

Multi-Country Study on Inclusive Education (MCSIE)

Malawi Literature Review

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Abbreviations

BLINC	Blended Learning in Inclusive Education Course
CRPD	Convention on the Rights of Persons with Disabilities
DEC	Development Exchange Clearinghouse
DEM	District Education Manager
DPO	Disabled Persons' Organizations
EMIS	Education Management Information System
FEDOMA	Federation of Disability Organizations in Malawi
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IEP	Individual Education Plan
KI	Key Informant
MANAD	Malawi National Association of the Deaf
MCSIE	Multi-Country Study on Inclusive Education
MERIT	Malawi Early Grade Reading Improvement Activity
MIITEP	Malawi Integrated In-Service Teacher Education Program
MoEST	Ministry of Education, Science and Technology
MUB	Malawi Union of the Blind
NGO	Non-governmental Organization
NRP	National Reading Program
PODCAM	Parents of the Disabled Children Association of Malawi
REFAM	Reading for All Malawi
SEGREM	Strengthening Early Grade Reading in Malawi
SEN	Special Education Needs
SHN	School Health and Nutrition
SIG	School Improvement Grants
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development
VPN	Virtual Private Network
YESA	Yesani Ophunzira "Assess the Learners"

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1. Executive Summary

Over the past 30 years, low and middle-income countries have made major progress on the meaningful inclusion of children with disabilities, both in education and the broader community. The passage of the Convention on the Rights of Persons with Disabilities (CRPD) in 2006 created a framework through which countries could create regional and national laws meant to uphold the rights of people with disabilities. This led countries such as Malawi to take steps, through both policy and implementation, to improve the lives of both children and adults with disabilities. The Government of Malawi defines disability as “any restriction of lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered ‘normal’” (Chilemba, 2011).

For the purposes of this report, the focus will be on children with disabilities within the context of inclusive education. The Malawi Ministry of Education, Science and Technology (MoEST) defines inclusive education as “the process of reforming the education system, cultures, policies, and practices to address and respond to diverse needs of all learners” (Ministry of Education, Science and Technology [MoEST], 2017). This definition is a human rights improvement on previous definitions related to the education of children with disabilities, which mainly focused on segregated settings, and defined special needs education as a setting for learners who cannot “benefit much” from mainstream settings (Chilemba, 2011).

Enrollment in schools has increased for learners with disabilities over the past 10 years, with enrollment rising from 2.16 percent in 2011 to 3.35 percent in 2018 (GIZ, 2019a). However, many of the placements remain segregated rather than inclusive, particularly for children with specific disabilities, such as children who have low vision or an intellectual disability. For those who remain out of school, barriers to school entry include attitudinal barriers, lack of school accessibility (particularly for children with physical disabilities), lack of transportation to and from school, and lack of teacher training around instructional strategies and classroom management for inclusive classrooms (Banks & Zuurmond, 2015).

A literature review was conducted between December 2019 and January 2020, and the research team found a total of 55 documents for inclusion in this review. The main findings of the literature review are as follows:

Finding 1: Disability identification practices. Screening and identification efforts in Malawi have progressed over the past two decades with support from NGOs. Some strategies used in Malawi to screen for possible disability include school visits from itinerant teachers accompanied by health professionals, as well as the emerging use of key informant methods to identify individuals requiring follow-up. Health centers are tasked with the identification of disability, but there are reported challenges related to accessing services. Generally, once individuals are identified as having a disability, they have limited access to the services and specialist supports they require.

Finding 2: Teacher training. With the support of Montfort College, there has been an increase in the systematization of pre-service training opportunities for both special and inclusive education teachers. However, even with these and other efforts, less than 10 percent of the educators with

a need for pre-service training have received it. Furthermore, there is a well-documented need to expand in-service training for special and inclusive educators, which is reportedly even more limited than it is for pre-service educators.

Finding 3: Attitudes. A strong body of literature exists to support the pervasive discriminatory beliefs about disability in Malawi, including widespread attribution of disability to witchcraft, curses, contagion, and parental misdeeds. While some studies document improving teachers' attitudes toward inclusive education, discrimination by teachers, community members, and peers is still persistent. Some studies document the benefits of peer support to children with disabilities in school settings.

Finding 4: Education for specific disability groups. Although both segregated and integrated educational settings along with support from itinerant teachers, are offered for children who are deaf or blind, research suggests a broad lack of technical capacity in special education. For example, three out of four schools for the deaf in the country use oral instruction instead of sign language. The educational experiences for other disability groups, such as learners with intellectual or specific learning disabilities, are poorly documented.

Finding 5: Additional classroom support. Some studies document emergent inclusive instructional practices such as differentiated instruction, curriculum adaptation, formative assessment, and disability accommodations, but the scale of these interventions is unclear. The use of school improvement grants has held documented benefits to many schools that choose to use such funds to support their learners with disabilities, with initiatives including purchase of teaching and learning materials or improvements in accessible school infrastructure. There is an emergent but still limited use of Individualized Education Plans (IEPs) in Malawi. Challenges related to inclusive education, such as transportation and a shortage of school-based therapies or services, remain.

Finding 6: Intersectionality. There is a documented intersectional vulnerability for girls with disabilities as compared to boys with disabilities, such as discriminatory societal treatment, lower enrollment rates, and added concerns around school safety and sexual violence. Despite most of the country's rural residential status, inequitable resource distribution and provision of specialist teachers is reported to disadvantage rural residents as compared to urban residents. These findings, along with many other themes generated from the literature review, are elaborated in greater detail in Section 5 of this report.

2. Introduction

This section describes the purpose of this literature review, and the broader aims of the MCSIE study.

2.1 Purpose

As part of the “inception” phase of the MCSIE, supported by USAID, the research team conducted three comprehensive literature reviews to focus on each of the three countries within the study: Cambodia, Malawi, and Nepal. The purpose of this literature review is to provide relevant background information on disability and inclusion efforts in Nepal. This review is intended to draw attention to gaps that may warrant further attention, and to shed light on the achievements and progress to date on the inclusion of children with disabilities in the education system.

2.2 Multi-Country Study on Inclusive Education

Through the Long-Term Assistance and Services for Research Partners for University-Led Solutions Engine (LASER PULSE) mechanism led by Purdue University, Inclusive Development Partners (IDP) will conduct a three-and-a-half year, \$3.585 million evaluation of three USAID inclusive-education activities in Cambodia, Malawi, and Nepal. The study will investigate USAID programming in these three countries in order to identify what works to sustainably advance teaching and learning outcomes for children with disabilities in varying contexts and ultimately inform current and future programming through recommendations to current implementing partners (IPs) at midline and broader recommendations for USAID at endline.

Five key themes provide a framework for the current study (process, identification, training, instruction, and consequences). The following questions inform the evaluation of individual country programs, as well as the evaluation of programming across the three countries:

1. What worked well/poorly in the process of setting up an efficient, effective, and sustainable system to focus on improving the quality of education for learners with disabilities? (Process)
2. What methods worked best to identify learners with disabilities? (Identification)
3. What training model(s) worked best to provide teachers with the resources and support they need to best meet the needs of learners with disabilities? (Training)
4. What instructional models worked best to improve classroom instruction and reading outcomes among learners with disabilities? (Instruction)
5. Were there any unintended consequences of the activity? What were they? (Consequences)

Each question includes the following sub-questions:

- How does the method/model work?
- Why does it work/not work?
- How costly is it?
- In which contexts is it likely to work best?
- How sustainable (both in terms of capacity and financial resources) is it? What is the impact on gender?

