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Deconstruction of School Assessment Accommodations and Learning Attainments for Learners with Disabilities, Nairobi County Primary Schools, Kenya

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Abstract:

This study sought to establish the school assessment accommodations for learners with disabilities and the learning outcomes of the school assessments for learners with disabilities. A concurrent mixed-methods research design was employed to investigate the school assessment accommodations and learning outcomes experienced by learners with disabilities in public primary schools in Nairobi County, Kenya. A combination of probability and non-probability sampling techniques was employed to select 50 public primary schools with inclusive education programs and Special Needs Education teachers. Data were collected through questionnaires, institutional questionnaires, and interview guides that were evaluated for validity and reliability. Quantitative data were analyzed through Statistical Package for Social Sciences (SPSS) version 24, while qualitative data were interpreted with a thematic approach and verbatim reporting. Findings from this study indicate that the provision of school assessments for learners with disabilities yields both positive and negative outcomes. The research recommends that literacy examinations be adapted and accommodations are made for learners with disabilities specific to their individual needs. These accommodations should include extra allotted time, materials printed in a larger font, use of sign language, assistance from authorized scribes, utilization of assistive devices, granting of alternative assessment presentations, and the option of alternative assessments.

Keywords: Assessment accommodation, learning outcomes, learners with disabilities, adaptation, modification, alternative assessment large print, sign language

1. Introduction

Modified assessments are accommodations and adjustments to the assessment process or materials to allow learners with disabilities to have equal access and achievement in the educational environment (Edwards, 2016). These accommodations include changes to the test format, the time allowed to complete the assessment, and the content or the presentation of the assessment (Lazarus et al., 2011). Adjustments to the assessment process may also involve providing alternate assessment options, such as allowing a student to use a laptop or other assistive technology (Rasooli et al., 2021). Modified assessment accommodations can help to ensure that learners with disabilities can demonstrate their knowledge, skills, and abilities equitably and that their educational attainments are not hindered by their disability.

Deconstructing assessment accommodations for learners with disabilities is essential to guarantee their right to an inclusive, quality, and free education, as laid out in Article 24 of the United Nations Convention on the Rights of Persons with Disabilities (UN, 2006). Edwards (2016) posits that accurately gauging the progress of students with disabilities is critical to upholding vital educational outcomes while preserving the integrity of educational content, even after making modifications to instructional or testing materials or procedures. Assessment accommodations must provide these students with equal opportunities to demonstrate their skills and knowledge without giving disabilities an advantage (Wu & Thurlow, 2018). Therefore, properly deconstructing assessment accommodations for learners with disabilities is essential to secure their right to an equitable education as outlined in Article 24 of the UN Convention.

Assessment accommodations are essential for learners with disabilities, allowing them to access grade-level instruction efficiently and participate in assessments on an equal basis. As detailed by Lovett (2021), these

accommodations are frequently provided to students diagnosed with disabilities to reduce or eliminate interference caused by their disabilities. Though accommodations present an alteration of the traditional process, they do not reduce grade-level standards or alter the amount or complexity of the information taught to the student (Li, 2016). Instead, they provide students with disabilities the opportunity to engage in the course material on an equitable level. The primary purpose of such accommodations is to minimize the impact of a disability on a student's academic performance (Carmel, 2016). The relevance of inclusive education practices is on the rise globally, with Nairobi County primary schools being no exception.

1.1. Problem Statement

Various research studies have been conducted globally to assess the effectiveness of inclusive education and its impacts on learning outcomes for learners with disabilities. Madriaga et al. (2010) conducted a survey in the United Kingdom, wherein it was revealed that learners with disabilities and those without disabilities experienced similar assessment-related issues. However, students with disabilities reported more difficulties in completing work within the given time frame. Recent research in the United States found that the majority of students with disabilities receive accommodations rather than evidence-based interventions (Lovett, 2020). Moreover,

Schuelka (2018) suggested that despite the conceptualization of inclusive education and its use to highlight success, it is prudent to evaluate the most significant impediments and challenges to successful inclusive education implementation. These generally include a rigid curriculum that does not accommodate modification or personalization, socio-cultural attitudes towards school and disability, and unsupportive school and district leadership. Additionally, Stephen, Sireci, Stanley, Scarpat & Shuhong Li (2005) suggested that standardized tests routinely used in educational systems within the United States can be infeasible or unfair for certain students, particularly those with disabilities.

In the United Kingdom, the marginalization of vulnerable learners, particularly those with special needs, has been reported (Harry & Klingner, 2014). Similarly, Australia's Australian Curriculum Assessment and Reporting Authority (ACARA, 2013) noted that discrepancies in assessment and reporting exist between states and territories, making it difficult to gauge educational progress made by students with disabilities. Such inconsistencies in the evaluation of students with a disability imply that national and state testing and its subsequent implications cannot include the outcomes of these learners.

In light of the dearth of data regarding learning achievements for learners with disabilities, UNESCO (2014) has observed that evidence of such outcomes tends to be scarce due to their lack of participation in assessments. Howgego, Miles, and Myers (2014) posit that research within the fields of education, disability, and inclusion requires a more systematic and deliberate agenda, including both qualitative and quantitative approaches, such as case studies, to establish attendance rates and learning outcomes for learners with disabilities and to disaggregate the data by sex, impairment, and income level in low and middle-income countries. As such, this study was designed to help address this knowledge gap.

