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Teachers' Perspectives on the Challenges of Implementing Vygotsky's Social Constructivist Outcome-Based Assessment in Secondary Schools in Botswana

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Abstract. This study examines teachers' perspectives and challenges in implementing outcome-based assessment (OBA) at Tsabong Unified Secondary School in Botswana using Vygotsky's social constructivist framework to explore how teachers' interactions shape assessment practices. Despite OBA's introduction, challenges include teacher preparedness and resource limitations. A mixed-methods approach was employed, with questionnaires surveying 50 teachers and interviews administered to 10 of the participants. The questionnaires were used to generate quantitative data while semi-structured interviews provided deeper qualitative insights into teachers' experiences, conceptions and instructional adjustments related to OBA. The sampling of the 50 teachers was done through convenience sampling to ensure participation from those familiar with OBA and actively engaged in its application in order to attract interested teachers and those knowledgeable on the use of OBA. Deductive analysis tested the hypothesis that teachers faced challenges, while inductive exploration identified strategies to overcome them. Findings revealed inadequate training, time constraints and

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misalignment between OBA expectations and available resources as major barriers, contributing to mixed or negative teacher attitudes toward OBA. However, teachers expressed a willingness to adopt OBA if provided with structured support, clear guidelines and adequate resources. Additionally, some teachers reported successes in using OBA to improve student engagement and critical thinking skills in their classrooms despite systemic limitations. Recommendations include comprehensive, ongoing professional development, structured mentorship programs, dedicated planning time and consistent leadership support to address barriers and enhance OBA effectiveness in secondary schools. Future research should explore policy-level interventions and long-term impacts of OBA on student achievement and teacher efficacy.

Keywords: Challenges in Implementation; Outcome-Based Assessment; Professional Development; Teachers' Perspectives; Social Constructivism

1. Introduction

Global trends in education are undergoing significant transformation, and Botswana is no exception. When introducing outcome-based assessment (OBA) in Botswana, teachers were not adequately trained in the application of suitable pedagogies and assessment activities for implementing the program. Botswana, emulating global trends and striving to modernize its education system, shifted its focus toward OBA through national policies. For example, the Revised National Policy on Education (RNPE) of 1994 addressed the transition from a traditional agro-based economy to an industrialized one, focusing on access, equity, and educational quality enhancement (Makwinja, 2017). Furthermore, the Botswana Education & Training Sector Strategic Plan (ETSSP 2015-2020) emphasized a shift from content-based to outcome-based learning (Republic of Botswana, 2015).

Despite Botswana's commitment to OBA, there remains a gap in understanding teachers' perspectives on its implementation, challenges and effectiveness. The reality of implementation involves significant hurdles, including a lack of teacher training, resource constraints and resistance to change (Anderson, 2019). These factors hinder the successful integration of OBA in Botswana's education system.

The implementation of OBA in Botswana is hampered by limited teacher preparedness and inadequate professional development, which affects the overall effectiveness of the system. Although education policies aim to align with economic needs, the challenges in implementation limit OBA's potential benefits in fostering student engagement, critical thinking and problem-solving skills. Additionally, previous research highlights political and technical problems in outcome-based assessment, emphasizing the need for high-quality teacher training and a deeper understanding of OBA's role in shaping learning outcomes (Ali, 2023; Hothi, 2024; Yen, Thi, Thuy, Thao, Thu, & Tra, 2024).

This study at Tsabong Secondary School in the Kgalagadi region aims to explore the landscape of OBA, examining the challenges and opportunities perceived by teachers. Understanding the local implementation of OBA is crucial for informing future educational policies and practices in Botswana. A critical review of the

outcomes-based approach in higher education suggests the importance of considering both practical and philosophical aspects to ensure effective classroom instruction (Tan, 2014; Asim, Vaz, Ahmed & Sadiq, 2021).

In the past decade, research on OBA has expanded, focusing on its theoretical frameworks, implementation strategies and effectiveness in improving learning outcomes. However, there is limited research specifically addressing teachers' experiences and perceptions of OBA in the Botswana context. Previous studies have primarily examined OBA from a policy perspective or its application in higher education, overlooking practical challenges faced by secondary school teachers. This study differentiates itself by adopting a teacher-centered approach, investigating firsthand experiences, concerns and strategies used in implementing OBA.

Outcome-based education (OBE) is an educational philosophy originating in the United States in the 1990s, emphasizing specific learning outcomes for students (Spady, 1994, 2020; Syeed, Shihavuddin, Uddin, Hasan, & Khan, 2022). It has gained global recognition by aligning with national educational goals, such as preparing students for twenty-first-century workforce challenges. Internationally, OBE has been adopted to help reform education systems, promoting inclusive and equitable education, as acknowledged by UNESCO in its global initiatives and frameworks (UNESCO, 2015).

In Africa, including Botswana, OBE has been incorporated into educational policies to address evolving societal and economic needs. Ideally, OBE implementation requires a committed teaching staff, comprehensive professional development, supportive leadership and a robust infrastructure for curriculum and assessment changes (Sackney & Walker, 2006; Guha-Majumdar, 2019). While challenges like resistance to change and concerns about standardization exist, OBE offers opportunities such as a learner-centered approach, critical thinking development, and alignment with contemporary job market demands (Anderson, 2019).

