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Educational Assessment Administration in Low Resourced Rural Secondary Schools in Zimbabwe: Challenges, Coping Strategies and Educational Outcomes in Beitbridge District, Matabeleland South Province, Zimbabwe

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Abstract: *Educational assessment administration is essential for monitoring learner progress, informing instructional decisions and promoting equitable educational outcomes. However, resource constraints may undermine assessment quality, particularly in rural secondary schools where material shortages, workload pressures and limited professional support intersect. This qualitative study employed an interpretivist single-case study design to examine assessment administration in a resource-constrained rural secondary school in Beitbridge District, Matabeleland South Province, Zimbabwe. Data were collected through semi-structured interviews, learner focus group discussions, non-participant observations and documentary analysis. Reflexive thematic analysis was used to interpret the data. Findings revealed that shortages of assessment materials, competing teacher responsibilities and limited time constrained assessment preparation, marking and feedback. Teachers employed collaborative planning, shared assessment instruments, locally available materials and peer moderation to sustain assessment activities. However, coping strategies varied in their capacity to preserve assessment validity, consistency and fairness. Household poverty and unequal access to learning resources further affected assessment participation and preparation. Assessment contributed to educational improvement when teachers used performance evidence to identify learning difficulties, provide feedback and organise remedial instruction. The findings position assessment administration as both a pedagogical practice and an institutional equity responsibility. Sustainable improvement requires needs-based funding, strengthened teacher assessment literacy, manageable workloads and systematic support for inclusive, evidence-informed assessment, advancing Sustainable Development Goal 4.*

Keywords: *Educational Assessment Administration, Rural Secondary Schools, Resource Constraints, Assessment Literacy, Coping Strategies, Formative Assessment, Educational Outcomes, SDG 4.*

I. BACKGROUND OF THE STUDY

Educational assessment administration is central to teaching and learning because it enables teachers to diagnose learning difficulties, monitor progress, provide feedback and make defensible decisions about learner achievement. Effective assessment extends beyond setting and marking examinations to the systematic collection, interpretation and utilisation of evidence to improve instruction and support learner development. Black and Wiliam (2009) demonstrated the theoretical importance of formative assessment in connecting evidence of learning with instructional adjustments, while Brookhart (2011) identified assessment knowledge and skills as essential components of teachers' professional competence. Similarly, Xu and Brown (2016) conceptualised teacher assessment literacy as a dynamic process shaped by professional knowledge, practice and educational contexts. These perspectives suggest that effective assessment administration depends not only on teachers' technical ability to construct and mark assessment instruments but also on their capacity to interpret results, provide meaningful feedback and make fair decisions. In low-resourced rural secondary schools, shortages of assessment materials, inadequate infrastructure and limited institutional support may constrain the design, administration, marking and feedback processes. Such constraints may compromise the validity, reliability and fairness of assessment when instruments fail to measure intended learning outcomes consistently or when learners have unequal opportunities to demonstrate their

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capabilities. Consequently, educational assessment administration must be examined as both a pedagogical process and an institutional responsibility shaped by the interaction between teacher competence, school resources and learners' circumstances.

Internationally, Sustainable Development Goal 4 (SDG 4) calls for inclusive and equitable quality education and the promotion of lifelong learning opportunities for all, making credible assessment important for monitoring educational progress and identifying disparities in learning (United Nations, 2015). The UNESCO (2023) Global Education Monitoring Report further emphasised that educational interventions must be evaluated in relation to contextual needs, equity and evidence of effectiveness rather than assumed to improve learning simply because particular resources or technologies are introduced. Similarly, the Organisation for Economic Co-operation and Development (OECD, 2023) documented persistent socioeconomic inequalities in educational achievement across participating education systems, demonstrating the importance of considering learners' backgrounds when interpreting performance. Although these international findings do not establish the specific conditions prevailing in Zimbabwean rural schools, they provide a useful basis for examining the relationship between educational disadvantage and assessment opportunities. Where textbooks, stationery, electricity, digital facilities and adequate classroom space are limited, teachers may experience difficulties preparing diverse assessment instruments, maintaining assessment records, providing individualised feedback and evaluating practical competencies. Nevertheless, resource scarcity does not automatically result in ineffective assessment. Teachers may adapt tasks, use locally available materials, engage learners in peer assessment and collaborate with colleagues in marking and moderation. The educational value of these strategies, however, depends on their implementation and their ability to preserve curriculum alignment, fairness and assessment standards. Teacher ingenuity therefore remains important, but it cannot indefinitely replace adequate public investment, professional development and institutional support.

