



Research Article

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Transformative Public Educational Policy: The Contextual Essentiality of Continuous Assessment Learning Activity for Quality Basic Education in Chikomba District, Zimbabwe

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Abstract

The quest for quality basic education influenced several countries to embrace Continuous Assessment Learning Activities (CALA) in their assessment systems. Zimbabwe responded by adopting a new curriculum in 2015. It then implemented CALA for certification of grade 7, forms 4 and 6 examination classes in 2021. This study seeks to interrogate contextual significance of CALA to quality basic education and to explore prerequisites for its successful implementation. The study was underpinned by Capability and Keep Learning on Track theories. The researchers used exploratory sequential design of mixed methodology. Purposive sampling was utilized to select schools from private, church run and public schools. Stratified sampling method was used to select 100 female secondary school teachers and 20 female secondary school heads. Additionally, random sampling method was exploited to pick 100 male secondary school teachers and 40 male secondary school heads. Sample size was 260 and 90% response rate. Data were collected using closed and openended questionnaires, structured and in-depth interviews and focus group discussions. Data were captured using SPSS. Quantitative data were analyzed using independent T tests, regression, ANOVA, correlation matrix (Pearson), cross tabulation of variables, normality tests, mean and standard deviation. Qualitative data were scrutinized thematically and interpretatively. Findings revealed that, CALA is imperative for quality basic education as it promotes technological, industrial, research, problem solving and entrepreneurship skills. Additionally, it enhances creativity, innovativeness, motivation of learners, fosters active participation of students and improves academic performance. However, it may be time consuming and requires too much profiling. Accordingly, for CALA to be successfully implemented, it requires training of teachers, resources mobilisation, stakeholders' participation, motivation of teachers and supportive educational legislative framework. Furthermore, it requires robust monitoring and evaluation of teachers and standardization of tasks. The study concluded by recommending policy makers to adopt identified prerequisites for effective implementation of CALA.

Keywords: Basic education; Contextual essentiality; Continuous Assessment Learning Activity; Public educational policy; Quality

Introduction

Background

Globally, significance of education prompted the United Nations (UN) to include Sustainable Development Goal 4 in September 2015 (UN, 2017). It advocates for quality education. In Zimbabwe, the Ministry of Primary and Secondary Education (MoPSE) adopted a new curriculum framework which was to be operational as from 2015 and reviewed in 2022 (MoPSE, 2015). However, it continued to be in existence up to 2024 with minor adjustments being effected in due course. It emanated from findings of Nziramasanga

Commission of inquiry on Education report of 1999. This commission, criticized the old curriculum for being too theoretical, thereby, lacking practical problem-solving skills (Nziramasanga Commission, 1999). At the heart of the new curriculum was CALA policy. It was incorporated for certification in all subjects for grade 7, forms 4 and 6 examination classes in 2021 (MoPSE, 2021). The key aim was to furnish pupils with needful knowledge, skills and traits. This approach was expected to enable learners to prosper in life through opportunities and difficulties they may confront (MoPSE, 2014).

However, there were misunderstandings, errors, discontent and general misconceptions coupled with resistance from multiple education stakeholders (Mpande, 2023). This primarily caused stakeholders to approach the courts to seek an interdict against implementation of CALA upon its adoption in 2015 (Nkala, 2017). The main challenge was failure to distinguish contextual significance of CALA to quality basic education and its prerequisites to be successfully implemented (Chitumba, 2023). Thus, the perspective that, the purpose of CALA was deemed to be futile from onset due to lack of enforcement necessities which stakeholders purported not to afford (Chitumba, 2023). Additionally, fundamental stakeholders were of view that, CALA was leaving out disabled, vulnerable and marginalized learners, as a result, it should be shelved (NASH, 2021). Therefore, in light of these constitutive constraints embedded with CALA, it was perceived to cause unnecessary vexation (Mpande, 2023). It is against this background that, this study is crucial as evidence from the existing literature suggest that, no research has been carried out to explore contextual importance of CALA to quality basic education specifically in Chikomba District, Zimbabwe. Additionally, though related researches had been conducted in other districts of Zimbabwe and other countries, most of them used qualitative approach and a few quantitative one. As a result, there is scant or limited scholars that used mixed methodology as only three were found hence more researches exploiting exploratory sequential design in assessing this CALA educational public policy are needed. Above all, the underlying political, economic, sociocultural and technological conditions of Chikomba District may be different and unique with other areas of Zimbabwe and other countries at large hence the need to carry out a robust research to determine whether the results will be similar with previous studies or not thereby proffering recommendations to policy makers accordingly. Therefore, this study seeks to achieve two main objectives as detailed below.

Research Objectives

The research objectives of this study were to:

- To discuss the link between CALA and quality basic education in Chikomba District, Zimbabwe and;
- ii. To determine the prerequisites necessary for successful CALA implementation in Chikomba District, Zimbabwe.

