BINDURA UNIVERSITY OF SCIENCE EDUCATION

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DEPARTMENT OF SCIENCE AND MATHEMATICS EDUCATION

AN INVESTIGATION IN THE ADMINSTRATION OF CONTINUOUS ASSESSMENT LEARNING ACTIVITIES IN MATHEMATICS. A CASE OF THREE SELECTED HIGH SCHOOLS IN MBARE/ HATFIELD DISTRICT HARARE.

BY

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APPROVAL FORM

The undersigned certify that they have read and recommended to the Bindura University of Science Education for acceptance of a research project

An investigation in the administration of continuous assessment learning activity in Mathematics. A case of three selected high schools in Mbare/Hatfield district in Harare.

Submitted by : Chikumbo Primrose (B212368B)

In partial fulfilment of the requirements of the Bachelor of Science Education Honours Degree in Mathematics

SUPERVISOR: GWIZANGWE I DATE……./……./…….

COORDINATOR……./……../……..

CHAIRPERSON……../……../……..

DEDICATION

I dedicate my work to my family and many friends. A special feeling of gratitude to my loving mum, Tambudzai Chikumbo and my sons Lincoln and Franklin Mbwanda whose words of encouragement, prayers and push for tenacity ring in my ears. I also dedicate this research to my little sister Petronella and brother Lameck Chikumbo who have never left my side in times of need and have helped me develop my technology skills. Both of them have also been my cheerleaders.

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ABSTRACT

Continuous assessment learning activity is an integral part of the instruction as it determines whether the goals of education are being met during and at the end of the instructional period. The updated curriculum of Zimbabwe introduced continuous assessment in Primary and Secondary schools with the aim of developing the skills of every learner and to allow them to excel in other areas. This study sought to investigate on how continuous assessment learning activity is administered in secondary schools with reference to Mathematics learners at ordinary level in Mbare/Hatfield district in Harare. Both qualitative and quantitative approach were employed in research design. A total of 135 learners and 9 in-service teachers selected from three secondary schools were sampled to participate in the study. The interview guide and the questionnaire were both used as research instruments to lure information. The study revealed that the problems that resulted in the process of administering continuous assessment in schools are inadequate training of teachers which led to poor strategies of assessment, large class sizes for teachers which resulted in overload of work and weak feedback, negative attitudes by learners caused by too much work and expenses involved, lack of tangible policy by the Ministry which has led to malpractices from both teachers and learners such as copying and bribery. It is therefore recommended that there be adequate financial and moral support by the government and the Ministry of education to the schools towards the realisation of the set down objectives of continuous assessment learning activities. Departments needs to have strong reporting systems and close supervision at all levels of the hierarchy. There should be regular workshops for teachers and experts to look into loads, time allocated and to develop pools of tests and assignments.

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Chapter 1: INTRODUCTION

1.1 INTRODUCTION

The majority of learners in urban schools are failing to master the mathematical concepts as well as attaining tangible results in Mathematics. For this reason, it is critical that all students have opportunities and necessary support to learn Mathematics in depth and understanding. This research attempts to investigate on how CALA is administered in Mathematics in some selected secondary schools in Mbare/Hatfield district in Harare. It seeks to find out whether Continuous assessment is effectively carried out as intended by the ministry of Primary and Secondary education (MoPSE) in Zimbabwe. First of all, the background of the study has been given which justifies the reason for conducting research. This is followed by the statement of the problem, objectives of the study, limitations and delimitations of the study together with key terms defined.

1.2 THE BACKGROUND TO THE STUDY.

The ultimate goal of any educational program is to make those undertaking it to learn. The Ministry of Primary and Secondary Education (MoPSE) in Zimbabwe introduced the CALA in 2015 as a way of improving the learner's ability to learn. Moyo (2022) said that the new curriculum was implemented as a result of recommendations from commission of enquiry as it seeks to encourage the learners to get into part of the activities through research, rather than spent most of the time seated in the class. He went on to say that learners need to be equipped with technical skills and innovation than to wait for the teachers to always narrate notes to them. He further argued that leaners are given more technical skills and to keep up with current times as Zimbabwe cannot remain behind in terms of technological advances. This means that the approach entails assessing the learner's competencies on a curriculum that includes knowledge, skills, abilities, values and traits.

Firorimwe (2022) says, “As such, Zimbabwe has introduced the new curriculum in schools comprising of CALA with the mind of producing education which is able to transform the economy for industrialization through innovation and creativity". CAlA was seen as a driveway to creative thinking which reduces the gap between theory and practice Akramjanovna (2021). The inclusion of the continuous assessment in Zimbabwe was initially introduced in 2017 in

schools but it was abandoned a few months after it started because teachers, parents and learners were not ready.

In March 2021, the MoPSE announced the urgent revival of continuous assessment framework for 2021. Although the initiative was embraced in schools and the candidates of 2021 were assessment using both formative and summative evaluation, quite a number of implementation procedures raises some eyebrows and this has led to the research on how the CALA is administered in schools. Matanda (2022) highlighted that although on paper it is a good policy, it was introduced to the school examination system without training of teachers. In Mbare/ Hatfield district, teachers did not receive any training on how to administer the CAlA program. Only workshops for CAlA moderation are done at the end of the year after the marks are already compiled in schools.

Matanda (2022) says, “The CALA project is too complex and expensive as it comes with many demands that need money to be forked out". Since the CAlA is made up of five components for every learning area, some assessments in Mathematics are in the form of research, practical work, drawing and constructing, they require supportive materials that require financing like instruments, smart phones, data bundles, typing and printing. Not all learners can afford gadgets and bundles thereby disadvantaging the less privileged.

In support of the CALA implementation, Firorimwe (2022) argued that each and every learning area must be innovative to scout talents and skills for learners. He said that after identifying the skills, the teacher must sharpen them and develop them in anticipation of innovation of new ideas. In some schools in Harare, the fundamental role of the CALA has lost track. Zhou (2021) is of the view that children now hate school. She says, "Teachers are the ones who were trained to understand how the CALA projects are done, yet they push us to assist the children with projects". She went on to say that what it means is that we are now learning together with our children, as we are the ones who end up doing their homework. Some students do not understand its framework and have used corrupt means such as paying teachers to do assignments for them, sextortion, bribes and other vices to pass. Matanda (2022). If CALAs are done by the teachers and parents, it compromises the real value of its effectiveness.

In most urban secondary schools, learners spent at most 5 hours at the school site since the day is split into morning and afternoon session. On average, learners can only have up to 30 minutes allocated to each learning area each day. The teacher can have at least 100 students in a stream in which he/she is required to supervise. On the school time table there is no time allocated for

CALA hence it is to the teacher's discretion on when and how to carry the assessments on each of the learners. Dube (2021) highlighted that although the CALA is a good initiative, the amount of time, energy, and resources spent on it does not match to its perceived weighting. He said that students spend too much time in CALA at the expense of summative final assessment which requires 70% weighting as compared to 30% formative.

Teaching and learning are, in some instances, brought to a standstill as learners are engaged in preparations and rehearsals of CALA components. Teachers are expected to meet the deadlines for each Cala component. ZIMSEC (2021) highlighted that the components and the respective mark schedules should be kept at the examination centre for access by moderators. Apart from this, teachers are also expected to prepare learner's guide, teacher's guide and marking scheme for each of the Cala component. CALA must never be imposed on teachers but introduced at an opportune time. This will allow for proper conditions to be put in place like budgetary allocation of resources, proper training of teachers, standardization and uniformity, Zhou (2021). Basing on these reports, the MoPSE needs to make some adjustments on how these CALAs are administered in school so as to lessen the burden on both teachers and learners.