This literature provides a context of past and current programming, services, and research conducted in Malawi.

3. Methodology

3.1 Literature Review and Analysis

The literature review was conducted December 2019 through January 2020. The following search terms relating to disability, education, and policy in Malawi were used: education; inclusive education; access; assess; special needs; “disab”; blind; deaf; intellectual, cognitive, developmental; impair; identification; screening; vision; hearing; institution; DPO; gender, girls, boys; young, youth, adolescents, children; “discrim”; barriers, exclusion, inclusion, aid, supports; enabling, enable; teacher, instructor, classroom; and training and resources. A snowballing technique was used to identify relevant published articles, reports, and grey literature. Additional resources on Malawi were found on international databases, including reports on past and current projects. In addition, the research team used USAID Development Exchange Clearinghouse (DEC) to obtain recent reports for USAID early-grade-reading and inclusive-education programs in the country.

The research team found 39 research articles and 16 reports relevant to this review online totaling 55 documents (see referenced documents), as well as 33 additional documents (21 research articles and 12 reports) that were reviewed but not included. Altogether, 88 sources of information were reviewed and included as part of the research on Malawi. The research team then coded the documents using NVivo 12 software to assist in analyzing the data; the final literature review includes findings from this analysis. Content was coded primarily through a deductive thematic analysis, utilizing categories of inquiry aligned with the various headings and subheadings of this paper. A total of 11 broad themes guided the review, such as *attitudes*, *identification practices*, and *teacher training*. An additional 49 sub-themes were listed within these 11 themes; for example, the category of *teacher training* included sub-themes of *general teacher training*, *inclusive pre-service training*, *inclusive in-service training*, and *special education*. Each theme and sub-theme was defined in a literature review protocol to promote consistency of coding amongst authors. Inductive thematic coding was also utilized to add additional categories of review according to the themes generated in the literature, such as the topic of poverty, which was not on the original list of categories. The authors populated these codes using NVivo 12 software to assist in analyzing the data; the final literature review includes findings from this analysis.

3.2 Limitations

This literature review is subject to several limitations related to scope and the desk nature of the review. This review is limited to journal articles, reports, policies, or other documents published in English. Documents that have not been published online for public access are not included in this analysis.

Furthermore, many programs and organizations have published reports over the years which may now contain outdated information, but follow-up reporting on the current status of activities is not consistently available. As inclusive education efforts continue to grow, the educational structure was difficult to comprehend, as some literature presented outdated information. Additionally, information regarding specific disabilities, such as developmental disabilities, was often lacking in the research and limited research on intersectionality was available as well.

Ultimately, the most thorough validation of these findings would be through key informant interviews and other interpersonal communication with key stakeholders, which was outside of the scope of this literature review. The MCSIE program more generally has identified several gaps in knowledge emanating from the literature that may be further investigated through other data collection activities.

4. Background

The purpose of this section is to provide context for the Multi-Country Study on Inclusive Education, specifically the Reading for All Malawi (REFAM) Program. Past and current programming efforts conducted in Malawi are highlighted here.

4.1 Background on Implementing Partners

Reading for All Malawi (REFAM) is a two-and-a-half-year task order with an anticipated funding ceiling of \$3 million. REFAM will ensure the educational needs of learners with disabilities are met under the Government of Malawi's National Reading Program (NRP), for which USAID provides technical and financial assistance in implementation. In 2016, USAID/Malawi in collaboration with the Ministry of Education, Science and Technology (MoEST) rolled out the National Reading Program (NRP) to address low Chichewa and English reading outcomes in the first four years of primary school across the country. The aim was to increase the reading skills of 5.58 million public primary school learners in Malawi by focusing resources, encouraging innovation, and striving to meet the global need for improved access to quality education through (a) improving reading instruction in the early primary grades; (b) increasing parental and community support for student reading; (c) improving the assessment of student learning; (d) improving the policy environment for reading; (e) increasing the availability and use of appropriate teaching and learning materials; and (f) expanding access to quality inclusive education. Since the launch of the NRP in 2015, USAID has funded the Malawi Early Grade Reading Improvement Activity (MERIT), Strengthening Early Grade Reading in Malawi (SEGREM), and Yesani Ophunzira "Assess the Learners" (YESA), as well as several awards for the printing and distribution of teaching and learning materials. The REFAM activity is intended to meet the goal of expanding access to quality inclusive education for children with disabilities.

REFAM is being implemented in close collaboration with the MoEST's Department of Special Needs Education, Montfort Special Needs Education College, and the Federation of Disability Organizations in Malawi (FEDOMA), an umbrella body of all disabled persons organizations (DPOs) in Malawi which includes Malawi National Association of the Deaf (MANAD), Malawi Union of the Blind (MUB), and Parents of the Disabled Children Association of Malawi (PODCAM).

4.2 General Background on the Situation of Education in Malawi

This section provides important background on the situation of education in Malawi, including the current state of education for children with disabilities in the country. The section is broken up into three subsections (historical background, national education structure, and education statistics).

4.2.1 History and Background

Malawi is one of the poorest countries in the world, where half of the country lives under the poverty line and 47 percent of children under five are stunted due to malnutrition (USAID, 2013). Partially due to this lack of resources, implementation of Universal Primary Education (UPE) in 1994 led to a 50 percent increase in primary school enrollment but a minimal increase in staff and resources to classrooms, particularly in lower primary (Chimombo, 2005). The elimination of school fees under UPE also led to over enrollment of over-age and under-age learners in lower primary grades; younger children as parents began to treat the early grades as childcare where children were acclimatized to school by attending sporadically before formally enrolling at age six and older children enrolled in school as soon as the cost barrier was removed (Croft, 2006). This

only exacerbated the shortage of qualified teachers, with a ratio of 81 learners to one teacher at the time UPE was rolled out remaining high, with a ratio of 83:1 as of 2005 (Nishimura et al., 2009).

Education for children with disabilities in Malawi began as a faith-based initiative, with Evangelical missionaries and the Dutch Reformed Church first setting up schools for children with visual disabilities in the 1950s (Kamchedzera, 2008; Lynch & Lund, 2011). This included the creation of the first residential schools for the blind as well as the Montfort Education Centre for the Blind (Makuwira, 2013). In the 1960s, international non-governmental organizations (NGOs) began to create resource centers for children with visual disabilities, which were attached to mainstream primary schools (Lynch & Lund, 2011). This effort was expanded in the 1970s with support from Sightsavers International and CBM (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ], 2019b). However, strides were not taken towards education for children who are deaf until the 1970s, when the Montfort Centre for the Deaf was established (Makuwira, 2013).

4.2.2 Current Structure of Education

Malawi follows an 8-4-4 pattern with eight years of primary school followed by four years of secondary school and four years of university education (GIZ, 2019b). However, partially due to high enrollment following UPE, there are not enough secondary schools for all children currently enrolled in primary school. As a result, secondary education is a competitive process based on exam performance, and the goal of primary school is to determine whether learners will continue their education (Croft, 2006). Learners with disabilities are covered by affirmative action policies, wherein if they pass exams they are guaranteed a secondary school seat (Banks & Zuurmond, 2015).