Thus, despite Botswana's commitment to OBE and its emphasis on preparing students for a knowledge-driven economy, this study provides a unique contribution by bridging the gap in knowledge regarding teachers' perspectives on OBA. By analyzing practical challenges and successes in implementation, the findings can guide more effective policy adaptations and targeted professional development programs. Insights gained from this research can contribute to refining educational policies and practices in Botswana, addressing barriers to effective OBA integration.

1.1 Questions of the Study

The study seeks to answer the following main research question:

What are teachers' perspectives on the challenges of implementing Vygotsky's social constructivist outcome-based assessment in secondary schools in Botswana?

The following sub questions have been formulated to guide the data collection process:

- a) What specific challenges do secondary school teachers face when implementing outcome-based assessment?
- b) What conceptualizations do secondary school teachers attach to the concept of outcome-based assessment?
- c) How do secondary school teachers adapt their instructional strategies to align with outcome-based assessment?

1.2 Objectives of the Study

The main aim of the study was to find out the perceptions of secondary school teachers at Tsabong Secondary School in Kgalagadi region, Botswana of the challenges they encountered in implementing OBA.

To achieve the aim, the following objectives are set:

- a) To identify challenges faced by secondary school teachers in the implementation of OBA.
- b) To find out teachers' conceptions of OBA and its implementation in secondary schools.
- c) To identify the best instructional strategies employed by secondary school teachers when implementing OBA.

The main aim of the study is to find out the perceptions of secondary school teachers on OBA.

To achieve the aim, the following objectives are set:

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- b) b) To find out teachers' conceptions attached to OBA.
- c) c) To identify best instructional strategies employed by secondary school teachers at implementing OBA.

1.3. Study variables

This mixed-method study seeks to examine the challenges faced by secondary school teachers in implementing OBA at Tsabong Unified Secondary School in the Kgalagadi region. The key study variables include teacher challenges as the independent variable and the effective implementation of OBA as the dependent variable. Teacher challenges encompass factors such as inadequate training, time constraints, limited resources, lack of institutional support and misalignment between OBA expectations and actual classroom realities. These factors are analyzed to determine their impact on the successful application of OBA in instructional practice. The dependent variable, effective implementation of OBA, is measured through teachers' ability to integrate OBA strategies into their teaching, align assessments with learning outcomes, and facilitate student engagement in a manner that promotes critical thinking and academic growth.

1.4 Significance of the study

The findings of this study provide valuable insights for various stakeholders, including policymakers, school administrators and educators, in enhancing the effective implementation of OBA at Tsabong Unified Secondary School and beyond. By identifying key challenges such as inadequate training, time constraints and resource limitations, this study highlights the need for comprehensive and ongoing professional development to equip teachers with the necessary skills and knowledge to successfully implement OBA. In addition, the study underscores the importance of structured mentorship programs and dedicated planning time to support teachers in aligning their instructional practices with OBA principles. These findings can guide the development of clear guidelines and strategic interventions to address systemic barriers and promote a more effective and sustainable OBA framework. Moreover, the study contributes to the theoretical application of Vygotsky's social constructivist framework, emphasizing how teacher collaboration and interaction influence assessment practices. By exploring whether OBA is effectively addressing the challenges teachers face, this research helps ensure that its implementation is purposeful, practical and responsive to real classroom needs.

2. Literature Review

The literature review addresses outcome-based education (OBE), OBA, challenges faced by teachers when implementing OBA, teacher's conceptualization attached to OBA framework and teachers' adaptation toward these two concepts.

2.1. Outcome-Based Education (OBE)

OBE is an educational approach that emphasizes aligning all aspects of the educational process and system with the expected outcomes to be demonstrated by students at the end of the curriculum (Macayan, 2017). This approach encompasses various components, including curriculum content, organization, teaching methods, strategies, and assessment practices (Donnelly, 2007). The implementation of OBE emphasizes the clear definition of outcomes, which serve as a guiding framework for both instruction and assessment, ensuring that educators have a well-defined roadmap to follow (Macayan, 2017). This highlights the importance of examining the implementation of OBA to determine if it aligns with the intended goals and principles of OBE.

2.2. OBA

OBA is an approach that aligns educational practices with desired outcomes, focusing on evaluating students' mastery of specific learning outcomes or competencies rather than solely assessing knowledge recall (Macayan, 2017; Jones, Priestley, Brewster, Wilbraham, Hughes & Spanner, 2021). Research has consistently demonstrated the positive impact of OBA on student learning outcomes, leading to improved academic achievement and enriched learning experiences (Jones et al., 2021).

Moreover, OBA plays a vital role in informing teacher professional development by identifying challenges and opportunities associated with its implementation, guiding the design of training programs that enhance instructional practices and

contribute to improved student learning outcomes (Brown & Williams, 2020). To address these challenges, it is crucial for the Teacher Training and Development (TT&D) unit and school management to collaborate and establish the specific obstacles faced by teachers during the implementation of OBE and assessment. By doing so, educators can develop targeted interventions that enhance the implementation of OBA. In general, the existing literature strongly supports the importance of OBA in enhancing educational practices, improving student learning outcomes, guiding teacher professional development and shaping educational policies. It is crucial for educators and policymakers to recognize the value of OBA and work collaboratively to overcome challenges, enhance implementation and ultimately improve the educational experience for students.