Schuelka (2014) highlights the lack of evidence concerning learning achievements and outcomes for disabled individuals, which makes creating a system to improve their learning difficulties. UNESCO (2014) notes that little data exists regarding the learning outcomes of this population due to a lack of participation in assessments caused by data not being disaggregated by disability. Emerging research conducted by Howgego, Miles, and Myers (2014) supports the importance of utilizing a combination of qualitative and quantitative approaches, such as case studies, to ascertain attendance rates and learning outcomes of individuals with disabilities in low and middle-income countries. The current study sought to illuminate this issue to address the knowledge gap in this area.

1.2. Research Questions

The following Research Questions guided the study:

- What assessment accommodations exist to support inclusive education practices for learners with disabilities in public primary schools within Nairobi County?
- What are the implications of these practices on the learning outcomes of those students?

2. Literature Review

2.1. Inclusive Education School Assessment Accommodations for Learners with Disabilities

Inclusive education practices involve creating a learning environment where students have equal opportunities to succeed (Lin & Lin, 2015). This approach to education emphasizes the importance of addressing the diverse needs of all students and creating a culture of acceptance and belonging within the classroom. Components of inclusive education practices include:

- Differentiated Instruction,
- Universal Design for Learning (UDL),
- Collaboration and co-teaching,
- Positive behavior support, and
- Curriculum and materials adaptation

Accommodations can be implemented as a way to provide equal access to instruction and assessment for students with disabilities. Such accommodations can take the form of presentation accommodations, which enable students with disabilities to access information provided in text, graphic, or spoken formats. For instance, to facilitate the acquisition of information by students with disabilities, textual and graphical information can be presented in alternative formats when

the standard print is either inaccessible or unintelligible to them. Furthermore, presentation supports are available to students with disabilities to enhance their ability to read, observe, and listen in the classroom. Such supports can include auditory, multi-sensory, tactile, and visual forms of access (Martha & Cathryn, 2008; Nees & Berry, 2013). Examples of common accommodations in the presentation category include oral reading (either by an adult or on audiotape), large print, magnification devices, Sign Language, and Braille. While each accommodation should be tailored to the individual student's needs, they all aim to 'level the playing field' (Larson et al., 2019).

Response accommodations can provide students with disabilities the opportunity to participate meaningfully in assessments, thereby enabling them to demonstrate their knowledge and skills (Martha & Cathryn, 2008; Hussu & Strile, 2010). Common examples of accommodations include providing learners with more time to complete tasks, alterations to text font or spacing, elimination of too difficult or inappropriate tasks, and the use of technological tools, such as computers/typewriters, Braille, scribes or augmentative communication devices, to provide students with the same opportunities in assessment as other students (Nees & Berry, 2013; Panzavolta & Lotti, 2012).

Setting accommodations are changes made to the educational environment which can help address accessibility issues, behavior, attention, and organization. They may involve changes to the location of the testing or assignments, the conditions in which they are carried out, or the use of assistive aids such as readers and scribes. Examples of setting accommodations include preferential seating, special lighting, and accessible workstations. Martha and Cathryn (2008) and Lin and Lin (2013) have both highlighted the importance of such changes in ensuring equitable and inclusive educational environments.

Martha and Cathryn (2008) found evidence of regular scheduling accommodations to increase available test or assignment time and alter time allotment. Miller et al. (2013) highlighted adaptations used to address attention, speed, and time-management issues. For example, extended time and rest periods can be implemented for students' benefit. However, there is still a lack of comprehensive research on the assessment and usage of different kinds of accommodations, including physical and sensory adaptations and communication accommodations, to support learners with disabilities in primary schools in Nairobi County, Kenya.

Sperotto (2013) emphasizes the importance of accommodations to ensure that students with disabilities have access to learning assessments and an equitable learning experience. Miller et al. (2013) note that those who receive suitable accommodations are more likely to perform better than those who do not. Lovett and Leja (2013) classify accommodations into four groups, while Li (2016) highlights the need for them to access grade-level instruction and participate in assessments. Overall, it is evident that accommodations must be provided for a fair and accurate assessment. Further research is needed to evaluate the appropriateness and efficiency of accommodations in primary schools in Nairobi County, pinpointing deficits in availability and implementation and assessing their effect on academic performance and accessibility of instruction. This is especially important, given the lack of inclusionary practices for these learners in the primary schools of Nairobi County.

2.2. Assessment Accommodations

Tests play an essential role in monitoring and supporting student achievement, such as identifying underperforming pupils, teachers, and schools and implementing corrective measures (Figlio & Loeb, 2011). Outcome measures may include student, state, or district performance relative to others (Hallaham et al., 2012), which can serve as valuable data to educate key stakeholders (Allen et al., 2014). In many countries, tests form the basis of school and teacher accountability (Amoako et al., 2019), including the effects these tests have on students with disabilities in inclusive school environments (Kart & Kart, 2021). It is imperative to research the existing accommodations in Nairobi primary schools and evaluate their efficacy in supporting inclusive education, as well as to identify strategies and measures to strengthen existing accommodations to improve learning outcomes for all students.

