

Exploring Inclusivity of Standardized Assessments for Learners with Disabilities at Lower Primary Special Schools in Zambia

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ABSTRACT

Standardized assessments have a long history of being the go-to measure of learners reading achievement, teacher accomplishment, and school accountability. Despite significant advancements in educational practices and policies aimed at promoting inclusivity, there are persistent challenges in ensuring that standardized assessments accurately and fairly measure the literacy and numeracy skills of learners with disabilities. Hence, this research aimed to explore the inclusivity of standardized literacy assessments for learners with disabilities at lower primary school. Interpretive paradigm and qualitative intrinsic case study design were employed because the case study outcomes were intended to provide insights to the researcher about experiences of learners with standardized literacy assessments for learners with disabilities in selected lower primary special education schools. Data was collected from ten head teachers and ten teachers from semi-structured interview guide and were analysed thematically. The study revealed standardized literacy assessments are accessibility, accommodations and fairness for learners with disabilities. The study also showed standardized literacy assessments often contain inherent biases that disadvantage learners with disabilities, undermining the fairness and validity of these tools. The study suggested the need for prioritizing flexibility, personalization, and diverse representation in assessments, teachers can better reflect the true potential and strengths of every student while fostering an inclusive educational environment that supports all learners in their academic journey. Based on these findings, the study recommends the ministry of education through schools should be developing Standardised Assessments for Learners with Hearing Impairment and Visual Impairment.

Keyword: Inclusivity, Hearing Impairment, Standardised Assessment, Visual Impairment

INTRODUCTION

Standardized tests have a long history of being the go-to measure of student reading achievement, teacher accomplishment, and school accountability. Given this habit of history, it is predictable that a single standardized reading test score is often considered the indicator of student reading growth and achievement. Assessment of learner progress is key in reaching desired learner outcomes. This cannot be over emphasized. Standardized literacy assessments have long been a cornerstone of educational systems worldwide, serving as tools for measuring student performance, guiding instruction, and informing policy decisions. These assessments are designed to provide a uniform metric for evaluating literacy skills, ensuring comparability across different schools and regions. Assessments, in general, are used to evaluate learners' knowledge and skills in specific content areas; to compare learner performance and evaluate programmes. Similarly, in the study OECD (2023) stated the roles, or uses, of standardized tests can be described without endorsing them. These include assessing student achievement, comparing students, evaluating programs, creating educational policy, and determining accountability. However, the standardized nature of these tests often overlooks the diverse needs of learners, particularly those with disabilities.

Notwithstanding the guidance provided in the 2013 National Literacy Framework (NLF) there was no uniformity in the way the teachers assessed learners in lower grades in Zambia. The implementation of Weeks 5, 10 and 13 Literacy Assessments started in 2014 following the 2013 Revised Curriculum (MOE, 2023). The skills assessed were mainly Phonemic Awareness and Phonics. The other key Literacy Skills namely: vocabulary, writing, comprehension and fluency, were rarely assessed. Arising from that, the Ministry of

Education through the Curriculum Development Centre (CDC), develop Standardised Literacy Assessments (SLAs) centrally with the support from the USAID- Let's Read Project. The SLAs had a consistent structure for each grade level within and across the seven zonal official local languages of instruction. The Ministry of Education working together with USAID Let's Read Project has been administering Standardised Literacy Assessment to Grades 1 – 3 in five provinces namely: Eastern, Muchinga, North Western, Southern and Western Province. Ever since the implementation of the standardised literacy assessments started in 2019, there have been complaints from schools with Learners with special educational needs (SEN) that Learners with Special Needs were not being provided for appropriately in terms of assessment in Literacy. It had therefore become necessary to establish how such schools administer SLA, if ever they do and to appreciate the challenges faced by these schools in conducting Standardised Literacy Assessments.

Within the context of standards-based educational systems, states are using large scale literacy assessments to help ensure that all children have the opportunity to learn essential knowledge and skills. Students participating in assessments today are more diverse than they were just a decade ago, and participation rates of students with disabilities, in particular, have increased dramatically. Thurlow (2019) noted that with the increasing participation of students with disabilities in large-scale assessments, it is essential to ensure that assessments are designed to be accessible and valid measures of student knowledge and skills. These increases mean that states and test developers are obligated to ensure that their assessments are accessible so that all students can show what they know and can do. An accessible assessment is one that reveals the targeted knowledge and skills of all students, including students whose characteristics create barriers to accurate measurement using traditional literacy assessments. Bwembya et al (2024) reported that despite efforts to provide a comprehensive assessment system that has evaluation procedures that can assess more intellectual capacities, attitudinal and dispositional outcomes in areas of innovation, problem solving, self-initiated and self-sustaining, Zambia grapples with issues of equity and inclusivity in assessment practices which pose significant obstacles to achieving fair and meaningful evaluation of assessment system that promotes accountability and enhances quality education provision. It is particularly challenging for some students with disabilities to show their knowledge and skills on reading assessments, especially when their disabilities affect reading.

Despite legislative efforts and educational policies aimed at promoting inclusive education, such as the Persons with Disabilities Act of 2012 and similar frameworks globally, there is evidence that standardized tests often fail to accommodate the needs of learners with disabilities effectively. Research has shown that these learners frequently underperform on standardized assessments not because of a lack of ability, but due to the inadequacies of the testing formats and conditions. Elliott et al., (2018) acknowledged that despite the push for inclusive education policies, standardized assessments remain largely inaccessible for many students with disabilities, leading to misinterpretations of their true academic abilities. The disparity in assessment outcomes had significant implications. Inaccurate representations of literacy skills lead to misdiagnoses, inappropriate educational placements, and inequitable access to educational resources and interventions. Learners with disabilities often struggle not due to a lack of competence but because standardized testing formats fail to accommodate their diverse learning needs, which can result in inappropriate educational placements and diminished learning opportunities (Thurlow & Kopriva, 2015). It affects learners' self-esteem and motivation, leading to long-term negative impacts on their academic and personal development.