The average class size has increased in the past 10 years, going from a teacher-student ratio of 43.2:1 in 2010 to 72.3 in 2018 (UNESCO, 2018). This large class size has resulted in inadequate quantity of textbooks, desks, or even classrooms, with some classes having to operate outside due to space constraints (Lynch & Lund, 2011). These constraints also exist within the special education system, where various reports show Malawi as having only between 100 and 150 resource centers across the country (Mkandawire, Mahlape, & Tseeke, 2016; GIZ, 2019b). Government records show that this is only space for roughly 3.5 percent of all children with disabilities in the country (Mkandawire, Mahlape, & Tseeke, 2016).

Resource rooms are attached to mainstream schools, and many children with disabilities who attend resource centers do so only a portion of the time and spend the remainder of their time in the general education classrooms (Hagen, 2016). Resource rooms are staffed by special needs education specialist teachers (SNESTs), who have higher qualifications than mainstream teachers and have qualifications in inclusive or special needs education (GIZ, 2019a).

In addition to these resource centers, Malawi also has several special schools for children with visual and hearing disabilities, though it was unclear from the literature how many exist. Much of the literature refers to only six of these schools in Malawi, a number that has been reduced as other schools have been converted to resource centers in an attempt to shift towards an inclusive-education model (Banks & Zuurmond, 2015). While all special schools are residential, only

approximately 15% of resource centers are, with the rest operating on the same schedule as mainstream classrooms (Banks & Zuurmond, 2015).

The inclusive education system is also supported by itinerant teachers, who work at the zonal level and travel to several schools within that zone to identify learners with disabilities and help mainstream teachers improve their classroom instruction (Braathen & Munthali, 2016). These zones are also known as school catchment areas, which are similar to school districts; there are 500 of these throughout Malawi (D. Chabwera, personal communication, September 11, 2020). However, itinerant teachers can have up to 15 different schools on their caseload, which can make it difficult for them to provide consistent support (Chilemba, 2013). As of 2011, there were 55 itinerant teachers working across 12 out of Malawi's 28 districts (Lynch & Lund, 2011).

4.2.3 Relevant Education Statistics

Overcrowded classrooms and limited resources have led to as many as 40 percent of children drop out of school before Grade 5, and the education quality for those who stay has remained inconsistent (Lynch & Lund, 2011). Due to repetition rates, it takes the average Malawian learner 12 years to complete eight years of primary school (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2008), and a child who starts school at age 4 completes an average of 9.4 years of school by the time they turn 18 (World Bank, 2018). However, if this is adjusted based on what children actually learn, it is closer to 5.4 years (World Bank, 2018), which explains why only 10 percent of learners in standard 6 are proficient in reading (UNESCO, 2008). This struggle with literacy continues for many into adulthood, as Malawi has a literacy rate of only 63.9 percent for adults and 56.1 percent for adults with disabilities (Mkandawire, Mahlape, & Tseeke, 2016).

The number of children with disabilities within the education system varies dramatically depending on the source. The Malawi Disability Policy, which was adopted in 2005, noted that 98 percent of children with disabilities did not receive formal education (Chilemba, 2014). However, a nationally representative study conducted in 2004 found that 65 percent of children with disabilities attended school (Leob & Eide, 2004), while a 2017 study of disability prevalence in two districts of Malawi found that 73 percent of children with disabilities were attending school (Tataryn et al., 2017). Additionally, the Department of Special Needs Education found the percentage of learners with disabilities in public primary schools increased from 2.16 percent in 2011 to 3.35 percent in 2018, which shows the number of children with disabilities in inclusive education is increasing (GIZ, 2019a).

The MoEST categorizes disability using the following: "low vision, blind, hard of hearing, deaf, physical impairment, and learning difficulties" (Ministry of Education, 2013). Malawi's Education Management Information System (EMIS) shows the most common disability is "learning difficulties" (45 percent), followed by visual and hearing disabilities (at 21 percent each) (Mkandawire, Mahlape, & Tseeke, 2016).

5. Findings

This section provides a summary of the findings from the literature review, organized into the following sections: 1) disability identification practices, 2) teacher training, 3) attitudes toward

disability, 4) education efforts for specific disability groups, 5) additional classroom supports, and 6) intersectionality of disability with other marginalizing factors.

5.1 Disability Identification Practices

Finding 1: Screening and identification efforts in Malawi have progressed over the past two decades with support from NGOs. Some strategies used in Malawi to screen for possible disability include school visits from itinerant teachers accompanied by health professionals, as well as emergent research on the use of key informant methods to identify individuals requiring follow-up. Health centers are tasked with the identification of disability, but there are reported challenges related to accessing these services. Generally, once individuals are identified as having a disability, they have limited access to the services and specialist supports they require.

The goal of identifying learners with disabilities at the classroom level is to understand if a learner has a disability or a barrier to learning, with the aim of providing them with appropriate services and support. Many low-and middle-income countries report challenges with identifying learners with disabilities (Hayes, Turnbull, & Moran, 2018). This section provides background on the identification of children with disabilities within Malawi, including specific practices for identifying potential hearing and vision disabilities. It provides a general overview related to identification, then explores specific issues related to sensory and intellectual/learning disabilities.

5.1.1 General Information on Identification Practices in Country

Information on the prevalence of children with disabilities in Malawi varies by source, partially because the definition of disability is not consistent. The 2008 Malawi Housing and Population Census estimated 2.4 percent of children had a disability (National Statistical Office Malawi, 2008), but this number is thought to be low given that the definition used was not aligned with the World Health Organization's Classification of Functioning, Disability and Health (Banks & Zuurmond, 2015). A nationally representative survey conducted in 2017 used the Washington Group/United Nations Children's Fund (UNICEF) Module on Child Functioning and found that 3.3 percent of children aged 2-17 had a disability (Braathen & Loeb, 2011). Additionally, a 2017 study found a prevalence rate of 39 percent, which included children with physical disabilities (39 percent), hearing disabilities (27 percent), intellectual disability (26 percent), epilepsy (22 percent), and visual disabilities (both blindness and low vision) (4 percent) (Tataryn et al., 2017).

Despite the existence of prevalence data, no clear system exists for identifying children with disabilities for the purposes of diagnostic services and support. Health centers in Malawi are responsible for identifying children and adults with disabilities, providing treatment, and referring those with physical disabilities to rehabilitative services within hospitals (Munthali, 2011). However, a study of childhood disability found that, of 300 children screened, only 14 percent of those identified as having hearing disabilities had been treated in an ear clinic, and only 57 percent of those with visual disabilities had been treated in an eye clinic (Devendra, Makawa, Kazembe, Calles, & Kuper, 2013). Identification is also part of the role of the itinerant teacher. According to one study, itinerant teachers screen learners each year and often bring medical doctors with them to assist with the screening, which includes visual and hearing tests (Braathen & Munthali, 2016). However, in a survey of head teachers (n = 520), only 8.1 percent reported that special schools offered support through the screening learners and the use of health workers to assist learners

(GIZ, 2019a). Additionally, within GIZ's capacity assessment, only 6 percent of schools (n = 520) reported that they identified children with special educational needs through screening by itinerant or specialist teachers (GIZ, 2019a; Mkwezalamba, 2019). The main methods of identification reported can be seen in Exhibit 1, wherein schools were asked to choose their most commonly used identification method.

