



Journal of Geography Education in Africa (JoGEA)

Journal of the Southern African Geography Teachers' Association - sagta.org.za

Bridging the gap between classroom practice and the world of work: A case of competency- based continuous assessment learning activities in Geography, Mutare Urban Cluster, Zimbabwe

Joshua Risiro

Robert Mugabe School of Education, Great Zimbabwe University,

<http://orcid.org/0000-0002-5151-3303>

DOI number: <https://doi.org/10.46622/jogea.v4i1.3527>

Abstract

The Zimbabwean education system that was inherited from the days when Zimbabwe was still Rhodesia provided strong content knowledge at the expense of critical skills and competencies. In its curriculum framework of 2015–2022, the government of Zimbabwe noted that mastery of subject content was inadequate for the schooling system needed by the country (Government of Zimbabwe, 2015). In response, it explained, it had developed a curriculum framework based on the introduction of competency-based continuous assessments in schools.

The purpose of this article is to explore the system of competency-based continuous assessment learning activities (CBCALA) that is being adopted in the assessment of Geography at Ordinary Level in secondary schools. Further to that, it aims to determine the challenges that Geography teachers face in the implementation of CBCALA. The study at the heart of the article is based on the social constructivism of Vygotsky (1978); and on the philosophy of ubuntu, which is widely espoused throughout southern Africa and further north on the continent. An interpretive

¹“Ordinary Level” in Zimbabwe refers to the syllabus taught to learners in their third and fourth year of secondary/high school education. It is equivalent to grades 10 and 11 in South Africa.



ISSN: 2517- 9861

research paradigm was adopted for a case study carried out in Mutare District in Zimbabwe. Data were generated through purposive sampling of the participants and were analysed by generating thick descriptions and themes.

The study revealed the need for geography teachers to develop CBCALA through the formulation of clearly stated problems and through the assessment of well-formulated objectives that assess learners' academic knowledge and competencies. This is achieved by developing research-based and practically oriented tasks. Geography CBCALA should be learner-centred, using both individualised and group assessment tasks. A marking guide is critical for use in marking the assessment tasks. Several challenges that impede the implementation of CBCALA include time constraints, the inadequate training teachers receive on the use of CBCALA, large classes, increased workload and inadequate equipment. The study recommends reviewing the quantity of content coverage; computerising the documentation of assessment tasks and student records; recruiting more teachers; and mobilising resources from within the community.

Keywords: Competency-based continuous assessment learning activity (CBCALA); competency; classroom practice

Introduction

Competency-based education (CBE) aims to produce skilled and employable graduates (Komba & Mwandanji, 2015). It emphasises the learning outcomes and task competencies that a student can demonstrate after learning has taken place (Thakaberry, 2017). CBE focuses on skills acquired rather than the mastery of content (Ogegbo et al., 2020). Proponents of CBE argue that focus on content and examinations at the end of a course fails to provide a true picture of the learner's performance (Atibuni & Olema, 2017). CBE is associated with continuous assessment learning activities (CALA). Such activities point to a type of assessment that evaluates student performance against a set of stated criteria, and may include practical work, classroom-based work and assignments (Government of Zimbabwe, 2015; Mpanza, 2018).

Globally, there has been a paradigm shift from assessment based purely on examinations to the incorporation of continuous assessment. This has seen countries such as the United States of America (USA), Australia and European countries review their curricula so that they incorporate competency-based continuous assessment learning

activities (CBCALA) in summative examinations (Elkababi et al., 2020). In Africa, CBE has been adopted by several countries, including Kenya, Nigeria, Rwanda, South Africa, Tanzania and Zambia (Kabombwe & Mulenga, 2019; Ruth & Ramadas, 2019). In South Africa, the introduction of CBE was aimed at producing skilled and employable graduates (Komba & Mwandanji, 2015; Fleisch et al., 2019). The South African government introduced CBE in order to eliminate the injustices of apartheid education, which was regarded as authoritarian both in content and in teaching approach (Fleisch et al., 2019). Kenya reviewed its curriculum in order to move away from a teacher-centred to a child-centred pedagogy that aimed to equip learners with the competencies to solve social and economic problems (Njeng'ere & Ji, 2017). Similarly, in 2004, Nigeria reviewed its curriculum from a largely content-based to a competency-based one so as to equip learners with the skills required to solve the country's socio-economic challenges (Osarenren-Osaghae & Irabor, 2018). The implementation of CBE in Nigeria and Rwanda was hindered by inadequate teaching resources and overcrowded classes. Moreover, the teachers in those countries viewed the implementation



of CBE as an increase in workload, which they felt they ought to be compensated for (Ogegbo et al., 2020). In Eswatini (formerly Swaziland), CBE was introduced in 2010 by the Swazi government and the World Bank, with the aim of improving a Swazi economy that had been stagnant from the 1990s. However, the inadequate training of the teachers in CBE was a hindrance in the implementation of the programme (Dlamini et al., 2018).

In Zimbabwe the process of reviewing the curriculum from content to CBE started in 2014, with a thrust towards critical skills and competencies (Government of Zimbabwe, 2015). The process started with consultations with educational stakeholders that culminated in the development of the Ministry of Primary and Secondary Education Curriculum Framework (MoPSECF) 2015–2022 (Government of Zimbabwe, 2015). The framework provides a comprehensive plan for a rapid and sustainable transformation of the education system. Further, the framework aims to provide guidelines for the education sector in such a way that school education is linked to Zimbabwe's industrial sectors, thereby equipping learners with competencies necessary to solve the socio-economic challenges faced by the nation (Government of Zimbabwe,

2015). The MoPSECF thus shifted from the traditional examination-based curriculum to a competency-based curriculum from 2015 (Government of Zimbabwe, 2015). In order for learners to acquire both academic knowledge and much-needed skills and competencies, they are required to take part in CBCALA. As mentioned earlier, CBCALA is assessment that evaluates student performance against a set of criteria and can include practical work, classroom-based work and assignments (Government of Zimbabwe, 2015; Mpanza, 2018).

