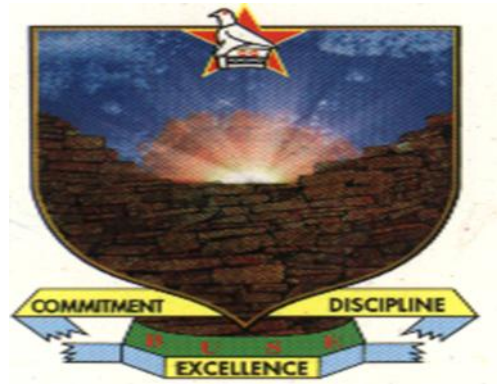


BINDURA UNIVERSITY OF SCIENCE EDUCATION



FACULTY OF SCIENCE EDUCATION

DEPARTMENT OF SCIENCE AND MATHS EDUCATION

**RESEARCH TOPIC: TEACHERS' PREPAREDNESS TO INTEGRATE SCHOOL
BASED PROJECTS AT PRIMARY SCHOOL LEVEL.**

BY

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REGISTRATION NUMBER: B225909A

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF BACHELOR OF SCIENCE HONOURS DEGREE IN
MATHEMATICS EDUCATION.**

BINDURA UNIVERSITY OF SCIENCE EDUCATION

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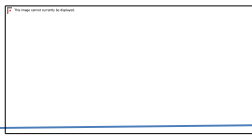
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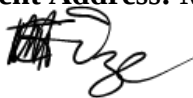
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DEDICATION

To my loving wife, Magombedze Beatrice, Your unwavering support, love, and encouragement have been the driving force behind this research. I dedicate this work to you, in appreciation of the countless sacrifices you made to ensure its completion.

May this achievement bring you pride and joy, knowing that your love and support have contributed to its success.

Abstract

This study investigated teachers' preparedness to integrate school-based projects at the primary school level. The objectives of the study were to determine the level of teachers' preparedness, identify training and support needs, and examine teachers' attitudes towards project-based learning. The study employed a mixed-methods approach, combining both quantitative and qualitative data collection and analysis methods within the pragmatic paradigm. The sample consisted of 30 primary school teachers selected from 10 primary schools in Mbire District using stratified proportional random sampling. The major findings of the study revealed that teachers lacked the necessary training and support to effectively integrate school-based projects, despite their positive attitudes towards project-based learning. The study found that 100% of teachers required training programs to enhance their skills in integrating school-based projects. Based on the findings, the study recommends that the Ministry of Education provide comprehensive training programs, mentorship initiatives, and ongoing support to build teachers' confidence and competences. Further studies can investigate the impact of project-based learning on student learning outcomes and explore strategies for scaling up project-based learning in primary schools.

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RESEARCH TOPIC: TEACHERS' PREPAREDNESS TO INTEGRATE SCHOOL BASED PROJECTS AT PRIMARY SCHOOL LEVEL

CHAPTER 1

1.0 INTRODUCTION

The integration of school-based projects in primary school education has been widely recognized as an effective approach to fostering hands-on learning, critical thinking, and problem-solving skills among students. However, the success of such projects hinges on teachers' preparedness to design, implement, and assess them effectively. This study investigates the level of preparedness among primary school teachers in Zimbabwe to integrate school-based projects in their teaching practices. Studies reveal that while teachers acknowledge the importance of project-based learning, they face challenges such as inadequate training, limited resources, and high pupil-to-teacher ratios, which hinder their preparedness to integrate school-based projects. The study recommends capacity-building programs for teachers, provision of resources, and review of curriculum policies to enhance teachers' preparedness and promote effective project-based learning in Zimbabwean primary schools.

1.1 Background of the Study

School-based projects have become an essential part of modern education, aiming to develop students' skills and knowledge through practical experiences. Effective integration of these projects relies heavily on teachers' preparedness. In Zimbabwe, the primary school curriculum has undergone significant reforms in recent years, with a shift towards a more student-centered and project-based approach (Ministry of Primary and Secondary Education, 2015). The new curriculum emphasizes the development of skills such as critical thinking, problem-solving, and collaboration, in addition to subject content knowledge (Zimbabwe Schools Examination Council, 2020). The Zimbabwean government has highlighted the importance of project-based learning in achieving these goals, encouraging schools to integrate school-based projects into their teaching and learning practices (Ministry of Primary and Secondary Education, 2019). However, the successful implementation of project-based learning relies heavily on teachers' preparedness to design and deliver effective projects (Chimbuya & Chimbuya, 2015).

Despite the importance of teacher preparedness, research suggests that many primary school teachers in Zimbabwe lack the necessary training and support to effectively integrate school-based projects into their teaching practices (Moyo & Moyo, 2018). This study aims to investigate teachers' preparedness to integrate school-based projects at the primary school level in Zimbabwe, exploring the challenges faced and support systems in place.

1.2 The Curriculum Infrastructure

The Heritage Based Curriculum is programmed into levels of learning that constitutes primary and secondary education. The HBC framework adopts the educational levels as in the previous framework. The organisation of the Zimbabwe school system spans the years from Infant to Upper Secondary School Level. The HBC is organised in Levels and

Modules. The Primary School Level comprises of the Infant School and Junior School modules and the Secondary School Level is comprised of Lower Secondary School and Upper Secondary modules. The Infant school module is a 4-year module from ECDA to Grade2, while Junior school module runs for 5years from Grade3 to Grade7. The Infant and Junior school modules constitute primary education and its duration is 9years. During the Primary School cycle learners can be channeled to academies that nurture and develop their identified competencies while they continue with their primary school education. Transition to secondary education follows completion of primary school education.

Identification of pupils' achievements on targeted skills is to start from ECD through implementation of school based continuous learning activities, such as the project and learner profiling. The project will be a critical component to identify and nurture skills development that will help place pupils on suitable pathways. Learner profiling is also to be strengthened and assist in certification. Certification, at the point of readiness by relevant bodies is carried out at all levels.

1.3 The Heritage-based education curriculum in Zimbabwe

The time frame for the heritage-based curriculum framework is 2024 to 2030. Under this curriculum, all learners at secondary school will now be placed on a two-route pathway of their choice, determined by whether they want to engage in academic pursuit or want to acquire vocational skills (MoPSE Heritage-based Curriculum Framework 2024-2030).

All learners at secondary schools will now be placed in a two-route pathway of their choice to be determined on whether they want academic pursuit or they want to acquire vocational skills as the Government begins to implement the Heritage-Based Curriculum Framework 2024 to 2030 that was recently adopted by Cabinet in 2024. The framework also entails that an Ordinary Level pupil will have to take up five compulsory subjects with an option of three

more, while those in Advanced Level are obliged to take three subjects determined by their career pathway. This means the days when some pupils would take up a huge number of subjects are now gone. According to a circular prepared by Secretary of Primary and Secondary Education, Mr. Moses Mhike, the primary objective of the Heritage Based Curriculum is to ensure that pupils acquire skills, values and attitudes for life and for work through integrating and reinforcing a strong scientific and technological bias as part of the Government's skills development strategy (Secretary's Circular number 4 of 2024).

To avoid any education wastage, the Heritage-Based Curriculum accommodates a two-route progression system as pupils enroll for Form 1. Route 1 is for those who want to progress to "A" level then university. Route 2 is for those who want to acquire vocational skills for life and for work. Route 2 pupils will follow the Zimbabwe National Qualifications Framework's skills pathway under Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development. They do HEXCO courses, National Foundation Certificate (NFC) at Form 4 and Nation Certificate (NC) after Form 4 using the module," reads the circular. "Forms 5 and 6 pupils study learning areas according to the career pathway. A pupil is placed into a pathway of choice using the acquired competencies (knowledge, skills and values) and profile record. All Learning Areas have the same weight. The curriculum promotes five pathways which are Science, Technology, Engineering, and Mathematics (STEM); Visual and Performing Arts; Technical and Vocational Education and Training; Humanities; and Commercials."

The five subjects that will be compulsory from Form One to Four are English Language, Mathematics, Indigenous Language, Combined Science and Heritage Studies. In addition, pupils may also study following categories: Sciences which include Computer Science (Form 1 to 4), Geography (Form 1 to 4), Physics (Form 3 to 4), Chemistry (Form 3 to 4) Biology (Form 3 to 4), Statistics (Form 3 to 4), Additional Mathematics Forms 3 to 4) Pure

Mathematics (Forms 3 to 4) and Pure Mathematics. Other categories include Languages, Humanities, Commercials, Technical and Vocational Education and physical education and arts. According to the implementation modalities, all the 2024 examination classes, that is, Grade 7, Form 4 and Form 6 will continue with the old curriculum and its assessment modalities, the 2024 examination classes, will continue with CALAs to complete the assessment cycle and submit to ZIMSEC. The cycle also stipulates that non — examination classes will commence School Based Projects in May 2024 and each pupil at whatever level will do one project per learning area per year and Grade 6, Form 3 and Form 5s 2024 school based projects will be considered as part of coursework mark to ZIMSEC in 2025. Learners in primary schools will now be offered a maximum of six learning areas instead of a minimum of 27. In line with the Second Republic policy of leaving no one and no place behind, the Government is also ensuring the provision of conducive teaching and learning infrastructure in rural areas, small-scale and commercial farming areas as well as old and new resettlement areas.

“The heritage refers to the natural endowments of Zimbabwe; flora, fauna, water, minerals and human resources; that our education should exploit. The underlying principle is an education system that produces goods and services useful to the economy, based on heritage,” reads the circular number 4 of 2024. The circular also directs that indigenous language should be used in teaching infants.

1.4 The pillars of Heritage-based education

According to the Draft Curriculum Framework for Primary and Secondary Education 2024-2030 (2024), Cabinet informs the nation that the Implementation Plan will commence in May 2024 and is anchored on the five main pillars, namely Programmes/ Curriculum

infrastructure; Staffing or workforce infrastructure; Physical and digital infrastructure; Regulatory and legal infrastructure; and the Financial infrastructure.

1.5 The importance of Heritage-Based education in Zimbabwe

According to the Secretary's Circular Number 4 of 2024 (dated April 2023), the inculcation of our heritage as Zimbabweans will also produce graduates who are proud of their identity and participate peacefully in sustainable development. Heritage-based learning incorporates the cultural, historical, and social contexts into the learning process. Heritage education brings out the best in children and deepens classroom learning. Alongside opportunities for informal learning, most museums and heritage sites work closely with schools and colleges to help children and young people learn outside the confines of the classroom. The philosophy of Ubuntu is also valued under Heritage-based curriculum. Other purposes of cultural heritage education include; helping students to discover their historical and cultural heritage, enabling them to gain knowledge and experience through the discovery of cultural heritage, helping them to understand the difference between local and global culture by going back and forth. Cabinet recently approved the heritage-based curriculum framework for 2024-2030 in 2024. It marks the first time the Government has reviewed the primary and secondary school curricula since the inception of the new curriculum in 2015.

