

**Primary School Teachers' Pedagogical Practices and Inclusive Education: A Case of Pupils with Moderate Deafblindness in Tanzania**

Manini Wakuru<sup>1</sup>, Sarah Ezekiel Kisanga<sup>2</sup> and Mwajuma Vuzo<sup>3</sup>

1. Ph.D. Candidate, School of Education, University of Dar es salaam, Tanzania,

E-mail: [wakurumanini@yahoo.com](mailto:wakurumanini@yahoo.com)

2 & 3 Department of Education Psychology and Curriculum Studies, School of Education, University of Dar es salaam, Tanzania,

E-mail: [sarahdalton8@gmail.com](mailto:sarahdalton8@gmail.com) ; [mvuzo@yahoo.co.uk](mailto:mvuzo@yahoo.co.uk)

**Abstract**

*This study presents evidence from the primary school teachers' pedagogical practices in the inclusion of pupils with moderate deafblindness. It also explains the factors hindering pupils' participation in learning. A qualitative approach with multiple case study design was adopted. Purposive sampling was used to select forty participants from four inclusive primary schools in Tanzania. Data were generated using semi-structured interviews, non-participatory classroom observations, focus group discussions (FGDs) and document reviews. Thematic analysis was used to identify, analyse, and record themes and sub-themes from the data generated. Findings indicate that lesson plans had long been homogenized, the teaching and learning approaches were not disability-sensitive and teaching and learning materials were also inadequate and inaccessible. Additionally, while the classroom environment was inaccessible for pupils with deaf-blindness, the assessment strategies were homogenized for all. The findings further show that the teaching practices and learning environment were exclusionary without considering the pupil's unique learning needs. Among other things, the paper recommends that there is a need to restructure teachers' pedagogical practices to accommodate the diversity needs of learners in order to ensure equitable access to quality education and participation of all pupils.*

**Keywords:** Inclusive education, pedagogical practices, deafblindness

## Introduction

An exclusionary practice in schools has been a great challenge to the successful implementation of the inclusive education model in many countries around the world. The practical conditions of inclusive education in many countries differ widely, between and even within schools (Haug, 2017). The Global Education Monitoring (GEM) report indicated that exclusionary practices are prevailing with an unequal distribution of education opportunities and barriers to quality education for many learners (UNESCO, 2020). Other studies further indicate that one in five children, adolescents and youth were entirely excluded from education due to stigma, stereotypes and discrimination practices (Kisanga 2019; Sánchez, Haro-Rodríguez and Martínez 2019; Asoh 2018). Inclusion calls for education systems to transform policies, legislations, regulations, education delivery, culture, processes, structures, infrastructure, practices and human resources to accommodate all learners into learning together wherever possible, regardless of any difficulties or differences they may have (UNESCO, 2020, 2017). The Universal declaration of human rights, promulgated by the UN in 1948, reaffirmed education as an inalienable right of everyone, which should underpin the 21<sup>st</sup> century education systems (Armstrong 2014; Ainscroe, Dyson and Weiner, 2013).

Moreover, inclusive practices bring about respect for people and an increased sense of working collaboratively among school staff, reducing the gap and stigmatisation between regular and special education teachers in inclusive settings (Adedoyin and Okere 2017; Rees 2017; Nketsia 2016). It has been found that non-disability peers also benefit by learning various special skills from pupils with disabilities, such as Braille skills, sign language and understanding other peoples' needs (Maciver et al., 2018; Adedoyin and Okere, 2017). Similarly, Selvaraj (2016) supports that educating all pupils within inclusive settings expresses an important ethical and moral commitment. Different studies show that inclusive teaching can influence classroom instructional practices to take into account the learning needs of all pupils on how to organise learning experiences, assess learning outcomes, employ teaching methods, communicate classroom instructions, arrange the learning settings and use teaching and learning materials (Mag et al., 2017; Onditi and Opini 2016; Mitchell 2015; NCERT 2014). In that regard, the learning environment should be heterogeneous. This requires teachers, to understand that individual differences are not a 'problem' to be fixed, but rather an opportunity to enrich learning (Florian and Black-Hawkins, 2011).

Studies have also shown that teaching pupils with deafblindness largely depends on the teachers' expertise and ability in adapting materials, classroom environment and learning facilities (Jaiswal et al., 2018; Duquette 2012; Kirk, et al., 2011). Likewise, Savage and Erten (2015) observe that pupils with special needs require considerable modifications of instructional time, criteria or conditions of assessment, methods of teaching and the use of multi-level instruction to involve all learners actively in the learning process. Similarly, Parker et al. (2009) and Riggio and McLetchie (2008) suggested that teaching pupils with deaf-blindness requires the use of multiple sensory and integrated child-centred approaches to develop their self-esteem, as well as teaching strategies adapted to meet their need. Recognising the need for inclusive education, various countries have made deliberate regulatory and strategic initiatives to ensure inclusivity.

In Tanzania, Education for All (EFA) has been a mantra at the core of Tanzania's education policy since the dawn of its independence in the early 1960s. In 1994, the Government of Tanzania ratified the Salamanca Statement and Framework for Action on Special Needs Education, and in 2004 the National Disability Policy was developed and the Convention on the Rights of Persons with Disability and its Optional Protocol was endorsed in 2009. Through these regulatory landmarks, the Government of Tanzania committed to adopting an inclusive education policy to support a mandatory approach at all levels of education to ensure equitable access to quality education (MoEST, 2021).

For effective implementation of inclusive education (IE), the Tanzania Government through the Ministry of Education, Science and Technology (MoEST), in collaboration with the President's Office-Regional Administration and Local Government (PO-RALG) endorsed the National Strategy for Inclusive Education (2021/22-2025/26) developed jointly with stakeholders to reduce the systemic and structural barriers that obstruct certain groups of Tanzanians from enjoying their rights to equal access to quality education, full participation, learning, and completion of education at all levels (MoEST, 2021). The overarching goal of the National Strategy on Inclusive Education (NSIE) ensures that in all levels of education, all learners learn together wherever possible, regardless of any difficulties or differences they may encounter. Notably, the implementation of IE is mainly hampered by a lack of teachers' knowledge and skills in adapting the relevant curriculum pedagogy that addresses a wide range of learning needs (Kapinga, 2015).