Research questions would rationally respond to objectives as to:

Research Questions

- i. What is the link between CALA and quality basic education in Chikomba District, Zimbabwe?
- ii. What are the prerequisites necessary for successful CALA implementation in Chikomba District, Zimbabwe?

Literature Review

CALA Framework in Chikomba District, Zimbabwe

MoPSE, (2015-2022) framework established an Assessment Model for evaluating performance of learners in a subject. It applies to all public schools in Zimbabwe. Thus, the model incorporates both CALA 100% and Summative Assessments 100%. However, the weight of each component may be reduced to accommodate each other for certification. As from 2021 to 2024, CALA constituted 30% and summative examinations 70% for grade 7, and forms 4 and 6 examination classes (MoPSE, 2023). The framework also involves profiling of learners through proper record keeping. Additionally, emphasis is on learner exit profile upon completion, final mark for certification and learner profile certification. (Figure 1.1) provides a summary.

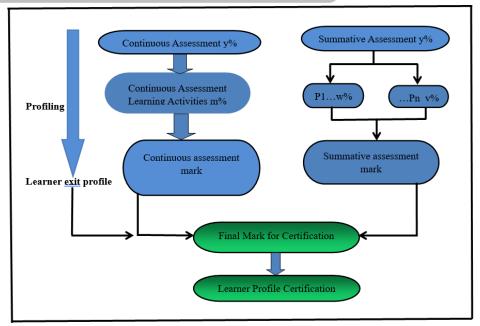


Figure 1.1: MoPSE of Zimbabwe CALA and Summative Assessment Framework Source:(MoPSE, 2015).

Notable challenges associated with CALA public policy implementation in Zimbabwe

A study was carried out in Nyanga District, Zimbabwe to determine the effectiveness of the implementation of CALA by MoPSE (Juliet et al., 2021). Key implementation constraints that were noted evolve around shortage of resources, limited time, too many tasks and poor network for learners to research (Juet et al., 2021). They further asserted other constraints as too broad syllabuses, national shocks such as Covid 19 delaying completion of tasks and lack of professionalism by some teachers. This concurs with the findings revealed by Gama (2022) who conducted a research on the challenges faced by learners and teachers in implementing the CALA program in secondary schools in Chirumanzu District, in Zimbabwe. These challenges include negative attitude by teachers, too much work load and it becomes too expensive for the learners to acquire resources for CALA (Gama, 2022). This is also in line with the observations made by (Vurayai & Muchuweni, 2024) who posited shortage of resources, too many tasks and high teacher pupil ratio as some of the constraints hindering effective CALA implementation. They also added, lack of proper training on the part of the learners and lack of parental support as some of the obstacles faced by learners. Accordingly, this study is of paramount significance to analyse the contextual importance of CALA to quality basic education given the challenges noted in some parts of Zimbabwe primarily attributed to lack of prerequisites for effective implementation of CALA public educational policy.

Overview

There is a strong positive link between CALA and quality basic education. It improved academic results (Mohammad et

al., 2017; Krishna, 2017; Aturinzire, 2020). Additionally, CALA is a learner-centered approach thereby fostering participation of learners, feedback, motivation development of skills (Bitew, 2022). This concurs with Mataka et al., (2022) and Firomumwe, (2022) who postulate that CALA promotes innovation, creativity, skills such as technological, entrepreneurship, problem solving and hands on approach. On the contrary, some previous research studies depicted CALA as compromising quality basic education due to lack of prerequisites. These constraints include: lack of trained teachers, too much profiling, time constraints, shortage of resources, high teacher pupil-ratio, huge teacher workloads, CALA missing marks and resistance from learners (Akoroda & Ugboh, 2012; Mlambo, 2022; Sintayehu, 2016; Gama, 2022; Marongedza et al, 2023; Vurayai & Machuweni, 2024 and Juliet et al.,2021). However, research in Chikomba District is imperative as underlying economic, political, cultural and technological conditions of, say, Pakistan, Nepal and Uganda may be different from that of Zimbabwe.

On prerequisites of CALA, most scholars identified availability of educational resources (Atsumbe & Raymond, 2012; Kikwato e tal., 2023; Chiyenge, 2017; Gasva et al., 2019; Chanda, 2022 & Risiro, 2017). Additionally, training teachers was identified (Chiyenge, 2017; Gasva et al, 2019). Furthermore, employment of more teachers was also posited (Risiro, 2017; & Kikwato et al., 2023). Moreover, proper filing was also noted (Chiyenge, 2017 & Risiro, 2017). Stakeholder participation was also suggested (Mapendere & Masvimbo, 2023). Moreover, motivation of teachers (Chanda, 2022 and Atsumbe & Raymond, 2012). Furthermore, standardisation of research tasks was emphasised (Kikwato et al., 2023 & Risiro, 2017). Above all, close monitoring and evaluation systems were mentioned (Atsumbe & Raymond 2012; Chiyenge, 2017 and Chanda, 2022). Accordingly, this

research adds knowledge to existing ones through filling the gap on the subject matter specifically at least as the first one of its type to be conducted in Chikomba District, Zimbabwe.