Exhibit 1: Identification Methods, Frequency and Percentage of Responses (n = 520)

How does your school identify children with special education needs?	Frequency	Percentage of responses
Liaising with parents	243	26.27%
Identifying learners by observing while teaching	136	14.70%
Working hand-in-hand with specialist teachers	106	11.46%
Screening by itinerant or specialist teachers	55	5.95%
Interviewing or using a checklist	286	30.92%
During admission and registration	99	10.70%
Total	925	100.00%

Source: Mkwezalamba, 2019 – Survey Item B1.3

Several studies also touted the effectiveness of the Key Informant (KI) Method, wherein volunteers are trained to identify children in their community and refer them to screening camps. However, this method has mixed results depending on the country, with studies in Malawi and Tanzania finding it was more effective than health workers in finding and identifying children (Duke, Ameh, Nwagbara, Lewallen, & Courtright, 2013), while a study in Bangladesh found high rates of detection but low rates of specification, particularly for hearing disabilities (Yousafzai, Lynch, & Gladstone, 2014). These screening camps provide diagnostic services as well as referrals to health centers and/or rehabilitative services (Banks & Zuurmond, 2015). A 2017 study in Malawi looking at prevalence of disability used 500 key informants, who identified 15,000 children as potentially having disabilities. Of this, 7,220 attended a screening camp and 39 percent of those children were found to have a disability (Tataryn et al., 2017). However, the fact that 48 percent of these children did not attend the subsequent screening camp shows the additional barriers that exist for getting children with potential disabilities full diagnostic exams. Additionally, another study using KIs found village leaders were reluctant to allow KIs to identify children in villages in which the KIs did not live, which raises the question of scalability (Kalua, 2016).

If children are identified as having disabilities, services are often limited. One district coordinator reported that even when schools are able to identify learners as having a disability, they do not have the funding to provide individualized services (Braathen & Munthali, 2016). Many services are only provided by NGOs and are concentrated in urban areas, and there are only a small number of speech, occupational, and physical therapists in the country. While community-based rehabilitation (CBR) has existed in Malawi since 1987, training programs are limited (Paget, Mallewa, Chinguo, Mahebere-Chirambo, & Gladstone, 2016). The national CBR program is overseen by Malawi Council for the Handicapped (MACOHA), who works with the Federation of Disability Organisations in Malawi (FEDOMA) to promote CBR at the district and subdistrict level (WHO, 2010).

5.1.2 Hearing and Vision Screening and Testing

Researchers have estimated eight out of every 10,000 Malawian children are blind (Chandna & Gilbert, 2010). Additionally, a study estimated there were 60 per million Malawian children with moderate/severe visual disabilities, as well as 100 per million with preventable corneal scarring (Tataryn et al., 2017). This same study estimated there are approximately 18 per 10,000 Malawi children who have hearing disabilities that could have been treated or prevented through basic health care services (Tataryn et al., 2017). This study also suggested more than 75 percent of hearing disabilities in children in Malawi were due to preventable conditions such as middle-ear infections and ear-wax buildup (Tataryn et al., 2017).

Most hearing and vision screening is currently performed by NGOs as part of their broader programming. Sightsavers International and Lions Club Eye Clinic both offer eye tests and work to train teachers on how to identify visual disabilities (GIZ, 2019b). Additionally, Save the Children's School Health and Nutrition (SHN) program performed hearing and vision screenings on a total of 124,000 children across two districts from 1999 to 2008 (Save the Children, 2010). After the program closed, the Ministry of Education launched a similar program modeled on the SHN program in one of the districts, but it did not include any screening component (Save the Children, 2008). The SHN screening program tested all children as a baseline, and in subsequent years, tested children entering first grade, as well as learners who were flagged as having potential hearing and vision issues. As part of the SHN vision screening, teachers checked the child's eye for consistency, color, and possible infection, followed by a test of the child's vision using the "tumbling E" chart. For hearing, the teacher stood behind the learner and made sounds, and, in some cases, the child used headphones to take a hearing test from a machine. Following screening, teachers changed classroom placement for those who needed to be closer to see or hear the teacher and referred those with more severe hearing and vision disabilities to health centers (Save the Children, 2008).

Even when hearing and vision screening does occur at the community level, parents often are not able to bring their referred children to health centers, with one study finding that one-third of children referred for cataracts still had not gone to hospitals three months after their referrals. Families that did not go to hospitals were more likely to live below the poverty line and lived twice the distance away (Kalua & Barrows, 2011). Additionally, there is a shortage of hospitals and specialists that offer eye services, with only five eye hospitals and nine ophthalmologists in the entire country (Kalua, 2016).

5.1.3 Identification of Learners with Intellectual or Learning Disabilities

Despite a study finding that 26 percent (n= 7,220) of children have intellectual disability (Tataryn et al., 2017) and reports from EMIS showing that learning difficulties are the most common disability type within classrooms (Mkandawire, Mahlape, & Tseeke, 2016), very little information exists on the process of identifying children with intellectual or learning disabilities. Additionally, no clear definition exists for what constitutes learning difficulties, with some sources defining it as synonymous with learning disabilities and some including autism and speech and language disabilities within this category. There also seems to be confusion on the definition of intellectual disability, as the 26 percent reported included a disaggregation of intellectual disability diagnoses and included cerebral palsy, microcephaly, hydrocephaly, and Down syndrome (Tataryn et al., 2017). The inclusion of these various disabilities indicates a definition that focuses more on disabilities involving the brain rather than disabilities affecting cognitive performance. This same

study also estimated there are approximately 2,100 children per million with intellectual disability but pointed out that the services to support them are not at the levels necessary (Tataryn et al, 2015).

5.2 Teacher Training

Finding 2: With the support of Montfort College, there has been an increase in the systematization of pre-service training opportunities for both special and inclusive education teachers. However, even with these and other efforts, less than 10 percent of the educators with a need for pre-service training have received it. Furthermore, there is a well-documented need to expand in-service training for special and inclusive educators, which is reportedly even more limited than it is for pre-service educators.

There are seventeen teacher training colleges in Malawi: nine public colleges and eight run by NGOs or religious institutions (M. Munthali, personal communication, September 5, 2020). However, only two of these colleges offer special education teacher programs (Chitiyo et. al, 2015). This section provides an overview on the existing training for teachers in both pre-service and in-service settings, as well as the training for teachers of special education.

5.2.1 Pre-service Training on Special Education

Much of the pre-service special education teacher training in Malawi is conducted by Montfort College, which was started in 1968 by the Catholic Church, in collaboration with Sightsavers International, to train teachers of children with visual and hearing disabilities. Since then, Montfort has expanded the types of education offered to include inclusive education. This was a necessary change, as previously Montfort only focused on training for specific disability types, including visual and hearing disabilities and a third category called “learning difficulties” (Chitiyo et. al, 2015).

Montfort requires at least three years of teaching experience for all learners admitted to their programs, followed by training in their area of specialization (Hummel, Engelbrecht & Werning, 2016). Each year, Montfort awards certificates to approximately 30 teachers specializing in education for children who are blind or have low vision, which includes training on visual assessment, daily living skills, braille, and the maintenance of brailers. It also includes a six-week student-teaching assignment, which occurs within a resource center for learners who are blind or have low vision (Lynch & McCall, 2010).

Following the government’s requirement in 2009 that all pre-service teachers receive a special education course, Montfort expanded their educational offerings to include a compulsory course on special education for all primary school teachers. The number of teachers trained by Montfort has also increased; from 500 primary school teachers in 2006 (Chilemba, 2013) to 1,742 primary and secondary school teachers in 2019 (GIZ, 2019b). Catholic University also began offering a bachelor’s degree in special education for secondary-level teachers in 2006 (Kamchedzera, 2010). One article mentioned that Mzuzu University was planning on launching a master’s degree in inclusive education starting in 2015, but nothing was found on whether this occurred (Chitiyo et. al, 2015).