The training of special education teachers in Tanzania at certificate and Diploma levels is only offered at Patandi Teachers' College of Special Education, where special education teachers for teaching children with visual, intellectual and hearing impairments are prepared; however, children with deaf-blindness are not catered for in the programmes offered at this College (Kapinga 2015; Tungaraza 2014). Similarly, Possi (2006) reports that the curriculum programmes at Patandi Teachers' College developed by the Tanzania Institute of Education (TIE), do not include a well-tailored course on deaf-blindness (MoEVT, 2012). Ironically, the National Disability Policy calls for regular teachers to provide a friendly learning environment for pupils with disabilities including deaf-blindness in inclusive settings (URT, 2004). The National Strategy for Inclusive Education (NSIE, 2020) calls for the adoption of inclusive values and principles in schools and applying them into real practice at all levels, in all programmes and in every classroom. However, regular teachers are not adequately trained to acquire the principles, approaches and practices required for effective instructional practices in inclusive education contexts (MoEVT, 2012). While teachers may be unaware of the multiple modes of implementing IE aligned with the Universal design for learning (UDL), the Education Training Policy (ETP) of 2014 remains silent on what 'inclusion' means and how it should be put into practice.

Despite the domestication of the international policies and legislations on IE in Tanzania, knowledge on implementation of IE in the classroom context is still limited (Kisanga 2017; Possi and Milinga 2017; Cosmas 2016). Thus, the need to explore the primary school teachers' pedagogical practices and how this may be an impediment to inclusive education, particularly for pupils with moderate deafblindness in Tanzania. To do so, the study had the following questions: 1) Do primary school teachers employ practices of inclusiveness to promote access to education and participation in learning of all pupils including those with deafblindness? 2) What are the pedagogical barriers facing teachers in promoting the participation in learning of pupils with deafblindness? Answering these questions is vital because it contributes to the scholarship on inclusive education in developing countries that has hitherto been limited. It also informs educational practitioners and policymakers, on the need to review and restructure the teachers' education and special education curricula, especially at primary school level to incorporate IE principles, theories and approaches that will provide teachers with the pedagogical knowledge and skills for effectively implementing IE.

## Literature Review

The study is informed by the Social Model of Disability (SMD) propounded by Oliver Mike (1981). The social model theorists believe that disability is socially constructed and characterized by unequal opportunities for participation (Anastasiou and Kauffman, 2013). The model acknowledges barriers to participation, whose institutions reside in the environment, rather than in an individual, but could be prevented, reduced or eliminated (UNESCO, 2020). The social model seeks to restructure laws, policies, and practices in the education system in response to individual differences to ensure full participation and non-discrimination (UNESCO, 2019). Proponents of the SMD state that disability exists because of exclusionary practices such as inaccessible environment, inappropriate teaching and learning approaches, absence of reasonable curriculum adaptation and insufficient resources (Levitt 2017; Rees 2017). This implies that disability is a result of society's failure to minimise or eliminate exclusionary practices that impede the full participation of pupils with disability (Shanimon and Rateesh, 2014). This model requires teachers to embrace diversity through making reasonable curriculum and environment adaptations to maximise the full potential of all children (Alasim 2018; Armstrong 2014). In this regard, the model considers holistic supportive and conducive environment for better learning.

This model was considered in the present study because it usefully explains issues associated with the instructional practices and learning environment in IE classrooms in Tanzania primary schools. The Salamanca Statement on IE, of which Tanzania subscribed schools to differentiate the curriculum to cater for the diverse needs, abilities and interests of pupils (UNESCO, 1994). However, smooth application of the model may sometimes be difficult. For instance, while the model advocates for 'inclusion' and adaptation of 'reasonable' curriculum, this may be difficult to design. The yardstick for 'reasonable' is complex to measure. For instance, how reasonable should the curriculum be, when the criteria for assessments are not clearly stated in the model? Despite the limitations, the Social Disability Model is deemed relevant in this study because it enables us to understand the pedagogical practices of primary school teachers' and how this may impede inclusion of pupils with moderate deafblindness.

A comprehensive review of literature shows that the inclusion of pupils with special education needs (SENs) has a major impact on teachers, in terms of having to adapt

classroom practices that cater for the diverse needs of all learners (Hartmann and Weismer 2016; Maciver et al., 2018; Perez, et al., 2017; Selvaraj, 2016). The study on the inclusion of deafblind young people in mainstream schools in the United Kingdom, Kamenopoulou (2012) found that teachers had limited understanding of the communication needs of deafblind pupils that impacted classroom practices. Further study by Dalton et al. (2012), investigated on the implementation of IE, revealed teachers lacked knowledge and skills to apply UDL to minimise barriers to learning in a single classroom, such as adapting the curriculum, using multi-sensory approaches and learning materials and various strategies that would enable learners to carry out tasks with different levels of support.

Similarly, Asoh (2018) conducted a study in Cameroon to explore public primary school teachers' knowledge of assessment strategies used in inclusive classrooms. Findings indicated that teachers assessed all their pupils in the same way without making essential curriculum modifications for children with special education needs. The study concluded that teachers lacked the knowledge and skills needed for assessing children with special needs in inclusive classrooms. Furthermore, Wanjiku (2014) in Kenya reported that teachers tended to distance themselves to teach pupils with disabilities due to teachers' lack of confidence and skills.

In Spain, Sánchez et al. (2019) conducted a study on the barriers to student learning and participation in an inclusive school, findings indicated that teachers' had limited training in the educational needs of pupils with disabilities in general classrooms, their inability to adapt the curriculum to meet their needs, inadequate resources, and limited application of multi-level teaching strategies. Previous studies conducted in developed countries may not help us understand the dynamics of inclusiveness in less developed countries such as Tanzania. Studies done elsewhere cannot accurately represent contextual barriers that prevent teachers to enhance learning and participation for pupils with deafblindness in inclusive classrooms.