The Zimbabwe government has issued comprehensive guidelines on implementing the Heritage Based Education 2024 -2030 curriculum ahead of the schools opening for the second term 2024. Primary and Secondary Education permanent secretary Moses Mhike issued the guidelines through the Secretary's Circular Number 4 of 2024 dated April 23 which is directed to education sector stakeholders.

These include senior education officials from district to national levels, heads of primary and secondary schools, correspondence and independent colleges, staff associations and unions,

responsible authorities, church education secretaries, vice chancellors of universities, principals of teachers' colleges, polytechnics, vocational training centres, and industrial training colleges. The guidelines mark the introduction of the Heritage Based Education curriculum framework 2024-2030 which is aligned to the National Development Strategy 1 and 2 (2021 – 2030) and replaces the Secretary's Circular number 2 of 2017 which was the guiding document from 2015 to 2022. The Heritage-based education curriculum is expected to present school heads, teachers, and the entire sector with an opportunity to develop professionally and improve learning outcomes. Heritage refers to natural endowments such as flora, fauna, water, mineral, and human resources which the education sector is expected to exploit and produce goods and services useful to the economy. The Heritage based Curriculum is, therefore, delivered conscious of the environment it seeks to transform with a mandate of ensuring that pupils acquire skills, values, and attitudes for life and work. It integrates and reinforces a strong scientific and technological bias as part of the government's skills development strategy. The new curriculum aims to produce highly competent pupils with a Zimbabwean outlook to promote and cherish the national identity, prepare pupils for life and work in an innovation and knowledge-driven economy. It also aims to foster lifelong learning, prepare pupils for participatory citizenship, peace, and sustainable development, and orient pupils for participatory leadership and voluntary service while cherishing the Zimbabwean philosophical orientation of unhu/ubuntu (humanity). A key concept associated with unhu/ubuntu is behaviour and interaction in the context of various social roles.

The Heritage-Based Curriculum syllabi requirements for projects at primary school level in Zimbabwe: General Requirements i.e. Projects should be learner-centered, interactive, and relevant to Zimbabwean culture and context; emphasis on critical thinking, problem-solving, creativity, and innovation; integration of multiple subjects (e.g., Social Studies, Science,

Language); and community engagement and participation encouraged, MoPSE Heritage-based curriculum Framework (2023).

1.6 Subject-Specific Project Requirements

Grade 1-3: Social Science: Local community profiles, traditional practices, and cultural heritage. Science: Environmental conservation, basic technology, and health-related projects. Language: Storytelling, poetry, and drawing based on Zimbabwean folklore. Grade 4-7: Social Science: Historical sites, cultural practices, and community development projects; research and present on national heroes and heritage figures; and create a community map highlighting historical and cultural landmarks, ZIMTA (2023). Science and Technology: Environmental conservation, renewable energy, and health-related projects; design and build a model of a traditional Zimbabwean structure; conduct experiment on local plant-based medicines; and develop a solar-powered system for a rural community. Language: Creative writing, drama, and presentations on Zimbabwean heritage; Write a short story or poem on Zimbabwean culture and heritage; Create a visual representation of a Zimbabwean myth or legend; and develop a script for a play on Zimbabwean history. Mathematics: Calculate the cost of building a traditional Zimbabwean hut, measure and design a community garden, and develop a budget for a school event celebrating Zimbabwean heritage. Life Skills include: create a traditional Zimbabwean craft or artifact, prepare a traditional Zimbabwean meal, develop a plan for a community clean-up initiative, teacher feedback, and community feedback.

Project-Based Learning Skills include research and information literacy, critical thinking and problem-solving, creativity and innovation, Communication and collaboration, and Community engagement and social responsibility, MoPSE Heritage-based curriculum Framework 2024-2030. Project Evaluation Rubrics are Content knowledge (40%), Process

and methodology (30%), Presentation and communication (20%), and Impact and relevance (10%). Teacher Support include guidance on project selection and planning, ongoing feedback and assessment, provision of resources and materials, and encouragement of creativity and innovation, MoPSE Heritage-based curriculum Framework (2023). Time Allocation: Grade 1-3: 2-3 hours/week for project work, Grade 4-7: 3-4 hours/week for project work. Term 1: Project planning and research (4 weeks), Term 2: Project implementation and execution (8 weeks) and Term 3: Project presentation and evaluation (4 weeks), ZIMSEC (2023).

Project-Based Learning Objectives include develop critical thinking, problem-solving, and creativity skills, foster research and information literacy, enhance communication, collaboration, and presentation skills, and promote community engagement, social responsibility, and cultural awareness. Project Requirements are: Learner-centered and interactive project, Integration of multiple subjects (e.g., Social Studies, Science, Language), Community engagement and participation encouraged, and emphasis on Zimbabwean culture, history, and heritage. Project Examples: Creating a local community map, Developing a traditional recipe book, Designing a model of a historical site, Creating a public service announcement on environmental conservation, and Writing a short story on Zimbabwean folklore. Assessment Tools include Project reports, Presentations, Posters, Models, and Peer assessment and self-assessment, MoPSE Heritage-based Curriculum Framework (2023).

1.7 Statement of the Problem

Despite the importance of school-based projects, teachers' preparedness to integrate them at the primary school level remains a concern. Despite the recognized benefits of project-based learning in enhancing students' critical thinking, creativity, and problem-solving skills

(Thomas, 2000; Wiggins & McTighe, 2005), primary school teachers in Zimbabwe face significant challenges in integrating school-based projects into their teaching practices. Research has shown that teachers' preparedness is a critical factor in the successful implementation of project-based learning (Mavuru, 2017; Chikoko, 2018). However, studies have revealed that primary school teachers in Zimbabwe lack sufficient training in project-based learning, leading to difficulties in designing and implementing effective projects (Chikoko, 2018). Furthermore, the Zimbabwean education system faces challenges such as limited resources, inadequate teacher training, and high pupil-to-teacher ratios, which exacerbate teachers' lack of preparedness (Moyo, 2019). As a result, the potential benefits of project-based learning remain unfulfilled, and students may miss out on opportunities for hands-on learning and skill development. This study aims to investigate the level of preparedness among primary school teachers in Zimbabwe to integrate school-based projects and identify strategies to enhance their preparedness.

1.8 Research Objectives

The research objectives are to assess teachers' level of preparedness to integrate school-based projects, identify challenges faced by teachers in integrating school-based projects, and explore support systems available to enhance teachers' preparedness.

1.9 Research Questions

What is the level of teachers' preparedness to integrate school-based projects at the primary school level?

What training and support do primary school teachers in Zimbabwe need to effectively integrate school-based projects into their teaching practices?

How do primary school teachers' attitudes and beliefs towards project-based learning influence their preparedness to integrate school-based projects?

1.10 Sub-Problems

What specific knowledge and skills gaps exist among primary school teachers in integrating school-based projects, and how do these gaps impact their level of preparedness?

What are the major challenges faced by primary school teachers in Mbire District, Zimbabwe, in integrating school-based projects, and how do these challenges affect the implementation of project-based learning?

What support systems (training programs, mentorship initiatives, resource allocation) are currently available to enhance primary school teachers' preparedness to integrate school-based projects, and how effective are these support systems in addressing teachers' needs?

1.11 Assumptions

Teachers' preparedness to integrate school-based projects is a critical factor in the successful implementation of project-based learning in primary schools.

Primary school teachers in Zimbabwe have the potential to effectively integrate school-based projects into their teaching practices with adequate training and support.

The Zimbabwean education system supports the integration of project-based learning in primary schools, and teachers are expected to implement project-based learning as part of their teaching practices.

Teachers' attitudes and beliefs towards project-based learning influence their preparedness to integrate school-based projects.

1.12 Significance of the Study

This study will provide insights into teachers' preparedness, highlighting areas for professional development and informing strategies to enhance project-based learning at the

primary school level. This study will contribute to the understanding of teachers' preparedness to integrate school-based projects in Zimbabwe, informing policy and practice in the country's education sector.

1.13 Limitations of the study

This study focuses on primary school teachers in Mbire District, Mash Central Province, with a sample size of 10. The study will only investigate teachers' preparedness and not the impact of projects on student learning.

1.14 Delimitations of the study

The study is guided by the Teacher Preparedness Framework, which includes dimensions such as subject matter knowledge, pedagogical knowledge, and project-based learning skills.

Geographic Delimitation: The study will focus on primary schools in rural areas of Zimbabwe, specifically in the Mashonaland Central Province, Mbire District. Population

Delimitation: The study will target primary school teachers with at least two years of teaching experience, excluding probation teachers and school administrators Content Delimitation:

The study will focus on teachers' preparedness to integrate school-based projects in Mathematics, excluding other subjects like English, Heritage-Social Studies, and Languages.

1.15 Definition of Terms

Heritage Based Curriculum (HBC)

Heritage-based curriculum is an educational approach that centres on the heritage and experiences of a country. Its goal is to provide pupils with a curriculum that is reflective of and relevant to their own backgrounds, identities and the country's resources thereby creating an educational experience that is more inclusive, representative, and meaningful for pupils from that heritage background. It can lead to increased engagement, better academic

outcomes and stronger connections between school and community (MOPSE Curriculum Framework, 2024).

Curriculum

Curriculum is the sum total of all learning experiences and opportunities that are provided to pupils in the context of formal and non-formal education (Mola & Mengistie, 2022). According to Pinar, W. F. (2014), Curriculum is a set of planned interactions through which teachers and pupils engage in content, instruction, and assessment in order to achieve personally and socially valued aims. Therefore, a curriculum is a planned and systematic approach to education that outlines what pupils will learn, how they will learn it and how their learning will be assessed.

Curriculum Framework

A Curriculum Framework is a systematic and structured policy guide which schools use to plan and develop their educational programmes. It comprises a set of interlocking components, including learning experiences, skills, values and principles underpinning the curriculum, learning outcomes, learning areas, nature of the learning context and assessment procedures in different learning areas across the curriculum (MoPSE Curriculum Framework, 2015).