2.3. OBA Policy in Botswana

The successful implementation of OBA is closely tied to national education policies, as these policies establish the framework within which OBA is executed. National policies provide guidelines for curriculum development, assessment practices, and teacher training, ensuring consistency in OBA implementation across institutions (Sun, 2011). In many countries, OBA policies emphasize competency-based education, accountability measures and continuous improvement strategies aimed at improving student outcomes (Jackson & Thompson, 2019). In Botswana, the RNPE of 1994 underscores the importance of learner-centered approaches by advocating for interactive and participatory teaching methods that place the learner at the center of the learning process (Republic of Botswana, 1994). This policy aims to promote critical thinking, problem-solving skills and independent learning, aligning with the principles of OBA. Additionally, the Education and Training Sector Strategic Plan (ETSSP) 2015-2020 explicitly emphasizes the adoption of OBE to enhance teaching and learning effectiveness (Republic of Botswana, 2015). The ETSSP highlights the need to shift toward a competency-based curriculum that focuses on skills acquisition, lifelong learning and employability.

Challenges related to policy implementation include resistance to change, inadequate training for teachers and limited resources to support OBA initiatives. Addressing these challenges requires strong leadership, ongoing professional development and clear communication between policymakers, educators and stakeholders (Brown & Williams, 2020).

2.4. Challenges Faced by Teachers in Implementing OBA

Research has identified challenges that teachers face when implementing OBA. For example, Brown and Williams (2020) posits that the major challenge identified by teachers is the shift from a traditional content-focused approach to an OBA framework. This shift emphasizes specific learning outcomes or competencies, requiring teachers to reorient their instructional practices and assessment methods, which can be a significant adjustment for some of them. In addition, teachers may face difficulties in aligning their instructional activities and assessments with the desired outcomes, as OBA requires a cohesive and integrated approach throughout the curriculum (Jackson & Thompson, 2019). Brown and Williams (2020) further discussed that time constraints and workload pressures also pose challenges, as effectively implementing OBA may require

additional planning and documentation efforts. Moreover, teachers may encounter challenges in accurately assessing and evaluating students' mastery of specific outcomes, as this often requires a more nuanced and holistic approach beyond traditional testing methods (Coe, 2013).

2.5. Teachers' Conceptualization of OBA

The existing literature provides valuable insights into teachers' conceptualizations of OBA, shedding light on their understanding and interpretation of this assessment approach. Brown and Williams (2020) discuss how teachers perceive OBA as an approach that goes beyond assessing content knowledge, instead emphasizing the assessment of students' mastery of specific learning outcomes or competencies. Moreover, researchers such as Vinluan and Bantugan (2025) indicate that teachers view OBA as a comprehensive framework that assesses not only knowledge acquisition but also skills development, enabling a holistic evaluation of student learning. Another conceptualization of OBA highlighted by Jones et al. (2021) is its potential to shift from a teacher-centered to a learner-centered approach, placing emphasis on students' active engagement and responsibility in demonstrating their learning outcomes.

Teachers also conceptualize OBA as an approach that necessitates alignment among instructional activities, assessments and desired outcomes (Jackson & Thompson, 2019). They perceive OBA as an opportunity to design instruction that directly targets identified learning outcomes, guiding their instructional planning and curriculum design (Brown & Williams, 2020). Furthermore, teachers recognize OBA as a means to provide meaningful feedback and support students' progress toward achieving the desired outcomes (Vinluan & Bantugan, 2025)

It is important to acknowledge that teachers' conceptualizations of OBA may vary based on their prior experiences, training, and contextual factors (Izci & Caliskan, 2017). These varied conceptualizations underscore the importance of clear communication and professional development initiatives aimed at aligning teachers' understanding and practice of OBA (Brown & Williams, 2020). Therefore, educational policymakers and school management must understand teachers' conceptualizations and beliefs regarding OBA to provide targeted professional development and support, enhancing the implementation of OBA practices.

2.6 Teachers' Adaptation of Instructional Strategies to Align with OBA

The literature on the adaptation of instructional strategies by teachers to align with OBA sheds light on the various approaches and practices employed by teachers in response to this assessment framework. Research has shown that teachers make significant adaptations to their instructional strategies to ensure alignment with the principles of OBA. One key adaptation is the emphasis on clearly defining and communicating learning outcomes to students, which serves as a guide for instruction and assessment (Black & William, 2009). Teachers recognize the importance of explicitly connecting instructional activities to the identified learning outcomes, ensuring that the content and strategies employed are directly aligned with the desired outcomes.

Gulikers, Bastiaens, Kirschner and Kester (2004) argue that teachers incorporate student-centered approaches in their instructional strategies to align with OBA. This involves engaging students in active learning, promoting critical thinking and problem-solving skills, and providing opportunities for self-reflection and self-assessment. By adopting learner-centered instructional strategies, teachers aim to empower students to take ownership of their learning and develop the necessary skills and competencies outlined in the desired outcomes. Furthermore, they adapt their instructional strategies by emphasizing the clear definition and communication of learning outcomes and incorporating student-centered approaches (Black & William, 2009). These adaptations reflect the teachers' commitment to aligning their instructional practices with the principles of OBA and creating meaningful learning experiences for their students.

2.7. Education in the 21st Century

Education in the twenty-first century is characterized by rapid technological advancements, evolving pedagogical approaches and an emphasis on competency-based learning. The shift from traditional rote memorization to OBE aligns with the demands of the twenty-first-century workforce, which requires critical thinking, problem-solving, and adaptability (Malviya, 2024). Integrating OBA within the broader context of twenty-first-century education ensures that students acquire the necessary skills and competencies to thrive in a dynamic global environment (Brown & Williams, 2020). Educators and policymakers must continuously refine OBA implementation to meet the evolving needs of students and society.