A few studies have been done in developed countries on the inclusion of pupils with deaf-blindness (Dammeyer and Ask-Larsen 2016; Herbster 2015; Jaiswal et al., 2018; Wolsey 2017). However, these studies are not relevant to Tanzania due to differences in socio-cultural, economic and educational contexts, even though they

have yielded valuable insights. More so, previous studies focused on secondary and higher education levels. Studies conducted in Tanzania concentrated on the general challenges facing the implementation of IE, focusing on students with intellectual, visual or hearing impairments (Cosmas 2016; Kisanga 2017; Kisanga and Richards 2018; Magige 2017; Ntiruka 2016). They fail to enlist particularly pedagogical practices in the inclusion of pupils with moderate deafblindness, which according to Herbster, (2015) and Wolsey (2017), empirical evidence is limited and scattered.

### **Methods and Materials**

The study was guided by the constructivist philosophical paradigm in a qualitative lens and it adopted a multiple-embedded case study design to address the problem in question. This approach was chosen due to the assumption that primary school teachers can adopt and apply multiple instructional practices pertinent to the inclusion of pupils with deafblindness. The qualitative research approach enabled delving into the personal experiences of different teachers to explore more on the application of pedagogical practices enabling or hindering the access and or participation of pupils with deafblindness.

The study was conducted in Tanzania, involved three districts, namely: Illemela and Nyamagana, in Mwanza city, and Ilala in Dar es Salaam. The districts were purposefully selected because of their high rates of enrolment of pupils with deafblindness compared to other districts in the country (MoEST, 2016). The concern for similar characteristics was to generate detailed and rich information for a comprehensive understanding of the studied phenomenon. Four public inclusive primary schools were selected purposefully on the basis of enrolling pupils with deafblindness.

Data were collected from 40 participants who were purposefully selected from the study regions. Eight (8) special and eight (8) regular education teachers, four (4) heads of schools and four (4) academic teachers were purposefully selected to participate in the study by virtue of their responsibilities. These included: identifying the unique learning needs of pupils with deafblindness, designing lesson plans, arranging classrooms, developing teaching and learning materials/ learning activities, providing assistive devices and teaching and learning materials. They were also mandated to ensure that education policies are put into practice in

schools. Their selection was; thus, based on the fact that they are key implementers of successful inclusion in education. Eight (8) pupils with moderate deafblindness and eight (8) non-disability pupils participated in the study because we wanted to get views on inclusion in the learning process.

### **Data collection methods**

To generate data, semi-structured interviews, non-participatory observations, focus group discussions and documentary reviews were used. Thirty two (32) semi-structured interviews were conducted with heads of schools, academic teachers, regular education teachers, special education teachers, pupils with deafblindness and their peers. Interview guides with a list of open-ended questions focused on examining teachers' pedagogical practices in the inclusion of pupils with moderate deafblindness and factors that impede participation in learning. Each interview was held at staff offices for duration of 40-60 minutes, depending on the nature of the required information. The interviews were conducted in Kiswahili, Tanzania's national language and medium of instruction in public primary schools. The observation assessed the actual teachers' instructional practices in the inclusion of pupils with moderate deafblindness in order to gain depth understanding of whether or not the teachers attended to the diverse learning needs in the classroom environment. Thus, pedagogical methods used, teaching and learning materials, learning activities and assessment strategies employed during the teaching and learning process were observed. Observation facilitated assessing whether or not the classroom practices and learning environment were in line with inclusive practices and approaches. Observations were conducted for 40 minutes of the teaching subject period. The researchers used an observation protocol (Creswell, 2014) that explicitly outlined the lines of inquiry.

The lessons were video-recorded and an explanation was provided for the participants to appreciate the need for recording. The researcher was aware that her presence in the classroom and recording could be problematic to the 'normalcy' and naturalness, of the data to be generated, which could affect the authenticity of the findings and conclusion. To avoid this, persistent observations were used to uncover actual classroom practices and post-observation video stimulated interviews to ensure trustworthiness of the findings. Post-observation video-stimulated interview (PVI) was done soon after the classroom observations to verify and clarify observed instructional practices.



### **Data analysis procedures**

Data were analysed using thematic analysis by applying the six steps proposed by Braun and Clarke (2013), namely: familiarization, coding, searching for themes, reviewing themes, defining and naming themes and writing up. In the end, themes were developed from patterns of the data sources through iterative inductive and deductive approaches. Coding procedures were done to identify themes from words, phrases, sentences and paragraphs that represent or symbolize issues relating to experiences of the participants. A thematic analysis allowed cross-case analysis and comparison of data from different case studies as advised by Yin (2014) and Creswell (2014). Cross-case analysis was also done to broaden the understanding of primary school teachers' pedagogical practices toward the inclusion of pupils with moderate deafblindness and impeding factors to ensure participation in learning in inclusive classrooms. Yin (2014) acknowledges that cross-case analysis aims at seeking to understand the applicability or transferability of the findings from one qualitative study to other similar studies. This stage involved the analysis of the similarities and differences in the participants' classroom practices and different sources of data in line with the aim of the study.

### **Results**

Based on the evidence established through data, four key themes were developed from the teachers' pedagogical practices regarding the inclusion of pupils with moderate deafblindness in Tanzanian primary schools contexts. These are: homogenized lesson plans and inclusive education; inappropriate teaching and learning approaches; scarcity and inappropriate teaching and learning materials; inaccessible assessment strategies and inaccessible environment.

#### **Homogenized lesson plans and inclusive education**

Analysis of teachers' lesson plans indicated that most teachers did not make a reasonable decision in adapting the instructional time for completion of learning tasks, teaching and learning materials, teaching and learning activities, teaching and learning methods, lesson's objectives, content to be taught and the assessment strategies to cater for the diverse needs of learners present in the classroom. Teachers who were unable to develop inclusive lesson plans were more likely to plan lessons without considering the individual pupil's learning needs. Hence, the actual teaching and learning process inhibited some pupils' active participation.