Theoretical Framework

This study was underpinned by Capability and Keep Learning on Track (KLT) theories. Capability theory emerged in the 1980s by Sen and KLT in 2006 by Ciofalo. Capability theory postulates that, people have the possibility to modify their individual and societal lives; if hidden strength and gift enshrined in them are known, analyzed and enhanced certainly (Sen, 1997). Capability theory was utilized to reflect whether CALA can foster basic quality education in learners by enabling them to undertake research which is based on creativity and innovativeness.

KLT theory was used to assess the prerequisites for successful implementation of CALA. It tested for ease of effective teaching and learning of learners in their classrooms (Dobish et al., 2017). This approach emphasizes evidence of pupils learning as criterion to adjust teaching to meet demands of learners (Dobish et al., 2017). In tantamount with KLT, CALAs should facilitate possibilities where teachers share with students' areas of focus. Therefore, this theory was used as a yardstick to glean on whether prerequisites of CALA were met or not. If not, it provides foundation to find out prerequisites of CALA to be successfully implemented.

Methodology

Research Design

In this study, a mixed method using exploratory sequential research design was employed. It explores the relationship between CALA and quality basic education, as well as the prerequisites for the successful implementation of CALA. This approach utilizes combined qualitative and quantitative methodologies to provide a more comprehensive understanding of the research questions. Thus, it starts with qualitative approach followed by quantitative one. Accordingly, questions that needed comprehensive expositions and hard to measure such as experiences, thoughts, feelings, behavior and attitude were best captured by qualitative approach (Tenny et al., 2024). Moreover, qualitative approach was found to combine human interactions, to be cost-effective and indeed the only option to provide insights (Mwita, 2022). On the other hand, the approach is prone to researchers' subjectivity, involves complex data analysis, makes anonymity difficult and has limited scope in generalization (Mwita, 2022). However, some of the limitations were curbed through triangulation of various participants and repeated trials. The qualitative data were collected through interviews and focus groups. This allows for rich, nuanced narratives that highlighted the human interactions involved in the implementation of CALA. In parallel, the quantitative component involved the collection of numerical data through surveys and assessments to measure specific outcomes related to CALA and its impact on

educational quality. This quantitative data provided a broader context and allowed for statistical analysis, enhancing the reliability and validity of the findings.

Target Population

Target population represents a constrictive group of persons who have inherent particular features or satisfy certain standards (Bhandari, 2022). In this study, the target population of only selected schools was 800 and it comprises of secondary school teachers and their respective school heads. They were all drawn from Chikomba District constituencies namely: West, Central and East.

Sampling Methods and Sample Size

Purposive, stratified and simple random sampling methods were explored. Purposive sampling was used to select schools from private, church run and government schools. Stratified sampling method was used to select 100 female secondary school teachers and 20 female secondary school heads. Stratified sampling was used to ensure female participation as they were outnumbered by male teachers hence inclusivity. Additionally, random sampling method was used to pick 100 male secondary school teachers and 40 male secondary school heads. Participants were equally drawn from schools selected from town set up, resettlement and marginalized areas. Stratified sampling technique was crucial as it potentially improved the precision of survey estimates and reduced bias as it ensured that all characteristics of groups are incorporated including gender (Peter, 2016). Random sampling was used as it would ensure equal chances for all teachers and secondary school heads to be picked thereby reducing bias. The sample size of this study was 260. It was determined by Yamene's 1967 formula with 95% confidence level.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \text{ sample size}$$

$$N = \text{population size of selected schools (800)}$$

$$e = \text{ allowable error of 5\% (level of precision)}$$

$$= 800$$

$$n = \frac{1 + 800 (0.05)^2}{1 + 806 (0.05)^2}$$

The sample size for the study was 260.

Data Collection

Data were collected using closed and open-ended questionnaires, structured and in-depth interviews and focus group discussions. Quantitative data were captured using SPSS. Questionnaires were drafted into three sections (A-C) with A for demographic information, B on the the contextual

importance of CALA to quality basic education and C on the prerequisites of CALA. Each section contains relatively coded questions which were validated by educational experts. Questionnaires were issued physically to participants and through their respective emails. As partially part of the pilot study, key informant interviews were done with 20 informants as follows: 5 Secondary female school heads, 5 male secondary school heads, 5 male and 5 female secondary school teachers, all from Chikomba District, Zimbabwe. The remaining 240 participants were given questionnaires to respond to. Six focus group discussions composed of secondary school learners, teachers and respective school heads were arranged in line with the areas they stay. Responses from the participants were captured with the assistance of 1 recorder.

Secondary Data

The researcher obtained information about the number of secondary school teachers and respective secondary school heads, pass rates of secondary schools since 2021 from Chikomba District officials. Information was typically shared physically and through Online means.