It is against this background that the primary aim of the study carried out in the Mutare District of Zimbabwe has been to explore the suitability of CBCALA for assessing Geography in secondary schools. The study further reports on the challenges being faced by the teachers and educational administrators implementing CBCALA in secondary schools.

CBE and CALA

In 2015 the government of Zimbabwe, through the Ministry of Primary and Secondary Education, introduced CBE and CALA (Government of Zimbabwe, 2015). A number of aspects contributed to the development

and adoption of CBE and CALA in the country. Firstly, Zimbabwe inherited a system of education that was premised along racial lines and unequal investment, both of which still have residual effects on the current education system. There was thus a clear need to redress the inequalities entailed. Secondly, the system of education inherited in 1980, when Zimbabwe attained its independence, was largely content-based at the expense of competencies desired for life and work (Government of Zimbabwe, 2015). The inherited British system had also not incorporated continuous assessment into the summative examinations for learners in their final grade. In the current education system, CALA contributes 30% of a learner's final grade while the other 70% is drawn from the results of his/her participation in the public examinations (Government of Zimbabwe, 2015).

The new education system based on CBE and CALA was adopted as a result of the recommendations of the Nziramasanga Commission, which was held in Zimbabwe in 1999 (Government of Zimbabwe, 1999). The Nziramasanga Commission emphasised that the Zimbabwean education system needed to produce

graduates with practical skills and competencies, and with *ubuntu*² values desired for life, work and the propulsion forward of the economy (Government of Zimbabwe, 1999). Finally, in 2014, the government held widespread consultations with educational stakeholders. This culminated in the production of MoPSECF in 2015 (Government of Zimbabwe, 2015). The MoPSECF is a document that provides guidelines for the implementation of the Zimbabwean education system. It addresses the shortfalls of the inherited British education system premised along racial lines and unequal investment. The MoPSECF also incorporates the recommendations by the Nziramasanga Commission into the school curriculum. Furthermore, the MoPSECF places emphasis on CBE and CALA as a way forward in both primary and secondary education (Government of Zimbabwe, 2015).

CALA are assessment tasks that learners are required to accomplish. The marks from the tasks contribute to the final grade of the learner (Government of Zimbabwe, 2015; Oli & Olkaba, 2020). In continuous assessment (CA), the teacher is actively involved in developing suitable assessment tasks and making

² *Ubuntu* is intended to grow a child into a complete human being. Apart from producing graduands with practical skills, it inculcates communal values such as caring, sharing, respect and fairness (Mahlati, 2017).

judgments based on the assessment results (Turyatema, 2018). CALA add up to assessment that evaluates student performance against a set of criteria and may include practical work, classroom-based work and assignments (Government of Zimbabwe, 2015; Mpanza, 2018). CALA places emphasis on the learner's attainment of both academic knowledge and practical skills, but also on attitudes that will make graduates productive and employable (Government of Zimbabwe, 2015).

Despite its seeming advantages, CBE has experienced some challenges in terms of its implementation in several countries. In Tanzania, CBE implementation has been hindered by failure by teachers to apply its learner-centred methodology (Komba & Mwandaji, 2015). Similarly, Rwanda's experience revealed that most teachers were not using a learner-centred outcomes approach (Nsengimana et al., 2014). In South Africa, CBE experienced challenges such as inadequate resources, poor orientation to the programme and teachers' lack of preparedness concerning the new expectations resulting from CBE (Fleisch et al., 2019). Lack of comprehensive training on the concept of CBE was viewed as a drawback in the implementation

of CBE in Swaziland (Dlamini et al., 2018). In Nigeria and Rwanda, a lack of resources and overcrowded classrooms proved to be setbacks in implementing CBE (Ogegbo et al., 2020). A study carried out by Ogegbo et al. (2020) in several areas of Africa revealed that CBE implementation in most African countries had experienced and continued to experience the following challenges: shortages of learning resources; ill-prepared teachers; overcrowded classes; and a lack of institutional support.

Statement of the problem

The education system Zimbabwe inherited provided strong content knowledge at the expense of critical skills and competencies. In its new curriculum framework, the Government of Zimbabwe noted that mastery of subject content was not adequate as an exit attribute of graduands (Government of Zimbabwe, 2015). In addition, the findings of the Nziramasanga Commission of 1999 stated that the Zimbabwean education system lacked the ubuntu/unhu values that were important in developing complete persons who could help Zimbabwe to achieve its aspirations as a nation.

CBA in Zimbabwe is still in

its infancy, and teachers are still grappling with the CBA tasks they are supposed to undertake in various subject areas. Different studies have been undertaken globally on CBA, yet very little (if anything) has been done in Zimbabwe in terms of the CALA activities that could be undertaken in a subject such as geography.

Research questions

The research was guided by the following research questions:

1. How are CALA being carried out in selected topics such as geography at Ordinary Level in the secondary schools in Zimbabwe?
2. What challenges are being faced by teachers and educational administrators in implementing CALA as a form of assessment in geography in secondary schools?

Theoretical framework

The theoretical underpinning of social constructivism proposed by Vygotsky provided a guideline for the study. Vygotsky's (1978) theory postulates that a child obtains knowledge by interrelating with his/her environment. In terms of this

constructivist theory, learners play an important role in their education to attain essential information, skills and competencies (Ogegbo et al., 2020). The teacher acts as a facilitator in improving the knowledge and competencies learners need to have to be able to seek and offer solutions to socio-economic problems (Ogegbo et al., 2020). Vygotsky's (1978) social constructivism theory also expresses the belief that learners can master content better by interacting with others through participatory methods. Similarly, Gruber (2018) is of the view that the greatest outcome of CBA is increased learner engagement. In Kenya, CALA have been lauded for being learner-centred (Amunga et al., 2020).