It showed that pupils' individual needs were not considered when planning the lesson, resulting in the exclusion of those with moderate deafblindness. Through interviews with the teachers, the study revealed a lack of understanding of how to design and develop inclusive lesson plans, as expressed by a regular education teacher from school C:

*Yes! I prepare a lesson plan in a general way without modifying it at any stage of the teaching and learning process. I don't have knowledge to consider diverse needs in the lesson plan. It is impossible to consider every pupil's needs in the lesson plan because we have large classes. I frequently use the same plan for teaching methods, learning activities, materials and assessments for all the pupils in my class (Regular, education teacher, school C).*

Similar situations were expressed by another special education teacher that:

*I prepare a lesson plan in the same way as we were trained at the teacher education college. I do not know how to prepare a lesson plan that considers individual learning needs, but most of the time I teach without having a lesson plan because I have so many periods per week. I usually use the same lesson plan without changing the teaching method, materials and learning activities (Special education teacher, school B).*

These revelations about homogenizing lesson plans imply that the teachers consider all pupils as being similar, even when there are some children with moderate deafblindness. This could impede children with deaf-blindness from effectively participating in the class since, from the initial planning, their needs have not been taken into consideration.

### **Teaching and learning approaches: implication for pupils' participation**

Observations indicated that teaching was dominated teacher-centred techniques, while pupils especially those with moderate deafblindness, remained passive. Only a few teachers employed the child-guided approach to foster inquiry and active engagement in learning.

Interviews with teachers showed that teaching was dominated by lecture methods that hindered the pupils' creativity, critical thinking, classroom interaction, communication and collaboration. The participatory approach was rarely used. The study also showed through group discussions, that there was no interpreter to help pupils communicate and there was no preparation made to encourage them to learn collaboratively. Additionally, other pupils were not trained on how to study with pupils with moderate deafblindness. These pupils without disabilities were not trained on how to speak and use multiple means of communication with pupils with moderate deafblindness. Table: 1 illustrates the dominant teaching and learning approaches used to facilitate learning for pupils with moderate deafblindness.

*Table 01: Dominant Teaching and Learning Approaches in the Inclusion of Pupils with Deafblindness*

SN	Type of Teaching and learning approaches	Popularity
1	Child-guided approach	Twelve observed teachers out of sixteen used teacher-centred approaches. Lecture method, question and answer methods, as well as chalk and board method were the dominant methods
2	Individualized Education Plan (IEP)	None of the observed teachers considered IEP
3	Peer-assisted learning	Only six of sixteen teachers encouraged peer-learning, while the remaining did not
4	Collaborative teaching or plans	Most observed teachers worked independently. There was no co-teaching of special and regular education teachers
5	Tactile learning	Two teachers out of sixteen encouraged tactile learning during instruction while fourteen did not
6	Multi-sensory approach	six teachers out of sixteen used multiple senses to learn but the rest did not
7	Differentiates methods/ materials /instructions	None of the teachers differentiated methods, teaching and learning materials and learning activities
8	Adapts assessment or learning activities	Classroom assessment and learning activities were adapted by none of the teachers
9	Activities-based approach	Eleven teachers out of sixteen used rote learning and memorization of facts, while five employed activity-based approach

Source: Researcher Field Data, 2020

The findings in table 1 indicate that teachers predominantly used teaching approaches that limit independent learning. They did not demonstrate pedagogical knowledge that implements the inclusive education policy. It was further indicated that no teacher made use of the required instructional practices. Some of the teachers expressed that they lacked knowledge and skills to employ this method, while others had various excuses as stated below by one of the participants:

*Our teaching is dominated by teacher-centred approaches due to large numbers of pupils in the classrooms. It is also not easy to employ participatory approaches due to the limited time indicated in the school timetable. Usually, I use the lecture, questions and answers method. Rarely do I use classroom discussions and participation among pupils due to the large number of pupils (Regular education teacher, school C).*

This was reiterated by one regular teacher, saying:

*I often use the lecture method to save time because the time allocated in the school timetable is not enough to focus on an individual pupil's needs. When you use the learner-centred approach, you will not complete the syllabus in the prescribed time. Mostly, I ask questions during my teaching because the class is large; it exceeds the teacher-pupil ratio (Special education teacher, school A).*

Similarly, other regular teachers concurred as one of the special education teachers admitted that:

*I don't use the learner-centred teaching methods frequently because the learning environment does not encourage their use. Also, classes are overcrowded. I use mostly questions and answers when teaching the class, which is simple to manage (Special education teacher, school, D).*

The excerpts above indicate that the teacher-centred techniques were dominant due to the large numbers of pupils per stream/class. The teachers thus applied approaches that were convenient regardless of suitability to divergent learning needs among the pupils.

### **Inadequate and inappropriate teaching and learning materials**

Analysis of the lesson plans revealed that most teachers were unable to state the instructional materials which would support pupils with moderate deaf-blindness to use multiple senses to learn. A few teachers used tactile pictures, raised maps and diagrams and concrete materials that would help pupils. Through interviews, special education teachers said that they knew how to adapt teaching and learning materials to meet the wide range of needs of pupils with moderate deaf-blindness. However, during classroom observation, it was discovered that there was a mismatch between teachers' knowledge of adapting the teaching and learning materials and their actual practice. It was noted that few teachers were aware of the importance of adapting teaching and learning materials, however, during teaching process did have accessible learning materials for all pupils something which exclude them to participate effectively in learning. It was observed majority of teachers lacked real objects, tactile pictures or raised diagrams to enhance pupils with deafblindness to learn effectively. For instance, inadequate and inappropriate teaching and learning materials were also acknowledged by regular education teachers participating in the FGDs, as one of them expressed that:

*It is obvious that our moderate deaf-blind pupils do not have enough braille machines and papers, hearing aids, reading stands, magnifiers, styluses, A4 interlining frames, glasses and special computers. Therefore, they depend on their non-disabled peers to support them in their learning (Regular education teacher, school, A).*

Another regular education teacher elaborated that:

*We encounter a serious problem of shortage of special materials, which means that we cannot give our pupils with deaf-blind disabilities appropriate support. In fact, a lack of materials prevents us from using the learner-centred approaches (Regular education teacher, school, C).*

The above quotes indicate that pupils with moderate deafblindness are experiencing an acute shortage of education equipment and assistive devices for effective learning, which makes them to be over-dependent on their peers.