Teacher preparedness

Teachers' knowledge, skills, and attitudes necessary for effective project integration. "Teacher preparedness refers to the extent to which teachers possess the necessary knowledge, skills, and attitudes to effectively implement a specific curriculum or instructional approach." (Villegas-Reimers & Reimers, 2020, p.12). "Teacher preparedness involves the teacher's ability to create an environment that supports student learning, including the ability to design

and implement engaging lessons, assess student progress, and adapt instruction to meet the needs of diverse learners." (Darling-Hammond, 2017, p. 5).

School-based projects

Student-centered, inquiry-based activities that align with curriculum goals. "School-based projects refer to student-centered, inquiry-based learning experiences that are integrated into the regular school curriculum and are designed to promote deep learning and understanding of important concepts and skills." (Thomas, 2000, p. 3). "School-based projects are extended learning experiences that require students to apply what they have learned in the classroom to real-world problems or scenarios, often involving collaboration, critical thinking, and problem-solving." (Walker & Adams, 2017, p. 10).

School Based Continuous Assessments (SBCA)

It is a system of measurement of using different assessment modes to establish what pupils have achieved during a teaching and learning process. Broadly, the SBCA is simply all forms or modes of assessment that can be undertaken by any learner or teacher. The SBCA focuses on School-Based Continuous Learning (SBCL) to ensure acquisition of competences through creative, innovative and hands-on activities. Under SBCL, pupils work through material on their own schedule, with options to accelerate or take more time as needed and as advised by the teacher. Examples of SBCL activities are hands-on activities, internships, school - based projects, class discussions, quizzes, presentations, and demonstrations. The teacher makes regular checks by meeting frequently with pupils to provide guidance, feedback, and support. SBCL is to ensure acquisition of knowledge, skills, values, attitudes and dispositions through creative, innovative and hands-on activities during every learning process and opportunity; and continuously assessed by the teacher, MoPSE Curriculum Framework (2024:14).

Project-based learning

Project-based learning (PBL) is an instructional approach that involves students working on real-world problems and projects that require critical thinking, creativity, and problem-solving skills (Thomas, 2000; Wiggins & McTighe, 2005). In PBL, students are encouraged to take ownership of their learning, work collaboratively, and engage in inquiry-based learning to develop deep understanding of subject matter (Larmer & Mergendoller, 2010; Bell, 2010). PBL is characterized by: Real-world applications (Thomas, 2000), Student-centered learning (Wiggins & McTighe, 2005), Inquiry-based learning (Larmer & Mergendoller, 2010), Collaboration and teamwork (Bell, 2010), Emphasis on process and product (Thomas, 2000).

1.16 Summary

This chapter has the following: introduces the research topic: Teachers' preparedness to integrate school-based projects at primary school level. Background to the study: Project-based learning enhances critical thinking, creativity, and problem-solving skills. Statement of the problem: Primary school teachers in Zimbabwe lack preparedness to integrate school-based projects. Research Questions/ Sub-problems/ Hypotheses: What is the level of preparedness among primary school teachers?, What challenges do teachers face in implementing school-based projects?, How do teachers' attitudes and beliefs influence their preparedness? Assumptions: Teachers' preparedness is crucial for effective project-based learning. Significance of the study: Study informs teacher training and curriculum development. Limitations of the study: Limited to urban primary schools in Harare and Bulawayo provinces. Delimitations of the study: Focus on Mathematics and Science subjects, and teachers with ≥ 2 years experience. Definition of terms: Project-based learning, school-based projects, teachers' preparedness.

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews existing literature on teachers' preparedness to integrate school based projects at primary school level focusing on Zimbabwean context. It examines the level of preparedness, required training and support, and the influence of the teachers' attitudes and beliefs on project based learning under Heritage-based curriculum 2024-2030. The integration of school-based projects in primary school education has been widely recognized as an effective approach to enhance student learning outcomes. However, the success of project-based learning depends largely on teachers' preparedness to design and implement projects that align with curriculum goals. Despite the growing body of research on project-based learning, there is a need to investigate teachers' preparedness to integrate school-based projects at the primary school level, particularly in the Zimbabwean context. This chapter reviews the relevant literature on teachers' preparedness, project-based learning, and related factors to provide a theoretical framework for the study. It synthesizes the findings of previous research, identifies gaps in the literature, and establishes the research problem. By examining the current state of knowledge, this chapter lays the foundation for the investigation of primary school teachers' preparedness to integrate school-based projects in Zimbabwe.

2.1 The Heritage-based curriculum 2024-2030

Zimbabwe's new curriculum emphasizes: Cultural heritage, patriotism, and skills development (Ministry of Primary and Secondary Education, 2024); and Teacher training and resources for effective implementation (Chinhengo, 2023; Moyo, 2023). The Heritage Based Curriculum (HBC) Framework is the main reference document informing the development and revision of the syllabi, designing and use of learning resources and the assessment of

learning from year 2024 to 2030. It is building on the strengths of the preceding Curriculum Framework for Primary and Secondary Education 2015 to 2022 and adopting a Heritage Based Education thrust.

According to MoPSE Curriculum Framework (2024), Heritage refers to tangible and intangible natural endowments such as social and historical legacy, beliefs, languages, land, flora, fauna, water, minerals and cultural values that are passed down from one generation to the next. The underlying principle is an education system that produces goods and services useful to the economy, based on heritage and conscious of the environment. The Heritage Based Curriculum for Primary and Secondary Education 2024 - 2030 emphasises the teaching of both theory and practice, balancing the acquisition of knowledge and skills. It aims to produce pupils with relevant competencies such as skills, knowledge, values, attitudes and disposition that are key to national development. Pupils will therefore be channeled through different pathways as per their strengths and abilities from Early Childhood Development (ECD) to Advanced Level, to initiate and enhance creativity and innovation for socio-economic transformation. HBC emphasises on strengthening measures to mould these pupils to cherish and practice the Zimbabwean philosophical orientation of Ubuntu/Unhu/Vumunhu. The HBC integrates and reinforces a strong scientific and technological bias promulgated through STEAM as part of the Government's skills development strategy, focusing on the five key sectors of the economy. It creates a base for human capital development through acquisition of knowledge, skills and values for employment creation and furthering education in higher and tertiary institutions. The HBC accommodates a two route progression system for all pupils. Route one is for pupils who choose to progress to “A” level, then tertiary. Route two is for pupils who choose to follow the Zimbabwe National Qualifications Framework’s (ZNQF) skills pathway. The pupils do vocational courses whilst at school and are trade tested at National Foundation Certificate and

National Certificate levels. These are equivalent to “O” and “A” levels respectively. The pupils can then enroll in polytechnics, Industrial Training Colleges, Vocational Training Colleges, Agricultural Colleges and other training institutions for further skills development courses for certification or just to acquire skills. The school should facilitate the process. The curriculum is aligned to Higher and Tertiary Heritage Based Education 5.0. This Heritage Based Curriculum Framework for Primary and Secondary Education 2024-2030, emphasises what pupils are expected to know, understand, value, demonstrate and the preservation of indigenous knowledge as a result of their learning experiences in schools and non-formal education settings. Its fundamental purpose is to provide a structure around which schools can build educational programmes that ensure pupils achieve desired learning outcomes. This framework identifies learning areas and assessment processes for all pupils. It is intended to guide schools and stakeholders on the curriculum process in a rapidly changing environment.

The development of this framework is driven by the growing urgency among policymakers and educators to adequately prepare Zimbabwean pupils for the 21st century skills, increased public and parental concerns regarding the relevance of education, and the necessity to respond to the needs of industry and commerce. It is also driven by trends in global education standards that need benchmarking (MoPSE Curriculum Framework, 2024).

2.2 The level of teachers' preparedness to integrate school-based projects at primary school level.

Studies have shown that teachers' preparedness to integrate project-based learning varies. A study by Chivore (2023) found that 60% of primary school teachers in Zimbabwe reported having some knowledge of project-based learning, but only 20% felt confident in implementing it. Similarly, a study by Moyo (2022) revealed that primary school teachers in

Zimbabwe faced challenges in integrating project-based learning due to lack of resources, training, and support.

The literature on teacher preparedness for project-based learning in Zimbabwean primary schools highlights several key themes. Firstly, research suggests that teacher preparedness is crucial for effective implementation of project-based learning (Mudyahoto & Mhaka, 2023). However, studies also indicate that primary school teachers in Zimbabwe lack the necessary preparedness, citing limited training and inadequate resources as major challenges (Chireshe et al., 2023; Mapfumo et al., 2023). Thomas (2000) emphasizes the importance of teachers' preparedness in project-based learning, stating that "teachers must be prepared to create an environment that supports project-based learning". Wiggins and McTighe (2005) concur, noting that "teachers need to be well-prepared to design and manage project-based learning". However, Larmer and Mergendoller (2010) suggest that teachers often lack the necessary training and support to effectively implement project-based learning. Studies indicate that teachers' preparedness is crucial for effective project-based learning (PBL) integration (Thomas, 2000; Wurdinger, 2005). In Zimbabwe, research reveals: limited resources and inadequate training hinder PBL implementation (Moyo, 2019; Ncube, 2020), teachers lack confidence in PBL due to insufficient support (Chivore, 2022), and also Primary school teachers require contextualized training programs (Mapfumo, 2022).

Evaluation: The literature highlights the crucial role of teachers' preparedness in project-based learning. However, there is a gap in research on the specific challenges faced by primary school teachers in Zimbabwe. Furthermore, the literature suggests that school-level factors, such as leadership and resource support, play a significant role in enhancing teacher preparedness (Machingambi et al., 2023). Additionally, teacher-level factors, including attitudes and beliefs, also influence teacher preparedness (Mudyahoto & Mhaka, 2023).

2.3 The training and support needed by primary school teachers in Zimbabwe to effectively integrate school-based projects into their teaching practices.

Research suggests that primary school teachers require training and support in areas such as: Project-based learning pedagogy (Chivore, 2023), Curriculum design and implementation (Moyo, 2022), Technology integration (Zimbabwe Ministry of Primary and Secondary Education, 2023), and Assessment and evaluation (Zimbabwe Schools Examination Council, 2023). A study by Ncube (2022) recommended that teachers receive ongoing professional development, coaching, and mentoring to enhance their preparedness.