3. Theoretical Framework

3.1 Vygotsky's Social Constructivist Theory and Outcome-Based Assessment

The purpose of this study is to investigate the challenges and opportunities perceived by teachers in implementing OBA at secondary schools. Vygotsky's social constructivist theory (SCT) serves as the theoretical framework guiding this study due to its unique approach to examining behavior and its broad applicability in educational research. This framework is particularly relevant in addressing the study's research questions:

- a) What specific challenges do secondary school teachers face when implementing OBA?
- b) What conceptualizations do secondary school teachers attach to the concept of OBA?
- c) How do secondary school teachers adapt their instructional strategies to align with OBA?

At the center of Vygotsky's (1934) SCT is his well-known concept of the Zone of Proximal Development (ZPD), which he defined as "the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Vygotsky submitted that individuals are born with basic cognitive abilities, but these abilities are refined through social interaction, which eventually leads to higher-order thinking skills (Shabani, Khatib, & Ebadi, 2010). Learning is

therefore a socially mediated process in which knowledge is constructed through interactions with peers, culture and society. Learners actively engage in the construction of knowledge by participating in conversations and collaborative activities, a principle that is crucial when implementing OBA in secondary school settings. Teachers, in this regard, should act as facilitators who create environments where students collaborate to solve complex problems beyond their individual capabilities, thereby advancing their ZPD (Roosevelt, 2008). Applying Vygotsky's SCT to OBA suggests that teachers need to employ learner-centered approaches, encourage critical thinking, and align assessment activities with students' cognitive development (Bozkurt, 2017). However, one of the challenges teachers face when implementing OBA is the extent to which they are equipped with the necessary pedagogical skills to scaffold learning effectively. Many teachers struggle to shift from traditional teacher-centered methodologies to a facilitative role that prioritizes student collaboration and dynamic assessment (Chaiklin, 2003; Vygotsky, 1978). The successful implementation of OBA relies on teachers' ability to design assessment tasks that promote meaningful student engagement within their ZPD. Furthermore, teachers conceptualize OBA differently based on their training and experience. Some view it as a mechanism to measure student competencies in real-world applications, while others perceive it as a rigid assessment system that is difficult to integrate into traditional curricula (Jaworski, 1994). These conceptual differences influence how teachers adapt their instructional strategies to align with OBA. Those who embrace a constructivist approach are more likely to implement formative assessments, peer evaluations and inquiry-based learning strategies, whereas others may struggle to transition from conventional assessment methods (Bozkurt, 2017).

4. Methodology

4.1. Design

The research methodology employed in this study encompasses both quantitative and qualitative approaches, commonly referred to as a mixed-methods design. This approach allows the researcher to gain a comprehensive understanding of complex phenomena by combining qualitative exploration of subjective experiences with quantitative analysis involving numerical data and basic statistical techniques (Creswell & Creswell, 2017). The study adopts a case study approach (Baxter & Jack, 2008) which enables an in-depth investigation of the research questions and facilitates a holistic understanding of the phenomenon under examination. By adopting the case study method, the study delves deeply into the phenomenon, exploring it within its specific context and drawing insights from various data sources. This multifaceted approach ensures a thorough examination of the research problem and contributes to a richer and more nuanced understanding of the phenomenon under investigation.

4.2. Procedure

A mixed-methods approach was used for triangulation purposes to gather data and gain insights into teachers' perspectives on OBA and the challenges encountered in its implementation. Quantitative data was collected through a survey with closed-ended questions designed to provide a numeric overview of teachers' practices and beliefs. The questionnaire was designed to elicit information about teachers' views, experiences and attitudes related to OBA.

4.3. Participants and Research Place

The target population for this study comprised teachers from Tsabong Secondary School in the Kgalagadi region. A sample of 50 teachers (26 females and 24 males) was selected from various departments within the school. The sample for this study was selected using a convenient sampling approach. This obviously introduces a bias because it relies on participants who are readily available or willing to participate, rather than selecting participants in a way that represents the broader population of teachers.

The sample size was sufficient for qualitative analysis, particularly since qualitative research tends to focus on depth rather than breadth of data. A sample size of 50 is adequate for identifying recurring themes, as qualitative data analysis often seeks to explore richness and variation in participants' experiences, rather than aiming for statistical significance. While qualitative research does not prioritize generalizability in the same way that quantitative research does, the sample size still plays a role in the richness of the data. A sample of 50 participants is large enough to capture a variety of experiences and perspectives, which can provide valuable insights into the research topic. However, since the sample was selected using convenience sampling, the findings may not be fully generalizable to all teachers in Botswana or beyond Tsabong Secondary School, especially since it may not represent teachers from rural areas or different educational contexts. Since inferential statistical analysis was performed to examine correlations between variables, this sample size could be sufficient for the basic statistical tests of chi-square (χ^2) which was utilized.

To mitigate this potential bias, several factors were taken into account such as:

- a) The sample included 26 females and 24 males, ensuring an equitable representation of both genders aimed at reducing gender bias in the data collection process.
- b) Teachers were selected from various departments within the school, ensuring a diversity of subject areas and teaching experiences, thus allowing for a broad range of views on the research topic.
- c) The selected participants had teaching experience ranging from 3 to 26 years, ensuring that both newer and more experienced teachers were represented, reducing the risk of bias toward one particular group.