5.2.2 Pre-service Training on Inclusive Education

The Malawi Institute of Education (MIE) uses the Initial Primary Education (IPTE) curriculum to help ensure student teachers have the knowledge to become high-quality teachers (MIE, 2017). As part of this curriculum, there are two modules related to inclusive education: one giving an overview on inclusive education and one covering learner diversity. The inclusive education module includes information about the concept and characteristics of inclusive education, the advantages and disadvantages of special needs education, and activities and discussion questions to help teachers reflect on their individual experiences and attitudes. The learner diversity module covers the characteristics of different disability types and ways to support these different learning needs (MIE, 2017).

Montfort College began offering a certificate course on inclusive education for current teachers in 2018, called Blended Learning in Inclusive Education Course, which graduated 178 learners in the first year using a combination of in-person and virtual education. Additionally, they began offering a diploma program on inclusive and special needs education in 2019, which graduated 124 learners (GIZ, 2019b). Montfort implemented the blended learning certificate course in collaboration with GIZ, while the inclusive education course for primary teachers was revised by Save the Children (GIZ, 2019b). This shift to inclusive education training aligns with a previous informal analysis of their teacher-training program, which had recommended Malawi focus more on inclusive education to ensure teachers would be equipped to provide education to learners with any type of disability (Chitiyo et al., 2015).

In addition to its work with Montfort, Save the Children introduced pedagogy around educating children with disabilities to student teachers at three teacher-training colleges, and supported the linked demonstration schools so that learners could effectively practice instructional strategies during student teaching (GIZ, 2019b). However, despite the work of both Montfort and Save the Children, the number of teachers equipped to teach children with disabilities is extremely low. In 2011, the Ministry of Education, Science and Technology (MoEST) reported that there were only 1,000 such teachers in the country, while the need in Malawi is around 12,000 (Munthali, 2011).

5.2.3 In-service Training on Special Education

The MoEST provides yearly in-service training for itinerant teachers, which is funded by Sightsavers International. However, this training does not include teachers working within resource centers or special schools (Lynch, & McCall, 2010). The Save the Children program, mentioned previously, includes in-service training for teachers within demonstration schools where student teachers also teach (GIZ, 2019b). Additionally, one article mentioned a Disability Toolkit that is given to all primary schools and contains information about how to support children with disabilities within inclusive classrooms. However, no data exists on how this toolkit is being used by schools or classroom teachers (Lynch & Lund, 2011).

5.2.4 In-service Training on Inclusive Education

There is very limited in-service training on inclusive education for primary school teachers. The Ministry of Education had introduced an in-service training program called Malawi Integrated In-Service Teacher Education Program (MIITEP) in 1997, following the passage of Universal Primary Education (Kunje, 2002). MIITEP focused on training those who wanted to be teachers

through on-the-job training. However, the program was suspended in 2006 after quality concerns (Brossard, Coury, & Mambo, 2010).

Given the lack of in-service training on special inclusive education, various studies highlight the need for more knowledge and support in this area. Participant teachers in one study ranked the need for continued professional development on teaching children with disabilities as “highly important”. Teachers also reported the need for more professional development to meet the needs for all learners, including learners with disabilities and learners with giftedness (Hughes, Chitiyo, Itimu-Phiri, & Montgomery, 2016). In GIZ’s capacity assessment, teachers requested more training in areas such as identifying children with disabilities, designing Individual Education Plans (IEPs), adapting and modifying the curriculum, and learning different strategies for instructing learners (Banks & Zuurmond, 2015; GIZ, 2019a). Teachers also shared the need for disability-type-specific resources, such as education materials for learners who are blind, have low vision, or have hearing disabilities (Hughes et al., 2016)

Additionally, district education managers (DEMs) and special needs education (SNE) coordinators reported that teachers were eager to assist learners with special needs as long as they received training, and that without this training, teachers were unsure of where to start from (GIZ, 2019a). Teachers in a third study reported that it was possible for mainstream teachers to teach learners with and without disabilities but only if they were given additional knowledge and skills on how to manage diverse learners (Chavuta, Itimu-Phiri, Chiwaya, Sikero, & Alindiamao, 2008).

5.3 Attitudes Toward Disability

Finding 3: A strong body of literature exists to support the pervasive discriminatory beliefs about disability in Malawi, including widespread attribution of disability causation to witchcraft, curses, contagion, and parental misdeeds. While some studies document improving teacher attitudes toward inclusive education, discrimination by teachers, community members, and peers is still persistent. Some studies also document the benefits of peer support in school settings.

Attitudes on disability can impact the effectiveness of inclusive education within a country (Hayes, Turnbull & Moran, 2018). In this section, we discuss the impact of historically held perspectives of disability and, specifically, the attitudes of teachers, parents, and children with disabilities.

5.3.1 Local Perspectives and Attitudes Toward Disability

Various groups of people in Malawi have differing cultural beliefs about disability that continue to be prevalent at the community level. One belief is that those with disabilities are dangerous and disability is contagious, and that pregnant women may give birth to a child with a disability, such as albinism, if they get too close to a person with a disability (Lynch & Lund, 2011). Some in Malawi also continue to believe disability is caused by witchcraft, with one study finding that 14 percent (n = 35) of parents believed this to be the cause of their child’s blindness (van Dijk & Courtright, 2000). Another study found that 83 percent (n = 210) believed psychosocial disabilities were due to being possessed by a spirit, and 55 (n = 60) percent believed clubfoot was due to being cursed (Crum, 2014). These types of beliefs are even common among key informants and

community health workers (Kalua, 2016). In contrast, community development workers in one study in rural Malawi attempted to share positive messages amongst the community about disability being a gift from God (Lorenzo, van Pletzen, & Booyens, 2015).

In addition to witchcraft, some communities also believe eye complications can be caused by having sex too close to the birth of a child or an expectant mother eating too much hot pepper. The latter is believed to be remedied by applying tomato leaves to the affected eye (Kalua & Barrows, 2011). Health workers in one qualitative study (n = 151) reported this was a common treatment for eye conditions in local communities, as well as the application of urine or crushed pepper, which were believed to have the ability to cure blindness (Kalua, 2016). Health workers admitted to using some of these remedies on their own eye issues, as well as advising relatives to do the same (Kalua, 2016).

5.3.2 Teacher Attitudes

The attitudes of teachers regarding inclusive education seem to have shifted over the past 10 years. In one 2016 study in northern Malawi, 70 percent of teachers reported being in favor of inclusive education because all learners with disabilities should be educated with their peers. This was true regardless of the teacher's certification (whether they had a background in special or inclusive education), the grade level they taught, or the setting in which they taught (urban versus rural) (Hughes et al., 2016). This differs from a previous study in southern Malawi, in which teachers reported they felt ill-equipped to teach children with disabilities and needed additional skills in order to do so. These teachers believed their own lack of knowledge was leading learners with disabilities to fail examinations and repeat classes year after year because these learners were not being adequately taught (Chavuta et al., 2008).

However, a study looking at parental perspectives of teacher attitudes showed a different picture: parents reported teachers frequently told parents their children with disabilities should be educated in segregated schools, even when learners had perceived "mild" disabilities and were performing at the same level, or slightly below, their peers (Banks & Zuurmond, 2015). Based on Chavuta et al.'s (2008) and Banks' (2015) studies, it is unclear whether the positive attitudes reflected in Hughes et al.'s findings would be reflected in the actions of teachers and/or schools.