1.3 STATEMENT OF THE PROBLEM.

The urgent need to promote learning and improve performance in education had resulted into a range of related but different developments in continuous assessment at classroom levels. The way the CALA is assessed still varies from school to school and from teacher to teacher. Kurebwa (2012) is of the view that some teachers have a casual approach to assessment. She further purports that some teachers would set tests that would only address one level of the taxonomy of objectives whilst others would duplicate items from past exam papers.

The assessment is done in a hurried manner for the sake of doing and the methods of assessment are poorly structured as they lack variety. Poor assessment practices are detrimental to effective teaching and learning. The study therefore seeks to unravel the strengths and weaknesses on how CALA is administered in schools. The problems on how CALA is administered in schools needs to be identified and solutions to the problems suggested. Developing a more systematic and uniform approach in continuous assessment can help to foster for a better implementation of the CALA.

1.4 OBJECTIVES OF THE STUDY.

The objectives of this research are to: -

1 identify the ways and strategies that are used in schools in the implementation of CALA

2 explore on the attitude and views of teachers, learner's and parents towards the implementation of CALA

3 evaluate the achievements of the learner through the use of CALA and basing on intended goals

1.5 RESEARCH QUESTIONS.

This will look into questions that makes the research to come up with findings. The question may include all or some of the following questions

(i) How do you manage the implementation process of the CALA at your school?

(ii) How do you assess the overall learner's achievements through CALA?

(iii) What are the learners and teachers' views towards the implementation of CALAs in Mathematics?

1.6 ASSUMPTIONS

i. The school Administrators will allow the researcher to carry out the research.

ii. Participants will cooperate during the entire research.

iii. All responses obtained from participants during the research are going to be truthful.

1.7 SIGNIFICANCE OF THE STUDY.

The research is conducted as a way of finding out how the ways and strategies in which CALA is administered in different schools in Mathematics. The knowledge generated should be beneficial to all teachers, learners and political philosophers involved. Leaners will be motivated towards the implementation of continuous assessment learning activities while teachers are guided on what and how to do. Each part concerned with continuous assessment has to experience the importance of this study. The study will help pupils to improve in learning Mathematics cooperatively.

The study will also add more knowledge to the findings from investigations conducted by other researchers on the same problem. This study will equip educators on the benefits and limitations of implementing Continuous Assessment Learning Activities and which approaches to follow as well as which ones to desist from. The study will assist curriculum planners in

developing a uniform and organized system for implementation of CALAs

1.8 DELIMITATIONS OF THE STUDY.

By definition, delimitations are choices made by the researcher which should be mentioned. They describe the boundaries that the researcher set for the study. The research is mainly on investigating on how CALA is implemented and not the change of the curriculum. Findings may be limited to only locally studied schools hence may not apply to other secondary schools in Zimbabwe. Learners under the study are the ones who are currently doing the CALAs. The research may address challenges faced by both teachers and learners in the findings but cannot solve them.

1.9 LIMITATIONS OF THE STUDY.

The researcher cannot reach all schools in Mbare/ Hatfield district. This is due to lack of adequate time and insufficient funds for travelling to other schools which are far away. The researcher can make use of only local schools around her location. Data will only be collected from the learners and teachers only, who are experiencing the curriculum change and not everyone but a few selected ones.

1.10 DEFINITION OF KEY TERMS

- ✓ CALAs means continuous assessment learning activities which is the evaluation of a learner over a period of time, assessing a variety of attitudes and skills (Chaurura, 2017)
- ✓ INVESTIGATE means to carry out a systematic or formal inquiry to discover and examine the facts of (an incident, allegation, etc.) so as to establish the truth.
- ✓ ADMINSTER means to manage affairs and to have executive charge of something Collins (2020)

1.11 SUMMARY

This chapter is an overview of the whole research. The background, significance, objectives and limitations of the study were outlined. Having closed this chapter, the following chapter will be focusing on the findings by other researchers or related literature pertaining to the administration of Continuous assessment in this country and other countries.

Chapter 2: REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

There is a wide literature provided by various authors concerning the effectiveness of implementing the new curriculum change in relation to the Continuous assessment learning activity in Mathematics. This chapter deeply presents a review of relevant literature of this study pertaining to the effectiveness of continuous assessment. The chapter highlights the conceptual framework and related literature on continuous assessment, its effectiveness, strategies and impact on learner's performance. It will also reveal the relevance to the problem.

2.2 INTERPRETATION AND EVALUATION OFB RELEVANT LITERATURE AND CITATIONS

Assessment is the purposeful gathering, interpreting and communicating of information about student's achievement, Mulu and Daniel (2005). They further highlighted that assessment is the process of making judgement about learner's performance on a particular task and the result clearly depends upon what the task is and how the judgement is made, in relation to what standard or criteria. Susanna (2019) defines continuous assessment as the periodic and systematic method of assessing and evaluating a person's attributes. She says that it is a mechanism whereby the student's final grading is cognitive, affective and psychomotor domains of the performance during a given period are evaluated.

Chaurura (2017) defined continuous assessment as the assessment of learner development throughout the entire period of study, rather than sorely by the examination at the termination of the course. From the definition, one could infer that continuous assessment is an assessment approach which involves the use of a variety of assessment instruments, assessing various components of learning, not only the thinking process but including behaviours, personality traits and dexterity. It is all the processes and tools teachers use to make decisions about their learner's progress.

According to Kellaghan and Greany (2003), "during the 1980‟s and 1990‟s, among the many countries that engaged in examination reform were Uganda (1983), Kenya (1985), Zimbabwe (1990), and Tanzania (1994)." Following the World Bank (1988) Policy Paper, „Education in Sub-Saharan Africa‟, which recommended, "a renewed commitment to academic standards principally through strengthening examination systems". According to the study conducted by Byabato and Kisamo (2014) highlights that the operationalization of continuous assessment in

Tanzania came officially in 1995 after the establishment of Tanzanian National Education and Training Policy which stipulates that continuous assessment score shall contribute 50% of the total weighting of the student's final results. They say that this resolution emphasised the necessity of getting rid of ambush type of examinations and reducing the excessive emphasis placed on written examinations.

Matome (2015) highlighted that the notion of continuous assessment was introduced in 2001 by the South African education department as the underlying policy of the National Curriculum Statement. He said that despite the curriculum changes and developments that had transpired in South Africa, the notion of continuous assessment continues to serve as a classroom strategy teachers apply to ascertain the knowledge, skills and values attained by learners using both informal and formal tasks, using different kinds of assessment methods and instruments.

From the above literature, it shows that the education system is moving into a situation where assessment has to be holistic and authentic. It follows that the learner's potential is not only what they keep in the head, but involves other skills. In Zimbabwe, educational planners and administrators are now more conscious than ever before of their role in the nationwide scheme of curriculum innovation. Not only have new courses been introduced and new contents injected into existing subjects. A fundamental change in the system of assessment of students' performance has also emerged through the formalization of Continuous Assessment as a component of evaluation process Moyo (2021).

According to Dube and Jeta (2018), in terms of the assessment methods, the old curriculum which was inherited from the Rhodesian government was criticized for depending much on summative evaluation. They propounded that such terminal assessment procedures could be affected by unforeseen disturbances and events on that particular day which would not reflect the leaner's capabilities of the learning period.