The effectiveness and inclusivity of standardized literacy assessments for learners with disabilities in lower primary education remain critical concerns in the educational landscape. Despite significant advancements in educational practices and policies aimed at promoting inclusivity, there are persistent challenges in ensuring that standardized literacy assessments accurately and fairly measure the literacy skills of learners with disabilities. As Thurlow et al. (2016) noted that many traditional assessments are not designed to accommodate the full range of student abilities, making it difficult for students with disabilities to demonstrate what they know and can do. Traditional standardized assessments often fail to account for the diverse needs and abilities of these learners, leading to potential misrepresentations of their actual literacy competencies. Standardized literacy assessments have made strides towards inclusivity, but significant gaps remain in terms of accessibility for learners with disabilities. According to Elliott et al. (2018), despite efforts to make assessments more inclusive, accessibility barriers remain, particularly for students with sensory and cognitive disabilities. However, many standardized tests still fall short, leaving visually impaired learners and those with other

disabilities struggling to access test materials effectively. As Johnstone (2020) argued that students who are blind or visually impaired continue to face challenges in accessing assessment content due to limitations in alternative formats and assistive technologies.

This misalignment results in inaccurate assessments, which in turn affect educational outcomes, resource allocation, and the overall learning experience of learners with disabilities. As Thurlow and Kopriva (2015) stated that assessment systems that fail to accommodate diverse learner needs can lead to misrepresentations of student abilities, misallocation of resources, and inequitable learning opportunities. The lack of appropriate accommodations and modifications within standardized testing frameworks exacerbates these issues, contributing to educational disparities and limiting the potential for academic success among learners with disabilities. Furthermore, there is a dearth of comprehensive research examining the specific barriers and biases present in standardized literacy assessments for this group. According to Johnstone (2020), found lack of empirical research on assessment biases for students with disabilities hinders the development of equitable testing practices and policies. Without such research, it is challenging to develop effective strategies and policies that ensure equitable assessment practices. Addressing this problem is crucial for fostering an inclusive educational environment where all learners, regardless of their abilities, have the opportunity to demonstrate their literacy skills accurately and receive the support they need to thrive academically.

Given the importance of early literacy and numeracy development and the role of assessments in shaping educational trajectories, it is crucial to critically examine the effectiveness and inclusivity of standardized literacy assessments for learners with disabilities in lower primary education. As Elliott et al. (2018) highlighted that the early years are critical for literacy and numeracy development, and inaccurate assessments can have long-term consequences for academic achievement and access to educational opportunities. By examining the experiences and outcomes of learners with disabilities, educators, and administrators, this research will provide comprehensive insights into the strengths and weaknesses of existing standardized literacy assessments and offer evidence-based recommendations for creating more equitable and effective assessment practices. Therefore, there is an urgent need to evaluate the current standardized literacy assessment practices, identify inherent challenges, and propose evidence-based solutions to enhance their effectiveness and inclusivity for learners with disabilities in lower primary education. As Klinger et al. (2015) argued that a critical examination of assessment practices is necessary to identify and eliminate barriers that prevent students with disabilities from demonstrating their true abilities. By doing so, it seeks to contribute to the development of more equitable educational practices that support the diverse needs of all learners.

Objectives: The study aimed to examine the inclusivity of standardized literacy assessments for learners with disabilities by evaluating how well these assessments accommodate diverse learning needs. It identified specific biases embedded within current literacy assessment tools that disadvantage learners with disabilities, limiting their ability to demonstrate their true literacy and numeracy capabilities. By uncovering these biases, the study highlighted areas where assessments fail to provide equitable opportunities for all learners. Additionally, the research proposed modifications or alternative assessment methods that would enhance both the inclusivity and accuracy of literacy evaluations. These recommendations focused on ensuring that assessments fairly measure the literacy and numeracy skills of learners with disabilities, promoting a more equitable and representative evaluation framework.

METHODS AND MATERIALS

In the study on the inclusivity of standardized literacy assessments for learners with disabilities, the case study methodology was employed to provide an in-depth, contextual analysis of how these assessments impact learners with various disabilities. Researchers selected 10 teachers and 10 head teachers from 10 schools that implement standardized literacy tests and identified learners with hearing impairments and Visual Impairment. By conducting detailed interviews with specialist teachers for Learners with hearing impairments and Visual Impairment, and school administrator, as well as observing the testing process and analyzing test performance data, the study captured a comprehensive picture of the challenges and successes experienced by these learners. The case study approach allowed for a nuanced understanding of individual experiences and systemic issues, highlighting specific barriers and effective practices, and ultimately providing detailed insights into the

inclusivity and accuracy of standardized literacy assessments for learners with disabilities. Study setting included either Special Schools or schools with special education units with learners with Hearing Impairment and Visually Impairment.

Findings

The first question focused on the inclusivity of standardized literacy assessments for learners with disabilities. From the findings the following themes emerged that included accessibility, accommodations and fairness in the way we present this standardized literacy assessments for them to be appropriate for learners with disabilities

Accessibility

From the findings it came out eminent that to ensure standardized literacy assessments are accessible and appropriate for learners with disabilities, several measures have to be considered. These findings were evidenced in the following verbal account given by one head teacher from School 1 during interviews who said that:

Assessments are usually presented to learners and teachers with visual impairments in ink print, the system of writing that excludes them from participating effectively. This Assessments needs to be providing in materials and formats that can be used by all learners, regardless of their disabilities.

Similarly, another head teacher from School 2 during interviews said that:

Standardized Literacy Assessments should be in braille, large print, and digital formats that are compatible with screen readers and other assistive technologies. Additionally, ensuring that digital test platforms are designed according to web accessibility standards is crucial for learners with various disabilities.

Also, one Specialist teacher from School 1 during interviews pointed out that: *Some assessments are normally presented to learners with hearing impairments in Chitonga, the language they do not understand. It would better to have the assessments for these learners in Zambian sign language and also accompanied by pictures.*

In conformity with the above findings, head teacher from School 5 during interviews said that:

Some school literacy assessment is intended to assess how well learners understand the sounds of the language, which is not applicable to our learners with hearing impairments. Instead of the sounds it is better to concentrate on the correct shapes of the letters of the alphabet. the Standardized Literacy Assessments needs to have accessible content for each group of learners with similar needs

Similarly, one Specialist teacher from School 3 during interviews said that: *We need specific assessments format to fit the diverse needs for each learner. There is need of varied assessment to suit learners needs*

Additionally, a specialist teacher from school 1 contributed by saying that: *without accessible formats, learners with disabilities are excluded from participating equally in assessments, leading to an inaccurate representation of their literacy skills and potential.*

Accommodations

Another theme which came from findings was accommodations in standardized literacy assessments. These accommodations address the unique needs of learners and promote equitable access to assessment content while maintaining the integrity of the test. To this effect, the head teacher from school 4 said that: *to create a more inclusive testing environment, standardized literacy assessments must provide appropriate accommodations for learners with disabilities.*

Contributing to how schools respond to effectiveness and inclusivity of standardized literacy assessments for learners with disabilities, a specialist teacher from School 2 during interviews narrated that: *the*

accommodations of standardized literacy assessments need to include extended time, frequent breaks, the use of a scribe, or alternative response formats such as oral answers or typing instead of handwriting.