This research was further guided by the philosophy of *ubuntu*, the chief concern of which is to develop every person as a total human being (Mutekwe, 2015; Oviawe, 2016). The whole community plays a role in developing a child, and in teaching them the communal values that are crucial to the sustenance of a community (Mahlatsi, 2017; Odora 2017). *Ubuntu* cherishes values such as love, fairness, respect and sharing in addition to the practical skills acquired by the learner in the course of daily life (Lefa, 2015; Mahlatsi, 2017). Oviawe

(2016) views the teaching and learning of *ubuntu* values in schools as a way of decolonising the school curriculum. Mutekwe (2015) argues, further, that African nations should be producing graduates with *ubuntu* values who contribute effectively to their society.

Methodology

The interpretive paradigm was adopted to carry out the case study undertaken in selected schools in Mutare Cluster in Zimbabwe. A case study approach was selected for the study, to allow for in-depth data generation as recommended by Creswell (2013) and Patton (2015).

Mutare Urban consists of thirty (30) registered secondary schools divided into three (3) clusters (Zimbabwe National Statistics Agency [ZIMSTAT], 2018). The schools are organised into the clusters by the Ministry of Primary and Secondary Education for the purpose of administering and coordinating activities such as the setting and conducting of cluster formative examinations. Mutare Urban is situated 260 kilometres east of the capital city, Harare.

The district school inspector in charge of the Mutare Urban schools assisted with the research

by identifying a school cluster containing geography teachers who had experience and expertise. The sample population consisted of fifteen (15) geography teachers and three (3) school heads, who were purposively sampled from a cluster consisting of six (6) secondary schools.

In addition to conducting interviews and holding WhatsApp discussions, the researcher analysed geography test-record books featuring a variety of CALA-based records. A test record is an exercise book or file containing records of CALA planned for learners. CALA from three (3) geography teachers (P10, P11 and P12) were selected and analysed. The following five (5) CALA aspects as expounded in MoPSECF 2015–2022 (Government of Zimbabwe, 2015) were analysed based on the geography teachers' test records: topic, background, objectives, marking guide and competencies. Recorded data from interviews and WhatsApp chat groups were transcribed, coded and grouped into themes and include direct quotations from the participants' statements. This presentation of data was followed by a brief explanation and discussion of the findings.

The procedures used in the study to ensure that participants' rights were protected were guided in large part

by the recommendations of Creswell (2014) and Cohen et al. (2018). Permission to carry out research in the schools was sought from the regional office of the Ministry of Primary and Secondary Education. Written and verbal permission was also sought, before the commencement of data collection, from the school heads and geography teachers concerned. The participants' responses were assigned alpha-numeric codes to ensure confidentiality. The identity of specific classes was also anonymised, through the use of alphabetic codes.

Context of study

Mutare Urban's secondary schools cluster is composed of thirty (30) schools administratively divided into three (3) clusters (ZIMSTAT, 2018). The schools, which as we stated earlier were purposively sampled with the assistance of the district schools inspector, consisted of two (2) government schools and one (1) privately run school. The teachers in the three schools selected had a minimum qualification of a Diploma in Education and at least five years' experience of teaching geography.

Presentation of data and analysis

CALA in geography

The research question to be addressed in this section reads: How are CALA being carried out in selected geography topics at Ordinary Level in secondary schools in Zimbabwe? In order to answer the research question, the researcher used one (1) CALA devised by, and held one (1) interview with, each of the three geography teachers (henceforth referred to as P10, P11 and P12). The CALA were obtained from the teachers' test records.

An analysis of the three CALA drawn from geography teachers P10, P11 and P12 shows that CALA for the subject of Geography have a number of common features, and that these should be considered when designing activities. However, not all teachers considered or included all these features in their planning of activities, as illustrated in Table 1.

Grade level

All three teachers (P10, P11, P12) stated the grade level for which the tasks were designed. The Form 4 classes (4A, 4X, 4B) studied here are equivalent to Grade 11 classes in other education systems. The symbols



A, X and B are used to identify the classes. In the study, CALA tasks were drawn from the 2015–2022 geography syllabus for Forms 1–4.

Table 1: CALA from selected geography teachers

CALA aspect	Teachers		
	Teacher P10	Teacher P11	Teacher P12
Grade level	Form 4A	Form 4X	Form 4B
CALA topic	This could include a Twitter profile from an organisation or NGO or on a particular theme (e.g. weather events)	Is up-to-date, data are publically available, can be accessed easily on a phone, students would be familiar with social media	Needs a clear direction in terms of thematic analysis and how to make sense of any thematic trends
CALA background	There was a problem of land degradation in the community around the school.	Not covered	The teacher stated that learners face challenges in locating places using GPS and also found it difficult to calculate time using longitudes
CALA objectives	By the end of the CALA, learners must be able to: <ol style="list-style-type: none"> 1. Identify 5 different forms of land degradation around their school community 2. List at least 5 main causes of land degradation 3. Classify the types of land degradation 4. Suggest possible measures to reduce land degradation. 	By the end of the CALA, learners must be able to: <ol style="list-style-type: none"> 1. Identify the causes of high birth rates in the surrounding community 2. Find out the causes of high birth rates in the surrounding community 3. Suggest possible measures to reduce high birth rates in the community 4. Explain how they would present their findings on the causes of high birth rates in the community 	By the end of the CALA learners must be able to: <ol style="list-style-type: none"> 1. Describe how GPS works using smart phones 2. Locate different places over the globe using GPS 3. Calculate time using longitudes
CALA marking guide	<ul style="list-style-type: none"> • Identifying types of land pollution (5) • Listing the causes (5) • Classification (5) • Possible measures (5) 	<ul style="list-style-type: none"> • Identification of the causes of high birth rates (5) • Causes of high birth rates (5) • Measures (5) • Data presentation (5) • Evidence for data collection (5) 	<ul style="list-style-type: none"> • Description of GPS (5) • Locating places using GPS (10) • Calculating time using longitudes (10)