4.4. Data Collection Techniques

For the quantitative part of the study, data collection involved a questionnaire with both closed-ended questions administered to 50 teachers. Qualitative data was collected through a semi-structured interview administered to ten teachers. These interviews provided an opportunity for in-depth exploration of teachers' perspectives on OBA. By employing a mixed-methods approach and using both questionnaires and interviews, the study was able to gather comprehensive data that provided a rich understanding of teachers' conceptualizations of and experiences with OBA. This multifaceted approach allowed for a more comprehensive exploration of the research questions and enhanced the validity and reliability of the findings.

4.5. Data Analysis Techniques

The quantitative data were gathered through teachers' questionnaires and were analyzed using the Statistical Package for Social Science (SPSS) version 29. Descriptive and inferential statistics were used to organize and summarize the collected information, enabling the researchers to address the research questions of the study. The qualitative data was analyzed thematically, focusing on identifying recurring themes and patterns in the information provided.

4.6. Data Validity and Reliability

This study used Cronbach's alpha to assess the internal consistency of the survey instruments used in our research. The reliability was tested during a pilot study involving 20 participants from another senior secondary school in the region, using a Likert scale. In the pilot study, the calculated Cronbach's alpha was found to be 0.749, 0.710, and 0.698 for the challenges, conception, and instructional strategies scales respectively, and 0.719 averagely, suggesting that the survey instruments had acceptable reliability. This reliability score also implies that the results gathered from the main study were robust and reliable, as the survey instruments had been empirically tested for consistency. Consequently, there was confidence in the interpretation of the findings of the main study, given that data collected reflected a stable measurement of the perceptions of the respondents.

4.7. Ethical Considerations

Stringent ethical standards were observed from the outset, beginning with the formal request for permission from the Director of Regional Operations in Kgalagadi Region, Tsabong, to initiate data collection through questionnaires and interviews. As such, the Ethical Committee of the Kgalagadi Region, Botswana granted approval for this study on 5 June 2023, reference number KGR/P746427209 I (51). Comprehensive information about the study's objectives was shared with participants, and their informed consent was actively sought and obtained. The study meticulously upheld principles of confidentiality, voluntary participation, and the participants' right to withdraw throughout its duration through the signing of consent forms. Explicit permissions were acquired from the school head to access teachers, and participants' identities were shielded through a coding system. The research project consistently prioritized the well-being and rights of the participants at each stage, ensuring the execution of a morally sound and responsibly conducted study.

5. Findings and Discussion of results

The study explored perceptions of secondary school teachers on outcome-based assessment, challenges and opportunities. Responses from the closed-ended and the interview questions were analyzed through SPSS while data from interviews were coded, categorized and themes were generated to respond to the research questions. The closed-ended questions were analyzed and discussed according to the themes that guided the research questions as follows:

Table 1. Mean responses for closed-ended questions.

Themes	Percentages (%)					
	Mean	SA	A	N	D	SD
Challenges						
Q3	2.45	3.03	24.24	18.18	24.24	30.30
Q4	2.24	0	9.09	33.33	30.30	27.27
Average mean	2.35					
Conceptions						
Q1	3.36	12.12	39.39	30.30	9.09	9.09
Q2	3.12	3.03	36.36	39.39	9.09	12.12
Q5	2.60	0.00	24.24	24.24	39.39	12.12
Q6	2.70	0.00	9.09	60.60	21.21	9.09
Q7	3.70	27.27	21.21	45.45	6.06	0.00
Q8	3.64	27.27	21.21	39.39	12.12	0.00
Q9	3.39	12.12	24.24	57.57	3.03	3.03
Q10	3.82	33.33	18.18	30.30	3.03	0.00
Average mean	2.93					
Instructional strategies						
Q11	3.03	3.03	33.33	36.36	18.18	9.09
Q12	3.21	9.09	30.30	39.39	15.15	6.06
Average mean	3.12					

Table 1 present result analysis for the closed-ended questions and the discussion focuses on the three themes as follows:

Theme 1: OBA implementation challenges

The results from Table 1 suggest that participants in the study either disagreed or were neutral regarding their professional development and access to resources for implementing OBA. This finding is supported by a mean score of 2.35 for questions 3 and 4, which specifically assessed participants' training related to OBA and the availability of appropriate resources and materials. Further analysis was conducted to establish correlations between variables (gender, age, qualification, experience) and teachers' conceptions about OBA and challenges encountered during implementation. The χ^2 test was employed to analyze participants' responses regarding challenges and conceptions in implementing the OBA in their classrooms. The results were disaggregated by gender, age, qualification and teaching experience. The focus was on the asymptotic significance (2-sided) or p-value, with a significance threshold of 0.05. If the p-value was below 0.05, it indicated a statistically significant relationship between the variables and participants' responses. The χ^2 test results were analyzed for responses on the adequacy of resources and training related to OBA. The following statistics emerged:

Table 2: χ^2 Test Results on Resources and Training

Statement	Gender	Age	Qualification	Designation	Experience
There are inadequate or appropriate resources to effectively implement OBA in my classroom	0.297	0.832	0.095	0.644	0.843
I am not well trained to handle OBE issues in my classroom instruction	0.853	0.650	0.886	0.926	0.817

$P < 0.05$

The results indicate that there was no statistically significant difference in participants' responses based on gender, age, qualification or teaching experience, as all the p-values were greater than 0.05. This suggests that participants' perceptions regarding the inadequacy of resources and training for implementing OBA were not dependent on any of these variables.