Warren, Martinez, and Sortino (2016) conducted a one-year mixed methods study to investigate the impact of an inclusive preschool program on academic and social growth among preschool children with or without disabilities. Fortysix children aged 3 or 4 and their parents participated in the study, which yielded positive results in eight areas measured with statewide standardized assessments, such as language, learning, cognitive competence, math, and literacy (Drogalis & Justice, 2020). These results demonstrate the benefit of this program to students without disabilities and the school community. However, there is an absence of research assessing the accommodations existing to support inclusive education practices in Nairobi County primary schools. Little is known about the academic and social growth of learners with disabilities in these schools or whether the accommodations are sufficient to support inclusive education practices. More research is needed to evaluate the current accommodations and their impacts on learners' achievement, engagement, and well-being, as well as the financial and practical costs associated with accommodating them.

Research has demonstrated that the careful design of teaching strategies, learning objectives, and assessment criteria are vital for promoting students' understanding and success (Rohala, 2014). Additionally, Sign et al. (2017) suggest that teachers have flexible lesson plans to identify a child's strengths and weaknesses (Gyimah et al., 2018). However, there has been a lack of research on assessing accommodations to support inclusive education practices for learners with disabilities in Nairobi County Primary Schools. Thus, research is required to gain knowledge of the strategies and resources teachers use to modify learning and assessment in order to provide accessible learning and success for those with disabilities; to generate strategies to ensure teachers have the resources and guidance to identify and support the difficulties experienced by learners with disabilities, and to inform educators on how to provide appropriate accommodations and support for such learners.

Gyimah and Amoako (2016) stated that class teachers' assessment practices of learners with Special Needs Education cause alienation, leading to discomfort and truancy or school drop-out. Bitler et al. (2019) pointed out the

misuse of test results, thus minimizing the importance of school assessment. In agreement, Cho and Chan (2020) and Bradbury (2019) argued that high-stakes tests used in general education are very stressful and damaging for both teachers and students, leading to headlines of people 'suffering stress' due to such assessments (Weale, 2017; Ward, 2018).

In Kenya, the Sessional Paper No. 14 of 2012 and MoEST (2015) have acknowledged that traditional examinations do not adequately consider the needs of learners with Special Needs Education (SNE). This has been further substantiated by a document analysis conducted by Mwoma (2017), which found a need for policy guidelines on curriculum and assessment for learners with disabilities and SNE. Wu (2018) posits that assessments consisting of paper exams and standardized tests can potentially exclude many students from achieving their potential or even discourage them from continuing their education. Therefore, she suggests that more research should be conducted on how teachers can combine traditional and inclusive assessments to serve all students more effectively.

2.3. Implications of Inclusive Education Practices

Inclusive education practices, adapted to individual needs, enable teachers to provide necessary support and guidance. This creates a learning environment where students with disabilities can participate in the same activities as others and build communication and collaboration between teachers, learners, and their families. Such practices promote social inclusion and understanding of those with disabilities.

2.3.1. Increased Access to Education

With the implementation of inclusive education practices, the research could assess how accessible the accommodations are to learners with disabilities in Nairobi County Primary Schools. This could help identify any barriers that students with disabilities face in being able to access the education they need.

2.3.2. Improved Academic Outcomes

Assessing the accommodations existing to support inclusive education practices could also provide insight as to whether they are effective in providing students with disabilities with the support they need to achieve success in their studies.

2.3.3. Cost-effectiveness

Additionally, assessing the existing accommodations could provide insight into their cost-effectiveness for supporting inclusive education practices. By measuring the cost-benefit of the existing resources, the research could inform future investment decisions for ensuring that the needs of all students are met in Nairobi County Primary Schools.

2.3.4. Monitoring Progress

Studying the accommodation existing to support inclusive education practices could also provide information about how far the Nairobi County Primary Schools have come in terms of providing inclusive education. This could help track how much progress has been made and identify areas where further improvements are needed.

3. Methodology

3.1. Research Design

This research adopted a mixed-methods approach, with a survey-based quantitative approach and a phenomenological qualitative research approach. The study was conducted in Nairobi County, Kenya. The target population consisted of 52 public primary schools with learners with disabilities, all the headteachers in those schools, and 206 special educational needs teachers in primary, special, and secondary schools in Nairobi County. To select the participants, a multistage sampling technique (Oso & Owen, 2011) was used, whereby schools were chosen proportionally at random in each sub-county for regular Special Needs Education schools and purposively for schools in marginalized areas, particularly those in extreme informal settlements. Purposive sampling was used for the headteachers due to their roles as custodians of the school and competent representatives of the school. The study then narrowed to 122 SNE teachers in public primary schools offering inclusive education.

In this study, the 30% Principle was implemented to acquire a sample size of 61.3 out of 206 instructors. To ensure the validity of the findings, an additional sample size of 80 SNE teachers was chosen randomly. The implementation of the 30% Principle to acquire a sample size of 61.3 out of 206 instructors helps ensure the validity of the findings by allowing the researchers to observe a significant population of the sample while not oversampling any particular demographic. By using a 30% sample size, researchers can adequately observe relationships among the full population while ensuring that any results represent the true nature of the population and not just a portion of it. Additionally, by randomly selecting an additional sample size of 80 SNE teachers, the researchers can better understand the correlations and interactions between the two different categories of teachers. Ultimately, this helps ensure the validity of their findings by incorporating different variables and perspectives. Questionnaires, interview guides, and document analysis guides enabled data collection, which was subsequently subjected to quantitative and qualitative analysis. Statistical analysis methods were utilized for the quantitative data, and thematic analysis methods for the qualitative data.