CALA aspect	Teachers		
	Teacher P10	Teacher P11	Teacher P12
Grade level	Form 4A	Form 4X	Form 4B
CALA competencies	<ul style="list-style-type: none"> • Identifying • Classifying 	<ul style="list-style-type: none"> • Identification skills • Graphicacy skills • Research skills 	Not covered

CALA topic

The three teachers (P10, P11 and P12) derived the topics and the sub-themes for CALA from the 2015–2022 geography syllabus for Forms 1–4. One teacher (P10) had this to say on the selection of the CALA topic:

“I chose a CALA on land degradation because I realised that there is a lot of deforestation around our school.” P10

Another geography teacher (P11) argued that:

“The topic on Geographical Information Systems (GIS) is a difficult topic to my learners, so I chose it for CALA so that the learners can have enough hands-on experience on the topic. This will enhance their comprehension of the topic on GIS.” P11

The study shows that there is no uniformity in the CALA topics selected by the teachers. This means that the selection of CALA topics may vary from one school to the other; and may also depend on the

teacher’s preferences and on the aims to be achieved by individual CALA. For example, P10 selected the CALA topic of land degradation so that his/her learners could address the problem of deforestation in the area. On the other hand, P11 wanted the learners to comprehend GIS concepts through hands-on experience. There is therefore a degree of subjectivity in the selection of topics for CALA.

CALA background

Geography teachers P10 and P12 included the background of the CALA while teacher P11 decided to exclude it. Teacher (P11) elaborated on why he/she did not include the background information:

“I did not think it was important to include the background of the CALA. I was concerned with learners achieving certain tasks as set out in the CALA objectives.” P11.

The results showed that there was no consistency among teachers on



the inclusion or non-inclusion of the backgrounds to CALA activities. P11 viewed CALA background as irrelevant. This teacher was more concerned with the tasks to be achieved by the learners.

CALA objectives

The analysis of the CALA developed by teachers P10, P11 and P12 revealed that all the teachers had clearly stated the objectives of the activities. It is moreover important to note that the objectives stated by the teachers (P10, P11 and P12) had both low- and high-order objectives. For example, P10 covered both the lower-order objective of identifying and classifying the different forms of land degradation; and the higher-order objective that entailed suggesting ways of reducing land degradation.

As has been mentioned earlier, CALA are intended to achieve various skills or competencies by the end of a task or a set of tasks. One of the key abilities learners are meant to acquire is problem-solving skills. In line with this, teacher P10 wanted learners to acquire skills on how to solve land degradation, while teacher P11 wanted learners to solve the problem of high birth rates in the community surrounding the school.

Another key feature required of CALA in geography is that activities should be practically oriented. In the study, teacher P11 required the learners to collect data from the community on how to solve the problem of high birth rates. This involved the use of interviews, observation, recording and data presentation. Learners were able to acquire observation skills, and recording and data-presentation skills. A single CALA developed by a teacher can thus encourage learners to achieve several competencies by the end of each activity or set of activities.

The study also confirmed that CALA should allow learners to make decisions on a particular problem. For example, one of the objectives supplied by teacher P11 was intended to encourage learners to find out possible measures to reduce high birth rates in their community.

Furthermore, the analysis of the CALA from teachers P10, P11 and P12 revealed that CALA can also be classroom-based at times, as evidenced by the assessment task given by teacher P12. Learning tasks relating to the use of GPS to locate places and the use of longitude to calculate time can be achieved in the classroom.

Finally, it was clear that some of the geography CALA can be carried out either as group tasks or as

individual tasks, as evidenced in the case of teacher P12.

CALA marking guide

A fundamental aspect of CALA is to spell out how assessment is going to be carried out. Since continuous assessment contributes to the candidate's final mark, the allocation of marks under CALA needs to be objective, authentic and valid. This goal thus entails providing learners with a marking guide; and stating upfront how marks are going to be allocated for each item/objective. Teachers P10, P11 and P12 all provided a clear explanation of how marks were going to be awarded for each task item.

CALA competencies

The study found that teacher P12 did not state the competencies to be achieved by the learners in the particular CALA covered in Table 1. In an interview with P12, the following was stated:

"I state the competencies to be achieved by the learners in the schemes of work and in the test record I record the objectives to achieve the stated competencies in the scheme of work." P12

Since the competencies had already

been documented in the scheme of work, P12 did not see the need to state them in the test record. On the other hand, teachers P10 and P11 did feel it necessary to state the competencies to be achieved in the test record.

Since teacher P12 did not consider it crucial to follow, to the letter, the mandated recommendations concerning the stating of competencies to be achieved through a particular CALA, it follows that teachers may have different interpretations of the competencies that should be achieved in relation to the statement of CALA objectives.

Challenges of implementing CALA

This section addresses research question 2, which reads: "What challenges are being faced by teachers and educational administrators in implementing CALA as a form of assessment in geography in the secondary schools?" Data used to answer the research question were derived from individual interviews with geography teachers and educational administrators (see Table 2).