The above views were reflected in a response from specialist teacher from 4 during interviews who confirmed that: *looking at our learners there is need to provide extended time, frequent breaks, or adjust the scheduling of assessments to accommodate student needs.*

Adding to the same discussion one head teacher participant from School 5 during interviews indicated that: *there is need to ensure consistent and straightforward access to necessary accommodations to ensure levelling the playing field for learners with disabilities on standardized literacy assessments which is friendly to take learners.*

These findings were evidenced in the following verbal account given by specialist teacher from school 1 participant during the interviews said:

There is need for consistency of accommodations, such as extended time, frequent breaks, or the use of scribes, hampers the effectiveness of standardized tests in accurately measuring the literacy abilities of learners with disabilities. When accommodations are not provided or are insufficient, learners with disabilities face significant disadvantages, resulting in assessments that do not reflect their true capabilities.

These findings were further supported by female Specialist teacher participant from School 1 during interviews who noted that: *to some extent we need assessment tailored to individual needs and strength's literacy abilities of our learners*

Adding to the same discussion, one head teacher participant from School 4 expressed additional feelings by saying that: *schools need to ensure that necessary assistive technologies are available and functioning properly during the assessment. Also, we need to train both learners and teachers in the use of assistive technologies to ensure smooth implementation. With rightful technology will be easier to administer the assessment*

Fairness

Attaining fairness in standardized literacy assessments is crucial to ensure that all students, regardless of their background, have an equal opportunity to demonstrate their literacy skills. Fairness in standardized literacy assessments means that every student has an equal opportunity to demonstrate their abilities and knowledge. This was confirmed by one Specialist teacher participant from School 4 who supported these findings:

What you should know is that equality is often compromised by, one-size-fits-all test designs, and the lack of individualized supports. Assessments need to be designed with universal design principles in mind, offering multiple means of representation, engagement, and expression which is not the case with our current standardised literacy assessment. The assessment must demonstrate the diverse ways in which learners with disabilities might best demonstrate their literacy.

Another Specialist teacher participant from School 3 added that:

SLA is usually advanced for learners with special education needs, for example our learners in grade one may be required to read and write all the vowels by the end of term one, when in the actual sense they are still practicing to write the dots of the cell and follow the lines of the writing slate, while the hearing are still being introduced to sign language where before the introduction of the alphabet they are introduced to exercises to do with finger flexibility. The assessments should be tailored to suit the levels of our learners, for example, learners at grade one visually impaired should just be assessed in braille alphabet and numeracy orally. The hearing impaired should be assessed in sign language.

In contributing on the views above, specialist teacher participant from School 5 during interviews indicated that: *in order to have a fair test item or standardised literacy assessment involve a diverse group of educators*

and experts in the test development process to provide varied perspectives and insights. Use clear and simple language to ensure that the test is accessible to all students, especially those who may struggle with complex linguistic constructs.

Supporting the findings above, one Head teacher participant from School 1 during interviews lamented that:

There is need to provide training for test developers and educators on cultural sensitivity to better understand and address potential biases for them to come up with inclusive assessment items. To have a fairly prepared assessment item to cater for all learners we need to ensure teachers are well-versed in assessment literacy, including how to administer and interpret assessments fairly.

In line with findings, other head teacher- participant from School 4 during interviews said that:

if we need to have an effectiveness and inclusivity of standardized literacy assessments for learners with disabilities first thing is to have access to the necessary resources, including high-quality instructional materials and experienced teachers, to prepare students for standardized assessments.

From the findings it was noted that by incorporating these accessibility accommodations and fairness in the standardized literacy assessments can become more inclusive, allowing all learners, regardless of their disabilities, to participate meaningfully and showcase their literacy skills.

Major biases present in current standardized literacy assessments that disadvantage learners with disabilities

From the findings it was noted that current standardized literacy assessments often contain inherent biases that disadvantage learners with disabilities, undermining the fairness and validity of these tools.

Inaccessible Test Formats

This was supported by one Head teacher participant from School 5 during interviews who noted:

Learners with VI were being given the same assessments as mainstream learners with adaptation while assessments given to Learners with HI were not standardised, individual schools come up with test items which they give learners with HI in week 5 and 10 which are not standardised.

Similarly, one Specialist teacher participant from School 1 reported that:

This standardized literacy assessments which comes in school are not designed with accessibility in mind. For example, test materials are not available in Braille, large print, or audio formats for learners with visual impairments. Additionally, digital formats are not provided which some extent may not be compatible with screen readers or other assistive technologies used by learners with disabilities.

Another specialist teacher during interview with similar views expressed that: *use of a chalkboard to write letters, syllables words and sentences when administering SLA may not be applicable to the visually impaired learners, and the current assessment demand that.*

Time Constraints

Time constraints in standardized literacy assessments pose significant biases against learners with disabilities. These constraints often fail to accommodate the diverse needs and abilities of students with disabilities. In support of this view, one Head teacher-participants from School 4 during interviews lamented that:

Standardized tests often impose strict time limits that do not accommodate the needs of learners with disabilities. Learners with Hearing Impairment and those with Visually Impairment or other reading-related disabilities may require more time to process text and respond to questions. Without extended time, these learners are at a significant disadvantage, as they cannot demonstrate their true literacy abilities.

In conformity with the findings above, one specialist teacher participant from School 3 lamented that:

Since Learners with Disabilities in general and those with Hearing and Vision impairments in particular grasp materials slowly, it was noted that they were still doing classwork for week 2 and 3. So giving them work for week 5 in the SLA was not achieving the objectives of the Standardized Literacy Assessment.