### **Inaccessible classroom environment for pupils with deafblindness**

Observations indicated that the majority of the teachers did not re-arrange the classroom to allow free and safe mobility of pupils with moderate deafblindness. It was observed that classes were in rows, with the pupils seated facing in front of the class, which hindered the teachers' movements around the classroom to provide individualized support. It was also observed that the classes with pupils with deafblindness were overcrowded and arranged improperly in such a way that the diverse needs of pupils with special needs were not appropriately considered. During observations, it was noted that an inclusive environment in schools did not exist. Ramps and rails on the school infrastructure were observed missing, affecting the movement of pupils with deafblindness. This could discourage pupils with impairments from attending school and not acquiring education, which further widens exclusion.

It was also observed that some pupils with moderate deafblindness sat at the back of the classroom and the furniture that had sharp edges was not arranged properly; thus, limiting pupils' mobility. In affirmation, during interviews, one teacher expressed how difficult it was to arrange furniture:

*It is very difficult to arrange the classroom with a large number of pupils and a lot of desks, because the space is not enough as you can see. There are even broken desks kept at the back of the classroom (Special education teacher, school, C).*

This condition as was observed and confirmed is not safe and conducive for the learning of pupils with disabilities. Inaccessible learning environment is partly attributed to lack of school safety guideline and limited teachers' knowledge and skills in adapting learning environment that caters for the diverse of all pupils. Unsafe learning environment limits their physical interaction with other pupils in the learning process. More so, shelves on which to keep assistive devices were not available, nor electricity to enable pupils to use optimal lighting and technological assistive devices. In all the studied schools, there were steep steps to the classroom entrance, making it difficult for pupils with disabilities.

### **Inaccessible assessment strategies: are all pupils the same?**

Analysis of the lesson plans showed that the teachers in inclusive classrooms did not assess pupils' learning activities in an individualized manner, particularly for

those pupils with moderate deafblindness, as indicated in Table 2. They only filled in the evaluation section with a general comment by using either percentages or words, such as ‘most pupils understood the lesson’, ‘80% of pupils understood the lesson’. One teacher from school D reported that he could more often provide the same learning activities without any changes to meet the school requirements due to limited time. He also added that all pupils were assessed in the same way. Classroom observation revealed that all teachers used standardized tests and examinations which could not consider the diverse needs of pupils with moderate deaf-blindness. Teachers did not give them more time to answer the questions.

During classroom observations, primary school teachers did not adapt assessment instructions or criteria such as extending the time for completion of learning activities or providing alternative tests or examinations. Teachers did not also use multiple tools for assessment and designing individualized learning activities to meet the diverse needs of all pupils in the inclusive classrooms. It was further indicated that the majority of primary school teachers, used paper-and-pencil tests rather than oral tests, and did not provide additional time during the learning process for pupils with moderate deafblindness. Findings from classroom observations revealed that teachers assessed the learning activities of pupils with moderate deafblindness without modifying the assessment criteria. For example, they did not give them extra time to complete their work, or use an alternative form of assessment so as to take their pace of learning into account. It was evident that both special and regular education teachers lacked knowledge and skills to adapt assessment to accommodate the diverse learning needs of all pupils.

*Table 02: Assessment Strategies for Pupils Performance*

<b>SN</b>	<b>Assessment Typology's Strategy</b>	<b>Status</b>
1	Provision of more time for completion of learning activities	All sixteen observed teachers did not provide extended time for completion of learning tasks or to answer questions
2	Use of multiple tools of assessment	Nine observed teachers out of sixteen used questions and answers, two employed group discussions and five used assignment
3	Adapting assessment criteria or instruction	No observed teacher adjusted assessment instruction or criteria
4	Reducing number of questions	No teacher reduced the number of questions
5	Designing individual learning activities	No observed teacher modified learning activities to cater for diverse needs

Source: Researcher Field Data, 2020

The findings indicated that the majority of primary school teachers used paper-and-pencil tests rather than oral tests, and did not provide additional time for pupils with moderate deaf-blindness during the learning process. During interviews with heads of teachers, it was reported that teachers lacked pedagogical knowledge to employ strategies that were more inclusive but they understood that their assessment strategies of pupils with moderate deaf blindness were exclusive.

## **Discussion**

This paper examined teachers' pedagogical practices in teaching pupils with moderate deafblindness in order to highlight factors that impede inclusion. The findings showed that most teachers use homogenized lesson plans, inappropriate teaching and learning methods, inadequate teaching and learning materials, inaccessible assessment and inaccessible physical environment. The aforementioned aspects impede effective learning of pupils with moderate deafblindness because they do not take into account their diverse learning needs. The teachers' practices in teaching pupils with moderate deafblindness were also exclusionary because it did not consider the diversity among the pupils. The following discussion will focus on the teachers' pedagogical practices and its implications for pupils' participation in learning. This is because the teachers' pedagogical practices are critical regardless of the environment or other impediments.