Under the secondary education system, ZIMSEC candidate's physical and behavioural skills are assessed continuously to contribute to 30 percent to their final marks whilst the final examination contributes 70 percent of the final grade. The number of projects a learner does per learning area is five throughout the course. If the learner does eight subjects, it means the candidate has to be assessed 40 projects before writing the final examinations. The comprehensive nature of a successful continuous learning activity lies in the hands and full support from stakeholders that surrounds the learner and that is the government, the school administration, teachers and parents.

2.2.1 Purpose of continuous assessment

There are several purposes of assessment. Atsumbe (2013) is of the view that most commonly known purposes of assessing leaner's performance are to diagnose content knowledge and process skills, to know learner's strengths and the see the application of these skills, to determine the needs and patterns of change and to provide feedback on learner's capability. Abejehu (2016) reported that assessment is there to improve the teaching of a lesson, to check whether the learning outcomes have been achieved, whether the teaching methods and strategies are appropriately and suitably used for teaching and learning process. The learner, as the assessed, has the right if knowing how he/she performed so that he/she could be in a position to reflect back and do self-assessment. This gives the learner a room for self-correction thereby making him/her an effective learner.

2.2.2 Effects of continuous assessment learning activity

The type of assessment that informs the teacher whether the learner has acquired knowledge, problem solving skills and values should be ongoing assessment, which will provide signs which confirm whether they are on the right track or not, if not, then corrective measures and information should be availed. Ali, Younas & Mushtaq (2021). Ali et al (2021) further argued that if the aims and objectives of their instructions and assessment criteria are clearly set and well defines in terms of what a learner is supposed to attain, then then assessment is not as a time-wasting exercise but as an integral part of planning for effective instruction.

Continuous assessment is active learning, hands on approach, constructive and most importantly allows students to be fully engaged in the learning process. It involves understanding how all the pieces of an entire concept fit together. Firorimwe (2022) suggested that the fundamental role of CALA is hinged on the concept that education must be education with production. He further argued that knowledge gained through continuous assessment applies to new learning situations and knowledge gained stays with learners for life. Since meaningful learning takes places, the idea behind these reports mean that continuous assessment makes learners develop learning skills and strategies that makes him/her get better grades in school.

Boachie, E. (2016) are of the view that continuous marks are determined at the school level, based on tasks that are not standardized across schools but vary by teacher in terms of number, level of difficulty and marking accuracy. They went on to say that thus such marks are less

accurate than the extremely set, marked and moderated matric exams and it is therefore fair to use the exam mark as the standard against which to judge the continuous assessment marks.

2.2.3 Continuous assessment implementation

The main concern of this study is to examine the practice of continuous assessment as well as to determine the status of implementation in secondary schools. Susanna (2019) reports that the purpose of assessment must be clear worthwhile agreed by all those involved in the process. She says what is to be assessed should be related to the purpose, clearly understood and needs to be agreed upon, should be systematic and timely.

Zhou (2021) has the same view as he reported that the efficacy of continuous assessment learning area has never been in serious doubt where it is properly planned. He says that it is the teachers that must provide comprehensive standardised assessment tools to guarantee success of continuous assessment. He further argued that continuous assessment must ensure the successful blending of the theory and practical experience and guarantee the imparting of life serving skills to students that can enable them to function beyond the classroom as it therefore promotes functional literacy as opposed to the dysfunctional literacy in Zimbabwe. This means that the broad engagement of teachers as the implementers is crucial as they in essence develop the CALA, administer CALA, keeping each learner's profile and guide against any forms of cheating.

The review points out that although there are numerous assessment strategies that can be employed and teachers do not make maximum use of these strategies. Teachers are supposed to contextualize CALA, facilitate learning and CALA execution, administer CALA assessment instruments; monitor, supervise and support learners during CA activity; mark CA (continuous assessment) records, keep CA records, profile learners' competencies, report performance of learners to stakeholders, ensure security of CALA scripts, and guard against malpractices National Association of School Heads (2021).

The teachers must provide comprehensive standardized assessment tools to guarantee success of continuous assessment (CA). There was no engagement of teachers for the implementation process and no budgetary preparation for its implementation in advance. The Ministry announced through the media that with immediate effect CALA would be implemented in schools starting with 2021 candidates. The Ministry also commanded provinces around the country to arrange rushed workshops for all exam classes without taking into contemplation various factors which affect implementation of the initiative. There was no budget for such

workshops and schools are expected to fund teachers and school heads attendance of such workshops. Zhou (2021) highlighted that the lack of systematic, resources and engagement of teachers contributes to the poor strategies of assessment. Therefore, broad engagement of teachers as the implementers is crucial as they in essence, develop CALA assessment instruments.

According to Chaurura (2017), learning is defined in cognitive psychology as the pursuit of knowledge: the student is an information-processor that receives information, performs cognitive operations upon that, and stores it in memory. As a result, its preferred teaching methodologies are lecturing and handbook reading. Thus, at its most extreme, the student is a passive receiver of knowledge from the educator. In addition, constructivism also helps understand the present research.

Constructivism originated in the 1970s and 1980s, bringing rise to the notion that students are not passive of information, but actively constructs it through environmental stimuli and the restructuring of their psychological mechanisms. Learners are thus considered as sense-makers, not merely recording but also evaluating information. This perspective on learning resulted in a move from the "knowledge-acquisition" metaphor to the "understanding" metaphor.

The rising body of evidence supporting the constructive form of knowledge was also consistent with and supported by the previous work of key theorists like Jean Piaget and Jerome Bruner Clark (2018). “Although there are various variants of constructivism, what they all have in common is a learner-centered approach in which the teacher is becoming a cognitive guide of the learner's learning rather than a knowledge carrier”, he says. In Zimbabwe, the Ministry of Primary and Secondary Education's mandate is to offer a well-rounded education for all Zimbabweans. It is the Ministry’s role to ensure that education system should be easily accessible and cheap, allowing citizens to contribute in the socioeconomic change.

2.3 CONTEXUALISATION OF LITERATURE TO THE PROBLEM

Onuka and Onabamiro (2010) found that regular individual assignments engender higher student learning and achievement because they form sources of feedback on the performance of the students and assist students to develop critical mind and good study habit. Thus, through assessment strategies like individual and group assignments, students are propelled to learn more so as to improve on their academic performance and compete favourably with their learning peers.

Although Lunsford (2013) indicate that the most commonly used continuous assessment strategies include oral presentation, practical test and interviewing learners, other studies have revealed that continuous assessment is not being implemented in terms of a wide range of alternate assessment strategies as it was intended to be, with pen-and-paper testing still being the more dominant practice (Deonarain; 2004; De Gaume & Naidoo, 2004). Thus, schools should design a range of assessment modes, such as oral questioning, observation of students, project work and assignments, according to their curriculum plans, so as to collect continuous information on students' progress and to give feedback on what students have learned and achieved.

The information collected will help motivate students' learning and help teachers find ways of bringing out more effective teaching and learning. Mwebaza (2010) found that written tests, take-home assignments and recap exercises dominated teachers' assessment strategies. Teachers have gained very little training in the use of methods of assessment.

2.4 KNWOLEDGE GAP

While the need to design instructional improvement is not limited to any particular school or district type, it is arguably most critical for urban settings. There is need to develop and test modes of assessment that can be used for the design of more effective CALA implementation. When the CALA was introduced for the first time, the government faced some challenges in trying to implement it as there was more resistance from parents, learners and teachers. The implementation could not run smoothly due to bad timing and inappropriate strategies. As a result, the main purpose of continuous assessment is gradually lost and irrelevant. Wrong impression for the continuous assessment learning activity prevails Darling-Hammond (2010) observed that the relevance of any curriculum is determined only when it has been implemented.