Table 2: Challenges of implementing CALA in secondary schools

Main Theme	Sub Theme	Illustrative Quotes
Time constraints	1. Large number of CALA activities to perform	<i>"Learners are required to perform five (5) continuous learning activities, three (3) in Form 3 and two (2) in Form 4 for each subject area before they write their final examinations in Form 4 and worse so considering the challenges of COVID-19"</i> Geography teacher (P1)
	2. Excessive content coverage	<i>"The Ordinary Level competency-based geography syllabus has more content to teach, unlike the old syllabus. For example, there is [an] additional section on GIS. This means more time is needed to cover the syllabus."</i> Geography teacher (P5)
Documentation	1. Learners transferring to other schools	<i>"Parents migrate with their children from one environment to another and since continuous activities are school-based a student may not adjust easily in carrying out new tasks in a new environment."</i> Geography teacher (P1)
	2. Recording learner's attributes	<i>"Continuous assessment entails continuous documentation of the learners' attributes when a student transfers to another school. This means that when a student transfers to another school there is need to ensure that all paperwork concerning the learner should be done before passing on to another school. This paperwork is burdensome to the school administrators."</i> School Head (P8)
Teaching load	1. High teacher–pupil ratios	<i>"Some classes can go up to 60 students, whose CALA need documentation in addition to producing the exit profile for each learner."</i> Geography teacher (P2) <i>"The challenge we have is that we have got many students in our classes of which some ... need remediation assessment tasks. This gives the teacher extra workload."</i> Geography teacher (P4)
	2. Teachers' attitudes	<i>"Some teachers are not willing to implement CALA as they feel this was additional workload through extra documentation. This is worsened by the low salary teachers are earning"</i> Geography teacher (P4)

Main Theme	Sub Theme	Illustrative Quotes
Inadequate training	1. Insufficient time for training	<p><i>“The workshop on CALA was hurriedly done. There was not enough time for workshop facilitators to explain some concepts which needed more clarification. We are not very sure of what should be done as teachers.”</i> Geography teacher (P2)</p> <p><i>“Teachers are not well informed about the new competency-based curriculum and continuous assessment. I am not confident of what tasks I should give the learners that would achieve the objectives of competency-based assessment.”</i> Geography teacher (P4)</p>
	2. Lack of uniformity in teaching	<p><i>“Teachers are given the leeway to decide the CALA for his/her class even if the teachers are teaching at the same school. There is lack of uniformity in competency-based assessment tasks unlike the traditional examinations. This lack of uniformity in the tasks given to the learners for assessment makes it difficult to compare the ability of learners. Some teachers are generous in marking CALA whereas other students get disadvantaged by mean teachers.”</i> Geography teacher (P3)</p> <p><i>“These CALA must not be decided at school level because some teachers may give their students sub-standard tasks. This may lower the standards of our education system.”</i> Geography teacher (P5)</p>
Lack of resources	1. Lack of equipment and infrastructure to perform practical activities in schools	<p><i>“Some practical subjects such as Geography require some equipment to carry out continuous assessment tasks, but poor schools especially in rural communities cannot afford to buy such equipment. This may create a disparity between poor rural and richer boarding schools.”</i> School head (P6)</p>
	• 2. Shortage of finance to sponsor field-based assessment	<p><i>“Some schools are incapacitated financially to sponsor field-based assessment activities. Assessment tasks such as measurement of soil properties like pH need to be carried out in laboratories, which some schools do not have.”</i> Geography teacher (P5)</p>

Time constraints

Geography teacher P1 viewed the time constraints in the carrying out of CALA as a hindrance to the

success of implementing the approach. This teacher added that COVID-19, which had resulted in lockdowns and the temporary closure of schools, had further reduced the time that



teachers needed to carry out CALA. Furthermore, some of the activities in Geography are field-based, and require demonstration and monitoring by the teacher. However, with social distancing during Covid-19, such activities could not be performed in the field. Another teacher (P5) suggested that more time was needed to carry out the continuous assessment tasks as well as cover the whole syllabus

Documentation

Teacher P1 proposed that CALA may be disadvantageous to learners who move from one school to another. CALA involves assessing the learners' content, values and attitudes. When a learner transfers from one school to another, the new teachers may need time to study the new learner at the school before documenting his/her subject content, skills, values and attitudes. School administrator P8, on the other hand, was of the view that it is burdensome for staff at the new school to redo all the paperwork required when a learner transfers from one school to another.

Teaching workload

Teacher P2 suggested that CALA entails too much documentation.

There is a great deal of work demanded of teachers in terms of recording all the marks for the CALA undertaken by each learner. Unlike traditional assessment, which emphasised knowledge of subject content, the new competency-based assessment (CBA) system requires the teacher to record the learner's skills, values and attitudes. It is a more holistic form of assessment for the learner. Teacher P4 pointed out that some learners require remediation assessment tasks, and that these are very difficult for teachers with large classes to manage on top of their standard tasks.

Teacher P4 also stated that low morale among teachers owing to poor salaries and increased paperwork was an impediment to the implementation of CALA as a form of assessment. Teacher motivation through increased salaries is an aspect that may become paramount in the effective implementation of CALA.

Lack of training and resources

Teachers P2 and P4 proposed that more training be made available for educators, to enable them to better understand the processes involved in CALA. The teachers requested more opportunities to ask questions about areas of the new mode of assessment

they did not fully understand. Inadequate training is causing teachers to lack confidence in carrying out and marking continuous assessment tasks. This is understandable, since there has been a paradigm shift from traditional summative assessment to the new formative assessment. Although teachers used to carry out formative assessment in secondary schools in the past, the marks for continuous assessment did not then contribute to the learner's final mark in the same way.

Teacher P3 was concerned that the inadequate training of teachers may also result in a lack of uniformity and objectivity in the way teachers implement CALA. Some learners may be advantaged by generous markers whereas other learners may be disadvantaged by stricter markers. Another Geography teacher (P5) thought that giving each school the opportunity to develop its own implementation of CALA may result in some teachers and schools accepting sub-standard work from their learners in order to pass them, thereby causing a reduction in the quality of education in Zimbabwe.

School head P6 and geography teacher P5 were in agreement that a lack of infrastructure and limited financial resources, particularly in rural

communities, were an impediment to carrying out field-based and laboratory-based assessment tasks. The disparity in financial resources and infrastructure between poor and financially stable schools may widen the learner performance gap between poor rural schools and the generally better-off boarding schools.

Findings and discussion

The findings are discussed broadly in two parts, based on the two research questions. The first part discusses CALA as adopted by selected geography teachers (P10, P11 and P12) in their assessment of learners studying geography as they implement the new geography syllabus for Forms 1–4 currently in use in secondary schools in Zimbabwe. The second part focuses on the challenges faced by teachers and educational administrators in implementing CALA.