The literature also highlights the need for context-specific training programs and resource support to enhance teacher preparedness (Chireshe et al., 2023; Mapfumo et al., 2023). Evaluation: The literature provides valuable insights into teacher preparedness for project-based learning in Zimbabwean primary schools. However, there are some limitations, including: limited generalizability due to small sample sizes (Mudyahoto & Mhaka, 2023; Chireshe et al., 2023), lack of longitudinal studies to examine the long-term impact of teacher preparedness on student learning outcomes, limited focus on teacher-level factors, such as attitudes and beliefs. Bell (2010) argues that teachers need ongoing training and support to develop the necessary skills for project-based learning. Mergendoller et al. (2006) found that teachers who received training and support were more likely to implement project-based learning successfully.

Teachers require training and support to effectively integrate PBL into their teaching practices. The Zimbabwe's Heritage-based Curriculum (2024-2030) emphasizes: teacher training and capacity building (Ministry of Primary and Secondary Education, 2024), and contextualized training programs addressing Zimbabwean teachers' specific needs (Chinhengo, 2023).

Evaluation: The literature emphasizes the importance of training and support for teachers. However, there is a need to investigate the specific training needs of primary school teachers in Zimbabwe.

2.4 The influence of teachers' attitudes and beliefs towards project-based learning on their preparedness to integrate school-based projects at primary school level.

Teachers' attitudes and beliefs significantly impact their preparedness to integrate project-based learning. A study by Mapolisa (2022) found that teachers with positive attitudes towards project-based learning were more likely to implement it. Another study by Nyathi (2023) revealed that teachers' beliefs about student-centered learning and collaboration influenced their adoption of project-based learning. Teachers' attitudes and beliefs significantly influence their preparedness to integrate PBL (Han & Bhattacharya, 2017). Research in Zimbabwe indicates: teachers' perceptions of PBL's effectiveness and alignment with the curriculum affect their willingness to adopt this approach (Machingura, 2020), and teachers' attitudes towards Project-Based Learning are shaped by their teaching experiences and school culture (Nyota, 2021). Bell (2010) suggests that teachers' attitudes and beliefs about project-based learning influence their implementation. Thomas (2000) notes that teachers' beliefs about student learning and motivation impact their approach to project-based learning. Evaluation: The literature highlights the importance of teachers' attitudes and beliefs. However, there is a need to investigate the specific attitudes and beliefs of primary school teachers in Zimbabwe.

2.5 The current state of project-based learning in primary schools in Zimbabwe.

Project-based learning (PBL) is gaining traction in Zimbabwean primary schools, but its implementation remains limited (Chivore, 2023). Despite its potential benefits, Project-Based Learning (PBL) remains largely underutilized in Zimbabwean primary schools.

Several factors contribute to this limited implementation. The challenges include: Lack of teacher training: Many teachers lack the necessary skills and knowledge to design and implement effective PBL experiences (Moyo, 2022). Insufficient resources: Limited access to technology, internet, and materials hinders the execution of project-based learning (Zimbabwe Ministry of Primary and Secondary Education, 2023). Curriculum constraints: The rigid curriculum framework and emphasis on rote memorization leave little room for flexible, inquiry-based learning (Chivore, 2023). Assessment concerns: Teachers struggle to assess student learning in PBL, as it deviates from traditional summative evaluations (Tshuma, 2020). Time constraints: Teachers perceive PBL as time-consuming, making it difficult to integrate into already packed schedules (Ncube, 2021). School culture: Traditional teaching methods and school cultures often prioritize didactic instruction over student-centered learning (Machingambi, 2019). Policy support: Limited policy support and guidelines from the Ministry of Primary and Secondary Education hinder widespread adoption (ZIMSEC, 2023).

The consequences include: Missed opportunities: Students miss out on developing essential skills, such as critical thinking, problem-solving, and collaboration. Teacher dissatisfaction: Teachers may feel frustrated with the limitations of traditional teaching methods. Curriculum stagnation: The lack of innovation in teaching and learning approaches hinders curriculum renewal. By addressing these challenges and implementing targeted solutions, Zimbabwean primary schools can harness the potential of Project-Based Learning to enhance student learning outcomes and prepare learners for the 21st century. A study by Moyo (2022) found that 70% of primary schools in Zimbabwe have introduced PBL, but only 30% have fully integrated it into their curriculum. Factors hindering PBL adoption include lack of resources, training, and support (Zimbabwe Ministry of Primary and Secondary Education, 2023).

2.6 The key factors that influence teachers' preparedness to integrate school-based projects.

Teacher Training and Support (Ncube, 2022): Effective training programs enhance teachers' confidence and competence. Ongoing support and mentoring facilitate successful project integration. Training should focus on project-based learning design, implementation, and assessment. Collaborative professional development opportunities foster sharing of best practices.

Teacher Attitudes and Beliefs (Mapolisa, 2022): Teachers' attitudes toward project-based learning impact implementation. Beliefs about student-centered learning and inquiry-based approaches influence preparedness. Teacher enthusiasm and motivation are crucial for successful project integration. Addressing concerns and misconceptions through open communication and training is essential.

School Resources and Infrastructure (Moyo, 2022): Availability of technology, internet, and materials affects project feasibility. Suitable learning spaces and equipment facilitate effective project execution. Budget allocation for projects and resource management impact preparedness. Partnerships with local organizations and industries can provide additional resources.

Curriculum Design and Flexibility (Zimbabwe Schools Examination Council, 2023): Curriculum flexibility allows for project integration and innovation. Clear curriculum guidelines and standards ensure alignment with project goals. Interdisciplinary connections and real-world applications enhance project relevance. Regular curriculum review and updates ensure alignment with changing educational needs.

Parental and Community Involvement (Nyathi, 2023): Parental support and engagement enhance project success. Community partnerships provide authentic learning experiences

and resources. Involving stakeholders in project planning and implementation fosters ownership. Effective communication strategies keep parents and the community informed. Additional Factors are School leadership and administrative support, Teacher workload and time management, assessment and evaluation methods, and Student motivation and engagement.

Recommendations: Provide comprehensive teacher training and ongoing support, foster positive teacher attitudes through open communication, ensure adequate school resources and infrastructure, review and revise curriculum frameworks for flexibility, and encourage parental and community involvement. By addressing these factors, educators and policymakers can enhance teachers' preparedness to integrate school-based projects, ultimately improving student learning outcomes.

2.7 The implications of teachers' lack of preparedness to integrate school-based projects on student learning outcomes

Reduced Student Engagement and Motivation (Chivore, 2023): Lack of project-based learning leads to tedious and repetitive instruction. Students become disengaged, demotivated, and disconnected from learning. Reduced enthusiasm hampers academic progress and overall educational experience. Long-term effects include decreased interest in learning and lower academic achievement.

Limited Development of Critical Thinking and Problem-Solving Skills (Moyo, 2022): Traditional teaching methods prioritize memorization over critical thinking. Students miss opportunities to develop essential skills in analysis, synthesis, and evaluation. Inability to apply knowledge to real-world problems hinders future success. Deficits in critical thinking and problem-solving skills impact academic and professional performance.

Poor Academic Performance (Ncube, 2022): Ineffective project integration leads to superficial understanding of concepts. Students struggle to apply knowledge, resulting in poor academic performance. Low grades and decreased academic achievement erode student confidence. Long-term consequences include decreased opportunities for higher education and career advancement.

Decreased Student Creativity and Innovation (Mapolisa, 2022): Lack of project-based learning stifles creativity and innovation. Students are not encouraged to think outside the box or explore new ideas. Limited opportunities for design thinking, prototyping, and experimentation. Consequences include reduced entrepreneurial spirit and decreased ability to adapt to changing environments.

Negative Impact on Student Attitudes towards Learning (Nyathi, 2023): Unengaging instruction leads to negative attitudes towards learning. Students view education as irrelevant, boring, or unimportant. Decreased motivation and interest in learning lead to disengagement. Long-term effects include increased dropout rates and decreased academic aspirations. The additional Consequences are: reduced collaboration and teamwork skills, limited development of communication and presentation skills, decreased ability to adapt to technological advancements, and negative impact on student mental health and well-being

Recommendations: Provide comprehensive teacher training on project-based learning, encourage collaborative planning and peer support, allocate resources for project materials and technology, foster positive school culture and climate, and monitor and evaluate project effectiveness. By addressing teachers' lack of preparedness to integrate school-based projects, educators and policymakers can mitigate these negative implications and enhance student learning outcomes.

2.8 Gaps in Literature

Existing literature lacks: in-depth examinations of Zimbabwean primary school teachers' preparedness for Project-based learning; and specific training needs required for effective integration of Project based learning under the Heritage-based curriculum 2024-2030.

2.9 Contextualisation of the Literature to the Problem:

The literature highlights the importance of teachers' preparedness in integrating school-based projects (Thomas, 2000; Wiggins & McTighe, 2005; Bell, 2010). However, the Zimbabwean context presents unique challenges, such as limited resources and inadequate teacher training (Mudyahoto & Mhaka, 2023). A recent study by the Zimbabwe Ministry of Primary and Secondary Education (2023) revealed that primary school teachers lack the necessary skills and knowledge to effectively implement project-based learning. Furthermore, research by Chireshe et al. (2023) found that Zimbabwean primary school teachers face challenges in accessing relevant resources and support for project-based learning. Additionally, a study by Mapfumo et al. (2023) highlighted the need for teacher training programs that focus on project-based learning in Zimbabwean primary schools. The literature also emphasizes the importance of school-level factors, such as leadership and resources, in supporting project-based learning (Mergendoller et al., 2006). In the Zimbabwean context, research by Machingambi et al. (2023) found that school leaders play a crucial role in promoting project-based learning in primary schools.

2.10 Establishing Problem in Knowledge:

Despite the importance of project-based learning in enhancing student learning outcomes, research suggests that primary school teachers in Zimbabwe lack the necessary preparedness to effectively integrate school-based projects (Mudyahoto & Mhaka, 2023). A recent study by the Zimbabwe Ministry of Primary and Secondary Education (2023)

revealed that only 30% of primary school teachers in Zimbabwe have received training on project-based learning. Furthermore, research by Chireshe et al. (2023) found that primary school teachers in Zimbabwe face challenges in accessing relevant resources and support for project-based learning. This knowledge gap highlights the need for research that investigates the preparedness of primary school teachers in Zimbabwe to integrate school-based projects and identifies strategies for addressing the challenges they face.

Addressing the Problem: This research aims to address the problem of teacher preparedness for project-based learning in Zimbabwean primary schools by: investigating the current level of preparedness among primary school teachers in Zimbabwe (Mudyahoto & Mhaka, 2023), identifying the challenges faced by primary school teachers in integrating school-based projects (Chireshe et al., 2023), exploring strategies for enhancing teacher preparedness for project-based learning, including training programs and resource support (Mapfumo et al., 2023).