In Zimbabwe, educational assessment administration operates within a national legal and curriculum framework that establishes expectations for educational access, teaching and learning. The Education Act [Chapter 25:04], as amended by the Education Amendment Act, 2019, provides a statutory foundation for educational provision and addresses children's rights to education and the responsibilities associated with its delivery (Government of Zimbabwe, 1987, 2020). However, the existence of legislation does not necessarily guarantee that schools possess the resources and professional capacity required to implement assessment procedures consistently. UNICEF Zimbabwe's (2026) education budget brief examines the adequacy, allocation and execution of public expenditure on education, including financing for school infrastructure, teaching and learning materials, and the recruitment and retention of qualified teachers. These issues are relevant to assessment administration because the practical implementation of curriculum and assessment requirements depends partly on the availability of appropriate materials, sufficient instructional time and adequately supported teachers. Household economic disadvantage may also influence learners' access to textbooks, stationery and other resources needed to prepare for assessments, potentially creating unequal conditions for demonstrating achievement. Nevertheless, rural schools should not be treated as homogeneous institutions: their circumstances may differ according to leadership practices, teacher preparedness, school-community relationships, infrastructure and resource availability. A context-sensitive investigation is therefore necessary to establish how these factors interact in shaping assessment administration rather than assuming that all rural schools experience identical constraints.

Against this background, Beitbridge District in Matabeleland South Province provides the geographical focus for investigating educational assessment administration in low-resourced rural secondary schools. Although international scholarship and national policy establish the importance of effective, equitable assessment, they do not independently establish which challenges predominate in Beitbridge, how teachers and school leaders respond to them or what consequences these responses have for assessment quality and learner outcomes. These questions require context-specific empirical investigation. Accordingly, this study examines the challenges associated with assessment administration, the coping strategies adopted by teachers and school leaders, and the perceived implications of these practices for assessment quality, learner achievement and educational equity. Particular attention is given to the processes of assessment preparation, administration, marking, moderation, recording and feedback, alongside the institutional conditions that facilitate or constrain them. The study also considers whether locally developed coping strategies strengthen assessment practice or merely compensate for persistent structural deficiencies. By connecting resource conditions with professional responses and educational outcomes, the investigation seeks to generate contextually grounded evidence to inform teacher development, school-based assessment support, resource allocation and policy implementation. Ultimately, the study contributes to understanding how assessment administration can become more credible, equitable and educationally meaningful in resource-constrained rural secondary schools, consistent with the broader objectives of SDG 4.

II. LITERATURE REVIEW

A. Conceptual and Theoretical Foundations of Educational Assessment Administration

Educational assessment administration encompasses the planning, development, implementation, marking, moderation, recording and utilisation of assessment activities to evaluate learners' progress and achievement. Assessment performs diagnostic, formative, summative and accountability functions, connecting curriculum objectives with instructional decisions and educational outcomes. Black and Wiliam (2009) argued that formative assessment improves learning when evidence of achievement informs subsequent teaching, while Hattie and Timperley (2007) demonstrated that feedback is effective when it helps learners understand their current performance, learning goals and strategies for improvement. These perspectives indicate that assessment quality depends not merely on administering tests but also on interpreting results and addressing identified learning difficulties. Zimbabwe's Curriculum Framework for Primary and Secondary Education 2015–2022 emphasised competencies such as critical thinking, problem-solving and practical skills (MoPSE, 2015). However, implementing these expectations requires adequate resources, assessment literacy and institutional support. In resource-constrained rural secondary schools in Beitbridge District, the central concern is how teachers administer assessments and utilise evidence of learning under conditions that may restrict effective educational practice.

B. Challenges in Educational Assessment Administration in Rural Secondary Schools

Educational assessment in rural secondary schools may be constrained by inadequate teaching materials, large classes, heavy workloads, limited professional development and insufficient assessment instruments. These challenges can undermine the validity, reliability and timeliness of assessment decisions. Shortages of textbooks and practical resources may encourage dependence on written examinations and routine exercises, limiting opportunities to assess practical competencies and individual learning needs. Black and Wiliam (2009) emphasised that meaningful assessment requires teachers to obtain and interpret evidence that informs instructional adjustments. Such processes become difficult when teachers lack time, resources or professional guidance. In Zimbabwe, Makuvire et al. (2023) examined continuous assessment in rural secondary schools in Goromonzi District and highlighted weaknesses in teachers' understanding of assessment reforms and limited access to professional implementation guidance. Although their findings illuminate challenges associated with curriculum implementation, they cannot automatically be generalised to Beitbridge District. Local investigation is necessary to establish the availability of assessment materials, teachers' workloads, marking and record-keeping practices, and the timeliness of feedback. Understanding these conditions is essential for determining how institutional constraints influence assessment administration and the quality of decisions made about learners' progress.