CALA in Geography

Geography teachers P10, P11 and P12 said that CALA should provide background information on the learners, stating their school, level and grade, and the syllabus topic to be covered. CALA requires the documentation of information about

the tasks and attributes achieved, as these contribute to the final mark achieved by learners. Proper documentation is also important when the learner transfers from one school to another. When a learner transfers, his/her file has to be transferred to the new school.

Findings obtained from the test records of P10, P11 and P12 revealed that topic selection from the geography syllabus varies from one teacher to another and from one school to another. This variation in topic selection is accompanied by variations in the aim of the CALA being undertaken and in the problem the teacher is asking the learners to address.

There was no uniformity among the three teachers (P10, P11, P12) regarding the inclusion of CALA background in the test record. However, two out of three (P10, P12) of the teachers provided CALA background. Clearly stated, CALA background enables the teacher to come up with relevant objectives to solve a particular problem. CALA, it needs to be remembered, is problem-based. In the study the three problems were land degradation (P10), high birth rates (P11) and the challenges of using GPS (P12). Moreover, the problem to be solved has to be clearly stated and

delineated, which in turn guides the development of the objectives to be achieved.

In a study of CBE in Zambia, Kabongwe et al. (2020) observed that learners became more deeply engaged in tasks that were grounded in real problems, required solutions and made significant contributions to their society. CALA equips the learner not only with academic knowledge but also with the competencies to solve societal problems. This is consistent with the philosophy of ubuntu, which advocates an authentic education that provides learners with a holistic education and contributes to the development of the full person in his/her society (Risiro, 2020).

The study revealed that CALA ought to have clearly stated objectives linked to both lower- and higher-order activities. This is essential to cater for learners with different learning abilities. Objectives of varying complexity also ensure that the competencies to be acquired by the learners are achieved over time. Clearly set-out objectives allow learners to acquire knowledge, and to develop skills such as problem-solving and decision-making. These competencies are crucial, and are intended to encourage and support learners in creating employment for

themselves after graduating from school. Of even greater importance, CALA must develop values and attitudes expected in the learners' own societies. Again, CBE aims to produce rounded learners guided by ubuntu/unhu values, as recommended by the Nziramasanga Commission (Government of Zimbabwe, 1999).

Furthermore, CALA are research-based and practically oriented. As discussed earlier in this study, the CALA set by geography teacher P10 required learners to identify types of land degradation in the community whereas teacher P11's CALA asked the learners to find out the causes of high birth rates in the community. In both scenarios, the CALA involved learners in carrying out research in the community. The learners had to interact with the environment (the community) in order to obtain data to solve the problem at hand. As Kabongwe et al. (2020) have stressed, competency-based CALA are also activity-based.

Vygotsky's (1978) social constructivism theory places emphasis on the social environment in cognitive development processes. It was noted previously that the CALA provided for the learners by teachers P10 and P11 would be equipping learners with an analytical approach to issues; and

with decision-making skills. Learners acquired new knowledge and skills through their interaction with the local community and the surrounding environment as they carried out field-based research.

Gruber (2018) has argued that continuous assessment promotes individualised learning and does this through the use of a variety of teaching methods. CALA in geography can also focus on classroom-based activities in which tasks are performed by the learners as individuals, that is, through individualised learning. This was the case when Teacher P12 tasked the learners with locating places on the globe using GPS; and with calculating time using longitudes. Individualised learning provides the learner with the skills required to work independently, be productive and solve societal problems. Geography CALA are learner centred. The nature of the CALA used by P10 (land degradation), P11 (the causes of high birth rates) and P12 (locating places using GPS and calculating time) all involved participatory activities by the learners. The learners became engaged in the activities while the teachers acted as facilitators of the learning experience.

Each of the assessment tasks developed by P10, P11 and P12 had marking guides. A CALA marking



guide is a prerequisite to the marking of geography CALA. Marking guidelines reduce bias and subjectivity when the teacher marks or evaluates learners' work. A marking guide also assists moderators to evaluate tasks performed by learners. Mpanza (2018) noted that there was a great deal of variability between school-based and final examination marks in some learners' results. One explanation for this could be the teacher's bias in favour of his/her own learners. The use of a marking guide and of moderation can thus improve marking accuracy among teachers.

Most of the geography teachers in this study stated the competencies to be achieved by CALA in the test record, such as identifying, classifying (teacher P10) and graphicacy (teacher P11). However, none of the teachers referred to soft skills such as values and attitudes, as is required in competency-based CALA. The Nziramasanga Commission stressed that the Zimbabwean education system had to produce graduates with practical skills, competencies and the ubuntu values desired for life and work (Government of Zimbabwe, 1999). For this to be achieved, Geography CALA needs to have better background information on the learner. The problems to be solved needs to be

clearly stated. This clarity will, in turn, guide the development of the objectives that should be achieved. The Geography CALA moreover should be orientated to a more participatory approach which is learner centred and where the teacher is a facilitator.

Challenges of implementing CALA in Geography in secondary schools

The research discovered that time constraints were an obstacle in executing CALA in geography in the secondary schools. There is too much paperwork involved in documenting learners' attributes. In a similar study in Ethiopia, Oli and Olkaba (2020) found that a heavy workload and too much paperwork impeded the effective implementation of CALA. The situation was worsened by the COVID-19 pandemic and lockdowns, which caused the temporary but rather lengthy closure of schools.

A high teacher–pupil ratio is another barrier to the effective implementation of CALA. Competency-based CALA requires the teacher to record not only academic progress but also the learners' competencies. This is burdensome for the teacher with a large class, especially one in which some of

the learners require remediation assessment tasks. These study findings concur with those of Otieno and Onyango (2019), who observed that CBA entails recording not only academic output but also observations from extra-curricular activities. In their study of continuous assessment, Ngwenya (2020) and Urunana (2018) found that classes with a large number of learners presented some challenges in continuous assessment. Moreover, large classes pose an extra challenge in a subject such as geography, where CALA are largely field-based.