Data Analysis

Data was analyzed using a mixed methods approach, incorporating both thematic analysis for qualitative data and statistical analysis for quantitative data. Quantitative methods that were used include: independent T tests, regression, ANOVA, correlation matrix (Pearson), cross tabulation of variables, normality tests, mean and standard deviation.

Thematic analysis

Thematic analysis is a highly worthy analytical method for qualitative researches as it provides insights into phenomenon under investigation or even theory-building (Prokopis, 2023). Thus, thematic analysis entails identification, analysis and interpretation of themes within qualitative data set (Prokopis, 2023). The thrust of thematic analysis evolves around identification, analysis and interpretation of themes within a qualitative data set. Therefore, the researcher followed six steps of analysing qualitative data which were: familiarization with research data, generation of initial codes, searching for and reviewing of themes, theme definition, creating theoretical diagrams and theory building and producing final report (Braun & Clarke, 2021).

Validity and Reliability

Reliability is about consistency of a measure, and validity is about accuracy of a measure (Middleton, 2022). Therefore, reliability was fostered by checking the consistency of results across time, across different observers and across parts of the test itself. Furthermore, validity was enhanced by monitoring how well results correspond to established theories and other measures of the same concept (Middleton, 2022). In this study, validity was fostered by making sure that questionnaires and

interview guides contained enough questions to achieve all stated objectives. Each questionnaire was crafted into sections, with each segment revealing a study goal. Additionally, reliability was ascertained by ensuring that same findings of the research can be obtained on repeated trials. Moreover, the researcher used multiple participants as part of triangulation. Quantitatively, Cronbach's Alpha reliability was used to test reliability of the data.

Table 1:1 Reliability Test.

Test	Value
Cronbach's Alpha	0.82

Explanation: A Cronbach's Alpha of 0.82 suggests high internal consistency, meaning that the survey items are reliable for measuring CALA factors. High internal consistency implies that respondents are interpreting the survey items in a similar manner, which enhances the credibility of the findings. It also suggests that the items are well-designed and relevant to the constructs they aim to measure. Consequently, researchers and practitioners can have greater confidence in the data collected, knowing that it accurately reflects the perceptions and experiences of individuals regarding CALA factors.

Ethical Considerations

Ethical considerations in research are a set of principles that guide one's research design and practices (Bhandari, 2024). In this study, research support and permission letters were sought from Ministry of Primary and Secondary Education for the researcher to obtain information from schools and Chikomba District educational offices. Additionally, voluntary participation was emphasized as only those who expressed willingness participated. Furthermore, participants were informed about purposes of the research including the absence of material gains. Moreover, anonymity and confidentiality were fostered as no identification of respondents was required. The researcher disseminated the results to participants through their mobile WhatsApp platforms and respective e-mail addresses. All literature used was properly cited.

Qualitative results

Findings for Theme 1: Link between CALA and Quality Basic Education

Most participants posited a positive link between CALA and quality basic education. In commencement, CALA fosters learners to be industrious. Accordingly, School Head, Mrs B (name protected) asserted:

"CALA provides balanced approach to learning system as learners are equipped to be more economically productive, develop sustainable livelihoods and enhance well-being."

Additionally, CALA promotes a variety of skills in learners. These skills enhance innovativeness and creativeness. One of Secondary School Heads Mrs D (name protected) asserted: "CALA promotes critical thinking, problem solving, research skills and generally innovativeness and creativity."

Furthermore, CALA promotes active learners' engagement. Thus, Teacher, Mr E (name concealed) commented:

"CALA allows learners to make input into their learning journey thereby enhancing their understanding."

More to it, motivation through improved academic performance was mentioned. Consequently, one of School's Heads, Mr F postulated:

"As from 2021 when CALA was introduced to be part of final certification of candidates, better performance was noted in most subjects in schools."

Furthermore, molding of Ubuntu philosophy through CALA exit profiles was identified. As a result, one of Secondary School Teacher, Mr H asserted:

"CALA facilitates development of soft skills such as being respectful and hard working through hidden curriculum."

Moreover, CALA promotes digital learning. Accordingly, Secondary School Head J postulated; "The need for discovery of new knowledge contributed to utilization of technology in teaching and learning."

In contrast, there are some opposing views that, the link between CALA and quality basic education is compromised in Zimbabwe. Accordingly, one of the secondary school's head Mrs I argued that:

"Teachers just give learners tasks for the sake of fulfilling ZIMSEC requirements. This is due to time constraints, too much profiling and too much tasks and lack of motivation on educators."

The positive link between CALA and quality basic education can be summarized as in (**Figure 1.2**).

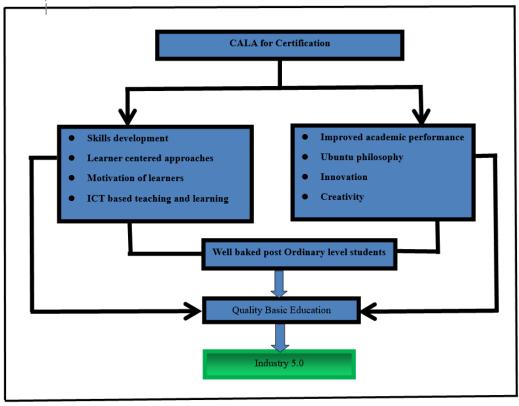


Figure 1.2: Established Positive Link between CALA and Quality Basic Education Source: (Authors, 2025).