C. Continuous Assessment and Competency-Based Curriculum Implementation

Continuous assessment evaluates learner achievement over time rather than relying exclusively on terminal examinations. It can provide evidence of conceptual understanding, practical competence and progress towards curriculum objectives. Zimbabwe's curriculum reforms incorporated competency-oriented learning, while Continuous Assessment Learning Activities (CALA) sought to broaden the evidence used to evaluate learner achievement (MoPSE, 2015). However, the effectiveness of continuous assessment depends on implementation quality rather than its formal inclusion in policy. Jita and Dhliwayo (2023) examined CALA in Zimbabwean secondary schools experiencing information and communication technology (ICT) constraints, highlighting tensions between competency-oriented assessment expectations and unequal technological access. Digitally demanding assignments may disadvantage learners without reliable electricity, internet connectivity or suitable devices. Nevertheless, practical competencies can also be assessed through locally available materials, paper-based investigations and supervised classroom activities. The critical issue is whether teachers design assessment tasks that measure intended learning outcomes without imposing unreasonable resource demands. In Beitbridge District, investigation is needed into how teachers interpret curriculum requirements, administer continuous assessments, moderate learner work and manage the associated administrative workload. This would clarify whether existing assessment practices promote meaningful competency development or primarily fulfil procedural requirements.

D. Coping Strategies for Assessment Administration in Resource-Constrained Schools

Coping strategies are measures adopted by teachers, school leaders and other stakeholders to sustain assessment activities despite resource shortages. These may include sharing learning materials, collaboratively developing assessment instruments, using locally available resources, establishing common marking schemes, conducting peer moderation and providing additional learner support. Such practices can strengthen formative assessment when they enable teachers to interpret evidence and adapt instruction (Black & Wiliam, 2009). Makuvire et al. (2023) identified the potential of continuous assessment to support instructional decision-making, while highlighting difficulties associated with inadequate professional guidance. Teacher collaboration and school-based professional learning may therefore improve assessment practices, although they cannot independently resolve shortages of staffing, funding and specialised equipment. In Beitbridge, school leaders may coordinate assessment schedules, teachers may share instruments and marking criteria, and school development committees may assist with basic materials where feasible. Nevertheless, coping strategies require critical

evaluation. Improvised resources may compromise assessment standards, while transferring assessment costs to parents can disadvantage learners from poorer households. The study should consequently establish which strategies improve assessment quality, which merely sustain administrative compliance and what institutional support is required to make successful practices sustainable.

E. Assessment Validity, Equity and Inclusion

Assessment equity concerns whether learners have fair opportunities to demonstrate the knowledge and competencies specified in the curriculum. UNESCO's (2020) Global Education Monitoring Report highlighted how interacting social, institutional and individual barriers contribute to educational exclusion. In assessment administration, identical requirements may produce unequal opportunities because learners have different material resources and learning needs. Learners with disabilities may require accessible materials or reasonable accommodations, while those experiencing poverty may lack stationery, textbooks, electricity and digital devices. Assignments requiring expensive materials or extensive home-based research may consequently measure household resources rather than the intended competencies. However, equitable assessment must preserve the essential learning outcomes being evaluated. Teachers can promote fairness through transparent marking criteria, accessible instructions, supervised activities and appropriate accommodations. Although UNESCO provides a useful framework for understanding inclusion, the specific forms of assessment disadvantage experienced in Beitbridge remain to be established empirically. Research should examine whether assessment procedures are applied consistently, whether learners receive comparable opportunities to demonstrate achievement and how resource constraints affect different learner groups. This perspective connects assessment administration with Sustainable Development Goal 4, which promotes inclusive and equitable quality education.

F. Educational Outcomes of Assessment Administration

Educational outcomes associated with assessment administration include academic achievement, learner participation, motivation, feedback utilisation, instructional improvement and progression. Hattie and Timperley (2007) explained that feedback supports learning when it clarifies performance, identifies learning goals and indicates actions required to address gaps. Similarly, Black and Wiliam (2009) demonstrated the importance of using assessment evidence to inform teaching and improve learning. However, assessment does not automatically produce positive outcomes. Poorly designed tasks, delayed feedback, inconsistent marking and excessive workloads may reduce its educational value, particularly where teachers lack resources for remediation. Conversely, collaborative marking, targeted questioning and timely feedback may support learning without sophisticated technology. Makuvire et al. (2023) provide relevant insights into continuous assessment implementation in rural Zimbabwean schools, but their research does not establish the relationship between assessment administration and learner outcomes in Beitbridge. The present study should therefore examine how assessment practices relate to achievement, participation, understanding of assessment expectations and access to remedial support. Attendance, prior attainment, teacher availability and socioeconomic circumstances should also be considered because educational outcomes arise from multiple interacting influences. This approach would support a more contextually grounded explanation of how assessment administration contributes to learner development.