The participants' disagreement or neutral stance on their professional development and resources for implementing OBA raises concerns about the readiness and support provided to educators in adopting OBA practices. OBA is an assessment approach that focuses on measuring the achievement of specific outcomes or competencies, rather than relying solely on traditional testing methods (Coe, 2013). It requires a shift in instructional practices, assessment design, and the availability of relevant resources and materials (Popham, 2008). Teachers need opportunities for ongoing training and collaboration to enhance their assessment literacy and pedagogical practices (Earl & Katz, 2006; Heritage, 2010). Inadequate professional development and resources may hinder teachers' ability to effectively incorporate new assessment strategies into their instructional practices (Penuel, Farrell, Coburn, McCarthy & Korbak, 2007).

In addition, the interview responses provided support for the findings, as they were analyzed thematically. Specifically, the theme of challenges emerged, with teachers expressing their lack of preparedness to implement OBA due to inadequate training and resources. This is illustrated by a participant's statement, which highlighted the following concerns:

Teachers are not prepared to implement OBA as we were given two days training for something that some people were trained for six weeks and there is no monitoring to check if the implementation is done accordingly. There was no audit done to check the resources if there were enough before starting the assessment through the approach.

From the above sentiments, the importance of having suitable resources and materials cannot be overstated, as they play a vital role in developing authentic assessments and facilitating meaningful learning experiences for students (Stiggins, 2005; Maphosa, Mthethwa-Kunene, Rugube & Dlamini, 2024). This observation is consistent with prior research that emphasizes the significance of comprehensive professional development and sufficient resources to assist teachers in implementing educational innovations (Darling-Hammond, Hyler & Gardner, 2017). The underlying factor is that learners work together in groups

sharing ideas, finding answers to problems or creating something new to add to existing knowledge. This learning theory deemphasizes teacher-autonomy in the classroom, but encourages active interaction among learners, the teacher and other components of the teaching learning process. Among other benefits, it also concretizes learning and knowledge by making students retain the facts that they discover and construct by themselves rather than those they are told by the teacher.

Theme 2: Teachers' Conceptions about OBA Implementation.

The results from Table 1 indicate that teachers had mixed or negative attitudes toward various aspects of OBA. These findings are supported by a mean score of 2.93 for questions 1, 2, 5, 6, 7, 8, 9 and 10, which assessed participants' knowledge and ability to implement OBA, time for planning and preparation, feedback and support from instructional leaders, potential benefits for students, the diverse range of skills and abilities for students, alignment of OBA with educational goals and fairness and equity of OBA as an evaluation method. Additionally, approximately 50% of the teachers either disagreed or were neutral regarding their knowledge of OBA. This finding aligns with the literature, indicating that teachers often lack sufficient understanding and familiarity with new assessment approaches (Darling-Hammond et al., 2017). This suggests a need for comprehensive professional development programs to enhance teachers' knowledge and skills in implementing OBA effectively. The results were further supported by participants' responses to Question 2, which inquired about their ability to implement OBA. An equal number of participants agreed and were neutral in their responses, indicating uncertainty about their own ability to implement OBA. This highlights the importance of providing teachers with the necessary training and support to build their confidence and competence in utilizing OBA methods (Black & William, 1998; Popham, 2008). Moreover, the teachers expressed disagreement regarding the availability of time for planning and preparation for OBA. This finding aligns with previous research emphasizing the need for dedicated planning and preparation time to successfully implement new assessment approaches (Garet, Porter, Desimone, Birman & Yoon, 2001; Darling-Hammond et al., 2017). Without sufficient planning and preparation, teachers may struggle to design and implement effective OBA tasks. Furthermore, the teachers disagreed that they received regular feedback and support from instructional leaders. This aligns with research highlighting the importance of ongoing support and feedback for teachers in implementing educational innovations (Darling-Hammond et al., 2017). Regular feedback and support from instructional leaders can provide guidance and help address any challenges or concerns that teachers may encounter during the implementation of OBA.

Further analysis of the χ^2 test was also conducted to assess participants' knowledge and competence in implementing OBA, time for planning and preparation, feedback and support from instructional leaders, and perceptions of the benefits of OBA. The results are summarized in the table below:

Table 3: χ^2 Test Results on Participants' conceptions of OBA

Statement	Gender	Age	Qualification	Designation	Experience
I know what an OBA approach is	0.943	0.204	0.819	0.548	0.456
I am not competent to implement OBA in my instruction	0.405	0.866	0.548	0.155	0.189
I receive feedback and support from instructional leaders regarding OBA approach	0.669	0.664	0.008	0.279	0.914
I know the potential benefits of OBA for students	0.927	0.849	0.440	0.262	0.693