By addressing this knowledge gap, this research aims to contribute to the development of effective project-based learning practices in Zimbabwean primary schools, ultimately enhancing student learning outcomes.

2.11 Summary:

This literature review highlights the importance of teachers' preparedness, training, and support for effective Project Based Learning integration. This chapter reviews the literature on teacher preparedness for project-based learning in primary schools, with a focus on the Zimbabwean context. The literature highlights the importance of teacher preparedness in implementing project-based learning, but notes that primary school teachers in Zimbabwe lack the necessary preparedness. Challenges faced by teachers include limited training, inadequate resources, and lack of support from school leaders.

The literature also identifies factors influencing teacher preparedness, including school-level and teacher-level factors. Strategies for enhancing teacher preparedness, such as training programs and resource support, are discussed. The chapter concludes by highlighting the need for further research on teacher preparedness for project-based learning in Zimbabwean primary schools.

Key Points: teacher preparedness is crucial for implementing project-based learning, primary school teachers in Zimbabwe lack preparedness for project-based learning, challenges faced by teachers include limited training, inadequate resources, and lack of support, factors influencing teacher preparedness include school-level and teacher-level factors, strategies for enhancing teacher preparedness include training programs and resource support. Further research is needed on teacher preparedness for project-based learning in Zimbabwean primary sschool.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research paradigm, research design, population, sample, data collection methods, and data analysis procedures used to investigate teachers' preparedness to integrate school-based projects at the primary school level in Mbire District, Mashonaland Central Province, Zimbabwe.

3.1 Research paradigm

The research paradigm can or can not be Pragmatism. Pragmatism focuses on: Practical problem-solving, Understanding real-world contexts, Combining qualitative and quantitative methods, and emphasizing utility and applicability. According to Creswell (2014), it gives emphasis on real-world contexts. There is recognition of complexity, and focus on practical solutions, valuation of multiple perspectives, Patton (2002). By employing Mixed Method Research within the Pragmatic Paradigm, this study provides a comprehensive, nuanced understanding of teachers' preparedness to integrate school-based projects, informing effective strategies for improvement. Mixed Method Research (MMR) combines quantitative and qualitative methods, provides comprehensive understanding of research problem, addresses multiple research questions (Morgan, 2014), and enhances validity and reliability. Triangulation: Combines multiple data sources, enhancing validity; Complementarity: Quantitative and qualitative data complement each other; Expansion: MMR explores aspects of teachers' preparedness not captured by single-method approaches; and Iteration: Findings from one method inform and refine the other, Creswell (2014).

3.2 Research Design

This study employed a mixed-methods approach, combining both quantitative and qualitative data collection and analysis methods. The quantitative approach helped to determine the level

of teachers' preparedness, while the qualitative approach explored the training and support needs, as well as attitudes and beliefs towards project-based learning.

3.3 Population and Sample

There are sixty-six (66) both primary and secondary schools in Mbire District, Mashonaland Central Province, Zimbabwe. There are thirty-nine (39) primary schools in Mbire District. The population consisted of primary school teachers in public schools in Mbire District, Mashonaland Central Province. A purposive sample of 30 teachers (15 males and 15 females) was selected from 10 primary schools in Mbire District. The population consisted of primary school teachers in public schools in Mbire District, Mashonaland Central Province, Zimbabwe. A sample of 30 primary school teachers (15 males and 15 females) was selected for the study from 10 primary schools out of 39 primary schools in Mbire District, Mashonaland Central Province, Zimbabwe. The ten out of thirty-nine primary schools were selected through stratified proportional random sampling. The stratified proportional sampling technique employed ensured representation of both male and female teachers. A sample of 30 teachers (15 male, 15 female) obtained from 10 primary schools in Mbire District, Mashonaland Central Province, Zimbabwe was used during the study.

3.4 Sampling Technique

Purposive sampling was used to select the teachers with experience in the former recently phased out Competence based curriculum which involved learners doing Continuous Assessment Learning Activities(CALAs), MoPSE Curriculum Framework (2015-2022). Additionally, cluster grouping representation was also considered to select the specific school. In Mbire District, schools are grouped into six clusters with varied number of schools depending on geographical setup of the schools Cluster grouping of schools refers to the process of grouping schools into clusters based on various criteria such as geographical

location, school size, student population, and socio-economic factors. The main objective of cluster grouping is to facilitate collaboration, resource sharing, and support among schools within a cluster. Cluster grouping can involve grouping schools into clusters of varied numbers, such as small clusters: 3-5 schools; Medium clusters: 6-10 schools; Large clusters: 11-20 schools.

Stratified proportional Random Sampling: To ensure representation from both male and female teachers, the sample was stratified by gender. The 10 primary schools selected from the 39 primary schools in Mbire District represented all the 6 clusters in the District.

Purposive Sampling: Teachers with experience in integrating Continuous Assessment Learning Activities (CALAs) under Competence based curriculum (MoPSE Curriculum Framework (2015-2022)) were purposefully selected to provide insightful data and 3 teachers per each school were selected. The sample size of 30 teachers is sufficient for a qualitative and quantitative mixed-methods study (Creswell, 2014) and the sample represents a significant percentage of the total teachers in Mbire District.

Primary school teachers with at least 2 years of experience. Teachers who have integrated CALAs in their teaching practices. Male and female teachers to ensure gender representation. Teachers from schools of varied locations and setup for example communal area schools and growth point located schools.

3.5 Sampling Procedure

Obtained a list of 39 primary schools in Mbire District from the District Education Office. Randomly selected 10 primary schools using simple random sampling. Representation of the six clusters was taken into consideration. Identified male and female teachers with experience in doing CALAs at each selected school. Selected 15 male and 15 female teachers using stratified random sampling. Ensured teachers met the participant selection criteria.

3.6 Data Collection Methods/ instruments

Questionnaires

A self-administered questionnaire was used to collect quantitative data on teachers' preparedness, training needs, and attitudes towards project-based learning. Questionnaire: A self-developed questionnaire, based on the research questions, was used to collect quantitative data. The questionnaire consists of: Teachers' preparedness to integrate school-based projects (Likert scale); Training and support needs (open-ended questions) and attitudes and beliefs towards project-based learning. The questionnaire was utilized as a primary research instrument to collect data from primary school teachers in Mbire District, Zimbabwe. The questionnaire was carefully designed to elicit information on teachers' preparedness to integrate school-based projects, challenges faced, and support systems available. It consisted of a combination of open-ended and closed-ended questions, including Likert scale items, to gather both qualitative and quantitative data.

The questionnaire was administered to a sample of 30 primary school teachers selected from 10 primary schools in Mbire District. The teachers were assured of ensuring confidentiality and reducing bias. The questionnaire was self-administered, allowing teachers to respond at their own pace and convenience. The questionnaire was pilot-tested with a small group of teachers to ensure its validity and reliability.

The data collected through the questionnaire was analyzed using both qualitative and quantitative methods. The findings provided valuable insights into teachers' preparedness, challenges, and support systems, informing recommendations for enhancing teachers' capacity to integrate school-based projects effectively. The Questionnaires were administered to the selected teachers during school hours. Teachers were allowed to share their views, opinions and thoughts freely.

Focus Group Discussions

The Focus Group Discussion (FGD) was employed as a qualitative research instrument to gather data from primary school teachers in Mbire District, Zimbabwe. A total of 30 teachers were divided into six focus groups, each consisting of five teachers. The FGDs were conducted to explore teachers' experiences, challenges, and perceptions regarding the integration of school-based projects into their teaching practices.

Each Focus Group Discussion was facilitated by a moderator who ensured that the discussions remained focused and productive. The moderator introduced the topics for discussion, encouraged participation, and probed for more information when necessary. The FGDs were audio-recorded, and detailed notes were taken to capture the discussions accurately. The focus group discussions were semi-structured, with a set of open-ended questions guiding the conversations. The questions were designed to elicit information on teachers' preparedness, challenges, attitudes, and support systems related to integrating school-based projects. The discussions were conducted in a comfortable and relaxed environment, allowing teachers to share their thoughts and experiences freely.

The FGDs provided rich qualitative data that complemented the quantitative data collected through the questionnaire. The discussions allowed teachers to share their personal experiences, opinions, and concerns, offering a deeper understanding of the challenges and opportunities related to integrating school-based projects. The data collected through the FGDs was analyzed using thematic analysis, identifying patterns and themes that emerged from the discussions. The findings provided valuable insights into teachers' experiences and perceptions, informing recommendations for enhancing teachers' capacity to integrate school-based projects effectively. The Focus Group Discussions were administered to the selected

teachers during school hours. Teachers were allowed to share their views, opinions and thoughts freely.

3.7 Data Analysis

Qualitative data was analyzed using thematic analysis to identify patterns and themes i.e. 5 themes were developed. Quantitative data from the questionnaire was analyzed using figures and percentages. Qualitative data from Focus Group Discussion was analyzed using thematic analysis.

3.8 Ethical Considerations

The study ensured confidentiality, anonymity, and informed consent from participants. The permission was obtained from Bindura University of Science Education (BUSE) to carry out the research study. The study also ensured no harm or discomfort to participants.

3.9 Reliability and Validity

Pilot testing ensured questionnaire reliability and validity Pilot testing ensured the reliability and validity of the data collection instruments. After pilot study, necessary corrections were made to the research instruments.

3.10 Summary

This chapter outlines the research methodology used to investigate teachers' preparedness to integrate school-based projects at the primary school level in Mbire District, Zimbabwe. The study employed a mixed-methods approach, combining both quantitative and qualitative data collection and analysis methods within the pragmatic paradigm. The study's population consisted of primary school teachers in public schools in Mbire District, and a sample of 30 teachers was selected from 10 primary schools through stratified proportional random sampling and purposive ssampling. Data was collected using questionnaires and Focus Group

Discussions (FGDs). The questionnaire gathered quantitative data on teachers' preparedness, training needs, and attitudes towards project-based learning, while the FGDs provided qualitative data on teachers' experiences, challenges, and perceptions. The data was analyzed using thematic analysis for qualitative data and figures and percentages for quantitative data.