Contributing on the findings above, one specialist teacher participant from school 1 during interviews reported that: *Administering SLA in week 5 for the visually impaired learners is too early*

Cultural Bias

Cultural bias in standardized literacy assessments presents significant challenges, particularly for learners with disabilities. This bias stems from the design of assessments that reflect dominant cultural norms, values, and linguistic patterns, which may not align with the lived experiences of diverse learners. For students with disabilities, these biases compound their difficulties and hinder equitable evaluation. Supporting the findings above, one Head teacher participant from School 3 during interviews lamented that:

Test content may reflect cultural biases that disadvantage learners from diverse backgrounds, including those with disabilities. Questions and reading passages may include references or vocabulary that are unfamiliar to learners with cognitive disabilities or those who have limited exposure to certain cultural contexts, affecting their comprehension and performance like learners with Hearing Impairment.

In contributing on the views above, one specialist teacher participant from School 5 during interviews indicated that:

The current assessment items do not lead to unequal opportunities for learners with disabilities to perform well, thus compromising the inclusivity of the assessments and disadvantaging those who do not share the same cultural or linguistic experiences.

One-Size-Fits-All Approach

The "one-size-fits-all" approach in standardized literacy assessments is a significant bias that disproportionately disadvantages learners with disabilities. This approach assumes uniformity in learning styles, abilities, and needs, failing to account for the diverse characteristics of students, particularly those with disabilities. In support of this, Specialist teacher-participant from School 1 during interviews, noted that:

This Standardized literacy assessments they bring in school often fail to accommodate diverse learning styles and strengths. The lack of varied assessment methods (such as oral responses, interactive tasks, or alternative formats) does not allow learners with different learning needs to demonstrate their literacy skills effectively.

Adding to the same discussion, one head teacher participant from School 4 expressed additional feelings by saying that:

Standardized literacy assessments typically employ a one-size-fits-all approach, which fails to account for the diverse ways in which learners with disabilities learn and demonstrate their literacy skills. This reduces the effectiveness of these tests in capturing the full range of learners' abilities. The lack of varied assessment methods marginalizes learners who might excel in non-traditional formats, such as oral presentations or project-based tasks, thus not providing an inclusive evaluation environment.

One other Specialist teacher participant from School 2 added that: *These assessments are often have fixed standards for all learners, disregarding variations in learning pace, cognitive processing, and developmental milestones among students with disabilities*

Lack of Individualized Supports

The lack of individualized supports in standardized literacy assessments is a significant bias that disadvantages learners with disabilities. Standardized testing often assumes that all students can succeed under uniform conditions, neglecting the unique needs of learners with disabilities.

These standardized tests do not provide the necessary supports that learners with disabilities require to perform at their best. This includes the absence of accommodations such as text-to-speech options, breaks during testing, or the presence of a scribe. Without these supports, learners with disabilities cannot fully engage with the test content, leading to an inaccurate representation of their literacy abilities.

These findings were also supported by views of head teacher from school 1 during interviews who stated that:

There was inadequate support given to both teachers and learners. Some schools had no Braille paper to transcribe the SLA into braille. For those with hearing impairments, the SLA was administered in English instead of Sign Language. The Hearing Impaired do not Learn in Zambian Language but in Zambian Sign Language. Some teachers for these learners were also Hearing impaired or had Low vision or were blind.

In contributing on the same, specialist teacher participant had this to say: *One of the major challenges is lack of appropriate teaching and learning material for the two categories of learners. The other concern is that teachers for learners with special needs have not been part of the training and coaching that the other teachers have been receiving.*

One other head teacher participant added that:

It was evident that teachers strived to conduct assessment, but of course, with a lot of difficulties. Adaptation of time and content will make teachers trained in SLA conduct it as per guidelines. Additionally, since Zambian Sign Language is not fully recognized as the 8th Official Language, this report recommends that let this language be recognized and placed with the same status as other Zambian Languages.

In support of the above contribution, specialist teacher participant had this to say:

Unavailability of braille literacy reading material has greatly disadvantaged the learners with visual impairments making it difficult for teachers to assist prepare for school literacy assessments. Reading materials should be provided eg THRAS and catch up materials in braille to help the learners to improve their fluency and comprehension skills.

Similarly, one head teacher participant reported that:

Modification is too costly and time consuming on the part of the school, Braille paper is expensive and the school cannot afford to the amount required for these assessments because there are other subjects that require more paper and also the visually impaired teachers use the same paper for their preparations. Teachers spend a lot of time on modifying and embossing the assessments, which is usually done manually due to the format in which the assessment come.

Contributing on the findings above, one specialist teacher participant during interviews reported that:

Standardized literacy assessments are not typically tailored to the individual needs and strengths of learners with disabilities. This generalization can result in an inaccurate measure of a student's literacy abilities. Without individualized assessment approaches, learners with disabilities are not provided with an equal opportunity to demonstrate their literacy skills, leading to a lack of inclusivity and potentially skewed results that do not reflect their true potential.

Propose modifications or alternative assessment methods that improve the inclusivity and accuracy of literacy assessments for learners with disabilities.

From the findings if assessment has to be inclusive there is need to prioritizing flexibility, personalization, and diverse representation in assessments, teachers can better reflect the true potential and strengths of every student while fostering an inclusive educational environment that supports all learners in their academic journey.

Adaptive Testing Platforms

From the findings it was observed that there is need to develop adaptive testing platforms that adjust the difficulty and format of questions based on the student's responses. In support of this view, one specialist teacher participant during interviews noted that: *There is need to develop SLA which are appropriate for the Hearing impaired and visually impaired learners*

In conformity with the findings above, another specialist teacher participant lamented that: *Teachers for the Hearing Impaired and Visually Impaired should be part of the group developing the assessment items so that they can also adapt the assessment items there and then from the English version.*

In agreement with the findings above, one specialist teacher during interview articulated that: *The assessments should be provided in braille and already modified. Specialist teachers should be involved in the formulation and modification of the assessment at the implementation stage*

In line with findings, one head teacher- participant from School 2 during interviews said that: *let there be the separate development of SLA for learners with VI and HI. this will promote development of SLA tailored to the needs of the learners.*

In conformity with the above findings, one specialist teacher during interviews said that: *there is need to use letter, syllable, word and sentence cards as opposed to the chalkboard with administering SLA to learners with visual impairment.*

Multi-Modal Assessment Options

From the findings it was suggested to offer assessments in various formats, such as written, oral, and visual presentations, and allow learners to choose the format that best suits their strengths. In support one specialist teacher, had this to say:

There is need to develop deliberate alternative formats for Audio-based assessments for learners with visual impairment. No effort was observed for creating audio-based assessments that could present assessment items, instructions, and prompts in spoken format. The audio assessments could have been delivered through digital platforms, interactive voice response systems, or audio recordings, allowing individuals with visual impairments to listen to and respond to assessment materials orally.