P < 0.05

The χ^2 test results reveal a significant difference in participants' responses based on qualification concerning receiving feedback and support from instructional leaders on OBA implementation (Chi-Square Asymptotic Significance value = 0.008). This means that qualification played a significant role in whether participants received support and feedback or not. Specifically, only 3% of degree holders reported receiving feedback and support from instructional leaders, while 77% of master's degree holders reported receiving such feedback and support. This suggests that individuals with higher qualifications may be more engaged with OBA, thereby seeking more guidance and assistance from instructional leaders compared to those with a first degree. To substantiate the findings of the χ^2 test, where a significant difference was found in the responses based on qualifications regarding receiving feedback and support from instructional leaders on OBA implementation, we can draw on several recent studies. For example, Zepeda, Parylo and Bengtson (2020) have shown that teachers with higher qualifications tend to be more engaged in professional development activities and often seek more feedback and support from instructional leaders. Furthermore, such teachers with advanced degrees, such as master's degrees, are more likely to engage in professional learning opportunities and actively seek feedback and support to implement new teaching strategies, thus possessing a greater sense of responsibility toward improving their practice and maintaining expertise standards (Vescio, Ross & Adams, 2017; Zepeda et al., 2020). Zeggelaar, Vermeulen and Jochems (2022) and Baker, Reeve and Gable (2018), similarly established in their research that that teachers with higher qualifications often exhibit a greater level of commitment to educational innovations. This aligns with the findings of this study as highly qualified teachers seemed to be engaging more with OBA, possibly because they felt confident in their ability to adapt and incorporate these new reforms.

Theme 3: Teachers' instructional strategies employed to align with OBA

The results from Table 1 reveal that teachers generally had positive attitudes toward the use of OBA during instruction and the utilization of formative assessment to monitor student progress toward learning outcomes. This is evident from an average mean score of 3.12 for questions 11 and 12, which specifically addressed teachers' practices related to OBA assessment. Furthermore, approximately 50% of the teachers either agreed or were neutral regarding their

use of OBA during assessments. The statements provided by participants further illustrate their affirmative views:

One participant stated that:

I incorporate various instructional strategies such as group discussions, debates, cooperative learning and presentations. Additionally, it is important to identify performance indicators to achieve learning objectives, which allows students to connect theory with practice.

This participant's response aligns with research that highlights the effectiveness of active learning strategies and the integration of real-world applications in enhancing student engagement and learning outcomes (Prince, 2004; Freeman, Eddy, McDonough, Smith, Okoroafor, Jordt & Wenderoth, 2014).

Another participant highlighted their use of a hybrid teaching method, explaining:

I utilize a hybrid method, combining face-to-face instruction with pre-class research activities conducted on laptops. This approach empowers students to engage in independent learning before class discussions, enabling them to practice and apply their knowledge.

This instructional strategy aligns with the principles of blended learning, which integrates both face-to-face and online components to create a more dynamic and flexible learning environment. By incorporating pre-class research activities, students are encouraged to take ownership of their learning, develop critical thinking skills and engage more meaningfully in class discussions. Additionally, this method fosters self-directed learning, as students explore course content independently before receiving further clarification and guidance from their instructor. Blended learning has been recognized for its ability to enhance student engagement and accommodate diverse learning preferences (Garrison & Vaughan, 2008; Picciano, 2009). The combination of in-person and digital learning elements allows for differentiated instruction, ensuring that students with varying learning styles can access and process information effectively. Furthermore, this approach supports the development of digital literacy skills, which are essential in today's technology-driven academic and professional landscapes. By leveraging the benefits of both traditional and online learning environments, hybrid methods can lead to improved knowledge retention, deeper understanding and a more interactive classroom experience.

These statements from participants provide valuable insights into teachers' approaches to instruction and their use of OBA. By employing various active learning strategies, promoting student engagement and linking theory with practice, teachers can enhance the effectiveness of OBA implementation and create meaningful learning experiences for their students.

6. Summary of findings and conclusions

The findings are summarized according to the research questions as follows:

Research Question 1: What specific challenges do secondary school teachers face when implementing outcome-based assessment?

The findings revealed that there was lack of professional development and access to resources for implementing OBA. These findings emphasize the importance of providing teachers with adequate training and resources to effectively implement OBA practices. Scholarly research supports the notion that comprehensive professional development and appropriate resources are crucial for successful implementation of educational innovations like OBA. Addressing these concerns can promote the effective integration of OBA into classrooms, ultimately enhancing assessment practices and supporting student learning.

Research Question 2: What conceptualizations do secondary school teachers attach to the concept of Outcome-based assessment?

The findings demonstrate that teachers had mixed or negative attitudes toward various aspects of OBA, including their knowledge and ability to implement it, time for planning and preparation, and feedback and support from instructional leaders. These findings underscore the need for comprehensive professional development programs, dedicated planning and preparation time, and regular support from instructional leaders to facilitate the successful implementation of OBA. By addressing these areas of concern, educational institutions can enhance teachers' readiness and support in implementing OBA, thereby promoting effective assessment practices and improving student learning outcomes.

Research Question 3: How do secondary school teacher adapt their instructional strategies to align with outcome-based assessment?

The findings demonstrate that teachers exhibited positive attitudes toward using OBA during instruction and employing formative assessment to monitor student progress. The statements provided by participants further emphasize the utilization of active learning strategies, the integration of real-world applications, and the adoption of blended learning approaches to support OBA implementation. By incorporating these practices, teachers can enhance student engagement, promote deeper learning and effectively assess student achievement of learning outcomes.

7. Conclusion

In conclusion, the study's findings shed light on the multifaceted landscape of OBA implementation in secondary schools by answering specific research questions. The first question addressed the challenges faced by teachers, revealing a significant lack of adequate training and access to resources for implementing OBA. This underscores the critical importance of providing teachers with adequate training and resources, aligning with scholarly research emphasizing their role in successful educational innovation implementation. The second question explored teachers' conceptualizations of OBA, revealing mixed or negative attitudes toward various aspects.