2.5 SUMMARY

Continuous assessment learning activity covers all aspects of school experience both within and outside the classroom. Various authors are of the view that it covers the cognitive as well as the affective and psychomotor aspects of learning. The next chapter focuses on how information is gathered and the data collection procedures to get the findings

Chapter 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the description of the research procedures that is by clearly explaining on the methods of how the research is to be conducted. The chapter gives an outline of research methods that were followed in this study. It provides information on the on the participants, that is, the criteria for the inclusion in the study, who the participants were and how they were sampled. The instruments that were used for data collection together with the procedures that were followed to carry out this study are included.

3.2 RESEARCH DESIGN

Research design is the framework of research methods and techniques chosen by a researcher to conduct a study. The design allows researchers to sharpen the research methods suitable for the subject matter and set up their studies for success. Bandari (2020) In this study, the focus is to investigate, inspect carefully and deduce on how Mathematics CALA administered in Zimbabwean secondary schools.

To achieve the objectives of the study, the survey research design and the descriptive research design has been employed. A survey research design has been chosen because it can be created quickly and administered easily. It is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group Bhandari (2020). In other words, only a part of the population is studied, and findings from this are expected to be generalized to the entire population. The survey is used to collect information on a broad range of things including personal facts, attitudes, behaviors and opinions.

The descriptive research design has also been employed to fully understand the views of different people. According to Parvathi (2015), interpretive or descriptive research design is the study which focuses mainly on meaning, experience and understanding across a frame or body of related cases. The researcher interacts with the participants by interviewing them, discussing and listening to their views in attempt to understand their perceptions relating to the study. It answers the ‘what’, ‘where’ and ‘when’ of a research problem. It is possible to get a balanced mix of numerical responses and open-ended answers from the descriptive method. In

relation to the research questions of the problem, descriptive research invites tracking the strategies and patterns adopted in implementation of the CALA.

Qualitative data instrument is used in this study to collect data from the respondents in their respective schools. A one-on-one direct communication by means of an interview is conducted as well as questionnaire for teachers and learners. Qualitative research is very important in educational research as it addresses the how and the why research questions, Leedy and Ormond (2014). They are of the view that qualitative research gives room for asking questions that cannot be easily put into numbers to understand the human experiences. What qualitative study seeks to convey is why people have thoughts and feelings that might affect the way they behave. Sutton and Austin (2015).

3.3 POPULATION

A population is the entire group that you want to draw conclusion about. A research population is known as a well-defined collection of individuals or objects known to have similar character and it is the entire group that you want to draw conclusions about the targeted population for the research comprises of three secondary schools in the Mbare Hatfield district. The individuals who were in the best position to furnish with information needed to answer the research questions are the Mathematics teachers and the form four learners who are currently doing the CALA. The population of the study comprise of more than 450 individuals in which all do not allow the researcher to include them all in the study. The population is made up of all Mathematics teachers and all form four students undertaking the CALAs.

3.4 SAMPLE AND SAMPLING TECHNIQUE

The time spent and cost of studying an entire population to answer a specific question is usually prohibitive. In that case, a sample is chosen from the whole group. A sample is a smaller group that represents the population in the study and is capable of giving the same information supposed to be provided by the entire population Lunsford (2013). A sample in this study is, therefore, a smaller group that represents the population in the study and is capable of giving the same information supposed to be provided by the entire population. The sample of this study stood up at 144 individuals of which 135 are students and 9 are Mathematics teachers.

At every station, out of the three stations, 3 teachers have been selected using simple random sampling. This was achieved by writing out the names of the staff who teach Mathematics on a piece of paper which was folded and put in a basket. After thorough reshuffling, the researcher selects an element, records it and puts it back in the basket until the required number is

obtained. That is, researcher applied sampling with replacement. Leaners were selected using the stratified random sampling in which the form 4 learners were selected from three categories namely the gifted, average gifted and the slow learners. From each category, 15 learners were selected using random sampling. This gives a total of 45 respondent learners per each school. Altogether, the number of learner respondents from the three schools was 135.

According to Parvathi (2015) a random sampling method is done in order to avoid bias in the selection of the sample and as well as producing the greatest amount of precision within constraints of limitations. In this method, every member is given a chance of being selected.

3.5 RESEARCH INSTRUMENTS

The term research instrument refers to any tool that is used by a scientist to obtain, measure and analyses data. The data is sourced from subjects included in the research experiment and focused on the topic Collins (2020).In this study, questionnaires and interview were purposefully chosen instruments to gather data. Oral face to face discussions have been carried out. All teachers and one third of the learners have been orally interviewed whilst the remaining two thirds have been assigned to complete the questionnaires.

3.5.1 Questionnaire

A questionnaire is a set of carefully designed, written down, and tested questions, which are asked of individual respondents to gather information in research Pahwa (2021). The questionnaire was used to collect data because the sample size is large and the time for collecting data was limited. Open and closed- ended questions were designed because they were easy to answer, save time and keep the respondents focused on the subject. Questionnaire was used because they collect numerical data and are the main method of data collection. Questionnaires collect large amount of data within a short time because respondents can answer the questions at the same time.

3.5.2 Interview

According to Bandari (2020), an interview is an exchange of views between two or more people on a topic of mutual interest. Interview schedules were equally used to collect primary qualitative data from the respondents. One on one oral interview was conducted in schools. Through the use of an interview, the researcher can observe and probes further to get the deepest information about the strategies and processes used in CALA implementation. The

questions designed were asked in a set order that helped in seeing patterns amongst responses. This gave room for making comparisons between participants while keeping other factors constant. Qualitative research provides a more realistic feel of the world that cannot be experienced in the numerical data and statistical analysis used in quantitative research.

3.6 VALIDITY AND RELIABILITY OF THE INSTRUMENT

Ali and Ajibola, (2015) stated that, in qualitative research, validity is another word for "truth" and there is no "golden key" to it, as all analysis is based on interpretation, all data have to be analysed, including contrary or deviant cases, and the whole analytical procedure has to be documented. Other staff members were asked to check on the appropriateness of the questionnaire and interview questions. Two staff members from the school were requested to answer the questions and verify for language errors and ambiguity.

Some assistance from Mathematics specialists including my supervisor was sought to test for validity and reliability of the instruments. Consultations with the supervisors, other lecturers, and peers helped to identify errors and offered the opportunity to modify and improve the instruments. Also, to ascertain the validity and reliability of the research instrument, a pilot study was done in two schools within the same district that did not participate in the actual study. Following the pilot study, more errors were identified and corrected in the instruments.

3.7 ETHICAL CONSIDERATIONS

Throughout this study, the researcher made a deliberate effort to free herself from the prejudices, biases and sentiments that might impede objectivity and neutrality. The research attempted not to omit data that will affect the interpretation of findings. Neither are the views twisted nor the experiences of participants changed. This research adheres to the highest possible ethical and professional research code of conduct. The following are the ethical codes which the researcher compiled from various sources for the Research Methodology course Ali and Ajibola (2015). These are:

a) Harm and risk: The researcher is considerate of what might this study do to hurt the people involved and how likely it is that such harm will occur? If any, preventative mechanisms will be put in place prior the study.

b) Honesty and trust: What relationship does the researcher have with the people or participants used in the study? Does the researcher tell the truth? Attempts should be made to garner mutual trust between the researcher and the participants.

c) The right to privacy or non-participation: A person has the full right not to participate in the study at all. The right to privacy refers to the right of a participant in a study to keep from the public certain information for themselves.

d) The right to remain anonymous: All participants will have the right to remain anonymous. That is why they don't need to write their names on the questionnaires.

e) The right to confidentiality: The participants have the right to insist that data collected from them be treated with confidentiality. There is a built-in mechanism to protect the participants' confidentiality.