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4. Data Analysis and Research Results

4.1. Inclusive Education School Assessment Accommodations Exist for Learners with Disabilities in Public Primary Schools within Nairobi County

The findings from the interviews indicated that, in most schools, learners with disabilities were subject to the same assessments as their peers without disabilities. However, to accommodate the specific needs of students with disabilities, varied assessment methods were employed, such as observations, oral assessments, written tests, rubrics, checklists, portfolios, and projects.

This study further revealed a lack of consistency in providing assessment accommodations across schools. The results indicated that there is no universal standard for such arrangements, with some schools providing accommodations while others did not. Furthermore, the responses highlighted the potential heterogeneity of assessment accommodation policies amongst different schools.

The first respondent had this to say:

"Learners with disabilities are assessed the same way as those without disabilities, they are given a written test, and we do not consider the time for taking the assessment, the disability, or the ability of the learner." The second respondent added:

"They are assessed just like the other learners without disabilities. We don't adapt or modify the assessments."

The other respondents explained:

"Learners with disabilities are given the same assessments though we have some adjustments in the time given for the assessment. They are added extra time of about thirty minutes".

"We have assessment accommodations which involve altering the assessment method. Instead of giving a written assessment to a learner with Cerebral Palsy who cannot write, we give oral assessments".

The findings also revealed that some schools had assessment accommodations based on the disability type. The responses were as follows:

One respondent explained that:

"We give the same assessments, though, for learners with visual impairments. We give them large prints while others use braille machines and an extra time of thirty minutes."

Another respondent had this to say:

"In this school, all learners are assessed the same way, except that for learners with autism, we assess them in separate rooms due to the nature of their disability. Some of them cannot sit down for long hours; they require short breaks during the assessment, so we provide the short breaks and add them extra time." Other responses were as follows:

"We have learners with hearing impairment in our school; they do Kenya Sign Language as an alternative assessment; they are also given extra time and guided during the assessments to ensure they understand what is being assessed."

"We have one learner with a physical disability who cannot write; the learner uses a head pointer to write the assessments and extra time is also given to the learner during the assessment."

There appears to be a disparity in understanding regarding the proper assessment of learners with disabilities. The first two respondents indicated that no accommodations or modifications are made to assessments, while the other two respondents mentioned accommodations such as extra time or modified assessment methods. This knowledge gap can lead to adverse outcomes for learners with disabilities, as they may not be given the necessary accommodations or modifications to demonstrate their knowledge and skills. This could lead to learners with disabilities being unfairly penalized or not being able to demonstrate their full abilities. Furthermore, it reflects that the institution is not providing an equal opportunity for all learners with disabilities by ensuring that the assessments are not providing an equitable platform.

The researcher also sought to establish the opinion of Special Needs Education teachers on assessment accommodation forms for learners with disabilities. Table 1 shows their responses.

	Response and assessment methods are given to LWD	The seating arrangement of learners with disability	Instruction is given (1) before (2) during (3) after	Presentation of assessment papers to LWD	Scheduling of assessment time
Hearing Impairment	15	26	26	25	23
Visual Impairment	8	9	7	7	8
Physical Impairment	5	7	6	8	6
Cerebral Palsy	5	3	6	5	6
Intellectual & Cognitive disability	14	12	14	10	13
Downs Syndrome					
Autistic S. disorder	5	5	4	3	4
Emotional & Behavioural Disability			1		1
Learning Disability		1			4
Speech & Language Disability					
Multiple Disability			1		
Deaf blind			4	4	
Albinism					
Dwarfism					
Total (%) of Teachers' response	52	63	69	62	65
	(65.0%)	(78.8%)	(86.3%)	(77.5%)	(81.3%)

 Table 1: Number of Special Needs Education Teachers' Opinions on Assessment

 Accommodation Forms for Learners with Disabilities (LWDs)

The results of table 1 demonstrate that the majority of Special Needs Education teachers (86.3%) consider that assessment accommodation should involve instruction before, during, and after assessment, while 81.3% advocate for the scheduling of assessment time. Furthermore, 78.8% of the teachers believe that the seating arrangement of learners with disabilities should be considered while providing assessment accommodation, and 77.5% propose that assessment papers should be presented in a way that students with disabilities can understand. Additionally, it was suggested that assessment accommodation should involve responses and assessment methods catered to learners with disabilities.

The findings from table 1 also indicate that Special Needs Education teachers generally understand the necessity of providing equal opportunities for learners with disabilities to demonstrate their knowledge and abilities. This is evident in the agreement that assessment accommodations for these learners must involve multiple aspects, such as instructing them before, during, and after assessment, scheduling assessment time, arranging seats, presenting papers in an understandable format, and making adjustments to the responses and assessment methods. This suggests that teachers recognize the significance of providing appropriate accommodations to ensure fairness in the assessment process.