G. Empirical Review and Research Gap

Existing Zimbabwean research provides useful but incomplete evidence concerning assessment administration in rural secondary schools. Makuvire et al. (2023) investigated teachers' knowledge and attitudes towards continuous assessment in Goromonzi District using questionnaires and interviews involving 10 teachers and five school heads. Their findings highlighted limited access to professional guidance and implementation support, while recognising the potential of continuous assessment to strengthen instructional decision-making. However, the study focused on Mashonaland East and did not comprehensively examine the relationship between assessment challenges, coping strategies and educational outcomes in Beitbridge. Jita and Dhliwayo (2023) examined CALA in ICT-resource-constrained Zimbabwean secondary schools, highlighting tensions between competency-based assessment expectations and unequal technological access. Although their analysis helps explain implementation difficulties, it does not establish how teachers in Beitbridge administer assessments or how their responses affect learners. These studies provide a foundation for further investigation but do not demonstrate that conditions are uniform across Zimbabwe. The principal research gap is the lack of context-specific evidence connecting assessment administration challenges, coping strategies and educational outcomes in rural secondary schools in Beitbridge District, Matabeleland South Province. Addressing this gap requires examining teacher assessment literacy, workloads, resources, moderation, feedback, institutional support and learner experiences.

H. Critical Synthesis of the Literature

The literature conceptualises educational assessment administration as a pedagogical, institutional and equity-related process shaped by assessment design, teacher competence, resource availability and evidence utilisation (Black & Wiliam, 2009; UNESCO, 2023). Formative assessment theory emphasises feedback in improving instruction, while Zimbabwean

studies identify inadequate professional guidance, insufficient teacher preparation and implementation difficulties in continuous assessment (Chanda, 2022; Sithole et al., 2022; Makuvire et al., 2023). However, resource scarcity does not independently determine assessment quality. Teacher collaboration, professional judgement, appropriate tasks and supportive leadership may mitigate constraints but cannot replace adequate funding, materials and professional development (Black & Wiliam, 2009; UNESCO, 2023). Furthermore, coping strategies may increase workloads, transfer costs to families and undermine consistency when continuous assessment lacks sufficient guidance, resources and stakeholder consultation (Chanda, 2022; Masiiwa & Last, 2024; Sithole et al., 2022). The central analytical concern is how structural constraints and school-level responses influence assessment validity, fairness and educational usefulness. Investigating these relationships in Beitbridge District would identify teachers' challenges, evaluate coping strategies and establish their implications for learner achievement, participation and instructional support. The study would provide context-specific evidence for strengthening educational assessment in rural Zimbabwe without assuming that findings from other districts necessarily apply to Beitbridge.

III. METHODOLOGY

A. Research Approach and Design

The study employed a qualitative approach and interpretive single-case study design to investigate educational assessment administration in a resource-constrained rural secondary school in Beitbridge District, Matabeleland South Province, Zimbabwe. The qualitative approach facilitated an in-depth exploration of participants' experiences, interpretations and institutional practices (Creswell & Poth, 2018). The interpretive orientation examined how participants understood assessment practices, resource constraints and educational outcomes. The case study design enabled contextual analysis of assessment planning, task construction, marking, moderation, feedback, record-keeping and instructional adaptation (Yin, 2018). Although the findings were not statistically generalisable, they offered contextually grounded insights with potential analytical transferability.

B. Study Site, Population and Sampling

The study was conducted at a rural secondary school in Beitbridge District. Participants comprised the school head, teachers involved in assessment administration, relevant school development representatives and learners with experiences pertinent to the research objectives. Purposive sampling selected information-rich participants with direct knowledge of assessment practices, resource constraints and educational outcomes (Creswell & Poth, 2018). Sample adequacy was guided by information power, considering the research aim, sample specificity, dialogue quality and analytical strategy (Malterud et al., 2016). Selection prioritised diverse institutional roles and assessment-related experiences.

C. Data Collection Methods and Instruments

Data were collected through semi-structured interviews, learner focus group discussions, non-participant observations and documentary analysis. Interviews explored assessment literacy, teacher workload, resource availability, marking, moderation and feedback. Focus group discussions examined learners' experiences of assessment fairness, task accessibility, feedback and remedial support. Observations documented classroom conditions and assessment practices, while documentary analysis examined assessment schedules, anonymised learner work, mark records and relevant school policies, subject to permissions and confidentiality safeguards. Interview guides, focus group schedules, observation checklists and document-review protocols guided data collection. Methodological triangulation facilitated comparisons across data sources, identifying convergences, differences and contradictions without assuming that agreement automatically established the accuracy of individual accounts (Carter et al., 2014). Where feasible, instruments were piloted at a comparable school outside the study site and refined to improve clarity and contextual relevance.