Qualitative findings for Theme 2: Prerequisites for Successful CALA Implementation

Key prerequisites include resource mobilization, supportive infrastructure, training of teachers, standardization

of tasks and employment of more teachers. Additionally, motivation of teachers, proper filing, digital infrastructure and close monitoring and evaluation.

Resource mobilization in schools was buttressed by the response:

"Resource mobilization in form of laptops, modern laboratories and libraries are important to enhance research." (Teacher 8)

Additionally, staff development was identified. Thus, the utterances: "Staff development of teachers is crucial to equip them with CALA administration skills." (Teacher 9).

Furthermore, establishment of digital infrastructure was emphasized. As a result, "Digital infrastructure such as Computer Laboratories should be available in all schools to support these research-based activities." (School Head 6).

Moreover, standardization of tasks was mentioned. Thus, the utterances that, "There is a need for standardization of CALAs to meet required competencies according to respective environments." (School Head 9).

Additionally, motivation of teachers was mentioned. Therefore, "CALA activities should be paid separately just like what ZIMSEC does to its examiners." (Teacher 12).

Furthermore, ICT based filing was established to be critical. Consequently, one secondary school head posited: "Proper filing is called for preferably through use of modern ICT to avoid missing marks mostly in big schools." (School Head 7).

More to it, employment of more teachers was noted. Thus, the remarks that, "It's very unfortunate that one teacher in some big schools has to administer about 250, (1:250) tasks of examination classes which is very difficult or impossible." (School Head 2.)

Finally, close monitoring and evaluation were found to be essential. As a result, one of the school heads pinpointed: "Monitoring and evaluation are imperative to ensure compliance and keeping supervisors informed for corrective measures." (School Head 13).

Figure 1.3 summaries prerequisites of CALA. Percentage was obtained according to the frequency of each response from participants.

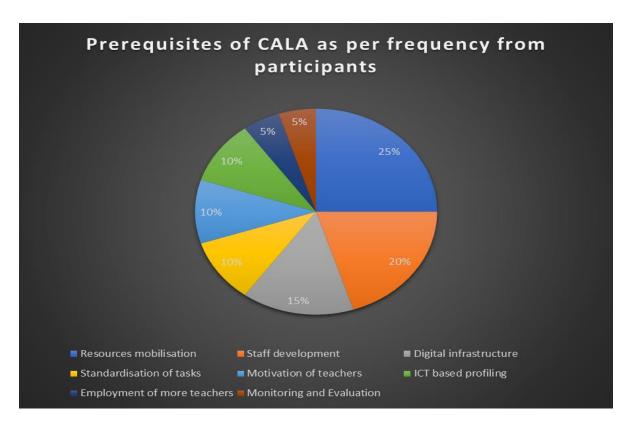


Figure 1.3: Prerequisites for Successful CALA Implementation Source: (Authors, 2025).

Discussion and Analysis

Quantitative interpretation and analysis of results

Table 1:2 Response Rate Discussion

Total Distributed Surveys	Responses Received	Response Rate (%)
100	90	90%

A response rate of 90% indicates a strong participation level, minimizing non-response bias and increasing the reliability of the findings. This high level of participation suggests that the data collected is likely to be representative of the population surveyed. A strong response rate minimizes

non-response bias, which can skew results and lead to inaccurate conclusions. Consequently, the reliability of the findings is significantly enhanced, providing a solid foundation for further analysis and interpretation.

 Table 1.3: Descriptive Statistics

Variable	Mean	Std Dev	Min	Max
Improved Academic Performance	3.07	1.4	1	5
Skills Development	2.93	1.44	1	5
Learner Engagement	2.86	1.37	1	5
Digital Learning Adoption	2.98	1.46	1	5
Resources Availability	3.01	1.48	1	5
Teacher Training	3.26	1.47	1	5
Standardization of Tasks	2.98	1.52	1	5
Monitoring & Evaluation	2.91	1.39	1	5

Explanation: The mean values range between 2.86 and 3.26, suggesting that most respondents rated the factors as moderately important for CALA implementation. The standard deviations for these variables range from 1.37 to 1.52, which indicates variability in the responses among participants. A higher standard deviation suggests greater dispersion in the ratings, meaning that opinions on the importance of certain factors may differ significantly among respondents. For instance, the standard deviation of 1.52 for

Standardization of Tasks indicates a wider range of perceptions regarding its importance, suggesting that some respondents may see it as critical, while others may view it as less significant. Descriptive statistics reveal that while respondents generally perceive the factors associated with CALA implementation as moderately important, there is notable variability in how these factors are viewed. These can be best explained by (**Figure 1.4**).