4.2. The Learning Outcomes of Inclusive Education School Assessment Practices for Learners with Disabilities in Public Primary Schools within Nairobi County

The researcher carried out interviews to establish the learning outcomes for learners with disabilities. The interview results indicated that the learning outcomes were both positive and negative. Some of the responses from the interviews are listed below:

"The assessments do not benefit learners with disabilities. After all, the performance is so poor that it is not of any value to the learners with disabilities."

"Some of the LWDs don't perform well in these school assessments. This has affected them so much that they don't come to school regularly, and then they end up just disappearing from school. When you follow up, they tell you they have dropped out because they are not benefiting."

"You see school assessments give us feedback on how learning is taking place, for LWDs the feedback is negative because the LWDs don't perform well so they cannot progress to the next class if they have not understood what they have been taught, but then you realize that the Ministry of education had outlawed repeating of classes, so we refer the LWDs to the special unit, this has made some of the LWDs to drop out of school."

"In this school, teachers have a negative attitude towards LWDs because we are a performing school. The mean score means everything to us. So no teacher wants to lower their mean score, so they reject LWDs in their classes. Sometimes even the LWDs themselves feel lost and drop out of school."

The interview results indicate that the learning outcomes for learners with disabilities are mixed. Some of the responses suggest that assessments do not benefit learners with disabilities and can lead to poor performance, resulting in decreased attendance and even dropping out of school. It also appears that there is a negative attitude towards learners

with disabilities in the school, as the mean score is considered more important than the well-being of the learners with disabilities. Additionally, it is mentioned that some LWDs feel lost and drop out of school due to the negative attitude of the teachers. This implies that the current assessment accommodation in place may not be effective in providing equal opportunities for learners with disabilities to demonstrate their knowledge and skills and that the system is not meeting the needs of learners with disabilities. It also implies that the teachers and school administration may not be aware of the impact of their attitudes and actions toward learners with disabilities and may not be sensitive to the specific needs of learners with disabilities. It could be concluded that the school is not providing an inclusive environment for learners with disabilities, and the current assessment accommodations are inappropriate and may negatively impact the performance and retention of learners with disabilities.

The interview results also revealed negative outcomes. Some of the findings revealed that the school assessments had positive learning outcomes for learners with disabilities in inclusive educational programs in Nairobi County. The responses are listed as follows:

"Learners with disabilities in this school are happy when they learn with their peers without disabilities. They are even given the same assessments as others and they still perform well and progress to the next classes."

"Some learners with disabilities perform well and even better than those learners without disabilities in the same regular classes they are in. some of the learners with disabilities' performance is average while some of them excel."

"The learners with disabilities have progressed through various classes, thus from one class to the next class. They have done various assessments and examinations until they sat for their Kenya Certificate of Primary Education (KCPE), and they even proceeded to high school."

"Assessment enables both teacher and the learner to get to know the progress they have made in the teaching and learning process."

"School Assessments enable the teacher to know the rate at which learning is taking place and the observed changes during the learning process."

"School Assessments motivate learners to react towards their full potential."

The researcher also addressed the research question on learning outcomes by administering a questionnaire to the Special Needs Education (SNE) teachers. Some of the learning outcomes in implementing inclusive education school assessment practices for learners with disabilities in inclusive public primary schools in Nairobi County. The results are shown in table 2. Table 2 in the study suggests that the majority of SNE teachers (73.8%) noted that the assessment of LWDs progressed to the next class, while 56 (70%) reported being referred to the special unit. Additionally, 66.3% of SNE teachers observed that measuring performance for LWDs was based on assessment accommodations. The data further reveals that 61.3% of SNE teachers indicated that LWDs made average progress, while 56.3% reported that the attainment of learners with disabilities was average. Furthermore, 51.3% specified the scoring for LWDs disaggregated by disability type. Additionally, 37.5% of SNE teachers said that the performance of LWDs was below average, with 36.3% noting that school attendance was not regular. Moreover, 30% of SNE teachers reported below-average progress for LWDs, and 22.5% mentioned that the students moved to the next class. Finally, only 17.5% of SNE teachers indicated that the progress of LWDs was above average.

Disability	Measuring perf. Is Based on accommodation	Scoring is disaggregated by disability type	Learners' performance is above average	Attainment is average	Attainment is below average	Progress is above average	Progress is average	Progress is below average	School Attendance regular	School Attendance is Not regular	Learners progress Next class	Do not progress	Learners drop-out	Referred to special units
Hearing	17	13	3	13	15	2	13	10	15	10	20	5	7	18
Impairment	-			-	_	_	-	-	10		-		-	10
Visual Impairment	8	6	1	9	5	5	9	2	10	3	9	4	3	10
Physical Impairment	2	3	2	8	1	1	2	2	4	5	6	1	2	4
Cerebral	4	4	4	4	2	3	5	2	2	2	5		5	7
Palsy Intellectual & Cognitive Impairment	12	8	4	10	3	4	13	4	7	5	11	4	4	9
Syndrome	1	1			2		2		2		2			1
Autistic S.	4	3			2		4	2	4	2	4	2	4	6
disorder Emotional & Behavioural Disorders	1	1					1			2	1		3	1
Learning Disability	1	1		1										
Speech & Language Disorders														
Multiple		1										1		
Disability Deaf blind	3							2			1	1		
Albinism											-	-		
Dwarfism														
Totals (%)	53 (66.3%)	41 (51.3%)	14 (17.5%)	45 (56.3%)	30 (37.5%)	15 (18.8%)	49 (61.3%)	24 (30.0%)	44 (55.0%)	29 (36.3%)	59 (73.8%)	18 (22.5%)	28 (35.0%)	56 (70.0%)
Table 2: Number of Special Needs Teachers' Opinions on the Implementation of														