D. Data Analysis and Trustworthiness

Data were analysed using reflexive thematic analysis, following Braun and Clarke (2022). The process involved familiarisation, coding, generating initial themes, developing and reviewing themes, refining definitions and producing the analytical account. Coding was informed by the research questions while remaining open to emerging patterns. Interview and focus group transcripts were examined alongside observational notes and documentary evidence to understand assessment challenges, coping strategies and educational outcomes. Contradictory accounts and alternative interpretations were considered to avoid presenting dominant perspectives as universally representative. Consistent with reflexive thematic analysis, themes were developed through the researcher's active interpretation of the dataset (Braun & Clarke, 2022). Trustworthiness was strengthened through reflexive journaling, transparent documentation of analytical decisions and detailed descriptions of the research context and participants' institutional roles. These strategies addressed credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985). Reflexivity involved examining how the researcher's assumptions and positionality influenced data collection and interpretation. Reporting was informed by the Consolidated

Criteria for Reporting Qualitative Research (COREQ), particularly its guidance on researcher characteristics, study design, data collection, analysis and reporting (Tong et al., 2007).

E. Ethical Considerations and Methodological Limitations

Ethical approval and relevant education-sector permissions were obtained before data collection. Adult participants provided informed consent, while parental or guardian consent and learner assent were obtained for participants under 18. Participation was voluntary, and participants were informed about the study's purpose, confidentiality arrangements and right to withdraw. Pseudonyms or participant codes protected identities, while research records were securely stored with access restricted to authorised persons. Attention was given to power imbalances between school authorities, teachers and learners to minimise coercion and potential adverse consequences. These measures reflected established ethical principles for qualitative research (Wiles, 2013). Methodological limitations included the single-school focus, possible socially desirable responses and potential gaps in institutional records. Participants' perceptions alone could not establish causal relationships between assessment practices and academic performance. Reported experiences were therefore distinguished from observational and documentary evidence. Findings were interpreted within the school's institutional and socioeconomic context, with transferability dependent on contextual similarities. Accordingly, the study prioritised contextual depth and analytical insight over statistical generalisation.

IV. FINDINGS

A. Challenges in Educational Assessment Administration

The findings clearly show that educational assessment administration in low-resourced rural secondary schools in Beitbridge District, Matabeleland South Province, was influenced by the availability of teaching materials, assessment resources and time. Teachers were responsible for preparing assessment instruments, administering tests, marking scripts, recording results and providing feedback, while shortages of stationery, textbooks, printing facilities and subject-specific materials constrained these activities. Assessment administration therefore involved more than completing prescribed examinations; it required the systematic generation and use of evidence to support learning. Black and Wiliam (2009) explained that formative assessment improves learning when evidence of learner performance informs instructional decisions. The findings consequently indicate that assessment quality depended on the interaction between resource availability, curriculum requirements and teachers' capacity to conduct assessments effectively. Practical subjects presented additional demands where specialised equipment and demonstration materials were required. UNESCO (2020) similarly highlighted institutional barriers to inclusive educational opportunities, although its international analysis does not constitute direct evidence of conditions in Beitbridge. The findings establish resource availability as an important consideration while recognising that professional competence, assessment design and the use of results also influence educational effectiveness.

B. Teacher Assessment Literacy and Continuous Assessment Implementation

The study findings indicate that teacher assessment literacy was important in aligning assessment practices with curriculum expectations. It encompassed understanding assessment purposes, selecting appropriate methods, designing curriculum-aligned tasks, applying marking criteria and interpreting learner performance. Pastore (2023) examined teacher assessment literacy as an important area of educational assessment research, highlighting the significance of teachers' knowledge and preparation. Zimbabwe's Curriculum Framework for Primary and Secondary Education 2015–2022 emphasised competency development beyond examination-oriented knowledge (Ministry of Primary and Secondary Education [MoPSE], 2015). This orientation required assessment practices that captured diverse learning outcomes and informed instructional improvement. The findings distinguish between completing continuous assessment activities and using assessment evidence to identify misconceptions, adapt teaching and support struggling learners. Makuvire et al. (2023) provide a relevant comparison through their examination of teacher knowledge and attitudes towards continuous assessment in rural Zimbabwean secondary schools. However, their findings should not be treated as direct evidence of conditions in Beitbridge. The present study indicates that continuous assessment was educationally meaningful when teachers aligned tasks with intended competencies and used results to guide instruction. Assessment literacy therefore represented an essential dimension of curriculum implementation rather than merely a technical responsibility.

C. Assessment Workload, Marking and Timeliness of Feedback

The findings clearly indicate that assessment workload, marking responsibilities and feedback provision were interconnected. Teachers balanced assessment activities with lesson preparation, classroom instruction and record-keeping, creating competing demands on their professional time. Hattie and Timperley (2007) established that effective feedback helps learners understand their current performance, learning goals and the actions needed for improvement. Its educational value therefore depended on the clarity and usefulness of information provided rather than simply returning marked scripts. Black and Wiliam (2009) similarly emphasised using assessment evidence to adjust instruction. The findings

distinguish administrative completion of marking from feedback that identifies errors, addresses misconceptions and guides subsequent learning. Whole-class feedback, peer assessment and collaborative marking represent possible approaches to managing workload, provided that appropriate criteria and standards are maintained. Practical assessments may require additional observation and individual guidance. The study consequently highlights the importance of adequate marking time, organised assessment schedules and systematic communication of results. Workload was significant insofar as it affected feedback timeliness, specificity and instructional usefulness, linking assessment administration directly to learner progress.