In contributing on the views above, a specialist teacher participant suggested that: *The use of models as opposed to pictures should be taken into serious consideration.*

Additionally, the Head teacher from school 3 contributed by saying that: *we need to provide our learners with the option to engage with assessment content through multiple modalities (audio, visual, tactile) to cater to diverse sensory needs, like pairing written prompts with visual aids or audio recordings for instructions.*

Extended Time and Flexible Scheduling

The other theme was the issues of provision of extended time and flexible scheduling options to all learners who need them, ensuring they have adequate time to complete the assessment without undue stress. Contributing on the findings above, one special education participant during interviews reported that: *allow*

learners with SEN to do the SLA in week 7 or reduce the content to respond to what they have covered up to week five. This means SLA for HI and VI learners should have reduced content.

In conformity with the findings above, another specialist teacher participant lamented that:

SLA should be administered in week 10 because learners with visual impairment may take a long period to grasp the concept of braille and the equipment used as they may be interacting with these ideas for the very first time in life.

Supporting the findings above, another participant indicated that:

We need to provide extended time or allowing breaks accommodates learners with processing challenges or fatigue issues. assessors have to ensure instructions are clear, simple, and supported by visuals for learners with intellectual disabilities or those who require language support.

Use of Assistive Technology

From the findings it was indicated that using assistive technology and alternative assessment methods significantly enhance the inclusivity and accuracy of literacy assessments for learners with disabilities. These responses were evidenced in the following verbal account given by the following participants: *we need to integrate assistive technologies, such as text-to-speech, speech-to-text, and screen readers, into the assessment process. Some relevant technology should be made available according to learners' needs*

Another specialist teacher participant indicated the following:

With schools having Braille Embossers and Braille Displays the assessments items can be converted into Braille for learners who are blind. Responses can also be recorded using Braille typewriters or electronic Braille displays. we need this assistive technology in school.

From the findings, specialist teacher participants indicated that: *learners can use Augmentative and Alternative Communication (AAC) devices to express their answers using the devices, ensuring their abilities are assessed without the barrier of traditional communication methods.*

Another specialist teacher during interviews stated that: *for deaf learners or those who use sign language, we can use interpreters who can facilitate assessments or allow for signed responses.*

Capacity Building in SLA

Teachers needed to be trained on how to handle SEN because currently, the trainings in the SLAs administration were only benefitting the average Learner and not learners with additional needs. Finally, the monitoring of the implementation of SLA's to learners with Hearing and Visual impairment was vital however, there was need to train people to adapt the English version to suit these disabilities.

DISCUSSION

The Inclusivity of Standardized Literacy Assessments for Learners with Disabilities

From the findings, it became evident that to ensure standardized literacy assessments are accessible and appropriate for learners with disabilities, several measures have to be considered. Assessments are usually presented to learners and teachers with visual impairments in ink print, a system of writing that excludes them from participating effectively. As Johnstone (2020) noted that the provision of assessments in ink print alone creates a significant barrier for visually impaired learners, limiting their ability to fully engage with test materials. Standardized assessments should be available in braille, large print, and digital formats that are compatible with screen readers and other assistive technologies. These assessments need to be provided in materials and formats that can be used by all learners, regardless of their disabilities. This aligns with Reeves et al. (2023), who emphasized that standardized assessments must be designed and implemented in ways that

ensure all students, including those with disabilities, have an equitable opportunity to demonstrate their knowledge and skills.

It was found that some assessments are normally presented to learners with hearing impairments in Zambian local languages, which they do not understand. The findings resonated with Kachlicka and Swanwick (2021), who stated that assessments in spoken or written language without sign language adaptation create significant accessibility challenges for deaf learners, impacting their ability to accurately demonstrate their knowledge. It would be better to have the assessments for these learners in Zambian Sign Language and also accompanied by pictures. There is a need for specific assessment formats to fit the diverse needs of each learner, as well as varied assessment strategies tailored to individual needs. Therefore, learners with disabilities are often excluded from participating equally in assessments, leading to an inaccurate representation of their literacy skills and potential. This was supported by Thurlow and Kopriva (2015), who highlighted that failure to provide accessible assessments not only skews performance data but also reinforces educational disparities by misrepresenting the capabilities of students with disabilities.

Another theme that emerged from the findings was accommodations in standardized literacy assessments. These accommodations address the unique needs of learners and promote equitable access to assessment content while maintaining the integrity of the test. According to Elliott et al. (2018), posits that accommodations in assessments are designed to remove barriers without altering the construct being measured, thereby ensuring a fair and valid evaluation for students with disabilities. To create a more inclusive testing environment, standardized literacy assessments must provide appropriate accommodations for learners with disabilities. These should include extended time, frequent breaks, the use of a scribe, or alternative response formats such as oral answers or typing instead of handwriting. This finding resonates with Thurlow et al. (2016), who emphasized the provision of accommodations such as extended time and alternative response methods is critical for ensuring that students with disabilities can demonstrate their true literacy abilities.

There is a need to ensure consistent and straightforward access to necessary accommodations to level the playing field for learners with disabilities on standardized literacy assessments. In support Ketterlin-Geller and Yovanoff (2019) argued that effective implementation of testing accommodations helps mitigate the impact of disabilities on assessment performance, ensuring that test results reflect students' knowledge rather than their disabilities. To some extent, assessments need to be tailored to individual needs and strengths in literacy abilities. The findings align with Thompson et al. (2018), who stated that providing appropriate accommodations in standardized literacy assessments is essential for an equitable evaluation of all learners. They further noted that testing accommodations are changes to the regular testing environment and auxiliary aids and services that allow individuals with disabilities to demonstrate their true aptitude or achievement level on standardized exams or other high-stakes tests.