3.8 DATA COLLECTION PROCEDURES

Two sets of structured questionnaires were developed and used to collect data from both groups of respondents that is one set administered to the teacher and the other one to the learners. The closed ended items in both sets of questionnaires were structured with such responses as Yes or No. Also, a four-point Liker scale of strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4) was used to design the items that meant to elicit responses on the views how continuous learning activity is carried out and it's weighting to students' learning

After the approval of the research instrument, the permission for carrying the study was granted from the relevant authorities in the geographical area which the researcher is scheduled to carry out study. The data to be collected are responses as a result of questions clustered according to the following headings: -

>Whether continuous assessment aims to integrate knowledge, skills and understanding in Mathematics.

>General strengths and weaknesses encountered in the implementation of continuous assessment.

>Suggested methods and strategies use when doing continuous assessment in Mathematics. Interview discussions are carried out face to face and respondents are questioned one by one. Data collected through questionnaires and interview schedule will be edited, coded, classified and analysed.

3.9 DATA ANALYSIS

Coursera (2022) is of the view that data analysis is the practice of working with data to glean useful information, which can be used to make informed decisions. She further argued that the raw data sets is needed in helping to answer the identified question. One can begin to find trends, correlations, outliers and variations that tell a story.

3.10 SUMMARY

This chapter has focused on the methodology used in this particular research. It clearly highlights the processes, the steps and the method that the researcher has used to extract information on how continuous assessment learning activity is administered through views of teachers and learners of Mathematics. The next chapter focuses on presentation of data collection pertaining findings of the research.

Chapter 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

This chapter focuses on data presentation, analysis and interpretation. The study explored on how the CALA is administered in secondary schools in the context of the Zimbabwe updated curriculum from 2015-2022. The results are the views of Mathematics teachers who implement the CALA as well the learners who are doing the CALA in secondary schools. Responses from the face-to-face interviews and questionnaires were read several times and data was categorised into themes developed from research questions. Three categories emerged from the themes through the research questions that guides the study.

4.2 DEMOGRAPHIC DATA

Demographic data refers to the data that is statistically socio-economic in nature such as age, race, gender, marital status, education and many more. This section gives information pertaining gender distribution, education and level of performance by learners. Some of the data is presented using frequency tables and the other using statistical graphs such as bar charts and pie chart.

Table 4A1: Demographic data of teachers

Gender	Males	Females	Total
Number of teachers	4	5	9

Of the 9 teachers who participated in the study, 4 are males and 5 are women. All teachers were interviewed and were all given a questionnaire to complete.

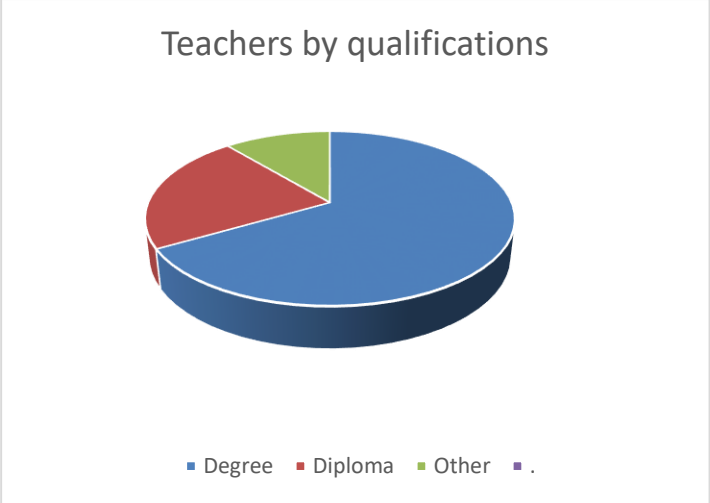

Figure 4B1: Teachers by qualifications

The data presented in the pie chart shows that 8 out of 9 teachers under the study are qualified teachers of which 6 of them are holders of degree in teaching whilst 2 have diplomas in education. Only 1 teacher had other qualifications not related to education. This improves the reliability of research findings since the majority of the teachers are qualified teachers.

4.2.2 Demographic data of learners

Table 4A:2 Gender distribution of learners

	Frequency
Boys	68
Girls	67
Total	135

The total number of participant learners in this study are 135. Of the 135 learners, the number of boys was 68 and girls were 67. There was a fair representation of both boys and girls and this served to minimise gender bias.

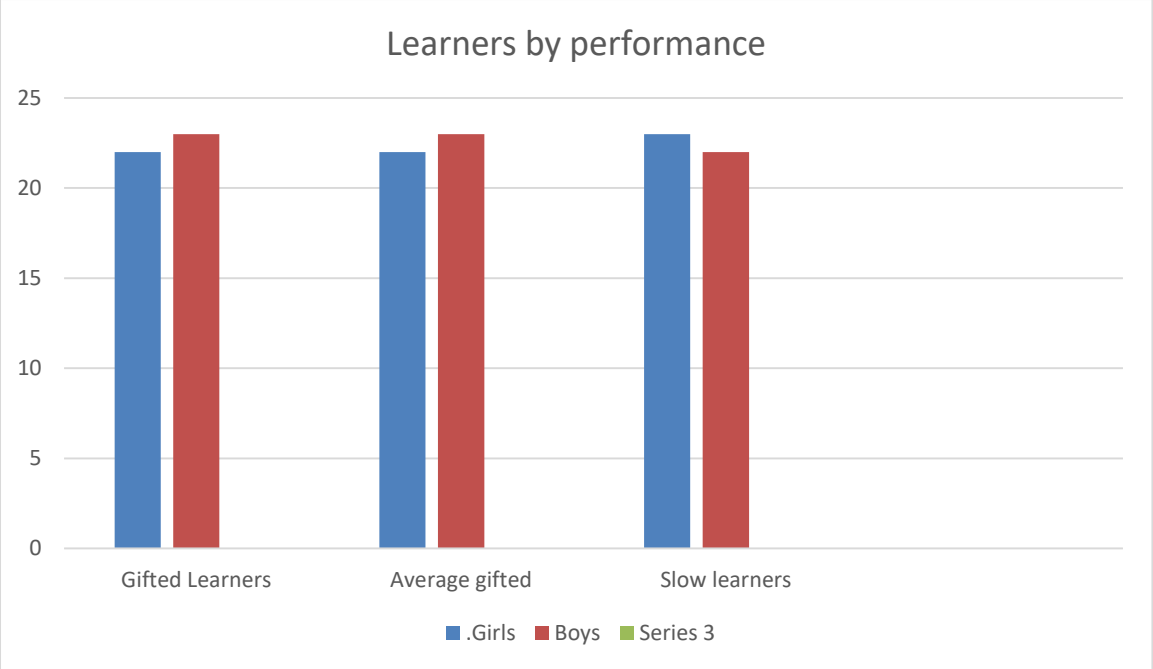

Figure 4B2: Learners by performance

The bar chart above shows the number of respondents who were participating in this study basing on three categories namely, the gifted learners, average gifted and slow learners. Each category has a total of 45 participants. Each category has either 22 girls and 23 boys or vice versa. The distribution is fair because all categories of performance have equal number of participants.

4.3 DATA OBTAINED FROM QUESTIONNAIERS AND INTERVIEWS

4.3.1 Interview responses from teachers and learners

Research question 1: How do you manage the implementation of Mathematics CALA?