The study ensured confidentiality, anonymity, and informed consent from participants, and pilot testing ensured the reliability and validity of the data collection instruments. Overall, the study's methodology provided a comprehensive understanding of teachers' preparedness to integrate school-based projects, informing recommendations for enhancing teachers' capacity to integrate school-based projects effectively.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter presents the findings of the study, which investigated the preparedness of primary school teachers in Mbire District, Mashonaland Central Province, Zimbabwe, to integrate school-based projects under the new Heritage-Based Curriculum into their teaching practices. The study employed a mixed-methods approach, combining quantitative and qualitative data collection and analysis methods. The data was collected through teacher questionnaires, interviews, and focus group discussion. This chapter will present the data, analyze it in relation to the research questions, and discuss the findings in light of existing literature. The information in this chapter is in line with what was proposed in the previous chapter.

4.1 Data Presentation

Demographic Characteristics of Participants

The study involved 30 primary school teachers (15 male and 15 female) selected from 10 primary schools in Mbire District, Mashonaland Central Province, Zimbabwe. The participants' age ranged from 25 to 55 years, with an average teaching experience ranging from 2-25 years. The teachers represented various learning areas, including Mathematics, Agriculture, Science & Technology, Physical Education & Arts, ChiShona, English, and Social Science.

Teacher Preparedness and Confidence

Teacher preparedness and confidence are crucial factors in the successful integration of school-based projects at primary school level. This theme explores the level of preparedness and confidence among primary school teachers in Mbire District, Mash Central Province of Zimbabwe. The quantitative data shows that none of the teachers (0%) reported receiving training on school-based projects under the Heritage-Based Curriculum. The quantitative data shows that 40% of teachers (12 teachers) reported being confident in integrating technology into school-based projects (Scale: 1-5). The qualitative data shows that teachers expressed

concerns about their lack of preparedness to integrate school-based projects, citing insufficient training and support.

Group A said, *"We were not adequately prepared to handle project-based learning, and it's going to be a challenge to implement it effectively."*

Group B said, *"We are not confident in our ability to integrate technology into project-based learning, and we think that's a major limitation."*

Group C said, *"We've had no training on school-based projects, and it's like they expect us to figure it out on our own. It's frustrating."*

Group D said, *"I don't think any of us feel confident in our ability to integrate school-based projects into our teaching practices. We need more support and training."*

Group E said, *"The lack of training on school-based projects is a major concern for us. We're not sure how to design and implement these projects effectively."*

Group F said, *"We're worried that without proper training and support, we'll struggle to implement school-based projects successfully. It's a lot of pressure on us as teachers."*

These responses from the six groups highlights the lack of training and confidence among teachers in Mbire District, Mash Central Province, in integrating school-based projects. The data indicates that primary school teachers in Mbire District lack training and confidence in integrating school-based projects. The findings are consistent with literature from Mudyahoto and Mhaka (2023) that highlights the importance of teacher preparedness and confidence in implementing innovative teaching methods. The lack of training and confidence among teachers may hinder the effective integration of school-based projects at primary school level. The absence of specific training on integrating school-based projects under the Heritage-Based Curriculum is a major concern. This lack of training directly contributes to teachers'

low confidence in integrating technology and implementing project-based learning effectively. This finding aligns with previous research highlighting the importance of teacher preparedness and confidence in implementing innovative teaching methods (Chivore, 2023; Mudyahoto & Mhaka, 2023).

Resource Constraints and Access

Access to resources is a critical factor in the implementation of school-based projects at primary school level. This theme examines the resource constraints and access issues faced by primary school teachers in Mbire District Mash Central Province of Zimbabwe. The quantitative data shows that 70% of teachers (21 teachers) reported having access to basic resources (e.g., textbooks, chalkboards) for implementing school-based projects, 90% of teachers reported needing resources like technology and materials for effective project-based learning and 50% of teachers (15 teachers) reported integrating school-based projects into their teaching practices occasionally. The qualitative data shows that teachers highlighted the scarcity of resources, including technology, materials, and infrastructure, as a significant barrier to implementing project-based learning.

Group C said, *"We don't have enough computers or internet access to support project-based learning, and it's frustrating."*

Group F said, *"We lack basic materials like paper, pens, and markers, which makes it difficult to engage students in project-based activities."*

Group A said, *"We have to share textbooks and other resources among classes, which makes it difficult to implement project-based learning effectively."*

Group B said, *"The school doesn't have a computer lab, and the few computers we have are outdated and often malfunction. It's hard to integrate technology into our teaching practices."*

Group D said, *"We lack access to reliable internet, which makes it challenging to conduct research and gather resources for project-based learning."*

Group E said, *"The school infrastructure is poor, with inadequate classrooms and limited storage space for materials. It's hard to create an conducive learning environment for project-based learning."*

These responses from the 6 Focus Groups (A, B, C, D, E and F) highlight the resource constraints and limited access to technology, materials, and infrastructure faced by primary school teachers in Mbire District. The data reveals that primary school teachers in Mbire District face resource constraints, particularly in accessing technology and materials. The findings are consistent with literature from Moyo (2022) and Ncube (2020) that highlights the importance of resource availability in implementing innovative teaching methods. The resource constraints faced by teachers may limit the effectiveness of school-based projects at primary school level. Therefore, the literature from Moyo (2022) & Ncube (2020) agrees with the data collected under this theme.

Attitudes and Beliefs about Project-Based Learning

Teachers' attitudes and beliefs about project-based learning can significantly influence its implementation. This theme explores the attitudes and beliefs of primary school teachers in Mbire District regarding project-based learning. The quantitative data shows that 90% of teachers reported associating project-based learning with improved student engagement and motivation. The quantitative data shows that 70% of teachers reported believing that student autonomy is essential for project-based learning, 90% of teachers associated project-based learning with improved student engagement and motivation, 67% of teachers (20 teachers) reported being concerned about curriculum coverage and standardized testing. The qualitative

data shows that teachers generally held positive attitudes towards project-based learning, recognizing its potential to enhance student engagement, motivation, and skill development.

Group B said, *"Project-based learning is an excellent way to encourage critical thinking and creativity in students."*

Group E said, *"Project-based learning helps students develop essential skills like collaboration, communication, and problem-solving."*

Group A said, *"Project-based learning allows students to take ownership of their learning, which is essential for developing autonomy and self-directed learning skills."*

Group C said, *"We believe that project-based learning helps students develop essential skills like critical thinking, creativity, and problem-solving, which are necessary for success in the 21st century."*

Group D said, *"Project-based learning encourages collaboration and teamwork among students, which helps to build social skills and a sense of community in the classroom."*

Group F said, *"We think that project-based learning is an effective way to make learning relevant and meaningful to students' lives, which can help to increase motivation and engagement."*

The data indicates that primary school teachers in Mbire District have positive attitudes and beliefs about project-based learning and they are really associating project-based learning with improved student engagement and motivation, development of critical and creative skills. The findings agree with literature from Mapolisa (2022) and Bell (2010) that highlights the importance of teacher attitudes and beliefs in implementing innovative teaching methods. The positive attitudes and beliefs among teachers may facilitate the effective implementation of school-based projects.

Support and Mentorship Needs

Teachers' support and mentorship needs are crucial in implementing innovative teaching methods. This theme examines the support and mentorship needs of primary school teachers in Mbire District. The quantitative data shows that all teachers require training programs to enhance their skills in integrating school-based projects at primary school level. 80% of teachers reported needing mentorship programs to support project integration. 100% of teachers reported needing training programs to enhance their skills in integrating school-based projects, and 80% of teachers reported facing challenges accessing training and support for project-based learning. The qualitative data shows that teachers emphasized the need for comprehensive training programs, mentorship initiatives, and ongoing support to build their confidence and competence in implementing project-based learning.

Group D said, *"We need more training and support to effectively integrate project-based learning into our teaching practices."*

Group F said, *"Mentorship programs would be incredibly helpful in guiding us through the process of implementing project-based learning."*

Group A said, *"We need ongoing support and training to stay updated on best practices in project-based learning and to build our confidence in implementing it."*

Group B said, *"Mentorship programs would provide us with the guidance and support we need to overcome challenges and improve our teaching practices."*

Group C said, *"We require access to resources and materials that can support project-based learning, such as technology, internet, and educational software."*

Group E said, *"Regular coaching and feedback from experienced educators would help us refine our teaching skills and address any challenges we face in implementing project-based learning."*

The data reveals that primary school teachers in Mbire District need support and mentorship, particularly in the form of training programs and mentorship initiatives. The findings are consistent with literature from Ncube (2022) and Mapfumo et. al. (2023) that highlights the importance of teacher support and mentorship in implementing innovative teaching methods. The provision of support and mentorship may enhance teachers' confidence and competence in integrating school-based projects.

Policy and Administrative Support

Policy and administrative support are essential in facilitating the implementation of innovative teaching methods. This theme explores the policy and administrative support available to primary school teachers in Mbire District. The quantitative data shows that 30 teachers need policy and administrative support to facilitate the integration of school-based projects. 90% of teachers reported needing resources like technology and materials for effective project-based learning. The qualitative data shows that teachers highlighted the importance of policy and administrative support in facilitating the implementation of project-based learning.

Group A said, *"We need policy support to ensure that project-based learning is prioritized and resourced adequately."*

Group C said, *"Administrative support is crucial in providing us with the necessary resources and infrastructure to implement project-based learning effectively."*

Group B said, *"We need clear guidelines and policies from the Ministry of Education to support the implementation of project-based learning, including guidelines on assessment and evaluation."*

Group D said, *"Administrative support is essential in providing us with the necessary infrastructure, such as computer labs and libraries, to support project-based learning."*

Group E said, *"Policy support is crucial in ensuring that project-based learning is integrated into the curriculum and that teachers are given the autonomy to design and implement projects that meet the needs of their students."*

Group F said, *"We need policy and administrative support to address the challenges we face in implementing project-based learning, such as limited resources, inadequate infrastructure, and lack of training."*

The data indicates that primary school teachers in Mbire District need policy and administrative support, particularly in the form of resource provision and policy initiatives. The findings are consistent with literature from Chivore (2023) that highlights the importance of policy and administrative support in implementing innovative teaching methods. The provision of policy and administrative support may facilitate the effective implementation of school-based projects at primary school level.

4.2 Conclusion

This chapter has presented the findings of the study, analyzed the data in relation to the research questions, and discussed the findings in light of existing literature. The study revealed a significant gap in teachers' preparedness to integrate school-based projects in Mbire District. The lack of training, inadequate resources, and limited support from school administrators and policymakers pose significant challenges to the effective implementation of project-based learning. The findings highlight the need for targeted interventions to address these challenges and promote effective project-based learning in Zimbabwean primary schools.