Findings indicated that most primary school teachers lacked appropriate theoretical and practical knowledge and skills to design inclusive lessons, adapt the curriculum in terms of objectives, content, learning activities, learning materials, assessment and learning environment to cater for diverse learners' needs. The findings are in line with Asoh (2018) in Cameroon, Mulinge (2016) in Kenya, Chireshe (2013) in Zimbabwe, Dalton et al. (2012) in South Africa who reported that majority of trained teachers lack knowledge and skills for handling learners with SENs in inclusive classrooms. Kisanga and Richards (2018) in Tanzania reported that teachers had inadequate knowledge and skills for implementing IE. Likewise, they did not modify the curriculum or use IEPs to meet the educational needs of pupils with disabilities. They developed schemes of work and lesson plans without considering pupils' differences and they failed to use participatory teaching and learning strategies. This is contrary to the Tanzania National Strategy for IE of (2021-2025/26), which requires the education system to respond to the diverse needs of learners through differentiation of curriculum,



in order to eliminate barriers in access and participation in learning processes (MoEST, 2021). The Tanzania National strategy for IE is in line with the call by UNESCO for nations to restructure the education system with supportive legal and institutional initiatives in response to individual differences in order to enhance full participation and non-discrimination (UNESCO, 2019). Most barriers can be deconstructed to ensure the inclusion of all pupils.

The revelations from various countries of Tanzania, Cameroon, Kenya, Zimbabwe and South Africa as indicated above, do not resonate with the Social Model of Disability which calls for developing a reasonable curriculum that draws out the participation of all children in learning (Anastasiou and Kauffman, 2013). The teachers' testimonials show that their practices were not mindful of the pupils with deafblindness. Teachers' practices was ascribed with limited IE content and approaches that incorporated in the teachers' education curricular and deafblindness course was not catered for (Possi, 2006). Shanimon and Rateesh (2014) argues that the essence of the Social Model of Disability is to discourage exclusionary practices which impede the full participation of pupils with a disability. The principles of the universal design for learning in inclusive education is to address a wide range of learning needs in a single classroom through differentiating curriculum (Dalton et al., 2012). Failure to do so implies that the teachers' practices discourage the full participation of pupils with disability.

Exclusionary practices as demonstrated by this study's findings are not an alien challenge in most countries even in developed countries. For instance, in Spain, Sánchez et al. (2019) reported that teachers had limited training in the educational needs of pupils with disabilities in general classrooms. In their study, Sánchez et al. (2019) further reveal that teacher lacked the ability to adapt the curriculum to meet pupils' needs, and had limited application of multi-level teaching strategies. Similarly, Hersh (2013) conducted a qualitative study in six developed countries and reported that people who are deafblind face communication, attitudinal and infrastructural barriers, and receive inadequate support. Hersh further reported that such barriers resulted in isolation, depression, lack of self-confidence, self-esteem and security, inability to function independently and withdrawing from social activities. This is the social construct of disability in the learning environment which Anastasiou and Kauffman, (2013) cautions us about. Arm et al. (2016), in Jordan found that the barriers to inclusion were teachers' lack of knowledge and

insufficient among other factors. Such learning environments as stipulated deny pupils equal opportunities to participate because they are not conducive for them as the social model of disability propagates (Anastasiou and Kauffman, 2013). A conducive learning environment facilitates teachers teaching practices. Similar to the present study findings, in a previous study in Tanzania, the learning environment was found not conducive and teachers had no alternative to ensure inclusive education (Kisanga (2017). Other scholars have also reported that a large number of pupils limited the teachers' use of a pupil-centred approach to provide one-to-one support and individualized activities; manage pupils' behaviour and classroom interaction (Magige, 2017; Ntiruka, 2016). In addition, studies also revealed that group discussions were used in the learning process, but the teachers found it difficult to design and organize appropriate collaborative learning activities in groups to manage time and get pupils with moderate deafblindness engaged in the discussion. This is however not in congruence with the social model of disability which promotes the need for appropriate instructional support to accommodate the diverse needs of learning; enhancing access and participation of quality education to all pupils in classroom activities (Alasim, 2018). Therefore, by applying approaches that are not supportive of pupils with moderate deaf blindness, teachers are doing a disservice to these pupils and their capacity to learn may be thwarted.

The findings of the present study confirm those of Kisanga and Richards (2018), Mwakyeja (2013), Tungaraza (2012) and Kita and Tilya (2010) who found out that primary school teachers in Tanzania used lectures, question and answer methods, as well as the chalk and board method, which hindered pupils from constructing knowledge, learning independently and developing critical thinking and functional skills for solving real life problems. According to Nketsia (2016), memorization and rote learning result in pupils' lack of engagement, and make learners to assume a passive role. In this regard, pupils with deaf-blindness when excluded from participation in learning may in extreme cases drop out of school, if not, academic performance is lowered and their confidence and self-esteem reduced. As Pritchard (2014) adds, this not only reduces the self-esteem and self-confidence of learners but also affects classroom interaction; ignores cooperative learning and self-acceptance, consequently affecting the learners' academic gains and progress. This retaliation of excluded pupils further confirms that disability is socially constructed as espoused in the social disability model

(Anastasiou and Kauffman, 2013). However, the exclusion observed in the present study and others is neither attributed to stigmatisation nor stereotyping, which the social disability model notes (Kisanga, 2019; Sánchez, et al., 2019; Asoh, 2018). The present study findings also concur with those of other scholars who reported that teachers sometimes use inappropriate materials in the learning environment that impede inclusion (Mulinge, 2016; Eunice, et al., 2015; Chireshe, 2013). Notably, this sounds like a disservice to pupils with special learning needs. Wanjiku (2014) added that teachers' use of inappropriate teaching and learning materials negatively inhibited the pupils' multi-sensory learning, critical thinking and development of interests on learning.

The findings from the present study have concurred with the evidence in other studies that teachers lack pedagogical knowledge and skills to adapt assessment to address diverse needs (Sanchez, et al., 2019; Kisanga, 2019; Asoh, 2018). Similarly, Kitta and Tilya (2010) opined that the assessment process in most teaching environments is geared toward passing examinations and not assessing pupils' competence. Studies have also established that pupils with deafblindness need to be assessed based on authentic performance-based approaches, which encourage teachers to use multiple tools of assessment, as well as, assessing pupils with diverse needs (Kiri et al., 2011; Riggio and McLetchie, 2008). Therefore, the lack of an assessment strategy for pupils with moderate deafblindness also resonates with homogenized lesson plans, and inadequacies in the teaching approaches and materials. This, in turn, violates the principles of IE because pupils with moderate deafblindness are eventually excluded.