Under the research question 1, teachers and learners were asked some few questions and below are the responses: -

a) All respondents were asked whether they have adequate time to do the CALA and whether the learners are meeting the deadlines

All the teachers and learners cited that the time for continuous assessment was not enough. It emerged that the teachers, at some point during the term, have stopped teaching while the learners stop learning in order to focus on the CALA components. Teachers have highlighted that the syllabus coverage is sometimes brought to a standstill and it has become very difficult

to conduct meaningful lessons since learners are tossed back and forth as they try to finish their tasks from all angles. One participant highlighted that as long as the learners are doing many researches in multiple learning areas, there is always scramble for the leaners by the teachers.

The teachers also indicated that nowadays it is no longer surprising to conduct a lesson with at least half of the learners in the classroom since some of them would have absconded the lesson with the reason of finding information and meeting other supervisors apart from the on-going lesson. Very few learners from the gifted category said were able to finish the Mathematics CALAs within the stipulated time interval. The rest of the learners said that they fail to meet the deadlines because the work is too much and sometimes complex. One of the learners said that the students end up paying individuals who assist them in their researches so that they beat the deadline for submission..

b) Teachers were asked whether they were being supervised in giving learners some meaningful tasks and what type of tasks do they usually give.

From the three schools under the study, a total of 15 different Mathematics tasks were analysed. Out of the 15 tasks, only 4 of them had a practical component as compared to the remaining 11 which were in form of written exercises. One teacher had revealed that due to challenges of pressure and learner behaviour, they ended up giving tasks which does not consume much of the learner's and the teacher's effort. Therefore, it was observed that there was a casual approach when it came to the given tasks.

There was no variety in testing. The tasks given showed that some of the higher-level objectives of the bloom's taxonomy were not addressed. They also highlighted that supervision was very minimum from their head of departments and 5 out of 9 teachers reported that they can give out a new task without the approval of their heads of departments. Teachers responded that the most critical aspect was to make sure that the learners are doing the CALAs rather than what type and quality of the tasks were given.

c) Teachers were asked whether all learners were co-operative in doing the CALA

All the teachers are in agreement that very few learners are willing to do the CALAs. Teachers said that they are in the habit of forcing the learners to submit their researches. Teachers also highlighted that whenever they try to give their learners some challenging tasks, the learners end up not doing the tasks. Teachers emphasized that the current form four learners had been affected by Covid-19 lockdown as well as teacher incapacitation in which they spent much of

their time in fun and playing with no learning taking place at all. The majority of them are reported to be doing their tasks in the last minutes as they end up submitting substandard work.

4.3.2 RESPONCES FROM QUESTIONNAIRE ON CLOSED-ENDED QUESTIONS

Research question 2: How do you rate on the overall achievement of learners in CALA?

Respondents were asked whether learners were doing well in CALAs, whether they are learning new skills or knowledge by doing CALA and whether the CALAs are an authentic practice

Table 4A3: Questionnaire responses of teachers

Research questions	Strongly Agree	% no"	Agree	% No''	Dis-agree	% No''	Strongly Disagree	% No''
Learners are doing better in CALAs	3	33,3%	4	44,4%	2	22,2%	0	0%
CALAs results in Maths are a true reflection of learner performance	1	11,1	3	33,3%	4	44,4%	1	11,1%
Learners are acquiring new knowledge and skills by doing CALAs	3	33,3%	4	44,4%	2	22,2%	0	0%
The methods and strategies used in CALA implementation motivates learners	0	0%	3	33,3%	4	44,4%	2	22,2%
CALAs should be incorporated for final assessment	0	0%	4	44,4%	5	55,5%	0	0%
By comparing the pros and the cons, CALA is relevant	1	11,1%	3	33,3%	2	22,2%	2	22,2%

Table4A4: Questionnaire responses of learners

Research questions	Strongly Agree	% no	Agree	% No''	Dis-agree	% no	Strongly Disagree	% no
You are scoring better marks in CALAs	15	16,6%	23	25,5%	28	31,1%	24	26,6%
CALA results are a true reflection of your performance	12	13,3%	27	30%	35	38,8%	16	17,7%
New skills and knowledge is acquired by doing CALA	50	55,5%	37	41,1%	3	3,33%	0	0%
Methods and strategies used by teachers for continuous assessment are motivating	0	0%	5	5,55%	62	68,8%	23	25,5%
CALA components should be incorporated in final assessment	10	11,1%	10	11,1%	36	40%	34	37,7%
By comparing the pros and cons, CALA is relevant	12	13,3%	15	16,6	34	37,7%	29	32,2%

Results from the tables above indicate that more teachers are in agreement to the fact that the learners are scoring higher in continuous assessment. The teachers highlighted that the learners eventually get higher marks after several consultations and corrections have been made. 44% of the learners were of the view that they are doing well in the CALA components as compared to 56% who feel that they are not performing well. The learners said that they are usually turned back or asked to re-do the same tasks several times and they feel that they are not doing well.

A bigger number of the teachers believe that the performance of learners in continuous assessment is not a true reflection of their actual performance. They explained that some of the learners fail to explain, in detail, what they would have written or narrate the stages on how they have done their tasks. Surprisingly, three of the teachers said that the learners still get good marks for their work submitted. As for the learners, 30% of them agree that the marks awarded to them are a true reflection of their performance whilst 38, 8% disagree.

Both the teachers and the learners are in agreement to the fact that there is new knowledge and new skills acquired by the learners whenever they are doing the CALAs. This is evidenced by 55% of the learners who strongly agree plus 41% of them who also agree that they are getting new skills and knowledge by doing multiple CALAs. 6 teachers out of 9 pointed out that the learners have a low moral when it comes to Continuous assessment activities.

Most teacher said that very few learners are willing to do the tasks on time. The rest can only do their tasks when force is exerted on them. The larger percentage (94%) of earners also revealed that they do not have internal motivation towards the activities of continuous assessment. The percentage of learners that indicated that the CALA has to continue to be incorporated stood at 22%. Around 30% of the learners said that the CALA is relevant in their new curriculum. Out of the 9 teachers questioned, 4 of them have the view that CALA is relevant and is to continue to be incorporated in the final assessment.

4.3.3 RESPONSES FROM INTERVIEWS ON OPEN-ENDED QUESTIONS

Research question 3: What are the views of teachers and learners concerning the issue of CALAS?

a) All respondents were asked whether they are comfortable with the strategies being used in administering the CALAs

Of the 9 teachers that were interviewed 8 out of 9 were not happy with how the CALAs are being administered in schools. Some indicated that learning can only take place when the learners are given enough time to demonstrate knowledge and skills on an activity. They said that bunching the tasks was of no benefit as learners only interested in the end product rather than the whole process. Teachers said that some of the work submitted by the learners are not their original work which also meant that the probability of doing mal-practices such as copying and paying for the service done.

More than two thirds of the learners complained that the way the CALAs were administered was overwhelming. They said that they are always at logger heads with the teachers and their parents when it comes to the CALA issues. Learners reported that their parents are not able to meet some of the financial obligations that are required in some of the CALA components yet the teachers are expecting total funding for CALA completion. The majority of learners highlighted that they were always stressed when it comes to balancing the expectations at school with regards to the reaction of their parents.

b) Teachers and learners were asked of the strengths and weaknesses encountered in doing CALAs

Table4A5: Views of teachers concerning CALA

STRENGTHS ENCOUNTERED	WEAKNESSES ENCOUNTERED
Improved relations between teacher and learner	No proper training received on how to do the CALA
Provides day to day feedback on performance of learner	Work overload due to large classes
Provides accurate picture of the learner's performance	No incentives for such a demanding job
Improvement on various skills	Lack of learner and parent co-operation
Allows feedback and evaluation	Higher chances of learner's malpractice

Table4A6: Views of learners concerning CALA

STRENGTHS ENCOUNTERED	WEAKNESSES ENCOUNTERD
Raised scores since corrections can be done	Work overload due to multiple tasks
There is room for consultations even outside school environment	Demotivating since some tasks are challenging
Promotes competition	Higher chances of bias on awarding of marks by teachers
	Requires financial funding which makes it costly
	Teachers become hostile resulting in unfriendly learning environment

c) All respondents were asked whether the CALAs should be continued, revised or phased out and why.