4.3 Summary:

Chapter 4 presents the findings of the study investigating primary school teachers' preparedness to integrate school-based projects in Mbire District, Zimbabwe. The chapter analyzes data collected through questionnaires, interviews, and document analysis, focusing on five key themes: teacher preparedness and confidence, resource constraints, attitudes

towards project-based learning, support needs, and policy/administrative support. The analysis reveals a significant gap in teachers' preparedness, primarily due to a lack of specific training on integrating school-based projects under the new Heritage-Based Curriculum. This lack of training contributes to low confidence in using technology and implementing projects effectively.

Despite these challenges, teachers express positive attitudes towards project-based learning, recognizing its potential to enhance student engagement and skill development. However, they strongly emphasize the need for comprehensive training programs, mentorship initiatives, and adequate resources to support their efforts. The chapter concludes by highlighting the crucial need for addressing these challenges to realize the full potential of project-based learning in Zimbabwean primary schools. It emphasizes the importance of providing targeted interventions, including training, resources, mentorship, and strong policy/administrative support, to empower teachers and promote effective project implementation.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the findings of the study, which investigated the preparedness of primary school teachers in Mbire District, Mashonaland Central Province, Zimbabwe, to integrate school-based projects into their teaching practices. The study employed a mixed-methods approach, combining quantitative and qualitative data collection and analysis methods. The findings are synthesized to draw conclusions and provide recommendations for enhancing teacher preparedness and promoting effective project-based learning in Zimbabwean primary schools.

5.1 Summary

This study aimed to investigate the level of preparedness among primary school teachers in Zimbabwe to integrate school-based projects into their teaching practices. The research focused on exploring the challenges faced by teachers, identifying their training and support needs, and understanding how their attitudes and beliefs influence their preparedness. The study was conducted in Mbire District, Mashonaland Central Province, using a mixed-methods approach. A purposive sample of 30 teachers (15 male and 15 female) from 10 primary schools was selected. Data was collected through questionnaires and focus group discussions. The study investigated the preparedness of primary school teachers in Mbire District, Zimbabwe, to integrate school-based projects under the new Heritage-Based Curriculum into their teaching practices. The findings revealed a significant gap in teachers' preparedness, primarily due to a lack of specific training on integrating school-based projects. The study also found that teachers face resource constraints, particularly in accessing technology and materials, and lack confidence in integrating technology into project-based learning. Despite these challenges, teachers expressed positive attitudes towards project-

based learning and emphasized the need for comprehensive training programs, mentorship initiatives, and adequate resources to support their efforts.

5.2 Research Questions

What is the level of teachers' preparedness to integrate school-based projects at primary school level?

The level of preparedness among primary school teachers in Mbire District, Zimbabwe, to integrate school-based projects under the new Heritage-Based Curriculum is alarmingly low. A significant finding of this study is that none of the teachers reported receiving specific training on integrating school-based projects. This lack of training has resulted in teachers feeling ill-equipped to effectively integrate project-based learning into their teaching practices. The absence of specific training on school-based projects under the new Heritage-Based Curriculum is a major concern. Teachers require comprehensive training programs that focus on the development of skills necessary for effective project-based learning. The current lack of preparedness among teachers may hinder the successful implementation of school-based projects, ultimately affecting student learning outcomes.

Furthermore, the study's findings suggest that teachers' lack of preparedness is not solely due to inadequate training but also due to limited access to resources. Teachers reported facing challenges in accessing technology, materials, and infrastructure necessary for effective project-based learning. This resource gap exacerbates the already existing lack of preparedness among teachers. In conclusion, the level of teachers' preparedness to integrate school-based projects at primary school level is low, primarily due to a lack of specific training and limited access to resources. Addressing these challenges is crucial for enhancing teacher preparedness and promoting effective project-based learning.

What training and support do primary school teachers in Zimbabwe need to effectively integrate school-based projects into their teaching practices?

Primary school teachers in Zimbabwe require comprehensive training programs, mentorship initiatives, and adequate resources to support their integration of school-based projects. The training programs should focus on developing teachers' skills in project-based learning, including planning, implementation, and assessment. Teachers need training on how to design and implement project-based learning activities that align with the new Heritage-Based Curriculum. They also require training on how to use technology effectively to support project-based learning. Furthermore, teachers need guidance on how to assess student learning outcomes in project-based learning environments. Mentorship initiatives are also essential in supporting teachers' integration of school-based projects. Experienced educators or mentors can provide guidance, support, and feedback to teachers as they implement project-based learning. Mentorship initiatives can help build teachers' confidence and competence in project-based learning.

In addition to training and mentorship, teachers require adequate resources to support their integration of school-based projects. This includes access to technology, materials, and infrastructure necessary for effective project-based learning. Policy and administrative support are also crucial in facilitating the effective implementation of school-based projects. The policy and administrative support required to facilitate the effective implementation of school-based projects in primary schools in Mbire District, Zimbabwe, includes resource allocation, curriculum flexibility, and ongoing professional development opportunities. Policymakers and school administrators must prioritize resource allocation to support project-based learning, including the provision of technology, materials, and infrastructure. Curriculum flexibility is also essential in allowing teachers to adapt project-based learning activities to meet the diverse needs of their students. Ongoing professional development

opportunities are necessary to ensure that teachers remain updated on best practices in project-based learning and are equipped to address emerging challenges.

How do primary school teachers' attitudes and beliefs towards project-based learning influence their preparedness to integrate school-based projects?

Primary school teachers in Mbire District, Zimbabwe, have positive attitudes towards project-based learning, associating it with improved student engagement, motivation, and skill development. Teachers believe that project-based learning enhances student learning outcomes, promotes critical thinking and problem-solving skills, and fosters collaboration and communication among students. Teachers' positive attitudes towards project-based learning influence their preparedness to integrate school-based projects in several ways. Firstly, teachers who hold positive attitudes towards project-based learning are more likely to be motivated to learn about and implement project-based learning activities. This motivation drives them to seek out training and support, which enhances their preparedness to integrate school-based projects.

Secondly, teachers' positive attitudes towards project-based learning influence their willingness to take risks and experiment with new teaching approaches. This willingness is essential in project-based learning, where teachers must be flexible and adaptable in responding to students' needs and interests. However, despite their positive attitudes towards project-based learning, teachers' lack of preparedness and inadequate resources hinder their ability to effectively integrate school-based projects. Therefore, it is essential to address these challenges through comprehensive training programs, mentorship initiatives, and adequate resource allocation. In conclusion, primary school teachers' positive attitudes towards project-based learning influence their preparedness to integrate school-based projects by enhancing their motivation, willingness to take risks, and adaptability. However, addressing the

challenges of inadequate preparedness and resource constraints is crucial for promoting effective project-based learning.

5.3 Conclusions

The study's findings provide valuable insights into the challenges and opportunities associated with integrating school-based projects in Zimbabwean primary schools. The key conclusions are: Lack of Training i. e. Teachers lack specific training on integrating school-based projects under the Heritage-Based Curriculum, leading to low confidence and limited implementation. Resource Constraints: Teachers face significant resource constraints, particularly in accessing technology and materials essential for effective project-based learning under Heritage-Based Curriculum (2024-2030). Positive Attitudes: Despite the challenges, teachers hold positive attitudes towards project-based learning, recognizing its potential to enhance student engagement and skill development. Need for Support: Teachers strongly emphasize the need for comprehensive training programs, mentorship initiatives, and adequate resources to support their integration of school-based projects. Importance of Policy and Administrative Support: Strong policy and administrative support are crucial for promoting project-based learning within the school system, including resource allocation, curriculum flexibility, and ongoing professional development opportunities.

This study provides a valuable contribution to the understanding of teacher preparedness for integrating school-based projects in Zimbabwe. The findings highlight the critical need for addressing the challenges faced by teachers, including a lack of training, inadequate resources, and limited support. By implementing the recommendations outlined in this chapter, educators and policymakers can work towards enhancing teacher preparedness and promoting effective project-based learning in Zimbabwean primary schools. This will

ultimately benefit students by providing them with opportunities for hands-on learning, critical thinking, and skill development, preparing them for success in the 21st century.

5.4 Recommendations

Based on the findings, the following recommendations are made:

Provide comprehensive training programs for primary school teachers on integrating school-based projects under the new Heritage-Based Curriculum. Develop and implement comprehensive training programs for primary school teachers on integrating school-based projects under the Heritage-Based Curriculum. These programs should focus on project design, implementation, assessment, and technology integration.

Allocate resources, particularly technology and materials, to support the implementation of school-based projects. Ensure that primary schools have access to adequate resources, including technology, materials, and funding, to support the implementation of school-based projects.

Establish mentorship initiatives to support teachers in integrating school-based projects. Establish mentorship programs to provide ongoing support and guidance to teachers as they integrate school-based projects into their teaching practices.

Provide ongoing professional development opportunities to enhance teachers' confidence and competence in project-based learning.

Review and revise policies to ensure they support the effective implementation of school-based projects in primary schools. Develop clear policies and provide strong administrative support to promote project-based learning within the school system. This support should include resource allocation, curriculum flexibility, and ongoing professional development opportunities.

Encourage collaboration between schools and local communities to provide authentic learning experiences and resources for school-based projects.

5.5 Areas of Further Research

Investigate the impact of comprehensive training programs on teachers' preparedness to integrate school-based projects.

Examine the effectiveness of mentorship initiatives in supporting teachers' integration of school-based projects.

Explore the role of policy and administrative support in facilitating the implementation of school-based projects in primary schools.

Investigate the challenges faced by teachers in implementing school-based projects in other districts or regions.

Develop and evaluate a framework for integrating school-based projects into the primary school curriculum.

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Appendices

Appendix A: Teacher Questionnaire Guide.

Appendix B: Focus Group Discussion Guide.

Appendix C: Bindura University of Science Education (BUSE) Approval Letter.

Appendix D: Policy Circular Document: Ministry of Primary and Secondary Education (MoPSE).

Appendix E: Article: Government introduces Heritage-Based Curriculum.

Appendix A:

Research Topic: Teachers' preparedness to integrate school based projects at primary school level.

Teacher Questionnaire Guide

Section 1: Demographic Information

1.1. What is your gender? Male /Female

1.2. What is your age?

1.3. What is your teaching experience?

Section 2: Preparedness to Integrate School-Based Projects

Research Question 1: What is the level of teachers' preparedness to integrate school-based projects at the primary school level?