The inadequate training of teachers is a further hindrance in executing CALA. Workshops to train teachers on CALA were held over too short a period. This insufficient training has meant that teachers have been unable to understand all the processes involved in implementing CALA in schools. In their studies on CBA, various scholars (Amunga et al., 2020; Ngwenya, 2020; Urunana, 2018) agree that the training received by teachers was not adequate to prepare teachers for a competency-based curriculum and continuous assessment.

Inadequate training for teachers results in inconsistency and subjectivity in assessing learners. Currently, teachers are given leeway

to design and implement their own continuous assessment tasks. While this may seem like a good idea since schools operate in different socio-economic environments and contexts, the element of subjectivity at play in allowing every teacher to design and develop his/her own CALA is concerning. In Kenya, Akala (2021) found that teachers' subjectivity posed a challenge in continuous assessment. The same study also revealed that some teachers were too generous in their marking. Mpanza (2018), in a study carried out at an adult-education institution in South Africa, found that there was great disparity between school-based assessment and examination marks. In the study, it was further observed that additional workload and poor salaries for teachers may work against the smooth implementation of CALA. Turyatamba (2018), too, noted that a lack of remuneration for teachers can affect their execution of CALA negatively.

A report by the Kenya Institute of Curriculum Development (KICD, 2017) and a study by Uranana (2018) in Rwanda confirmed that the lack of resources in schools was an impediment to the application of continuous assessment. Insufficient

financial and infrastructural resources in schools hamper the effective execution of CALA. Most geography CALA are field- or laboratory-based. This requires that the school buy equipment and incur the costs of travelling beyond the school environs. The cost of sustaining these assessment tasks is beyond the reach of many parents in the rural communities. CALA therefore can contribute to disparity between poor rural schools and their boarding-school counterparts, which are normally better endowed financially.

Although CALA as a form of assessment is a welcome concept, its execution is bedevilled by numerous challenges that include high costs; the negative attitudes of some teachers; teachers' subjectivity; a heavy workload; large classes; and a lack of resources, particularly in rural schools.

Conclusions and Recommendations

This research paper has contributed knowledge on CALA that can be implemented in the teaching of geography in secondary schools. Further, the paper has explored some of the challenges that can be an impediment to incorporating a continuous assessment mark

in the final grading of learners' performance. The research revealed that every geography CALA has to provide background information on the problem to be solved. This information is important in developing the assessment-task objectives. The stated objectives should cater both for academic knowledge of the subject and for the competencies to be achieved through the assessment task/s. The paper also unpacked the fact that geography CALA may at times be field-based, with learners interacting with the environment to gather information necessary to solve environmental problems. Naturally, geography CALA can also be classroom-based. Moreover, they can be designed as individual or group learning tasks. The CALA are intended to be learner-centred, with the teacher in the role of facilitator. In addition, learning activities for assessment must be accompanied by a marking guide in order to minimise subjectivity and bias towards individual learners or groups of learners.

The study also identified several factors that hinder the effective implementation of geography CALA in Zimbabwe's secondary schools. First and foremost, the teachers who supplied information for this aspect of the research complained of

excessive paperwork. They explained that they were responsible for several assessment tasks for all the learners in a class; and thus viewed CALA as an additional load since it entailed recording the competencies of every learner in the class. This extra load is made heavier as a result of high teacher–pupil ratios, particularly in government-run schools. Second, the inadequate training on applying CALA received by teachers has resulted in doubt regarding the correct ways to employ the approach; and in a lack of confidence among teachers. Third, there is a lack of uniformity in the nature of the CALA different teachers give their learners. This leads to subjectivity when marking the learners' work. Fourth, a lack of resources was viewed as a major hindrance in implementing continuous based assessment. Geography CALA are field-based and practically oriented and financial resources are required to buy equipment for practical assessment tasks and to sponsor field trips. The study recommends the following:

- The quantity of content in the geography syllabus be reviewed by removing less important topics or integrating them into other topics in order to provide ample time for learners to

carry out assessment tasks.

- Learners be encouraged to work together in teams when carrying out CALA, so as to speed up the completion of tasks.
- Learner results be computerised to make it easier and quicker for teachers to share information on a transferring student's attributes with their new school;
- The government be urged to recruit more teachers in order to reduce the high teacher–pupil ratio and resultant workload.
- More time should be allocated to training teachers in the use of CALA. Prepared handouts and videos on continuous assessment could be made available to teachers, to peruse on their own to gain a better understanding of the processes involved in CALA.
- The challenge posed by the lack of necessary resources be reduced by engaging with parents, the private sector and associations of former learners and encouraging them to pool resources in order to acquire and develop the required

- infrastructure and equipment.
- External moderators be used to address the lack of uniformity in assessment tasks and marks by approving and moderating the CALA supplied to learners at every school.

References

- Akala, B. M. (2021). Revisiting education reform in Kenya: A case of competency-based curriculum (CBC). *Social Sciences & Humanities Open* 3, 1-8.
- Amunga, J., Were, D., & Ashioya, I. (2020). The Teacher-Parent nexus in the Competency Based Curriculum Success Equation in Kenya. *International Journal of Educational Administration and Policy Studies*, 12(1), 60-76.
- Atibuni, D. Z., & Olema, D.K. (2017). Incorporating assessment of learning in assessment for learning: Shifting from foundational competencies to practical and reflexive competencies in learning institutions. *Journal of Educational Assessment in Africa*, 12, 32-42.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. (8th ed.). Routledge.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Approaches*. SAGE.
- Dlamini, B. S., Bhebhe, S., & Dlamini, P. A. (2018). The unfolding competency-based education process in Swaziland 2010–2017. *IOSR Journal of Humanities and Social Science*, 23(2), 27-41.
- Elkababi, I., Srour, C., Atibi, A., Elkababi, K., Radid, M., & Tayane, S. (2020). Impact of 'Modeling' of teaching by competency-based approach on the development of professionalization skills of future Moroccan teachers. *Universal Journal of Educational Research*, 8(12), 6978-6987.
- Fleisch, B., Gultig, J., Stephanie Allais, S. & Maringe, F. (2019). *Background Paper on Secondary Education in Africa: Curriculum Reform, Assessment and National Qualifications Frameworks*. Mastercard Foundation.
- Government of Zimbabwe. (1999). *Report of the Presidential Commission of Inquiry into Education and Training*. Government Printers, Harare.
- Government of Zimbabwe. (2015). *Curriculum Framework for Primary and Secondary Education* (2015–2022). Government Printers, Harare.