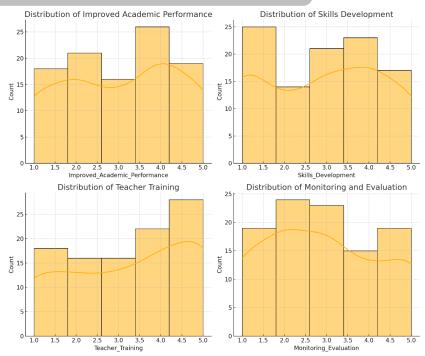


Figure 1.4: Distribution of variables. Source: (Authors, 2025).

Table 1.4: Normality Tests (Shapiro-Wilk)

Variable	Shapiro-Wilk p-value	Normality Decision
Improved Academic Performance	0.08	Approx. Normal
Skills Development	0.03	Not Normal
Learner Engagement	0.04	Not Normal
Digital Learning Adoption	0.12	Approx. Normal
Resources Availability	0.06	Approx. Normal
Teacher Training	0.02	Not Normal
Standardization of Tasks	0.09	Approx. Normal
Monitoring & Evaluation	0.05	Approx. Normal

Explanation: A p-value > 0.05 suggests normality, while p < 0.05 suggests non-normality. Some variables (e.g., Skills Development, Learner Engagement) deviate from normality, which may affect parametric tests like regression. The non-normality of certain variables suggests that there may be underlying issues affecting these areas that warrant further exploration. For example, the low levels of normality in Skills Development and Teacher Training could indicate systemic challenges within educational programs or disparities in access

to resources. Understanding these factors could lead to more effective interventions and improvements in educational outcomes. Consequently, the findings imply that interventions aimed at improving Skills Development and Teacher Training should be tailored to address the specific needs of different groups. If certain demographics are consistently underperforming, targeted support and resources may be necessary to bridge the gap and enhance overall performance.

Table 1.5: Cross-Tabulation of Performance Level & Skills Development

Performance Level	Low (1-2)	Medium (3-4)	High (5)
Skills Development	25%	60%	15%

Explanation: Most participants (60%) rated Skills Development in the Medium category, showing that while CALA contributes to skill enhancement, it requires further improvement. The predominance of the Medium rating highlights a critical insight into the effectiveness of CALA in enhancing skills. While CALA initiatives appear to have a

positive impact on skill enhancement, the fact that 60% of participants are not achieving high levels of proficiency suggests that these programs may not be fully meeting the diverse needs of all learners. The 25% of participants who rated their skills development as Low is particularly concerning, as it indicates that a notable segment of the

population may be at risk of falling behind. Furthermore, the 15% of participants who rated their skills development as High suggests that there are individuals who are successfully benefiting from CALA initiatives. However, this percentage is relatively small compared to those in the Medium category,

indicating that while some learners are thriving, the majority are not reaching their full potential. This disparity emphasizes the importance of identifying the factors that contribute to high performance and replicating those conditions for a broader range of participants.

Table 1.6: Correlation Matrix (Pearson)

Variable	Academic Performance	Skills Development	Digital Learning	Resources
Academic Performance	1	0.72	0.65	0.80
Skills Development	0.72	1.00	0.58	0.69
Digital Learning	0.65	0.58	1.00	0.55
Resources	0.80	0.69	0.55	1.00

Explanation: Strong positive correlations (0.7-0.8) exist between Academic Performance & Skills Development and Academic Performance & Resources, suggesting that well-resourced schools perform better. These high correlation coefficients suggest that as skills development and resource availability increase, academic performance also tends to improve significantly. The correlation between Skills Development and Resources (0.69) further indicates that well-resourced environments are likely to foster better skill-

building opportunities for students. Additionally, the correlation between Digital Learning and Academic Performance (0.65) suggests that the integration of digital tools in education is associated with enhanced academic outcomes. This finding highlights the need for educational institutions to prioritize resource allocation and skill development initiatives to enhance overall academic performance.

Table 1.7: Regression Analysis (OLS)

Variable	Coefficient (β)	Std. Error	p-value	Significance
Constant	1.23	0.45	0.01	Significant
Skills Development	0.58	0.12	0.00	Significant
Digital Learning	0.40	0.15	0.02	Significant
Resources Availability	0.62	0.10	0.00	Significant

Explanation: A positive and significant effect of Resources (β =0.62), Skills Development (β =0.58), and Digital Learning (β =0.40) on Improved Academic Performance confirms that better resources and skill-building lead to higher performance. This suggests that for every unit increase in skills development, digital learning, and resources, there is a corresponding increase in academic performance. Specifically, the strongest effect is observed with Resources Availability (β

= 0.62), indicating that enhanced resources have a substantial impact on improving academic outcomes. Skills Development also plays a significant role, with a coefficient of 0.58, suggesting that effective skill-building initiatives are crucial for academic success. Digital Learning, with a coefficient of 0.40, further emphasizes the importance of integrating technology into educational practices.