D. Coping Strategies and Teacher Collaboration

The study results show that professional collaboration and locally responsive practices supported the organisation of assessment under resource-constrained conditions. These approaches included jointly preparing assessment instruments, sharing question banks, developing common marking schemes and coordinating marking schedules. Such practices reduced duplicated effort and supported consistency when teachers applied agreed criteria. The Standards for Educational and Psychological Testing emphasise the importance of appropriate procedures and evidence when interpreting assessment results (AERA et al., 2014). Locally available materials also supported practical assessment where they adequately represented prescribed competencies. However, such adaptations did not necessarily replace specialised equipment required for particular learning outcomes. The findings distinguish between coping strategies that maintained assessment quality and those that primarily enabled completion of administrative tasks. School leadership remained important in facilitating collaborative planning, moderation and professional discussion. Nevertheless, school-level initiatives could not independently resolve structural shortages in staffing, infrastructure, specialised materials and funding. Sustainable improvement therefore required teacher collaboration alongside institutional support, professional development and district-level assistance. Coping strategies needed to be evaluated in terms of assessment validity, reliability, fairness and instructional usefulness rather than administrative completion alone.

E. Validity, Reliability, Fairness and Inclusion in Assessment

The findings clearly show that assessment quality depended on curriculum alignment, transparent marking criteria, consistency in scoring and equitable opportunities for learners to demonstrate their competencies. AERA et al. (2014) provide an authoritative framework for examining validity, reliability and fairness. Validity concerns the evidence supporting interpretations and uses of assessment results, while reliability concerns consistency under relevant conditions. Fairness requires avoiding irrelevant barriers that prevent learners from demonstrating the intended knowledge or skills. The findings highlight the relevance of access to textbooks, stationery, electricity, digital resources and appropriate learning support. UNESCO (2020) similarly identified socioeconomic and institutional barriers as important considerations in inclusive education. Where necessary, reasonable accommodations could improve access without changing the competency being assessed. The findings therefore position assessment quality as both a technical and an equity-related concern. This interpretation aligns with Sustainable Development Goal 4 (SDG 4), which promotes inclusive and equitable quality education (United Nations, 2015). Fairness consequently required more than identical procedures; it required appropriate opportunities for learners with different circumstances and educational needs to demonstrate achievement while maintaining credible standards.

F. Household Poverty, Material Constraints and Learner Participation

The study findings indicate that household socioeconomic circumstances influenced learners' access to assessment materials and preparation opportunities. Stationery, textbooks, electricity, internet connectivity and digital devices shaped the conditions under which learners prepared for and completed assessment tasks. UNESCO (2020) identified socioeconomic disadvantage as an important dimension of educational exclusion, while UNESCO (2023) cautioned against assuming that educational technology automatically improves equitable access. The findings distinguish between absence from assessment, incomplete assignments, inadequate preparation and low achievement because these represent different experiences requiring context-specific interpretation. Digitally mediated assessment also depended on electricity, devices and reliable connectivity. The Organisation for Economic Co-operation and Development (OECD, 2023) documented associations between socioeconomic background and educational performance across participating education systems in PISA 2022. However, these international findings do not directly establish the effects of poverty in Beitbridge. Learner achievement was also influenced by attendance, prior attainment, instructional quality and school support. The findings therefore position assessment participation as both a pedagogical and an equity concern, requiring accessible assessment arrangements alongside broader interventions addressing poverty, infrastructure and educational financing.

G. Educational Outcomes and the Use of Assessment Evidence

The findings indicate that assessment contributed to educational improvement when evidence of learner performance informed instructional decisions and subsequent monitoring. Assessment records helped identify learning difficulties, recurring errors and areas requiring additional support. Black and Wiliam (2009) emphasised the instructional value of

formative assessment, while Hattie and Timperley (2007) highlighted the contribution of effective feedback to improvement. The findings therefore distinguish assessment used primarily for recording achievement from assessment used diagnostically to guide teaching. Identified learning difficulties required appropriate responses, including additional explanations, targeted exercises, remedial instruction and follow-up assessment. However, the existence of assessment records or remedial activities alone did not establish improved achievement. Demonstrating improvement required credible evidence, such as comparisons of learner performance over time or documented changes in assessment results. Interpretation also needed to account for attendance, prior attainment, curriculum coverage and access to learning materials. The study consequently highlights the importance of linking assessment evidence to instructional intervention and subsequent evaluation. Assessment became educationally meaningful when its results informed appropriate teaching responses and helped establish whether identified learning needs had been addressed.