Therefore, to support the participation of children with disabilities in large-scale testing, accommodations or modifications may be necessary in how the test is administered or how a given child takes the test. These findings are in line with Ysseldyke et al. (2017), who asserted that the provision of accommodations ensures that students with disabilities can engage meaningfully with assessments, promoting educational equity and access. It is the responsibility of the Individualized Education Program (IEP) team to determine how a student with a disability will participate and to document that decision in the child's IEP.

Attaining fairness in standardized literacy assessments is crucial to ensure that all students, regardless of their background, have an equal opportunity to demonstrate their literacy skills. Fairness in standardized literacy assessments means that every student has an equal opportunity to demonstrate their abilities and knowledge. What you should know is that equality is often compromised by, one-size-fits-all test designs, and the lack of individualized supports. Assessments need to be designed with universal design principles in mind, offering multiple means of representation, engagement, and expression which is not the case with our current standardised literacy assessment. The assessment must demonstrate the diverse ways in which learners with disabilities might best demonstrate their literacy. The assessment must be as free as possible of biases based on ethnic group, gender, nationality, religion, socioeconomic condition, sexual orientation, or disability (NCTE, 2009). Similarly, the National Centre for Education Statistics (NCES) highlights that differences between

groups should be investigated to make sure that they are not caused by construct-irrelevant factors (NCES, 2002). The assessments should be tailored to suit the levels of our learners, for example, learners at grade one visually impaired should just be assessed in braille alphabet and numeracy orally. The hearing impaired should be assessed in sign language. This also call for use of clear and simple language to ensure that the test is accessible to all students, especially those who may struggle with complex linguistic constructs. From the findings it was noted that by incorporating these accessibility accommodations and fairness in the standardized literacy assessments can become more inclusive, allowing all learners, regardless of their disabilities, to participate meaningfully and showcase their literacy skills.

Inclusivity in standardized literacy assessments remains a significant challenge, as these tests frequently overlook the diverse ways in which students with disabilities process and express information. As the UNESCO, (2020) emphasized that assessments should be inclusive, gender-responsive, culturally and language-relevant to accommodate diverse learner needs. To address this, inclusive assessment practices should be developed, incorporating multiple modalities of response and adaptive technologies. According to Florian and Spratt (2019), inclusive assessments must provide multiple means of engagement, representation, and expression to ensure that all students can demonstrate their abilities effectively. These practices would ensure that all students, regardless of their disabilities, can fully participate and showcase their abilities.

Moreover, educators and policymakers must prioritize individualized assessment strategies that reflect each student's learning profile. In formality with the study by Hehir et al. (2016), asserted that tailoring assessments to individual student needs fosters a more accurate representation of their knowledge and skills, reducing bias in standardized testing. By fostering an inclusive assessment environment, the education system can better support the literacy development of all learners, paving the way for a more equitable and accurate evaluation process. Also, Thurlow et al. (2016) highlighted that without inclusive assessment practices, students with disabilities are at risk of being misrepresented in terms of their true academic potential.

Major biases present in current standardized literacy assessments that disadvantage learners with disabilities

While some strengths were identified, such as the presence of teachers and adequate desks, numerous weaknesses were highlighted. These included the lack of adapted standardized literacy materials, inadequate classroom accommodations, scarcity of suitable reading materials for the HI and a deficiency in teachers' proficiency in sign language. Standardized assessments have long been utilized to gauge students' reading and writing skills, providing a uniform metric for educational evaluation. However, their effectiveness for learners with disabilities has been a subject of debate. While these assessments offer a broad overview of literacy competencies across diverse student populations, they often fail to accommodate the unique needs of students with disabilities. Factors such as the rigidity of test formats, lack of appropriate accommodations, and the standardized nature of questions can disadvantage these learners. Consequently, students with disabilities does not accurately demonstrate their literacy capabilities, leading to misrepresentations of their true academic performance and potential (OECD, 2023).

Current standardized assessments harbour several major biases that disadvantage learners with disabilities, starting with the rigidity of their design. These tests are typically structured around a one-size-fits-all approach, which fails to consider the diverse needs of students with various disabilities. For instance, standardized assessments often require quick processing speeds and fine motor skills, which can be particularly challenging for students with cognitive impairments, dyslexia, or physical disabilities. Additionally, the emphasis on written responses disadvantages students who may excel in oral or alternative forms of expression but struggle with traditional writing tasks. This rigidity does not accommodate the varied ways in which learners with disabilities process and convey information, thus leading to skewed results that do not accurately reflect their true literacy capabilities. Similarly, Macqueen et al., (2018), indicated that standardized literacy assessments often utilize test formats that can be inaccessible to certain learners, particularly those from diverse linguistic and cultural backgrounds. For example, a study on national standardized literacy and numeracy testing in remote Australian Indigenous communities found that "the numeracy test is 'almost a test of English

comprehension, rather than mathematical ability (Macqueen et al., 2018). This observation highlights how the language used in assessments can pose barriers for learners whose first language is not English.

Another significant bias is the lack of appropriate accommodations within standardized testing environments. While some accommodations, such as extended time or the provision of a quiet room, are offered, they often fall short of meeting the specific needs of all students with disabilities. Standardized literacy assessments often lack appropriate accommodations for learners with disabilities, hindering their ability to fully demonstrate their knowledge and skills. The Inclusive Education Initiative (2023) highlighted that learners with disabilities are often excluded from standardized assessments or provided with inadequate accommodations, leading to invalid results and perpetuating educational inequities. Similarly, a study on adapting assessments for dyslexic learners notes that standardized assessments do not offer accommodations, presenting challenges for students with dyslexia. For example, a student with a visual impairment may need more advanced assistive technology than what is typically available during testing. Furthermore, the standardized format itself often limits the extent to which accommodations can be individualized. This systemic shortfall means that many students with disabilities are left without the necessary support to perform to the best of their abilities. Consequently, the results of these assessments can perpetuate a cycle of disadvantage, impacting educational opportunities, support services, and future academic success for learners with disabilities.

From the findings, it was noted that current standardized literacy assessments often contain inherent biases that disadvantage learners with disabilities, undermining the fairness and validity of these tools. The findings are in line with Thurlow et al. (2016), who highlighted that standardized assessments are often developed with a one-size-fits-all approach, which fails to consider the unique needs of students with disabilities, leading to misrepresentation of their true abilities. Learners with visual impairments (were being given the same assessments as mainstream learners with adaptations, while assessments given to learners with hearing impairments (HI) were not standardized. Instead, individual schools developed test items for learners with HI, which were administered in weeks 5 and 10 but lacked standardization. According to Elliott et al. (2018), revealed that the inconsistency in assessment practices for students with disabilities contributes to disparities in academic outcomes.