 Table 1.8: Independent Samples T-Test

Group	Mean (Digital Learning)	Std Dev	p-value	Conclusion
Low Performance	2.5	1.2	0.03	Significant difference
High performance	3.8	1.1	-	-

Explanation: A p-value of 0.03 (<0.05) suggests a significant difference in Digital Learning Adoption between Low and High Performers, indicating that schools adopting more digital tools tend to perform better. The results imply that the

integration of digital learning resources is a critical factor in enhancing student performance, and schools should prioritize the adoption of digital tools to support learning.

Table 1.9: ANOVA Results

Factor	F-Statistic	p-value	Decision
Performance level	4.32	0.02	Significant

Explanation: A p-value of 0.02 suggests that Performance Level significantly affects multiple dependent variables, supporting the need for differentiated interventions. The significance of this result supports the need for differentiated interventions tailored to the varying performance levels of learners. The findings suggest that different performance levels may require distinct educational strategies and resources to effectively address the diverse needs of learners. This highlights the importance of implementing targeted interventions that consider the specific challenges and strengths of students at different performance levels, ultimately aiming to enhance educational outcomes across the board.

Qualitative Interpretation and Discussion of Results

Stakeholders, namely, Secondary School Teachers and Secondary School Heads, postulated that there is a positive direct link between CALA and quality basic education. Teachers were selected in large numbers to participate as they were the real administrators of CALA starting from setting and marking the research questions and compilation of marks. Secondary School Heads were also of paramount significance as they were responsible for supervising and monitoring the progress of CALA. Results indicated that, effective CALA implementation requires effective utilization of digital learning which is also a key feature of quality education. Gone are the days when teaching and learning were characterized only by traditional teaching and learning methods. This was very useful during world shocks such as Covid-19 era mostly for 2019 and 2020. The essentiality of technological skills in defining quality basic education concurs with the views of (Bitew, 2022; Fromumwe, 2022). This is also in tantamount with envisioning industry 5.0 super smart society marked by usage of technological devices replacing human ways of doing things. Additionally, CALA envisages quality basic education by promoting creativity, innovation and a quite number of skills. These skills include critical thinking, problem solving and entrepreneurship thus preparing learners who meet industrial requirements primarily by being economically active. This can solve the unemployment rate that is rife in Zimbabwe. This is in line with findings of (Mataka, Matee & Hokonya ,2022; Firomumwe, 2022). This also addresses the vision of industry 5.0 which seeks to have a well adaptable and efficient workforce in a sustainable manner.

Additionally, CALA promotes learner's engagement, feedback and motivation which results in better understanding. This concurs with the observations made by (Bitew, 2022). Furthermore, it improves academic performance, especially in practical subjects such as Agriculture and Woodwork. This is key in defining quality education. The same findings were noted by (Mohammad, Samiullah & Aysha 2017; Krishna 2017; Aturinzire, 2020). This study notes that CALA promotes attributes such as *Ubuntu* and respect through the hidden curriculum. The research-based activities defy laziness and fosters learners to be respectful in their communities whilst researching data. This concurs with Industry 5.0 which simplifies social and cultural activities. However, a few

viewed CALA as compromising quality basic education due to the absence of the prerequisites as the case in Chikomba District. The same sentiments were echoed by (Akoroda & Ugboh, 2012; Mlambo, 2022; Sintayehu, 2016; Gama 2022; Marongedza *et al.*, 2023; Vurayai & Machuweni 2024 and Juliet *et al.*, 2021).

Most of the research instruments pointed resource mobilization to be a key prerequisite for effective CALA implementation. The same observation was made by Atsumbe & Raymond, 2012); Kikwato, Neroh & Chanda, 2023; Chiyenge, 2017; Gasva et al., 2019; Chanda, 2022 & Risiro, 2017). In addition to that, training of teachers was found to be critical for successful CALA implementation for quality basic education. Most of the teachers in Chikomba District did not receive workshops on effective CALA administration. This is in tandem with the findings of (Chiyenge, 2017; Atsumbe & Raymond, 2012; Gasva et al., 2019). Furthermore, establishment of digital infrastructure to facilitate e-learning in elementary and secondary schools was found to be critical. The same results were identified by scholars such as (Risiro, 2017 & Chiyenge, 2017). This is essential in this era of Industry 5.0 where Artificial Intelligence, Big Data Analytic, Internet of things and Digital twines are at center stage.

Moreover, standardization of tasks for credibility and uniformity of competencies tested by tasks was noted to be a vital prerequisite of CALA. This is supported by research findings from (Kikwato *et al.* 2023; & Risiro, 2017). More to it, motivation of the teachers through incentives and other fringe benefits such as housing stands was mentioned by participants as key condition for successful CALA implementation. This would enable educators to administer CALA whole heartedly. The same sentiments were noted from (Chanda 2022; & Atsumbe & Raymond, 2012). Additionally, to reduce CALA missing marks, adoption of software for profiling of CALA marks was recommended. This concurs with the conclusions drawn by (Chiyenge ,2017; Risiro, 2017 and Mapande & Masvimbo, 2023).