Table 2: Number of Special Needs Teachers' Opinions on the Implementation ofSchool Assessments and Learning Outcomes for Learners with Disabilities

4.3. The Learning Outcomes of Inclusive Education School Assessment Practices for Learners with Disabilities in Public Primary Schools

The findings of this study revealed that the learning outcomes were both positive and negative. The positive learning outcomes were ascribed to the fact that learners with disabilities progress to the next class, learners' progress was average, their attainment was average, and school attendance was average. The negative learning outcomes were associated with the inability of the assessment to reflect the actual performance of learners with disabilities, the effect of the assessments on school mean scores, negative attitudes from teachers towards including learners with disabilities in school assessments, and their poor performance in the school assessments.

The study findings also revealed that the SNT teachers (25%) reported that learning outcomes for learners with hearing impairment showed that they progress to the next class. School attendance of visually-impaired learners is regular, and they are generally referred to the special unit classes. Physically impaired learners attain average grades. Intellectual and cognitive learners had average progress, while learners with the Autistic spectrum were mainly referred to special unit classes. While the CSOs allied the school assessment learning outcomes to the ability of both the teacher and the learner to get to know the progress they have made in learning. It gives the teacher feedback on how learning took place.

5. Conclusion

5.1. School Assessment Accommodations

This study found that assessment accommodations are available for learners with disabilities in Nairobi County. However, while some of these accommodations yielded positive outcomes, others had negative results. As such, this study underscores the importance of adapting, modifying, and accommodating assessments to include learners with disabilities. Specifically, this includes providing instructions before, during, and after assessments, scheduling assessments, providing seating arrangements, presenting the assessments, and allowing for alternative response methods.

5.2. Learning Outcomes for Learners with Disabilities in Inclusive Education

This study uncovered both positive and negative learning outcomes for learners with disabilities. The positive outcomes included progression to the next class, average progress, attainment, and school attendance. Conversely, the negative outcomes were attributed to the inability of the assessment to reflect the performance of learners with disabilities, the impact of the assessments on the school's mean scores, negative attitudes from teachers towards including learners with disabilities in school assessments, and their poor performance in the assessments.

6. Recommendation

6.1. School Assessment Accommodations

The present study advocates that school assessments for students with disabilities should be tailored, adjusted, and provided with accommodations. Such adjustments should be tailored to the specific disability type, and accommodations may include extended time, large-letter format, sign language, utilization of scribes, use of assistive technology, provision of alternative assessments, and amending the presentation of the assessment.

6.2. Learning Outcomes

School assessments and learning outcomes are essential for measuring the progress and achievements of learners with disabilities, evaluating the efficacy of educational programs, and identifying ways to improve. A well-crafted assessment system should allow teachers to observe the rate at which learners with disabilities are advancing, as well as a general understanding of their accomplishments. This data can then be used to identify each student's strengths and weaknesses and devise strategies to help them learn. It is also essential that assessments be inclusive and suitable for learners with disabilities, offering reasonable accommodations such as extra time, assistive technology, or alternative assessment methods.

Furthermore, assessments should be equitable, providing all learners with equal opportunities to demonstrate their knowledge and abilities and recognize their strong and weak points. Additionally, assessment environments should be inclusive, offering appropriate support such as special education teachers, counselors, and assistive technology and cultivating positive attitudes toward learners with disabilities among staff. To sum up, school assessments and learning outcomes are essential for the education of learners with disabilities. Assessments must be inclusive, fair, and conducted in an inclusive atmosphere to ensure those with disabilities can demonstrate their knowledge and skills, enable teachers to recognize their strengths and weaknesses, and develop strategies to support their learning.