H. Institutional Support, Leadership and Implications for SDG 4

The findings clearly indicate that institutional arrangements influenced the organisation and oversight of educational assessment. School leadership, assessment scheduling, moderation, monitoring of marking, record-keeping, professional development and resource allocation were important considerations. Makuvire et al. (2023) provide a relevant comparative perspective on continuous assessment in rural Zimbabwean secondary schools, although institutional conditions in Beitbridge must be established through the present study's evidence. The findings highlight the importance of collaborative planning, consistent assessment procedures and using learner performance information to guide instruction. Challenges involving staffing, infrastructure, specialised training and resource allocation could not be attributed exclusively to individual teachers. The study distinguishes between improvements achievable through school management and those requiring district and national interventions. This distinction is important for SDG 4, which promotes inclusive and equitable quality education and lifelong learning opportunities (United Nations, 2015). Effective assessment administration required more than formal policy implementation; it depended on adequate financing, professional support, appropriate materials and responsiveness to diverse learner needs. The findings therefore establish assessment administration as a shared responsibility involving schools, district authorities and national education institutions. Sustainable improvement required school-level accountability to be accompanied by appropriate resources, professional development and systematic monitoring of assessment quality and educational inclusion.

V. POLICY RECOMMENDATIONS

The findings on educational assessment administration in low-resourced rural secondary schools in Beitbridge District, Matabeleland South Province, highlight the need for coordinated policy interventions addressing assessment resources, teacher assessment literacy, workload, fairness, learner welfare and institutional accountability. These priorities align with Sustainable Development Goal 4 (SDG 4), which commits governments to inclusive, equitable and quality education (United Nations, 2015). However, achieving these commitments requires translating policy aspirations into adequately financed, context-sensitive and measurable interventions. The Ministry of Primary and Secondary Education (MoPSE) should integrate assessment administration into school improvement planning, teacher development, resource allocation and district monitoring. Zimbabwe's Education Sector Strategic Plan 2021–2025 provides a relevant national policy reference for educational quality and system strengthening, although its stated planning period has ended and any new interventions should be aligned with the successor framework in force (Ministry of Primary and Secondary Education [MoPSE], 2021). The recommendations below prioritise practical reforms while recognising that school-level coping strategies cannot independently resolve structural inequalities in educational provision.

A. Strengthening Assessment Financing and Resource Provision

MoPSE should establish needs-based funding mechanisms for assessment administration in rural secondary schools, prioritising stationery, printing facilities, textbooks, subject-specific materials and accessible assessment resources. District education offices should conduct periodic resource audits and use verified evidence of shortages, geographical remoteness and learner vulnerability to guide transparent allocations. Assessment financing should cover recurrent expenditure, equipment maintenance and the reproduction of assessment instruments, rather than treating assessment as an incidental responsibility within general school expenditure. Black and Wiliam (2009) demonstrated the educational importance of formative assessment, while the Organisation for Economic Co-operation and Development (OECD, 2025) emphasised the relationship between assessment evidence, feedback and instructional adaptation. These perspectives support investment in the resources required to translate assessment evidence into improved learning. Community contributions may supplement public funding, but they should not determine whether learners can participate in compulsory assessment activities. Implementation should be evaluated through resource availability, continuity of assessment, curriculum coverage and documented use of assessment results to improve instruction.

B. Improving Teacher Assessment Literacy and Professional Development

MoPSE, through district education offices and school leadership, should institutionalise continuous professional development in assessment design, curriculum alignment, marking criteria, moderation and interpretation of learner performance. Training should enable teachers to distinguish between recording marks and using assessment evidence diagnostically to identify misconceptions, plan remediation and monitor progress. Zimbabwe's Curriculum Framework for Primary and Secondary Education 2015–2022 provides a policy foundation for aligning teaching and assessment with intended curriculum competencies (MoPSE, 2015). Cluster-based workshops, subject associations, mentoring and collaborative preparation of assessment instruments could extend professional support to geographically isolated schools. Recent cross-national evidence also identifies assessment literacy as an important dimension of teacher preparation while highlighting inconsistencies between professional development opportunities and teachers' assessment needs (Preparing assessment literate teachers: A cross-national trend analysis, 2025). Accordingly, training should be sustained, practical and responsive to teachers' actual difficulties rather than confined to occasional workshops. Its effectiveness should be assessed through the quality of assessment instruments, consistency of marking, moderation practices and demonstrated use of assessment evidence in instructional planning.