Furthermore, employment of more teachers was noted to be crucial to reduce high teacher-pupil ratio thereby enabling the teacher to effectively administer CALA. The same views were highlighted by (Kikwato et al., 2023). Above all, close monitoring and evaluation on the progress of CALA was found to be useful. This could enable anomalies to be addressed during the administration of CALA and for ensuring compliance mostly from learners, teachers and heads as supervisors. This is in unison with the findings obtained by (Chanda 2022; Atsumbe & Raymond, 2012). The link between CALA and quality basic education concurs with capability theory as the findings depicted that, learners can be creative and innovative if given the opportunity. Additionally, the prerequisites for CALA are in line with KLT theory as their availability will enable learners and teachers to effectively and efficiently implement CALA for quality basic education.

Limitations of the Study

When carrying out the study, the researchers encountered quite a number of challenges. These constraints hindered the investigators to execute the research effectively. Firstly, and foremost, change of public educational policies in 2025 shifting from CALA to Heritage Based Curriculum (HBC) whilst the research was underway. However, this anomaly was solved to a greater extent as the HBC in its context is almost similar to CALA but varying in the ways of implementation. Additionally, this problem was tackled as in 2025 there were still the same teachers and learners who did CALA, hence questionnaires, interviews, focus group discussions were done with ease. Secondly, lack of financial resources hindered the effectiveness of research especially transport, accommodation and stationery costs. To curb these financial related problems, the researchers had to rely on his personal savings from his salary and other personal projects. Thirdly, a few numbers of initially selected respondents resisted to be part of the survey as they had fear of the unknown to include being taken to the courts after being quoted wrongly and being published in the state media. However, the researchers convinced participants with ethics clearance certificates. Additionally, the researchers explained that, their privacy and confidentiality were guaranteed and that the research findings were to be used for academic purposes only.

Conclusion

It can be concluded that, to a greater extent, there is a positive link between CALA and quality basic education. This is so, because CALA fosters various skills in learners. These include: critical thinking, practical and industrial, cognitive, innovation, creativity, problem solving, technical and research among others. These skills are critical in Industry 5.0 as they aid in socioeconomic transformation for development of the modern societies. Additionally, these competencies in learners facilitate them to discover knowledge on their own. Thus, also learners' engagement and feedback motivate them to discover more. Furthermore, it embraces the utilization of digital learning. This is in line with envisioning industry 5.0 mantra for super smart city through the use of technology. Moreover, it improves academic performance and molds the character of learners through exit profiles. However, there were a few scholars who were of the view that CALA compromise quality basic education as it is time consuming, too much profiling, too many tasks and resistance by learners to complete all tasks. CALA was also perceived to be associated with difficult prerequisites for successful implementation in developing countries (Akoroda & Ughboh, 2012; Mlambo, 2022 & Sintayedu, 2016). It should be noted that, the positive link of CALA to quality basic education outweigh the few limitations. As a result, it must be embraced to achieve United Nations Sustainable Development Goal 4 on quality education. The prerequisites for successful implementation of CALA for quality basic education include: use of modern ICT, resources mobilization, engagement of all key educational stakeholders, motivation of teachers, training of teachers, proper filing with aid of modern ICT gadgets. Additionally, there is a need for

standardization and quality assurance of tasks and employment of more teachers. Furthermore, competitions should be organized to encourage creation of new ideas. Above all, robust monitoring and evaluation of research-based activities were also highlighted as key prerequisites for successful CALA implementation.

Implications and Future Work

This study is of paramount significance as it unpacks the importance of CALA to MoPSE and Zimbabwe School Examination Council as key policy makers and implementers respectively to continue embracing CALA for realization of quality basic education. Other key educational stakeholders such as learners, teachers and parents can develop positive attitude towards implementation of CALA after being enlightened on its desired goals. During the course of the study, the researcher noted the need for the research on impacts of national shocks such as Cyclone Idai and Covid 19 to quality basic education.

Recommendations

Based on the research findings, the study strongly recommends the policy makers in Zimbabwe specifically the government through the Ministry of Primary and Secondary Education and its wings to:

- Set aside a budget allocation to cater for the needs required for successful CALA implementation in rural and marginalized schools;
- Standardize the research-based activities taking into cognizance the prevailing environment in which schools and learners exist;
- Centralize cluster assessment of CALAs by trained CALA examiners;
- Spearhead competitions on CALA exhibitions to promote creation of new inventions;
- Establish digital infrastructure especially in marginalized schools to enhance digital learning;
- Regular funding of CALA workshops for both teachers and learners in their respective districts;
- Use of modern data capturing software to avoid missing CALA marks of learners at school and national levels;
- ❖ Routine review of CALA to ensure that competencies continue to be in line with dynamic national, regional and global market.

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