *UNESCO spotlights how digital learning can promote equity in low-resource contexts*. UNESCO.
- Kasuga, W., & Kalolo, J. (2025). Competency-based curriculum in Tanzania: Charting dilemmas for successful implementation. *Cogent Education*. Advance online publication.