## References

- Adedoyin, O., & Okere, E. (2017). The significance of inclusion concepts in the education system as perceived by Junior secondary school teachers: Implications for teachers training programmes in Botswana. *Global Journal of Social Sciences Studies*, 3 (1), 13-28.
- Ainscove, W., Dyson, A., & Weimer, S. (2013). *From exclusion to inclusion: Ways of responding in schools for students with special needs*. Reading: Centre for Equity Education.
- Alasim, K. N. (2018). Participation and interaction of deaf and hard-of-hearing students in inclusion classroom. *International Journal of Special Education*, 33 (2). 493-506.
- Anastasiou, D., & Kauffman, J. M. (2013). The social model of disability: Dichotomy between impairment and disability. *Journal of Medicine and Philosophy*, 38, 441–459.
- Arm, M., Al-Natour, M. & Al-Abdallat, B. (2016). Primary school teachers' knowledge, attitude and views on barriers to inclusion Jordan. *International Journal of Special Education*, 31(1), 67-77.
- Armstrong, H. M. (2014). *Inclusion through different eyes*. Unpublished Master's Dissertation, University of Massey.
- Asoh, B. F. (2018). Teachers' awareness of assessment strategies used in inclusive classrooms and actual practices of inclusiveness: A case study of public primary schools in English speaking Cameroon. *International Journal of Trend in Specific Research and Development (IJTSRD)*, 2 (4), 2667-2676.
- Braun, V., & Clarke, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26 (2), 120-123.
- Chireshe, R (2013).The state of inclusive education in Zimbabwe: Bachelor of Education (Special Needs Education) students' perceptions. *Journal of Social Science*, 34(3), 223-228.
- Cosmas, V. J (2016). Educational challenges and coping strategies among students with hearing disability in Tanzania inclusive public secondary schools. Unpublished Doctorial Thesis, University of Dar es salaam.
- Creswell, J. W. (2014). *Research design: A guide to design and implement* (3<sup>rd</sup> ed.). Sage Publications

- Dalton, E. M., Mckenzie, J. M., & Kahonde, C. (2012). The imlementation of inclusive education in South Africa: Reflections arising from a workshop for teachers and therapists to intrduce universal design for learning. *African Journal for Disability*, 1 (1). <https://sci-hub.tw/10.4102/ajod.v1i1.13>
- Donohue, D., & Bornman, J. (2014). The challenges of realising inclusive education in South Africa. *South African Journal of Education*, 34 (2). <https://files.eric.ed.gov/fulltext/EJ1137404.pdf>
- Dudley-Marling, C. B. (2014). Two perspectives on inclusion in the United States. *Global Review Education*, 1 (1), 14-31.
- Duquette, J. (2012) Communication between people with deaf-blindness: How could it be facilitated?. Institute of Nazareth & Louis.Braille. <http://www.inlb.qc.ca/wp-content/uploads/2015/01/Communication-between-people-with-deafblindness.pdf>
- Eunice, A., Orodho, J. A., & Nyangia , E. O. (2015). Challenges facing implementation of inclusive education in public secondary schools in Rongo sub- county, Migori county, Kenya. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20 (4), 39-50.
- Haug, P (2017). Understanding inclusive education: Ideals and reality. *Scandinavian Journal of Disability Research*, 19 (3), 206–217.
- Hersh, M. (2013). Deaf-blind people, communication, independence and isolation. *Journal of Deaf Studies and Deaf Education*. <https://academic.oup.com/jdsde/article.pdf18/4/446/1492792/ent022.pdf>.
- Jaiswal, A., Aldersey, . H, Wittich, W., Mirza, M., & Finlayson, M. (2018). Participation experiences of people with deafblindness or dual sensory loss: A scoping review of global deaf-blind literature. *PLoS ONE*, 13 (9). <https://doi.org/10.1371/journal.pone.0203772>
- Kapinga, O. (2015). Teacher trainees' knowledge and preparedness for inclusive education in Tanzania: The case of Mkwawa University College. *Journal of Education Development (JED)*. 1-20. <https://www.cucom.ac.tz/storage/publications/journals/JED%20VOL%201.pdf>
- Kirk, S.A., Gallagher, J. J., Coleman, M. R., & Anastasiow, N. J (2015). *Educating exceptional children* (14<sup>th</sup> ed.). Houghton Mifflin Company.
- Kisanga, S. E. (2017). Educational barriers of students with sensory impairment and their coping strategies in higher education institutions. Unpublished Doctoral Thesis, ©Trent University.