5.3.3 Parent Attitudes

Parents in several studies reported that stigma continues to exist toward families of children with disabilities. Community members in one study reported the belief that disability is the result of a parent's misdeed (Kalua, 2016) while parents in another study reported a lack of faith because otherwise God would have healed the child (Masulani-Mwale, Mathanga, Silungwe, Kauye, & Gladstone, 2016). A mother in one study also reported, after having a child who is blind, that she and her husband were disowned and not allowed to see family for risk of spreading this "disease" (Kalua, 2016). Results of several studies indicated that stigma tended to fall on the mother more so than the father, with several mothers sharing that giving birth to a child with a disability had led their husbands to leave them (Kalua, 2016; Masulani-Mwale et al., 2016). Several mothers reported they were given nicknames related to having a child with a disability, such as "mache saona" or "mother of the blind child" (Kalua, 2016).

In addition to stigma, many parents experience a financial burden as a result of having a child with a disability. In one study, parents shared that the high cost of transportation and caring for their child takes so much time it leaves little time for other things, including a job (Paget et al., 2016). Since many children are expected to contribute to the household as adults, either through economic contributions or caring for the household, many parents reported an anticipated impact on future economic security (Kalua & Barrows, 2011).

Another focus within the research is on the attitudes of parents regarding their children's enrollment and attendance in school. Several parents in one study in Ntcheu district reported they did not send their children to school because they worried they would not be cared for or would be too large of a burden on the classroom teacher (Banks & Zuurmond, 2015). This fear of burdening the teacher led parents who did send their children to take a hands-off approach, rather than advocating for their child and requesting accommodations (Banks & Zuurmond, 2015). Other parents in a small qualitative study reported sending their children to school with the hope that it would lead their children to have an independent life. Some of these parents acknowledged their children could not go into farming like other Malawians and hoped education would open up other alternative paths for them (Banks & Zuurmond, 2015).

5.3.4 Children's Attitudes

Despite the lack of perspectives of learners with disabilities within the broader literature, several studies in Malawi highlight the views of learners with disabilities and their peers, including discriminatory behavior these learners experience from both teachers and peers. For example, one learner shared that the teacher ignored him specifically but attended to his peers, leading him to say, "I have decided that if I have a question, I will ask a friend to ask it and then the teacher will respond" (Hagen, 2016, p. 39). A learner in another study lamented that teasing from peers kept him from attending school regularly, as peers would tell him that he should be at home and could achieve nothing from school. When asked what assistance he needed from teachers, he said he wanted teachers to get his friends to stop laughing at him (Braathen & Munthali, 2016).

Despite these issues, another study conducted in 2008 interviewed learners with disabilities in twenty schools in four districts (Mulanje, Phalombe, Thyolo and Chiradzulu) in Malawi on their perspectives around inclusive education and found that all children interviewed enjoyed learning together with learners without disabilities. This included examples of playing with peers and peers assisting them with tasks, such as getting to the toilets and reinforcing instructions given by the teacher. Conversely, learners without disabilities also reported they enjoyed being educated with learners with disabilities, as well as supporting them in classroom activities. Examples of support provided to learners with disabilities included getting to school and reading aloud from the board for learners with low vision (Chavuta et al., 2008). A study interviewing learners with albinism in four districts (n = 60) highlighted the types of classroom accommodations that could help children with disabilities learn more effectively. Learners shared that they have problems seeing the blackboard and wish they could sit closer to the board and wear sunglasses indoors to help with glare. They also shared ways peers have helped them within the classroom including letting them hold the book (when books are shared between several children), reading to them when they cannot see the board, and copying their notes for them (Lynch & Lund, 2011).

5.4 Education Efforts for Specific Disability Groups

Finding 4: Education for specific disability groups. Although segregated and integrated educational settings are offered for children who are deaf or blind, along with support from itinerant teachers, research suggests a broad lack of technical capacity in special education. For example, three out of four schools for the deaf in the country use oral instruction instead of sign language. The educational experiences for other disability groups, such as learners with intellectual or specific learning disabilities, are poorly documented.

Malawi has two special schools for the blind and four special schools for the deaf¹. In addition to these specialized schools, Malawi has between 100 and 150 resource centers throughout the country. These rooms are connected to mainstream schools, with many rooms specializing in a certain type of disability, such as visual disabilities. This can lead to inclusion for learners with specific disabilities, but learners with other disabilities that are not served by that particular resource center suffer from a lack of resources. One deputy head teacher shared:

We have been keeping a deaf child in our school, which is meant for integration of normal and blind learners, for more than five years without her learning anything, and yet she is growing old by the year. Whenever we ask the authorities for assistance, we are referred to a school that is almost 100 kilometers away, and the parents cannot afford the transport or the boarding costs (GIZ, 2019a).

Itinerant teachers can help supplement the expertise that exists within resource centers, as these teachers travel between several schools. However, several teachers in a qualitative study expressed challenges with having too many schools, too far apart, which makes it difficult to support schools and learners consistently (Braathen & Munthali, 2016). In addition to these responsibilities, GIZ also reports itinerant teachers supporting mainstream teachers in their inclusive-education efforts, including adapting curricular materials (GIZ, 2019b). However, incidents of this were not found in the rest of the literature.

5.4.1 Education for Learners who are Blind or Have Low Vision

Education for children who are blind or have low vision relies on a combination of resource centers and itinerant teachers. Most of the resource centers for these learners are residential, which means that the school has adjoining boarding facilities for these students, within 14 primary schools and 15 secondary schools. However, many of these programs are in poorly resourced facilities with teacher-learner ratios as high as 1:30, which makes individualization difficult (Lynch & Lund, 2011).

¹ Malawi has four special schools for the deaf: Mua School in Dedza, Embangweni School for the Deaf in Mzimba, Bandawe School for the Deaf in Nkhatabay and Karonga School for the Deaf in Karonga (USAID, 2019). Malawi has two special schools for the blind: Chilanga School of the Blind in Kasungu and Lulwe School for the Blind in Nsanje (Lynch & McCall, 2010).

Teachers in these programs often believe children with albinism should learn braille due to the mistaken belief that their eyesight will ultimately deteriorate. Advocates within the albinism community have criticized the lack of inclusion of information about albinism within the visual disabilities' curriculum. Additionally, researchers found lecturers at Montfort believed children with albinism become blind as they grow older and should therefore learn braille, which is not accurate as albinism is not associated with degenerative eyesight (Lynch & Lund, 2011). All children with albinism have some degree of visual challenges due to involuntary eye movement and sensitivity to light, but have enough residual vision to read print rather than braille. Experts generally recommend the use of magnifying glasses for reading and dark sunglasses to help with light sensitivity (Lynch & Lund, 2011).

Other children with low vision are also taught to read and write braille due to the lack of resources and individualization. One study reported that resource teachers were surprised to see some children with low vision draw extremely detailed drawings on paper, as they were not aware their learners had enough vision to do so (Lynch & Lund, 2011). In addition to resource centers, there are also two special schools for children who are blind, Chilanga School for the Blind in Kasungu (central Malawi) and Lulwe School for the Blind in Nsanje (southern Malawi) (Lynch & McCall, 2010). As of 2016, there were 95 learners across the two schools (Kalua, 2016).