The study used a mixed-method approach, combining a closed-ended questionnaire and semi-structured interviews to explore teachers' experiences and views on implementing OBA in a secondary school. This approach allowed the researchers to gather both detailed insights and broader views on teachers' challenges, attitudes and practices with OBA. The qualitative data from interviews provided a deeper understanding of the challenges and successes teachers face, revealing underlying factors that influence their practices. However, the small sample size limited the generalizability of the findings to the wider teacher population. Reflecting on the methodological choices made in this research, the mixed-methods approach provided a more comprehensive understanding of OBA implementation by capturing both numerical data and in-depth qualitative insights. One key strength of this approach was its ability to triangulate findings, ensuring greater validity. However, limitations included the potential for researcher bias in qualitative analysis and the small sample size, which may not fully represent all teachers' experiences. A larger-scale quantitative study could have yielded more generalizable results, while an ethnographic or longitudinal approach might have provided deeper insights into changes in teachers' attitudes and practices over time.

This study makes an important contribution to the understanding of OBA in secondary education. It highlights the positive role of formative assessment and how teachers' attitudes toward it are changing to focus more on continuous learning. It also emphasizes the need for ongoing professional development to support the successful implementation of OBA, aligning with existing research on the importance of teacher training. The study adds to our knowledge of how teachers perceive OBA, revealing mixed or negative attitudes, which suggests that educational innovations face resistance at the implementation level. Additionally, the study introduces a framework for OBA that includes structured support systems like planning time and instructional leadership.

From a theoretical perspective, this study expands on existing assessment frameworks by integrating the concept of structured support mechanisms within OBA implementation. It provides new insights into the role of instructional leadership and professional development as critical factors in shaping teachers' attitudes toward OBA. These findings build upon existing research by offering a more nuanced understanding of the interplay between assessment strategies and teacher preparedness, highlighting the importance of a holistic support system. Furthermore, the study contributes to the broader discourse on educational assessment by demonstrating how a blended approach to OBA—combining active learning techniques with continuous formative feedback—can enhance student engagement and learning outcomes.

Finally, the research shows that when teachers engage with active learning and blended approaches within OBA, they see positive results in student engagement and deeper learning. This provides a new perspective on how OBA can be not just an assessment tool but also a way to enhance teaching and learning.

8. Recommendations and Implications

The following recommendations are made:

Teachers should be encouraged to continue using active learning strategies, integrating real-world applications into lessons, and adopting blended learning approaches to align with OBA principles. There is an urgent need to further emphasize the importance of formative assessment during instruction to monitor student progress, providing timely feedback for continuous improvement. In addition, teachers should develop initiatives to encourage positive attitudes among teachers toward various aspects of OBA, emphasizing its benefits for student learning and professional growth.

The Department of TT&D should design and implement comprehensive professional development programs that address teachers' needs related to OBA, including theoretical foundations, practical implementation and strategies for overcoming challenges. They should also advocate for dedicated planning and preparation time to allow teachers the opportunity to effectively plan and implement OBA practices in their classrooms. Teachers should be encouraged to actively seek and participate in ongoing professional development opportunities to enhance their understanding and implementation of OBA. The Department of TT&D should establish a culture of continuous reflection among teachers, encouraging them to assess their own practices and explore ways to align teaching strategies with OBA principles. Furthermore, there is need to collaborate with educational authorities to ensure that teachers have access to the necessary resources for successful OBA implementation, including teaching materials, technology and support systems. There should also be opportunities to establish regular support mechanisms for teachers, including mentorship programs and forums for sharing experiences and best practices related to OBA.

Researchers are encouraged to conduct longitudinal studies to explore the long-term impact of OBA implementation on student learning outcomes, teacher professional development and institutional practices. There should be further investigation and comparisons of the experiences of teachers in different schools or regions to identify contextual factors that may influence the effectiveness of OBA implementation. This would provide opportunities to explore innovative approaches to OBA implementation, considering emerging educational technologies and evolving pedagogical practices.

The exploration of secondary school teachers' perceptions of OBA carries significant implications for various facets of education, including instructional practices, student learning outcomes, teacher professional development, educational policy and the broader research landscape. Insight into teachers' beliefs, attitudes and practices concerning OBA is paramount for refining educational practices within schools. Policymakers and administrators can leverage this understanding to craft targeted interventions and support mechanisms aimed at improving the implementation of OBA. Moreover, the study's findings can offer valuable insights into how OBA influences student learning experiences and academic achievement, thereby contributing to enhanced learning outcomes. The research also serves as a foundation for shaping

teacher professional development programs by identifying challenges and opportunities related to OBA, guiding the design of training initiatives that foster improved instructional practices and student success. Additionally, the study has the potential to influence educational policy decisions, including those related to curriculum design, assessment frameworks and instructional strategies. As part of the broader research base, this study contributes to the existing knowledge on assessment practices and lays the groundwork for future research and discussions on OBA, making it a valuable resource for educational enhancement, student success and the advancement of educational research in Tsabong and beyond. Furthermore, the implications of OBA extend to educational policy, ensuring alignment with the needs of students, teachers and the overarching educational system.

Future research should explore interdisciplinary collaborations by integrating expertise from education, sociology and other relevant fields. Combining these perspectives can provide a more comprehensive understanding of OBA by examining its social, psychological and institutional influences. Collaborative research efforts can enhance the development of innovative assessment models, address systemic challenges and inform policies that support effective teaching and learning practices.

9. References

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