7 out of 9 teachers had the view that the continuous assessment should be continued but revised. They reasoned that continuous assessment was a vehicle for educational improvement especially when learners' skills are thoroughly sharpened. One teacher remarked that the reason why these CALAs are not embraced by the learners is because of how the assessment is done. 21 learners out of 135 supported the idea of having CALA components in their curriculum. This means that 15% of the learners are comfortable in doing the CALA components. 85% of the learners were not ready to do the CALA components and they suggested that it should be phased out.

4.4 LINK OF LITERATURE REVIEWED WITH NEW FINDINGS

The research findings revealed that the standards used teachers during assessment are varying from school to school and from one teacher to the other. Any teacher can determine and set up his/her own procedures for scoring and grading. The availability of valid and reliable and reliable test for all is not practised in all schools. This puts to question the concept of comparability of standards. This came in line with what some authors have said pertaining to standardized testing. Clark (2018) are of the view that continuous marks are determined at the school level, based on tasks that are not standardized across schools but vary by teacher in terms of number, level of difficulty and marking accuracy. They went on to say that thus such marks are less accurate than the extremely set, marked and moderated matric exams and it is therefore fair to use the exam mark as the standard against which to judge the continuous assessment marks.

On another note, results show that the most continuous assessment strategies used by the Mathematics teachers were in form of written exercises. Practical assessments were fewer than written scripts. Other forms of assessment like role play, presentations, recitations and modelling were neglected. However assessment should not only focus on one area of learners' skills. This was explained by Abejehu (2016) when he reported that assessment is there to improve the teaching of a lesson, to check whether the teaching methods and strategies are appropriately and suitably used for teaching and learning purposes.

In this research, it emerged that the way the continuous assessment is implemented in schools is casual and substandard. Teachers opted for strategies that would work within the limited time frame. The responses show that teachers are in a situation in which they are implementing the CALA in order to meet the requirement of the ministry and anything beyond that is deemed

useless. Thus the limited time and resources available in schools does not allow diversity of continuous assessment strategies available for use. This came in line with what some authors have indicated. Mwebeza (2010) found out that the written tests, take home assignments and recap exercises dominated the teachers' assessment strategies. He said that the teachers have gained very little training in the use of methods of assessment. The research shows that the teachers are not properly trained to carry out continuous assessment. Many of them do not have the skills required to carry out it effectively. Workshops and seminars to improve the teachers' skills are scarcely organized by the school administration and government.

4.5 DISCUSSION

A lot of ideas which are more useful in the effective implementation of the continuous assessment have been gained by doing this research. Firstly, the teachers who have an upper hand of running the continuous assessment program reported that interested parties should not shift blame on them on how the CALA is administered because they say they need to be fully equipped with knowledge on how to handle these tasks. They went on further exposing their feelings regarding the introduction of the CALAs citing that not even a workbook, teachers guide or manuals were availed to them for orientation. Therefore if the ball is in the hands of the teachers, they are the ones who decide on what to do.

Learners have reported that the teachers are usually not available for clarifications and consultations. Lack of prompt feedback and on performance means that very little or no time is set up for CALA tasks. This has made the overall load of the tasks to rest on the shoulders of the learners. Too much pressure pressed down on learners causes stress and likely contributes to cheating. When too much focus is placed on submitting tasks and achieving, learners are more likely to engage in malpractices like paying for the services done as well as copying from colleagues. Furthermore, if learners feel that they are working under pressure, it demotivates them to the extent of shunning other important activities. In this research, learners said that the strategies used for assessing were demotivating. They suggested that it should not be incorporated into the final assessment but rather be abandoned.

Additionally, the results of the study yielded that there has been a lot of malpractices from both the teachers and the learners. Some of the learners reported that teachers are in the habit of assisting those individuals who have paid some small fee. Some even said that as long as they pay some small token of appreciation to the teacher, the deadline of submitting of tasks does not matter. The rising complains from the learners against funding teachers meant that the teachers are busy channelling their efforts towards fund raising activities at the expense of the

main motive. The need for money has driven some teachers to do the CALA tasks on behalf of the students for a certain fee. This has disrupted the whole purpose of the initiative, which is targeted at improving the education system.

Research findings have shown that most of the government secondary schools are over populated. The demand for the teachers to meet the all the required expectations is overwhelming. One teacher, for instance, said is supervising a total of 233 form 4 learners. Apart from the usual record keeping for normal lessons, they are further expected to carry out the continuous assessment diligently. Teachers are expected to clarify objectives to learners, to do careful record keeping, ensure continuity of records and being resourceful. All this cannot be done by one person especially when the number of learners is too much.

Too much work load for the teachers results in lack of patience, objectivity, diligence and initiatives. Thus the teachers are eventually putting the responsibility on learners who also, in turn, expect much from the teachers. Adding on to that, it was clearly observed that there is some blame game ongoing between the teachers and the learners. Teachers said that the learners are not co-operative and willing to the tasks. Learners are also shifting blame on teachers for their hostility and carelessness. The relationship between some of the students and their teachers is eventually ruined causing the learners failing to operate in such an environment. On the other side, the teachers are not to blame considering the fact that the class sizes were too high for proper supervision to take place. The teacher to student ratio is just not manageable which means normal supervision is not guaranteed. Some of the problems cited by the learners against their teachers, at most, are beyond the teacher's control.

In terms of learner performance, teachers said that the learners would finally get better marks if they keep on doing some consultations and corrections of what is expected. They said that continuous assessment was not meant to judge the performance of student at once, but to assist them until they are able to execute the tasks by themselves. However this is where some of the learners are not utilising the privilege. Some of them reported that the CALA tasks are causing stress since the processes are too long and tiring. It was also observed that the learners are highly demotivated by the continuous assessment activities. By making some investigations, learners are also not to blame because some of the methods and strategies that are used on them are not pleasing.

4.6 SUMMARY

The chapter focused on presentation, analysis and discussion of the data collected. The link between the cited literature and the new findings has been given. A connection if the new findings in relation to the research questions has been made as well as the overall discussion. The next chapter outlines the research summary, gives conclusion of the whole research and recommendations related to the findings of this study.

Chapter 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter, having discussed on the findings of the research, would give some summary and concludes on the reports for the whole research pertaining to how the Continuous assessment learning activities are being administered in Mathematics in Mbare/Hatfield district in Harare. The findings of the study are interpreted followed by recommendations for future use in various educational ministries and institutions.

5.2 SUMMARY

The study show that the continuous assessment learning activities (CALA) in Mathematics have been administered in a variety of ways that best suits the teacher on the ground. Little supervision in schools has been done towards the implementation of the CALA. There has not been a systematic way of conducting the continuous assessments even at school level. Written tests made by the teacher were the most commonly used method of assessing performance. It was observed that even teachers at the same school, teaching the same subject, would give different tasks despite the fact that they are teaching the same stream.