School attendance is lower for children with visual disabilities, with 39.3 percent of blind children never attending school as opposed to only 19.7 percent of learners who are sighted (Kalua, 2016). Additionally, 10.7 percent of children who are blind ultimately drop out of school, as compared to 4.7 percent of children who are not blind (Kalua, 2016). In some cases, learners in general education schools are asked to drop out once their vision begins to deteriorate, as was the case of one girl interviewed for a study, who shared:

I would like to go back to school. I admire my friends who go to school... It hurts me [that I was asked to drop out] because if I had continued to go to school, I would've been independent (Banks & Zuurmond, 2015).

In inclusive schools, the main challenge for teachers is to ensure children still have access to the curriculum, though this is difficult due to the lack of braille learning materials, particularly in rural areas. Montfort College, which has a small brailier, produces braille materials, and Sightsavers International also supports the production of materials in braille. However, they are only able to produce a small number of books at a time and rely solely on external donors to fund this work (Lynch & McCall, 2010).

5.4.2 Deaf Education Including Sign Language

Several studies reported the lack of quality education for children who are deaf or are hard of hearing. Although Malawi has four specialized schools for the deaf, three out of four use oral teaching methods rather than sign language, which means learners have to read the lips of their teachers (Salmonsson, 2006). A learner in one of these schools was unable to learn in his inclusive classroom either because the teacher did not know sign language or know how to teach learners with hearing disabilities (Hagen, 2016). The lack of prevalence of those who know sign language also extends outside of the classroom, with one study reporting that sign language interpretation is hard to find and that, as it is not government sponsored, very expensive (Braathen & Loeb, 2011). Overall, there is limited research on the education and learning outcomes of deaf children in Malawi.

5.4.3 Learners with Physical Disabilities

Although nothing could be found about the education learners with physical disabilities receive once they enter the classroom, much exists in the literature on the barriers regarding accessibility of school for children with physical disabilities. A qualitative study included a case study of a 12 year old boy with a physical disability (paralyzed from the waist down) who lived in rural Zomba, wherein he shared his difficulties accessing school facilities, particularly the bathroom. According to the case study, Thokozani started four years late in school because of lack of means of transportation to school; While he should have been in Standard 8, he is in Standard 4. His friends push him to school on his wheelchair, and he reported needing to walk on his hands and knees in the school's pit latrines, as they are not accessible (Hagen, 2016).

Additionally, another study reported on the exclusion experienced by learners with various physical disabilities, including clubfoot and cerebral palsy. Learners reported that teachers would ignore their attempts to participate in class, and wouldn't find ways to let them participate in school activities. One learner shared that the teacher decided he could not manage to participate in physical education due to his wheelchair, so had him guard the learners' clothes (Alavi, 2012).

5.4.4 Learners with Learning or Intellectual Disabilities

The literature reviewed for this document did not contain any information about the education of children with learning disabilities, intellectual disability, or multiple disabilities.

5.5 Additional Classroom Supports

Finding 6: Some studies document emergent inclusive instructional practices such as differentiated instruction, curriculum adaptation, formative assessment, and disability accommodations, but the scale of these interventions is unclear. The use of school improvement grants has held documented benefits to many schools that choose to use such funds to support their learners with disabilities, with initiatives including purchase of teaching and learning materials or improvements in accessible school infrastructure. There is an emergent but still limited use of IEPs in Malawi. Challenges related to inclusive education remain, such as transportation constraints and a shortage of school-based therapies or services.

This section provides an overview of the support that exists for both classrooms and schools for inclusive education. Support structures may be present through inclusive education efforts, instructional strategies used by teachers within inclusive classrooms, access to the curriculum for learners with disabilities, the existence and implementation of individual education plans, accessible transportation and classroom accommodations such as the access to technology.

5.5.1 Inclusive Education Efforts

As awareness about children with disabilities' needs for accessing school and receiving quality education increases in Malawi, inclusive education efforts also increase. One vehicle for change has been the School Improvement Grant (SIG), which is funding the government gives annually to schools who develop a School Improvement Plan (SIP) to spend on activities included in these plans. Many schools (87 percent of 520 schools, according to a survey done by GIZ) see this as

a source of funding for inclusive and special education efforts, which they then use to buy teaching and learning materials (42.9 percent), construct ramps and accessible toilets (26 percent), or provide resources to learners with disabilities, such as paying for school uniforms (31.1 percent) (GIZ, 2019a).

Additionally, schools were asked what guidelines or procedures they had enacted. The variation of their responses, as seen below in Exhibit 2, show that the inclusive education priorities of schools are wide-ranging.

Exhibit 2: Guidelines or Procedures for Inclusive Education (n = 520)

Guidelines or Procedures for Inclusive Education	Percentage of Responses
Providing learners with wheelchairs	3%
Avoiding discrimination of students	24%
Identifying SNE learners at classroom level	13%
Having a register for special needs learners	7%
Constructing ramps in schools	23%
Introducing bylaws governing learners with SEN learners	31%
Total	100%

Source: Mkwezalamba, 2019 – Survey Item B1.3

However, more than half of the head teachers (n = 520) reported there are no national or school-based standards currently in place on how to support learners with disabilities. When standards were in place, they were used most frequently to support learners according to their needs, followed by the standard to involve learners with disabilities in sports (GIZ, 2019a).

5.5.2 Instructional Approaches

Despite overcrowding and a lack of training on how to support all the children in their classrooms, teachers in two qualitative studies reported using different instructional approaches to better educate learners with disabilities. Teachers in both studies reported putting children with low vision, including children with albinism and children with hearing disabilities, close to the chalkboard in order to see (Lynch & Lund, 2011; Banks & Zuurmond, 2015). Teachers also reported writing in big clear letters, and creating large print worksheets so these children could participate (Lynch & Lund, 2011). Teachers in a second study reported following up with parents or caregivers and helping children take down notes after class (Banks & Zuurmond, 2015).

Teachers in two studies also used strategies, such as peer models, to support all learners. One teacher reported having an older learner demonstrate a task in order to show learners how it should be done. Teachers called this strategy “learn from friends” (Croft, 2006). The Ministry’s MIITEP program also included components of formative evaluation. One module included

questions teachers should include within lessons in order to monitor learner progress and identify learners who are struggling. Teachers were expected to help these learners outside of school hours (Croft, 2006). Several other studies touted the use of individual continuous assessments by teachers, which helped teachers become more aware of learner strengths and weaknesses, as well as identify children with potential disabilities that the teachers had not noticed previously (du Plessis, 2003).

5.5.3 Access to Curriculum

The national curriculum in most countries sets the standards related to teaching and learning but often learners with disabilities do not have access to the same curriculum as learners without disabilities, which can result in lower learning outcomes for this subgroup of learners (Hayes, Turnbull & Moran, 2018). Although differentiation of curriculum, instruction and materials is beginning to occur in inclusive classrooms, it mainly occurs around classroom modifications, rather than modifications to ensure access to the curriculum for learners with disabilities. GIZ reports that specialist teachers assist mainstream teachers with adapting curriculum materials to ensure learners with disabilities have their educational needs met. They also report that 7,545 general education and special education teachers were trained in how to adapt curriculum for learners with disabilities through funding from MoEST, Save the Children, FEDOMA, GIZ, and the British Council (GIZ, 2019b). However, there is no indication of how or if teachers are applying this training within their classrooms yet.