- Kisanga, S. E., & Richards, G. (2018). *Teaching pedagogies in Tanzanian inclusive educational settings: Do they respond to diverse needs? Voices from students with visual impairment*. *British Journal of Visual Impairment*, 36(3), 216-226
- Kisanga, S. E. (2019). "It is not our fault we are the victims of education system: Assessment of the accessibility of examination and information for students with visual impairment in Tanzania. *Journal of International Association of Special Education*, 19 (1), 15-26.
- Kitta, S., & Tilya, F.N. (2010). The status of learner-centred learning and assessment in Tanzania in the context-based curriculum. *Paper in Education and Development*, 29, 77-91.
- Levitt, J. M (2017). Exploring how the social model of disability can be re-invigorated: In response to Mike Oliver, *Disability and Society*, 32(4), 589-594.
- Maciver, D., Hunter, C., Adamson, A., Grayson, Z., Forsyth, K., & McLeod, L (2018). Supporting successful inclusive practices for learners with disabilities in high schools: A multisite, mixed method collective case study. *Disability and Rehabilitation*, 40 (14), 1708-1717.
- Mag, A. G., Sinfield, S., & Burns, T. (2017). The benefits of inclusive education: New challenges for university teachers. MATEC web for Conference, 121. <http://sci-hub.tw/10.1051/mateconf/201712112011>
- Magige, M. (2017). Challenges facing inclusive education in primary schools in Korogwe district: Implementation status. Unpublished M.A Dissertation, University of Dar es Salaam.
- Manini, W. (2020). Inclusion of pupils with moderate deafblindness in Tanzanian primary schools: Analysis of teachers' classroom practices for improving learning and participation. Unpublished M.A Dissertation, University of Dar es Salaam.
- Mitchell, D. (2015). Inclusive education is a multi-faceted concept. *CEPS Journal* 5 (1). [https://www.pedocs.de/volltexte/2015/10611/pdf/cepsj\\_2015\\_1\\_Mitchell\\_Inclusive\\_Education.pdf](https://www.pedocs.de/volltexte/2015/10611/pdf/cepsj_2015_1_Mitchell_Inclusive_Education.pdf)
- MoEST. (2016). Basic education statistics in Tanzania: National data (BEST). MoEST
- MoEST (2021). National strategy on inclusive education 2022-2026. MoEST.
- MoEVT (2012). National strategy on inclusive education 2009-2017. MoEVT.

- Mulinge, D. (2016). Teachers' perceptions towards inclusion of children with special education needs into mainstream classroom in Kenya. Unpublished Masters Dissertation, University of Oslo.
- Mwakyeja, B. M. (2013). Teaching students with visual impairments in inclusive classrooms: A case study of one secondary school in Tanzania. Unpublished Masters' Thesis, University of Oslo.
- NCERT (2014). Including children with special needs: Primary stage. NCERT.
- Nketsia, W (2016). Initial teachers' preparation for inclusive education in Ghana: Status and challenges. Unpublished Dissertation, University of Jyväskylä
- Ntiruka, V. (2016). Challenges of accessing inclusive education for children with disabilities in Kasulu, Tanzania. Unpublished Master's of Arts Dissertation, University of Dar es salaam.
- Onditi, H., & Opini, B. (2016). Education for all and students with disabilities in Tanzanian primary schools: Challenges and successes. *International Journal of Educational Studies*, 3 (2), 65-76.
- Parker, A.T., Blaha, R., Cooper, H., Irby, P. & Montgomery, C.(2009). Teachers of students with deafblind professionalizing the field. *DVI Quartely*, 54 (3). <https://documents.nationaldb.org/products/dviqblaha.pdf>.
- Pérez, J S., Llanos, M. N., & Guasp, J.J.M. (2017). Inclusive practices: The role of the support teacher. *Aula Abierta*, 46, 49-56. <https://dialnet.uniriajo.es/descarga/articulo/6060632.pdf>.
- Possi, M. (2006). From special to inclusive for children with special needs in Tanzania: Old wine in new bottle? *Journal of Issues and Practice in Education* 1(2), 46-62.
- Possi, M. K., Milinga, J. R. (2017). Special and inclusive education in Tanzania: Reminiscing the past, building the future educational process. *International Journal*, 6 (4), 55-73.
- Pritchard, K. H. (2014). A comparative study of classroom teachers' perceptions towards inclusion. Unpublished PhD Thesis, Gardner-Webb University.
- Rees, K. (2017). Models of disability and the categorization of children with severe and profound learning difficulties: Informing educational approaches based on an understanding of individual needs. *Educational and Child Psychology*, 34 (4). <https://www.researchgate.net/publication/321154848>

- Riggio, M., & Mclethie, P. (Eds) (2008). *Deafblindness: Educational services guidelines*. Perkins Schools for Blind.
- Sánchez, Haro-Rodríguez, & Maldonado (2019). Barriers to student learning and participation in an inclusive school as perceived by future education professionals. *Journal of New Approaches in Educational Research*, 8 (1), 18-24.
- Savage, R., & Erten, O. (2015). Teaching in inclusive classrooms: The link between teachers' attitude-practices and student outcomes. *J Psychol Psychother*, 5, 219. <https://www.longdom.org/open-access/teaching-in-inclusive-classrooms-the-link-between-teachers-attitudespractices-and-student-outcomes-2161-0487-1000219.pdf>.
- Selvaraj, J. (2016). Inclusion in New Zealand secondary schools: Policy and practices. Unpublished PhD Thesis, University of Auckland.
- Shanimon, S. M & Rateesh, K. N. (2014). Theoretizing the models of disability philosophical social and medical concepts: An empirical research based on existing literature. *International Journal of Scientific and Research Publications*, 4 (6), 1-7
- Tungaraza, F. D. (2012). Including the excluded: Impediments to attaining this goal in education in Tanzania. *Special pedagogiska rapporter och notiser fran Hogskolan Kristianstad*, 9, 4-30.
- Tungaraza, F. D. (2014). Training teachers in special needs education in Tanzania: A long and challenging ordeal to inclusion. *Journal of the Open University of Tanzania*, 16 , 49 -60.
- UNESCO (1994). The Salamanca Statement and Framework for Action on Special Needs Education. UNESCO.
- UNESCO (2017). Training tools for curriculum development: Inclusive student assessment. UNESCO.
- UNESCO (2019). Beyond commitments: How countries implement SDG 4. UNESCO.
- UNESCO (2020). Global Education Monitoring Report, 2020: Inclusion and education: All means all. UNESCO. <https://gem-report-2020.unesco.org/>.
- URT (2004). National policy for Disability. Ministry of Labour, Youth Development and Sports (MoLYDS).



- Wanjiku, W.A.R. (2014). Teaching strategies used by teachers to enhance learning to learners with multiple disabilities. Unpublished Master's Dissertation, University of Kenya.
- Wolsey, J. L. (2017). Perspectives and experiences of deafblind college students. *The Qualitative Report*, 22 (8), 2066-2089.
- Yin, R.K. (2014). *Case study research: Design and methods* (5<sup>th</sup> ed.). Sage Publication