7. References

- i. ACARA. (2013) Student Diversity and the Australian Curriculum: Advice for Principals, Schools, and Teachers. [Online at www.australiancurriculum.edu.au/StudentDiversity/Pdf/StudentDiversit. Accessed on: 14/08/14]
- ii. Allen, R., Burgess, S., & McKenna, L. (2014). School performance and parental choice of school: Secondary data analysis. Department for Education Research Report. Department for Education, London: England. Accessed on 13 April, 2020 from: https://assets.publishing.service.gov.uk/govern
- iii. Amoako, I., Quainoo, E., & Adams, F. (2019). High-stakes test accountability: A controversial issue in educational measurement. *International Journal of Latest Research in Humanities and Social Science*, 2(10), 94–96.
- iv. Bitler, M., Corcoran, S., Domina, T., & Penner, E. (2019). Teacher effects on student achievement and height: A cautionary tale. NBER Working Paper No. 26480.
- v. Bradbury, A. (2019). Pressure, anxiety, and collateral damage. The headteachers' verdict on SATS. More Than a Score research report. Accessed on: 13 April, 2020 from: https://www.morethanascore.org.uk/wp-content/uploads/2019/09/SATs-research.pdf
- vi. Carmel. (2016). Teacher effectiveness in adapting instruction to the needs of pupils with learning difficulties.
- vii. Cho, E., & Chan, T. (2020). Children's well-being in a high-stakes testing environment: The case of Hong Kong. Children and Youth Services Review, 109(1), 104694. https://doi.org/doi.org/10.1016/j.childyouth.2019.104694
- viii. Drogalis, R, A & Justice, L. (2019). Is the Proportion of Children with Disabilities Inclusive Preschool Programs Associated with Children's Achievement? Journal of Early Intervention. 42. 105381511987310. 10.1177/1053815119873100.
- ix. Edwards, M. (2016). Virginia: Gauging Progress, Accelerating Pace. 2016 State Progress Report on the Challenge to Lead 2020 Goals for Education. In *Southern Regional Education Board (SREB)*. Southern Regional Education Board (SREB).

- x. Figlio, D., & Loeb, S. (2011). School Accountability. In E. A. Hanushek, S. Machin, & L. Woessmann (Eds.), Handbooks in Economics (Vol. 3, pp. 383–421). North-Holland.
- xi. Gyimah EK, Ntim K, Deku P. (2018). Assessment techniques in special education. Cape Coast: UCC Press.
- xii. Gyimah E.K., & Amoako R. (2016). Pre-service teachers' perceptions on procedures to identify and assess children with special educational needs and disabilities: The case of colleges of education in Ghana, *Journal of Education and Practice*. 7(2):110–116.
- xiii. Hallaham D. P., Kauffman, J. M., & Pullen P. C. (2012). *Exceptional Learners an Introduction to Special Education*. (12th Ed) Pearson Education, INC. Upper Saddle River. New Jersey.
- xiv. Harry, B. & Klingner, J. (2014), *Why are so many minority students in special education?* Teachers College Press, New York.
- xv. Howgego, C., Miles, S., & Myers, J. (2014). *HEART Topic Guide Inclusive learning*. HEART59pp. http://www.heart-resources.org/wp-content/uploads/2014/09/Inclusive-Learning-TopicGuide.pdf Preparing_for_a_Renaissance_in_assessment.pdf. Retrieved on: 6th March, 2019. https://doi.org/from https://www.theguardian.com/education/2017/may/01/sats-primary-school-children-
- xvi. Hussu, A. M., & Strle, M. (2010). The assessment of children with special needs. Procedia Social and Behavioral Sciences 2, 5281–5284. Julka, And. Index for developing Inclusive Schools. New Delhi: NCERT. http://www.Jostor.org/stable/23880563. In regular primary schools in Ghana. Journal of Educational Research and Innovation, Vol 23, 35-45.
- xvii. Kart, A., & Kart, M. (2021) Academic and Social Effects of Inclusion on Students without Disabilities: A Review of the Literature. Educ. Sci. 11, 16. https://doi.org/10.3390/educsci110
- xviii. Larson, E. D., Goldstone, L., Liu, K. K., Thurlow, M. L., & Lazarus, S. S. (2019). Student demonstrations of their use of accessibility features and accommodations. Minneapolis, MN: University of Minnesota, Data Informed Accessibility—Making Optimal Needs-based Decisions (DIAMOND).
- xix. Lazarus, S. S., Cormier, D. C., & Thurlow, M. L. (2011). States' Accommodations Policies and Development of Alternate Assessments Based on Modified Achievement Standards: A Discriminant Analysis. *Remedial and Special Education*, *32*(4), 301–308.
- xx. Li, H. (2016). How is formative assessment related to students' reading achievement? Findings from PISA 2009. Assessment in Education: Principles, Policy & Practice, 23(4), 473–494. https://doi.org/10.1080/0969594x.2016.1139543
- xxi. Lin, P. Y., & Lin, Y. C. (2013). The Impact Of Setting Accommodation On Large Scale Assessment Of English Language Learners With And Without Learning Disabilities: Balanced Vs. Unbalanced Data In Latent Class Analyses. *Journal of Studies in Education*, *3(2)*, *1–19*.
- xxii. Lin, P., & Lin, Y. (2015). Identifying Canadian Teacher Candidates' Needs for Training in the Use of Inclusive Classroom Assessment. *International Journal of Inclusive Education*, *19*(8), 771–786.
- xxiii. Lovett, B.J. (2021) Educational Accommodations for Students with Disabilities: Two Equity Related Concerns. Front. Educ. 6:795266. doi: 10.3389/feduc.2021.795266
- xxiv. Lovett, B.J. (2021). Educational Accommodations for Students with Disabilities: Two Equity Related Concerns. Front. Educ. 6:795266. doi: 10.3389/feduc.2021.795266
- xxv. Madriaga, M., Katie, H., Caroline H., H. K., Sarah N., & Ann W. (2010). "Confronting Similar Challenges? Disabled and Non-Disabled Students' Learning and Assessment Experiences." *Studies in Higher Education 35 (6): 647–658. doi:10.1080/03075070903222633.*
- xxvi. Martha, R & Cathryn, A. (2008). Prevalence of Physical Disabilities and Accommodation Needs among Students in Physical Education Program. Journal of Postsecondary Education and Disability, 28(3), 303–328.
- xxvii. Miller, L. A., Lewandowski, L. J., & Antshel, K. M. (2013). Effects of extended time for college students with and without ADHD. Journal of Attention Disorders. Advanced online publication. Doi: 10.1177/1087054713483308.
- xxviii. Mwoma, T. (2017). Education for Children with Special Needs in Kenya: A Review of Related.
- xxix. Nees, M. A., & Berry, L. F. (2013). Audio assistive technology and accommodations for students with visual impairments: Potentials and problems for delivering. *Performance Enhancement & Health, 2(3), 101- 109.* Literature, *Journal of Education and Practice.* 8 (28). Accessed from www.iiste.org 8/9/2019.
- xxx. Oso. W. Y & Onen. D. (2009). A general guide to writing Research Proposal and Report A handbook for Beginning researchers. The Jomo Kenyatta Foundations Nairobi.
- xxxi. Panzavolta, S., & Lotti, P. (2012). Special Needs and ICT in Mainstream Schools: Trends and Innovative Approaches. SEnnet.
- xxxii. Rasooli, A., Razmjoee, M., Cumming, J., Dickson, E., & Webster, A. (2021). Conceptualizing a Fairness Framework for Assessment Adjusted Practices for Students with Disability: An Empirical Study. Assessment in Education: Principles, Policy & Practice, 28(3), 301–321.
 - https://doi.org/10.1080/0969594X.2021.1932736
- xxxiii. Rohaya, T., Mohd. Z. K., Hamimah. A. N., & Adibah. A.L. (2014). From principle to practice: Assessment for learning in Malaysian school-based assessment classroom. *International Journal of Social Science & Education*, 4(4).
- xxxiv. Schuelka, M.J. (2014). Excluding students with disabilities from the culture of achievement: the case of the TIMSS, PIRLS, and PISA. *Journal of Education Policy*, 28 (2), 216–230. https://doi.org/10.1080/02680939.2012.708789