1.1. Have you received training on project-based learning? Yes/No

1.2. How confident are you in integrating technology into school-based projects?

1 (Not confident at all)

2 (Somewhat confident)

3 (Neutral)

4 (Confident)

5 (Very confident)

1.3. What resources do you have access to for implementing school-based projects? (Check all that apply)

Technology (e.g., computers, tablets)

Internet access

Projector and screen

Whiteboard and markers

Other (please specify) _____

1.4. How often do you integrate school-based projects into your teaching practices?

1 (Rarely)

2 (Occasionally)

3 (Sometimes)

4 (Often)

5 (Almost always)

1.5. What teaching methods do you use to deliver project-based learning? (Check all that apply)

Student-centered learning

Collaborative learning

Problem-based learning

Inquiry-based learning

Other (please specify) _____

1.6. How do you assess student learning outcomes from school-based projects?

1.7. What challenges do you face when implementing school-based projects? (Open-ended)

1.8. How many years of experience do you have with project-based learning? (Open-ended)

1.9. How do you evaluate the effectiveness of school-based projects?

1.10. What support systems do you have in place for struggling students?

1.11. How do you ensure equity and inclusivity in project-based learning?

1.12. Can you provide an example of a successful school-based project?

Section 3: Training and Support Needs

Research Question 2: What training and support do primary school teachers in Zimbabwe need to effectively integrate school-based projects into their teaching practices?

2.1. What specific training programs would enhance your project-based learning skills?
(Check all that apply)

Technology integration

Project-based learning design

Assessment and evaluation

Classroom management

Other (please specify) _____

2.2. How often would you like to receive training on project-based learning?

1 (Rarely)

2 (Occasionally)

3 (Sometimes)

4 (Often)

5 (Almost always)

2.3. What resources (e.g., technology, materials) do you need for effective project-based learning? (Check all that apply)

Technology (e.g., computers, tablets)

Internet access

Projector and screen

Whiteboard and markers

Other (please specify) _____

- 2.4. Would you benefit from mentorship programs for project-based learning? (Yes/No)
- 2.5. What challenges do you face accessing training and support for project-based learning?
(Open-ended)
- 2.6. How can school administrators support your integration of school-based projects?
- 2.7. What ongoing professional development opportunities would enhance your ability to integrate school-based projects?
- 2.8. How can training programs improve your project-based learning practices? (Open-ended)
- 2.9. How can technology enhance project-based learning training?
- 2.10. What incentives would motivate you to participate in project-based learning training?
- 2.11. How can school administrators provide resources for project-based learning?
- 2.12. What role can community partnerships play in supporting project-based learning?

Section 4: Attitudes and Beliefs

Research Question 3: How do primary school teachers' attitudes and beliefs towards project-based learning influence their preparedness to integrate school-based projects?

- 3.1. What benefits do you associate with project-based learning? (Check all that apply)

Improved student engagement

Enhanced critical thinking and problem-solving skills

Increased student motivation

Better retention of knowledge

Other (please specify) _____

- 3.2. How does student-centered learning influence your teaching practices?

1 (Not at all)

2 (Somewhat)

3 (Neutral)

4 (A great deal)

5 (Almost entirely)

3.3. Do you believe student autonomy is essential for project-based learning?

Yes

No

3.4. How concerned are you about curriculum coverage and standardized testing? (Scale: 1-5)

3.5. How confident are you in your ability to integrate project-based learning? (Scale: 1-5)

3.6. Have your experiences with project-based learning influenced your attitudes? (Yes/No)

3.7. How does school culture and climate impact your attitudes towards project-based learning? (Open-ended)

3.8. Would professional development change your negative attitudes towards project-based learning? (Yes/No)

3.9. How do parental involvement and expectations impact your attitudes towards project-based learning?

3.10. What strategies promote student reflection and self-assessment in project-based learning?

3.11. How do you address potential biases in project-based learning assessments?

3.12. What strategies facilitate effective teamwork in project-based learning?

Likert Scale Key

1: Strongly Disagree/Not Confident at All/Rarely

2: Disagree/Somewhat Confident/Occasionally

3: Neutral/Neutral/Sometimes

4: Agree/Confident/Often

5: Strongly Agree/Very Confident/Almost Always

Thank you for taking your time to complete this questionnaire!

Appendix B:

Focus Group Discussion Guide

Research Question 1: What is the level of teachers' preparedness to integrate school-based projects at the primary school level?

- 1.1. What are the common challenges faced when implementing school-based projects?
- 1.2. How do you currently integrate technology into project-based learning?
- 1.3. What resources are essential for effective project-based learning?
- 1.4. How often do you collaborate with colleagues on project-based learning?
- 1.5. What teaching methods are most effective for project-based learning?
- 1.6. How do you assess student learning outcomes from projects?
- 1.7. What role does teaching experience play in project integration?
- 1.8. How can schools support teachers' preparedness to integrate school-based projects?
- 1.9. How do you encourage student creativity in project-based learning?
- 1.10. What strategies facilitate effective project management?
- 1.11. How do you ensure project-based learning aligns with curriculum standards?
- 1.12. Can you share a success story about project-based learning?

Research Question 2: What training and support do primary school teachers in Zimbabwe need to effectively integrate school-based projects into their teaching practices?

- 2.1. What training programs would enhance your project-based learning skills?
- 2.2. How can school administrators facilitate project-based learning?
- 2.3. What resources are necessary for effective project-based learning?
- 2.4. How can mentorship programs support project integration?
- 2.5. What challenges do you face accessing training and support?
- 2.6. How can training address rural teachers' unique needs?
- 2.7. What ongoing professional development opportunities would enhance project integration?
- 2.8. How can training programs improve project-based learning practices?

- 2.9. How can mentorship programs support new teachers in project-based learning?
- 2.10. What resources are essential for effective project-based learning?
- 2.11. How can school administrators provide ongoing support for project-based learning?
- 2.12. What strategies promote teacher leadership in project-based learning?

Research Question 3: How do primary school teachers' attitudes and beliefs towards project-based learning influence their preparedness to integrate school-based projects?

- 3.1. What benefits and challenges do you associate with project-based learning?
- 3.2. How does student-centered learning influence project integration?
- 3.3. What role does student autonomy play in project-based learning?
- 3.4. How do concerns about curriculum coverage affect project-based learning?
- 3.5. What is the relationship between self-efficacy and project integration?
- 3.6. How do experiences with project-based learning influence attitudes?
- 3.7. What impact does school culture have on project-based learning attitudes?
- 3.8. How can professional development change negative attitudes towards project-based learning?
- 3.9. How do teacher attitudes towards technology impact project-based learning?
- 3.10. What strategies promote student self-directed learning?
- 3.11. How do you address potential equity issues in project-based learning?
- 3.12. What role does community involvement play in project-based learning?

Appendix C:

Bindura University of Science Education (BUSE) Approval Letter

Appendix D:

Relevant Policy Documents:

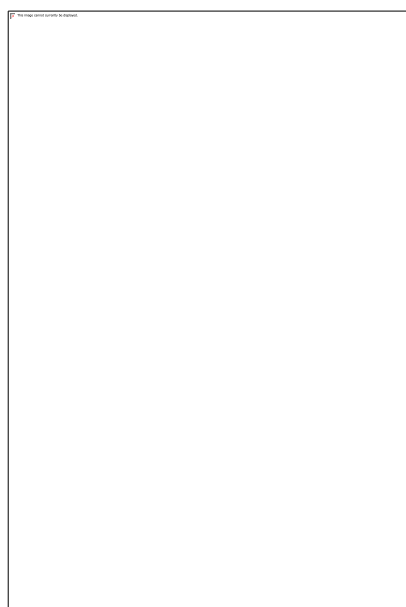
MoPSE Policy circular

Appendix E:

Article: Government introduces Heritage-Based Curriculum.

Government Outlines Heritage Based Curriculum Implementation Roadmap

4 months agoWed, 29 May 2024 05:56:26 GMT



The government has outlined the road map towards the implementation of the Heritage-Based [Education](#) Curriculum which includes the printing and distribution of the curriculum documents by 30 June this year.

The Cabinet adopted the Heritage Based Education Curriculum in February for primary and secondary [education](#), and its implementation started when schools opened for the second term.

The Cabinet Committee chairperson on Human Capital Development, Skills Application and Employment Creation Amon Murwira presented the Heritage Based Curriculum implementation plan before Cabinet leading to its adoption on Tuesday.

Speaking during the post-Cabinet media briefing, Information, Publicity and Broadcasting Services Minister, Jenfan Muswere, outlined the road map towards the implementation of the curriculum. He said (via [Chronicle](#)):

Regarding the implementation of the curriculum or programme infrastructure, the Cabinet wishes to highlight that the implementation plan for the Heritage-Based Education 2024-2030 Curriculum Framework provides guidance in the delivery of a coherent and inclusive quality primary and secondary education.

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This includes the printing and distribution of the curriculum documents by 30 June 2024; unpacking of the Heritage-Based Curriculum Framework, which is ongoing up to 31 May 2025; and the review of learning area syllabi that is, rationalisation of content in learning areas commencing on the 1st October 2024; and the review of the assessment tools by 30 October 2024.

Muswere revealed that Continuous Assessment Learning Activities (CALA) will now be school-based and should be done at school unlike in the past when learners did the tasks at home where parents and guardians would end up doing the CALAs for them.

He said exclusive summative evaluations will only be done at Grade Seven and Form Four levels.

Muswere said for pupils in Advanced Level, 80 per cent will be summative examinations while 20 per cent will be continuous assessments for grading and certification purposes. He added:

The assessment of non-formal learners shall follow that of the mainstream regimen with the continuous assessment marks having a shelf life of three years.

Muswere said the Government is conducting an ongoing teacher capacity development so that they will be able to deliver heritage-based education. He said:

The Ministry will roll out the unpacking of the curriculum and syllabi to teachers through workshops, circulars and various media for the rationalised learning areas as well as the implementation modalities by 31st December 2024.

Provision of adequate and appropriate infrastructure will continue, including classrooms; workshops; laboratories; internet connectivity; technical equipment; and teachers' houses, in order to achieve the intended goals by 2030.

Muswere said the implementation of the new curriculum shall constantly be monitored, evaluated and refined to ensure it achieves the intended goals. He said:

This shall include establishing a participatory structure for continuous Heritage-Based education refinements, such as the establishment of learning area associations and panels at school, district, provincial and national levels by 31st July 2025.

Particular focus will be on checking for compliance in the implementation of the curriculum through monitoring and evaluation that promotes strengthening school-based continuous assessment and documentation of best practices, which is currently ongoing to 31st December 2030.