It was also observed that teachers mostly used questions they get from the textbooks or past exam question papers to strengthen their tasks. When teachers were asked whether they gave learners various meaningful tasks they said that there are various problems that restricts them from setting certain types of tasks. Some of the problems mentioned were of limited time of preparing and marking the tasks, laziness amongst the learners, lack of material and monetary resources that supports , bad attitude, lack learner corporation and work overload due to high student teacher ratio. This has pushed the teachers to the edges of giving the easiest tasks that are readily available.

One aspect that was observed in the study was that the teachers were not embracing the CALA with passion. The administrators of the school and heads of departments in schools are not making follow up and efforts to improve on the welfare of continuous assessment especially on the methods and strategies used by the teachers. It was observed that the staff members within one station were not working collaboratively when it comes to continuous assessment so that they improve on questioning technique, proper timing and bringing uniformity.

Most of the teachers highlighted that continuous assessment helped them to identify weak learners and assist them accordingly. They said that methods of delivering lessons have since improved because whenever the learners fail to execute a certain task, the teacher is also

expected to revise his/her own methods of teaching and then select the most appropriate. However teachers also reported that some of the work submitted by the learners showed some elements of plagiarism. They reported that quite a number of learners are too lazy to do the tasks on their own. They hand in work which is not their original with some of the work too abstract beyond their capabilities. Such type of learners would have paid money or asked their friends for the service to be done on their behalf so that they earn good marks.

5.3 CONCLUSION

Drawing on teachers' and learners' perception, there were many continuous assessment strategies used and these were found to have positive and negative effects on the learning environment. Black and William (2010) said that there is often little attention paid to whether the students can actually understand the concepts but rather whether they can pass the tests. Although learners might score higher marks in continuous assessment, emphasis has to be put on learning and acquisition of skills rather than on achieving certain grades. Through continuous assessment, teachers tend to realize their own weaknesses in teaching and those of their learners. Good application of the continuous learning strategies would help in moving towards the achievement of long term goals of education.

Reflecting on what have occurred, the major problems of assessment of learners have been in the approaches and methods adopted. Its potential usefulness lies in the series of options such as criteria used, methods and strategies adopted and material resources to support the initiative. Along the research lines, the students gave a lesser value and meaning to the continuous assessment because of its short-comings. There is no doubt that these problems have caused so much obstruction to the successful implementation of this evaluation method.

5.3 RECOMMENDATIONS

Basing on the research findings from this study, the following recommendations are provided as follows:-

In-order to see a better implementation of the continuous assessment, teachers are to be mandatorily and formally trained in CALA principles and practice both at pre-service and in-service levels and they should be given material as well as moral support through provision of computing tools and teachers guides

The ministry of Primary and secondary education should put in place regulations, checks and balances to ensure that different continuous assessment strategies are in secondary schools. A uniform policy on this practice should be emphasized so that all schools are starting on a level ground as well as benefiting from it

Teachers should not only dwell on written tests and assignments in assessment. Assessment should be comprehensive which means it should measure the individuals behavior, cognitive psychomotor and affective. On each of these domains, a detailed assessment should incorporate instruments such as homework, seminar presentations, drawings, demonstrations, constructions and many more.

Teachers need to improve on their methods and strategies in giving out their instruction in order to motivate the learners. This is because flexible and innovative approaches so that they create a better environment for learning

The researcher suggests use of checklists whenever assessment is done. Checklists can be used to record the presence or absence of a particular skill. They may be used to record such information in relation to written work, presentations, drawings or any form of task. This works best to reduce bias in awarding of marks as some teachers would rate some learners highly more than the others.

The Ministry of primary and secondary education should reduce the number of tasks to at most two per learning area since the number of teachers against the number of learners does not permit proper handling of CALAs

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LIST OF APPENDICES

Appendix A; an interview guide for both teachers and learners

1 How much time do you dedicate for the CALAs?

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……..

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…….

2 Are the learners co-operative in doing the tasks and are they able to meet the given deadlines for submission of CALAs?

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……..

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……

3 How do you rate on the general performance of learners in CALAs?

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4 To what extend is supervision assisting you in the process of CALA implementation?

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…….....,.....……

11. What are the strengths and weaknesses encountered in CALAS?

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…….....

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…….....

12. Should CALA be continued, revised or phased out? Explain whether CALAs are an authentic practices

……
…….....

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…….....

13. What are your suggestions towards the way the CALA is administered in secondary schools?

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Appendix B: Questionnaires for teachers

Dear respondent

I, Primrose Chikumbo, am doing an Honours Bachelor of Science Education degree in Mathematics at Bindura University of Science Education. I'm doing a research on how the Continuous assessment learning activity CALA is being administered in Mathematics. The research is to be carried out in three selected secondary schools in Mbare/Hatfield district in Harare.

You are kindly being asked to provide information by means of filling in the questionnaire. Names of persons, school or places under study are not required therefore you are asked to participate anonymously. The data should be confidentially kept and sorely used for research purposes

PART A

Questions 1 and 2 are for DEMOGRAPHIC DATA

1 Gender Male ☐

Female ☐

2. Qualifications Diploma in education ☐

Degree in education ☐

Others ☐

PART B

Questions 3-5 are providing answers for research question 1

3 Number of classes taught.....and the average sizes of each.....

4 Do you have adequate time to administer the CALA? Yes…. / No……

5 Do you have knowledge on how to assess and provide meaningful CALAs? Yes…../No……..

6 Are the learners co-operative in doing the tasks? Yes……../ No…….

7 Are the learners able to meet the given deadlines for submission of CALAs? Yes…/ No……..

8. Is there any supervision on how you administer the CALAs? Yes…. / No…….

9. Are the learners motivated to do the tasks given? Yes…/ No…..

Part C Provide answers for research question 2

Research questions	Strongly Agree	Agree	Disagree	Strongly Disagree
Learners are doing better in CALAs				

CALAs results in Maths are a true reflection of learner performance				
Learners are acquiring new knowledge and skills by doing CALAs				
The methods and strategies used in CALA implementation motivates learners				
CALAs should be incorporated for final assessment				
By comparing the pros and the cons, CALA is relevant				

Appendix C: Questionnaires for Learners

Dear respondent

I, Primrose Chikumbo, am doing an Honours Bachelor of Science Education degree in Mathematics at Bindura University of Science Education. I'm doing a research on how the Continuous assessment learning activity CALA is being administered in Mathematics. The research is to be carried out in three selected secondary schools in Mbare/Hatfield district in Harare.

You are kindly being asked to provide information by means of filling in the questionnaire. Names of persons, school or places under study are not required therefore you are asked to participate anonymously. The data should be confidentially kept and sorely used for research purposes

PART A

Questions 1 and 2 are for DEMOGRAPHIC DATA

1 Gender Male ☐

Female ☐

2. Level of performance Gifted ☐

Average gifted ☐

Slow learners ☐

PART B

Questions 3-5 are providing answers for research question 1

3 Do you have adequate time to do the CALAs? Yes…/No….

4. Are you able to meet the given deadlines for submission of CALAs? Yes…/No…….

5. Is there any close supervision and immediate supervision from your Mathematics teachers pertaining the CALAs? Yes…/No…….

6. Are you motivated to do the tasks you are given? Yes…. /No……..

7. Strengths encountered are more than weaknesses encountered in doing CALAs? Yes…. /No…..

Part C provide answers for research question 2

Research questions	Strongly Agree	Agree	Disagree	Strongly Disagree
You are scoring better marks in CALAs				

CALA results are a true reflection of your performance				
New skills and knowledge is acquired by doing CALA				
Methods and strategies used by teachers for continuous assessment are motivating				
CALA components should be incorporated for in final assessment				
By comparing the pros and cons, CALA is relevant				

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RELEASE FORM

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