- xxxv. Schuelka, M.J. (2018). Implementing inclusive education. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
- xxxvi. Schuelka, M.J. (2018). The cultural production of the 'disabled' person: Constructing student difference in Bhutanese schools. Anthropology and Education Quarterly, 49(2), 183–200.
- xxxvii. Singh, C.K.S., Lebar. O., Kepol. N., Rahman. R.A., & Mukhtar. K.A.M. (2017). An Observation of Classroom Assessment Practice Among lecturers in Selected Malaysian Higher Learning Institutions. *Malaysian Journal of Learning and Instruction: Vol. 14 No. 1 (2017): 23–61.*
- xxxviii. Sperotto, L. (2013). Educational Assessment of Children with Disabilities: A school level Approach. In S. G. Robinson, A. M. Kelly, & J. Williams, Children with Neurodevelopmental Disabilities: The Essential Guide to Assessment and Management (p. 688). London: Mac Keith Press. UIS. 2017. Education and Disability. Fact Sheet No. 40. February 2017. Montreal: UIS. Retrieved from: https://unesdoc.unesco.org/ark:/48223/pf0000247516 UN. 2016.
 - xxxix. Stephen G. Sireci, Stanley E. Scarpati, and Shuhong Li (2005). Test Accommodations for Students with Disabilities: An Analysis of the Interaction Hypothesis. American Educational Research Association Review of Educational Research, Vol. 75, No. 4 (winter, 2005), pp. 457–490. Published by Stable URL. http://www.jstor.org/stable/351610 suffering- stress exam-time
 - xl. UN. (2006). Convention on the rights of disabled people. New York: UN. Retrieved from: https: www.ohchr.org/EN/HRBodies/CRPD/Pages/ConventionRightsPersonsWithDisabilities.aspx#2
 - xli. UNESCO. (2014). Teaching and Learning: Achieving Quality for all. EFA Global Monitoring Report 2013/2014. Paris: UNESCO. Retrieved on www.unesco.org, accessed on 22/03/2018.
 - xlii. Ward, H. (2018). The stress of SATs gives children nightmares. Times Educational Supplement 9th July, 2018. Accessed on: 13 April, 2020 from: https://www.tes.com/news/stress-sats-gives- Children nightmares.
 - xliii. Warren, S.R. Martinez, R.S. Sortino, L.A. (2016). Exploring the quality indicators of a successful full-inclusion preschool program. *J. Res. Child. Educ.* 30, 540–553. [CrossRef]
 - xliv. Weale, S. (2017). More primary school children suffering stress from SATs, survey finds. The Guardian Monday 1st May 2017. Guardian. Accessed on: 13 April, 2020.
 - xlv. Wu, X. (2018) *Introducing Inclusive Education to Chinese Teachers*. (Unpublished Master's thesis) Vancouver Island University. Retrieved on: 16th February, 2019.
 - xlvi. Wu, Y. C & Thurlow, M. L. (2018). Students in Special Education Receiving Assessment Accommodations. Minneapolis, MN: The University of Minnesota, National Center on Educational Outcomes.