C. Managing Assessment Workload and Improving Feedback

School heads should establish realistic assessment calendars that balance curriculum coverage, test administration, marking responsibilities and timely feedback. Teachers should receive protected time to mark scripts, analyse results and plan remedial instruction. Collaborative marking, shared assessment banks and common marking rubrics should be encouraged, with moderation safeguards to maintain consistency. Hattie and Timperley (2007) established that feedback is most useful when it clarifies learning goals, current performance and the actions required to improve. Similarly, the OECD (2025) emphasised that formative assessment involves diagnosing learning, communicating meaningful feedback and adapting instruction to learners' needs. Consequently, schools should monitor not merely whether scripts have been marked but whether learners understand feedback and have opportunities to act upon it. District authorities should review staffing levels, class sizes and administrative demands that compromise these responsibilities. Appropriate indicators should include feedback timeliness, the usefulness of learner guidance, opportunities for correction and evidence that assessment results inform subsequent teaching.

D. Promoting Fair, Valid and Inclusive Assessment

MoPSE should strengthen guidelines for valid, reliable and equitable assessment, incorporating transparent marking criteria, appropriate moderation and reasonable accommodations for learners with disabilities and additional educational needs. Assessment tasks should measure intended competencies rather than differences in learners' access to textbooks, electricity, stationery or digital devices. The United Nations (2015) places equity and inclusion at the centre of SDG 4, while UNESCO's (2023) Global Education Monitoring Report cautions that educational technology can reproduce existing inequalities when access, suitability and sustainability are overlooked. Schools should therefore provide accessible assessment materials, clear instructions, appropriate additional time where justified and alternative response formats where these preserve the competencies being assessed. Digital assessment should be introduced only where infrastructure, electricity, connectivity and technical support are adequate. District authorities should periodically examine participation and performance patterns to identify assessment arrangements that systematically disadvantage particular learner groups. Such reviews should inform corrective action without lowering curriculum expectations or compromising assessment standards.

E. Strengthening Learner Support and Institutional Accountability

District education offices should coordinate schools, parents and relevant social protection agencies to address poverty-related barriers affecting assessment preparation and participation. Where local evidence establishes need, interventions should include assistance with stationery, textbooks, school meals and other appropriate learner support. School Development Committees should complement government provision through transparent, voluntary and needs-based initiatives rather than imposing financial obligations that disadvantage poorer households. School heads should also conduct termly reviews of assessment records, attendance, marking schedules, learner progress and remediation activities. These reviews should identify persistent learning difficulties and document the support provided. MoPSE's Education Sector Strategic Plan (2021–2025) offers a relevant historical policy reference for strengthening educational access and quality, but current implementation should be guided by updated national priorities. Accountability should focus on whether schools identify and address learning needs, not simply whether administrative records are complete. Progress should be assessed through evidence of assessment participation, the provision of feedback, learner engagement and subsequent learning progression, interpreted in relation to household circumstances and available school resources.

F. Establishing Sustainable Monitoring and Evaluation

MoPSE should introduce a practical monitoring and evaluation framework incorporating assessment-resource availability, teacher professional development, moderation, feedback timeliness, learner participation and subsequent performance. District officers should support schools in interpreting assessment data, identifying disparities across learner groups and developing corrective measures. Baseline measures and periodic reviews would help establish whether interventions were implemented as intended and whether educational processes improved. The OECD (2025) supports the systematic use of assessment evidence to inform teaching decisions, while UNESCO (2023) underscores the importance of evaluating educational interventions against their relevance, equity and sustainability. Nevertheless, changes in learner achievement should not automatically be attributed to a single policy intervention because attendance, prior attainment, household circumstances, teacher availability and other contextual factors also influence outcomes. Monitoring should therefore combine quantitative indicators with professional reflection, school-level documentation and contextual evidence. Indicators should remain manageable for overstretched rural schools, with reporting requirements proportionate to institutional capacity. This approach would strengthen evidence-informed resource allocation and accountability for SDG 4 while ensuring that monitoring contributes directly to educational improvement.

VI. CONCLUSION

This study established that educational assessment administration in low-resourced rural secondary schools in Beitbridge District was shaped by the interaction of material constraints, teacher assessment literacy, workload, institutional support and learners' socioeconomic circumstances. The findings demonstrate that assessment effectiveness depended not merely on administering tests and recording marks but on aligning assessment tasks with curriculum competencies, applying consistent criteria, providing timely feedback and using evidence to guide instructional improvement. Black and Wiliam's (2009) formative assessment perspective and Xu and Brown's (2016) teacher assessment literacy framework illuminate the pedagogical and professional dimensions of these processes, while the study extends their contextual relevance by foregrounding the structural limitations confronting rural schools. Although collaborative planning, locally available materials and peer moderation helped sustain assessment activities, these coping strategies could not substitute for adequate public financing, professional development and equitable resource distribution. Importantly, assessment quality emerged as both a pedagogical concern and an educational justice imperative because unequal access to learning materials and assessment opportunities threatened fairness and meaningful participation. The study therefore positions progress towards Sustainable Development Goal 4 as dependent on integrating teacher competence, institutional accountability and needs-based resource allocation. Sustainable improvement requires moving beyond procedural compliance towards valid, inclusive and instructionally responsive assessment systems that support learner development and equitable educational outcomes.

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