Time constraints in standardized literacy assessments pose significant biases against learners with disabilities. These constraints often fail to accommodate the diverse needs and abilities of students with disabilities. Standardized tests often impose strict time limits that do not accommodate the needs of learners with disabilities. Learners with Hearing Impairment and those with Visually Impairment or other reading-related disabilities may require more time to process text and respond to questions. Without extended time, these learners are at a significant disadvantage, as they cannot demonstrate their true literacy abilities. Since Learners with Disabilities in general and those with Hearing and Vision impairments in particular grasp materials slowly, it was noted that they were still doing classwork for week 2 and 3. So giving them work for week 5 in the SLA was not achieving the objectives of the Standardized Literacy Assessment. This supported by Opperman (2020) observed that students in double and no time-limit conditions performed significantly better than the normal time-limit group, suggesting that standard time limits may not accommodate all learners effectively.

Cultural bias in standardized literacy assessments presents significant challenges, particularly for learners with disabilities. This bias stems from the design of assessments that reflect dominant cultural norms, values, and linguistic patterns, which may not align with the lived experiences of diverse learners. For students with disabilities, these biases compound their difficulties and hinder equitable evaluation. The current assessment items do not lead to unequal opportunities for learners with disabilities to perform well, thus compromising the inclusivity of the assessments and disadvantaging those who do not share the same cultural or linguistic experiences. The findings are in agreeable with Seno-Alday & Budde-Sung (2022), who noted that standardized literacy assessments often exhibit cultural biases that disadvantage learners from diverse backgrounds. For instance, research indicates that standardised tests are culturally biased against rural students, as questions may reference experiences unfamiliar to them, such as beach outings or train travel, which are less common in rural settings.

The "one-size-fits-all" approach in standardized literacy assessments is a significant bias that disproportionately disadvantages learners with disabilities. This approach assumes uniformity in learning styles, abilities, and needs, failing to account for the diverse characteristics of students, particularly those with disabilities. Standardized literacy assessments typically employ a one-size-fits-all approach, which fails to account for the diverse ways in which learners with disabilities learn and demonstrate their literacy skills. This reduces the effectiveness of these tests in capturing the full range of learners' abilities. The lack of varied assessment methods marginalizes learners who might excel in non-traditional formats, such as oral presentations or project-based tasks, thus not providing an inclusive evaluation environment. Standardized literacy assessments often adopt a "one-size-fits-all" approach, which can present significant challenges in diverse educational contexts. Levy-Feldman and Libman (2022) argue that "when this wrong assumption [that 'one size fits all'] comes to students' assessment it can have devastating consequences for individuals and groups. They highlight the necessity of adapting educational assessments to accommodate multicultural and diverse learner populations.

The lack of individualized supports in standardized literacy assessments is a significant bias that disadvantages learners with disabilities. Standardized testing often assumes that all students can succeed under uniform conditions, neglecting the unique needs of learners with disabilities. These standardized tests do not provide the necessary supports that learners with disabilities require to perform at their best. This includes the absence of accommodations such as text-to-speech options, breaks during testing, or the presence of a scribe. Without these supports, learners with disabilities cannot fully engage with the test content, leading to an inaccurate representation of their literacy abilities. Standardized literacy assessments often lack individualized supports, posing challenges for learners with diverse needs. The International Literacy Association (2017) noted that these assessments do not fully reflect students' reading achievement and development and can impede the development of students' self-efficacy and motivation. Similarly, Rick (2018) highlights that without proper assessment literacy, "the result would be poor educational decisions that slow or otherwise harm student learning. It was evident that teachers strived to conduct assessment, but of course, with a lot of difficulties. Adaptation of time and content will make teachers trained in SLA conduct it as per guidelines. Additionally, since Zambian Sign Language is not fully recognized as the 8th Official Language, this report recommends that let this language be recognized and placed with the same status as other Zambian Languages. Without individualized assessment approaches, learners with disabilities are not provided with an equal opportunity to demonstrate their literacy skills, leading to a lack of inclusivity and potentially skewed results that do not reflect their true potential.

Propose modifications or alternative assessment methods that improve the inclusivity and accuracy of literacy assessments for learners with disabilities.

To improve the inclusivity and accuracy of literacy assessments for learners with disabilities, significant modifications to existing standardized tests are essential. One effective approach is to integrate Universal Design for Learning (UDL) principles into assessment creation. As Rose et al. (2018) state indicated that UDL provides a flexible approach to learning and assessment, ensuring that diverse learners, including those with disabilities, can engage with content in meaningful ways. UDL emphasizes providing multiple means of representation, action and expression, and engagement, allowing students to demonstrate their literacy skills in diverse ways. This resonated with the study by Meyer et al. (2016), who indicated that when assessments offer varied formats and approaches, students are better able to demonstrate their true abilities rather than being limited by their disabilities.

For example, incorporating multimedia components, such as audio or visual prompts, can help students with reading disabilities better understand and respond to questions. As Hall et al. (2019) highlighted that integrating multimedia elements into literacy assessments enhances accessibility for students with disabilities, particularly those who struggle with traditional text-based formats. Additionally, offering a variety of response formats, including oral presentations, typed responses, and the use of assistive technologies, ensures that students can choose the method that best suits their abilities, thereby providing a more accurate representation of their literacy skills. This is in agreeable with Thompson et al. (2018), who emphasised that allowing

students to select from multiple response modes enables them to demonstrate their knowledge in ways that align with their strengths, reducing assessment bias.

Beyond modifying existing assessments, developing alternative assessment methods tailored to individual learning profiles can significantly enhance inclusivity. Portfolio-based assessments, for instance, allow students to compile a collection of work over time, showcasing their progress and literacy achievements through various mediums. This approach accommodates different learning styles and provides a comprehensive view of a student's abilities. Moreover, performance-based assessments, where students engage in real-world tasks or projects, can offer practical and meaningful evaluations of literacy skills. Such methods not only cater to the strengths of learners with disabilities but also reduce the anxiety often associated with high-stakes testing. By implementing these modifications and alternatives, the education system can create a more equitable assessment landscape, ensuring that all students, regardless of their disabilities, are accurately and fairly evaluated. Adaptive testing platforms enhance standardized literacy assessments by tailoring question difficulty to each learner's ability, leading to more accurate measurements of reading skills. For example, the OECD (2023) highlighted that adaptive testing allows for a more accurate measurement of student performance by asking students questions that are better suited to their ability.