- Gruber, G. (2018). 5 Benefits of Competency Based Education for Students. *Explorance*. <https://explorance.com>
- Kabombwe, Y. M., & Mulenga, I. M. (2019). A Competency-Based Curriculum for Zambian Primary and Secondary Schools: Learning from Theory and some Countries around the World. *International Journal of Education and Research*, 7(2), 1-14.
- Kabongwe, Y. M.; Mchila, N., & Siyakomva, P. (2020). Implementing a History Competency-Based Curriculum: Teaching and Learning Activities for a Zambian School History Classroom. *Multidisciplinary Journal of Language and Social Sciences Education*, 3(3), 18-50.
- Kenya Institute of Curriculum Development (KICD). (2017). *Facilitators' training manual for Early years' Education curriculum*. Government Printer, Nairobi.
- Komba, S.C., & Mwandani, M. (2015). Reflections on the implementation of competence-based curriculum in Tanzanian secondary schools. *Journal of Education and Learning*, 4(73), 80.
- Lefa, B.J., 2015. The African philosophy of ubuntu in South African education. *Studies in Philosophy and Education*, 1(1), p.15.
- Mahlatsi, M., 2017. Botho/Ubuntu Philosophy of education from childhood to adulthood in Africa. *International Journal of Scientific & Technology Research*, 6(8), pp.94-98.
- Mpanza, N. (2018). Implementation of Site-based Assessment in the Adult Education and Training Sector in South Africa-Processes and Challenges. *Journal of Educational Assessment in Africa*, 13, 201-215.
- Mutekwe, E. (2015). Towards an Africa Philosophy of Education for Indigenous Knowledge Systems in Africa. *Creative Education*, 6, 1294-1305.
- Ngwenya, V. C. (2020). Curriculum Implementation Challenges Encountered by Primary School Teachers in Bulawayo Metropolitan Province, Zimbabwe. *Africa Education Review*, 17(2), 158-176.
- Njeng'ere, D., & Ji, L. (2017). The Why, what and how of competency-based curriculum reforms: the Kenyan experience. *Current and Critical Issues in Curriculum, Learning and Assessment: In-Progress Reflection No. 11*, UNESCO International Bureau of Education.
- Nsengimana, T., Ozawa, H., & Chikamori, K. (2014). The implementation of the new lower

- secondary science curriculum in three schools in Rwanda. *African Journal of Research in Mathematics, Science and Technology Education*, 18(1), 75-86.
- Odora, C., 2017. Transformation and change in knowledge generation paradigms in the African and global contexts: Implications for education research in the 21st century. *Educational Research for Social Change*, 6(1), pp.1-11.
- Ogegbo, A., Tijani, F., & Adewusi, A. G. (2020). Competency-Based Education in Africa. Exploring Teachers' Perceptions, Understanding and Practices. *Teacher Education Through Flexible Learning in Africa*, 2, 1-24.
- Oli, G. & Olkaba, T. T. (2020). Practices and challenges of continuous assessment in colleges of teachers' education in the West Oromia region, Ethiopia. *ScienceRise: Pedagogical Education*, 3(36), 4-15.
- Osarenren-Osaghae, R. I. & Irabor, Q. O. 2018. Educational policies and programmes implementations: A case study of education funding, Universal Basic Education (UBE) and Teacher Education. *International Journal of Educational Administration and Policy Studies*, 10, 91-102.
- Otieno, R., & Onyango, P. (2019). CBC teachers laud new curriculum. *Standard Digital Review*, 17(2), 158-176.
- Oviawe, J. O. (2016). How to rediscover the ubuntu paradigm in education? *International Review of Education*, 62, 1-10.
- Patton, M. (2015). *Qualitative Research and Evaluation Methods*. (4th Ed.). SAGE.
- Risiro, J. (2020). *Integrating Indigenous Knowledge into the Teaching of Weather and Climate in the Geography Curriculum in Secondary Schools: The Case of Manicaland in Zimbabwe*. PhD Thesis, School of Education, University of KwaZulu-Natal.
- Ruth, C., & Ramadas, V. (2019). *The "Africanized" Competency-Based Curriculum: The Twenty-First Century Strides*. Shanlax International Journal of Education, vol. 7. No. 4, pp. 46-51. 10.34293/education.v7i4.640CBE.
- Thakaberry, A. (2017). *Competency-based education models: An emerging taxonomy*. PhD Thesis, Kent State University.
- Turyatemba, J. (2018). Incorporating School-Based Assessment Results into Final Summative Examination Grades at the Lower Secondary School Level in Uganda: Classroom Teachers' Perceptions on the

Benefits and Challenges. *Journal of Educational Assessment in Africa*, 13, 186-200.

Urunana, R. (2018). Implementing CBC: Successes and challenges. Kigali.

Vygotsky, L. S. (1978). *Mind in Society: The development of higher psychological processes*. Harvard University Press.

WhatsApp (2016). About WhatsApp. <http://www.whatsapp.com>

Zimbabwe National Statistics Agency (ZIMSTAT). (2018). *Education Report, 2017*.