From the findings, if assessment is to be inclusive, there is a need to prioritize flexibility, personalization, and diverse representation in assessments. By doing so, educators can better reflect the true potential and strengths of every student while fostering an inclusive educational environment that supports all learners in their academic journey. In support of this view, the study by Darling-Hammond et al. (2019) asserted that inclusive assessments should be designed to accommodate diverse learners by integrating flexibility in content delivery, response formats, and accessibility features. From the findings, it was observed that there is a need to develop adaptive testing platforms that adjust the difficulty and format of questions based on the student's responses. The findings are in agreeable with Shute and Rahimi (2021), who indicated that adaptive assessments provide a more equitable evaluation by adjusting to the individual learning needs and abilities of students, ensuring a more accurate measure of their skills and knowledge. In support of this view, one specialist teacher participant during interviews noted that there is a need to develop SLA which are appropriate for the Hearing Impaired and Visually Impaired learners. There is a need to have a separate development of SLA for learners with VI and HI; this will promote the development of SLA tailored to the needs of the learners. This was in line with Thurlow et al. (2016), who emphasised the need for separating and tailoring assessments for students with specific disabilities ensures that their learning needs are adequately addressed, reducing barriers to participation and enhancing the validity of assessment outcomes.

From the findings it was suggested to offer assessments in various formats, such as written, oral, and visual presentations, and allow learners to choose the format that best suits their strengths. There is need to develop deliberate alternative formats for Audio-based assessments for learners with visual impairment. No effort was observed for creating audio-based assessments that could present assessment items, instructions, and prompts in spoken format. The audio assessments could have been delivered through digital platforms, interactive voice response systems, or audio recordings, allowing individuals with visual impairments to listen to and respond to assessment materials orally. The need to provide our learners with the option to engage with assessment content through multiple modalities (audio, visual, tactile) to cater to diverse sensory needs, like pairing written prompts with visual aids or audio recordings for instructions was stressed. Integrating multimodal assessment options into standardized literacy evaluations enhances our understanding of learners' diverse abilities and learning styles. For instance, Ly and Forzani (2023) highlighted that teachers need first to understand the multimodal practices that children bring into the classroom in order to then develop instruction that builds on, and extends, children's existing literacy practices.

The other theme was the issues of provision of extended time and flexible scheduling options to all learners who need them, ensuring they have adequate time to complete the assessment without undue stress. Contributing on the findings above, one special education suggested learners with SEN to do the SLA in week 7 or reduce the content to respond to what they have covered up to week five. This means SLA for HI and VI learners should have reduced content. We need to provide extended time or allowing breaks accommodates learners with processing challenges or fatigue issues. assessors have to ensure instructions are clear, simple,

and supported by visuals for learners with intellectual disabilities or those who require language support. The study by Wei & Zhang (2024), also suggested that providing extended time accommodations during standardized literacy assessments has been shown to enhance the performance of students with learning disabilities. A study analyzing data from eighth graders with learning disabilities found that students who received and utilized extended time scored significantly higher on assessments compared to their peers who did not receive such accommodations. Additionally, these students reported lower levels of perceived time pressure and higher levels of interest and enjoyment in the subject matter.

From the findings it was indicated that using assistive technology and alternative assessment methods significantly enhance the inclusivity and accuracy of literacy assessments for learners with disabilities. There is need to integrate assistive technologies, such as text-to-speech, speech-to-text, and screen readers, into the assessment process. Some relevant technology should be made available according to learners' needs. the schools to converted into Braille for learners who are blind. Responses can also be recorded using Braille typewriters or electronic Braille displays. we need this assistive technology in school. Also, learners can use Augmentative and Alternative Communication (AAC) devices to express their answers using the devices, ensuring their abilities are assessed without the barrier of traditional communication methods. For deaf learners or those who use sign language, there is need to use interpreters who can facilitate assessments or allow for signed responses. Teachers needed to be trained on how to handle SEN because currently, the trainings in the SLAs administration were only benefitting the average Learner and not learners with additional needs. Integrating assistive technology into standardized literacy assessments significantly benefits learners with disabilities by providing tailored support that aligns with their individual needs. For instance, a study by Almgren et al. (2024) found that students with reading difficulties could use reading and writing apps (with text-to-speech, TTS and speech-to-text, STT) in portable tables to be able to gain access to, and to produce text in an applied school setting.

CONCLUSION

While standardized literacy assessments provide a uniform measure of literacy skills, they are often ineffective and lack inclusivity for lower primary school learners with disabilities. The rigidity of test formats and insufficient accommodations hinder these students' ability to demonstrate their true abilities. To create a more equitable assessment environment, it is crucial to adopt modifications such as the integration of universal design for learning principles and the development of alternative assessment methods like portfolio-based and performance-based evaluations. These changes will ensure that all students, regardless of their disabilities, have the opportunity to accurately showcase their literacy skills, fostering a more inclusive and supportive educational system.

RECOMMENDATIONS

To promote inclusive literacy assessments, the Ministry of Education should advocate for policies that recognize and support the use of inclusive assessment methods. These policies should mandate the provision of necessary accommodations and ensure that alternative assessments hold equal value to traditional standardized tests. Additionally, the Ministry should develop standardized assessments specifically designed for learners with hearing and visual impairments to ensure fair and accurate evaluation. Addressing the shortcomings in current literacy assessments requires adapting and modifying literacy standards, providing adequate resources, and enhancing teacher training in sign language and specialized instruction. Furthermore, ongoing professional development opportunities should be established to equip educators with the skills needed to implement inclusive assessments effectively. Schools should actively engage with learners, parents, educators, and disability advocates in developing and refining assessment methods, ensuring that they are practical, effective, and widely accepted. Organizing workshops and seminars led by literacy experts will provide hands-on experience with standardized assessments, fostering a more informed and inclusive approach to literacy evaluation.

Conflict of Interest statement

The authors declare no conflict of interest

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