5.5.4 Individualized Education Plan (IEP)

An IEP is a “written plan that sets the learning goals for learners with disabilities, and addresses the services or accommodations that will be provided by the school” (Hayes, Turnbull & Moran, 2018, p 38). There is limited literature around IEPs for children with disabilities in Malawi. One GIZ report (2019) referred to special education teachers, parents and general education teachers throughout Malawi developing IEPs based on individual learners’ goals that were then used to update parents on learner progress (GIZ, 2019b). However, the use of IEPs was not found elsewhere in the literature, much less at a national scale. The recently created Blended Learning in Inclusive Education Course (BLINC) at Montfort College also includes training on the use of IEPs. GIZ’s report referred to BLINC teachers as the heads of inclusive education for their mainstream schools and, therefore, recommended they lead training (including training on class management of individual children through the use of IEPs) for other teachers within their schools, (GIZ, 2019a).

5.5.5 Transportation

Transportation was consistently shared by families as a barrier keeping children with disabilities in Malawi from enrolling in school or attending consistently. One learner with a physical disability reported crawling 1.5 hours to school each day, getting her mother to carry her, or getting peers to take her on their bicycles (Hagen, 2016). Children with disabilities in one qualitative study (n = 17) reported that assistance from family and friends was inconsistent and not regularly available. This difficulty getting to school leads to absenteeism, chronic tardiness, or ultimately dropout (Banks & Zuurmond, 2015).

Parents of children with disabilities in one qualitative study shared that they could not afford school transportation, and sometimes had to make a choice between taking their children to school and maintaining employment. This led some of these parents to consider boarding schools, though many could not afford the fees (Sheerin & Weedle, 2015). Although the cost of boarding is often free in Malawi, the transportation to and from school during breaks is not, and these schools are often far from communities where children live. As many parents cannot afford these fees, most children will only attend if school is near their house (Banks & Zuurmond, 2015).

5.5.6 Technology

As Malawi is over 80 percent rural, very few classrooms in the country have access to technology. This is partially due to the limited access to electricity, with only 9% of the country's population having access to electricity (USAID, 2013). However, there are possibilities of expanded access to technology due to increased mobile phone use. The National Strategy on Inclusive Education mentions using technology in order to better transfer data from the school to the district level, including using mobile phones to transmit EMIS data. Additionally, it lists a future goal of installing virtual private networks (VPNs) in all district offices in order to link them with the national MoEST. However, there is no indication that this has been implemented yet (MoEST, 2017).

5.5.7 Other Professional Support

In countries with sufficient resources, professional services such as therapies and access to experts are provided within the school setting without additional cost to the family (Hayes, Turnbull & Moran, 2018). Nothing could be found in the literature about the use of occupational, physical, or speech therapy in Malawi. This is understandable given the shortage of these specialists within the country. Additionally, teachers in Malawi do not have other support that might be found in middle- or high-income countries, such as paraprofessionals or other support staff.

5.6 Intersectionality of Disability with Other Marginalizing Factors

Finding 6: Intersectionality. There is a documented intersectional vulnerability for girls with disabilities as compared to boys with disabilities, such as discriminatory societal treatment, lower enrollment rates, and added concerns around school safety and sexual violence. Despite most of the country's rural residential status, inequitable resource distribution and provision of specialist teachers is reported to disadvantage rural residents as compared to urban residents.

This section provides an overview of the intersectionality that exists in Malawi, particularly around gender and out-of-school children. Although Malawi has one refugee camp (Dzaleka) serving refugees from Congo, Burundi, Rwanda and Somalia (Ministry of Gender, Children, Disability and Social Welfare, 2014), there was no literature found on the intersectionality of disability and refugee status. Additionally, Malawi does not experience displacement of ethnic minorities.

5.6.1 Gender and Disability

Several studies examined the intersection between disability and gender. A woman in one qualitative study focused on the intersection between education, disability and poverty recounted how her family had chosen to take her, who had a disability, out of school but continued to send her brother who did not have a disability. Another woman with a disability in the same study stated, “Men are pushed up – women are pushed down” (Braathen & Loeb, 2011, p. 84). Additionally, another study interviewed DPOs who shared conflicting expectations for boys and girls with disabilities. While some agreed they should be treated equally regardless of gender, others used certain terms for boys (such as “courageous” and “determined”) and others for girls (such as “shy” and “ashamed”). As a result of these beliefs, DPOs have begun to advocate for more discussion around the issues of discrimination against women and girls with disabilities (Kvam & Braathen, 2008).

Other studies in Malawi have found several possible reasons explaining the disparity between the enrollment of girls and boys with disabilities in school. Key informants in one study looking at barriers and enablers to inclusion raised a concern of safety of girls, particularly in secondary school, which led the government to construct more residential housing at schools to ensure girls’ safety. Informants also expressed concerns regarding the risk of girls with disabilities to sexual violence, particularly for children who are not able to communicate what has been done to them (Banks & Zuurmond, 2015). Another study, which was conducted by Sightsavers, included interviews with girls with visual disabilities who reported sexual and verbal abuse from teachers, including taunts that no one would want to have “an affair” with them and teachers leading them to the wrong classrooms (Suka, 2006).

5.6.2 Rural and Urban Differences

Of Malawi’s 17.6 million people, the majority (84 percent) live in rural areas (Malawi National Statistics Office, 2019) with generally lower educational resources. Disability is more prevalent in rural areas, with a reported prevalence rate of 4.1 percent (compared to 2.5 percent in urban areas) (National Statistical Office Malawi, 2008). However, rural areas also experience more stigma around disability, which leads many families to isolate their children with disabilities from the community and not seek external support (Kelly, Ghalaieny, & Devitt, 2012).

Rural areas usually have a school catchment area, where one school serves several communities, which can make the distance from a child’s home to school prohibitively far (Rose, 2003). The roads are generally not paved, and the trip to and from school can take up to 90 minutes each way (Banks & Zuurmond, 2015). Existing schools have much fewer resources for children with disabilities. This is partially due to how difficult it is to convince specialist teachers to take rural postings or redeployment, particularly in extremely remote areas. There is a Rural Development Fund, which is money given by the government to build more classrooms and houses for teachers in rural areas. However, this is not adequately funded (Hagen, 2016), and there are not enough houses for those who choose to teach in rural areas (Banks & Zuurmond, 2015).

5.6.3 Out-of-School Children

Following the passage of Universal Primary Education in 1994, the enrollment rate rose in Malawi from 50 percent to 82.3 percent by 2004 (Crum, 2014). In 2005, UNESCO estimated that 113,000 children were out of primary school, and UNICEF estimated that only 44 percent of children in

Malawi stayed in school until grade 5 (Yates, 2008). More recently, UNESCO found in 2013 that 54.1% of children completed the last grade of primary school, which in Malawi is grade 8 (UNESCO, 2013). However, more recent statistics were not found as part of this review.

The enrollment rate for learners with disabilities is much lower and tends to vary by disability type, including 67 percent for learners with physical disabilities (Crum, 2014) and 60.7 percent for learners who are blind (Kalua, 2016). The reasons children remain out of school also varies by disability type, with learners with physical disabilities reporting it is due to difficulties getting to and from school. One study interviewed children who were previously enrolled in school, who spoke of the feelings of isolation and boredom they felt now they were not with their peers at school. One girl with a visual disability shared:

I would like to go back to school. I admire my friends who go to school...when they carry their notebooks and are going to school...[How do you feel about not going to school?] It hurts me because if I had continued to school I would've been independent. (Banks & Zuurmond, 2015).

Additionally, within a qualitative study conducted in 20 schools southern Malawi, learners who had hearing disabilities shared they were unable to participate in class activities, which led to them failing exams and ultimately repeating or dropping out (Chavuta et al., 2008). This highlights the fact that while getting children to initially enroll is still an issue, getting children to stay in school also remains a struggle.

6. Conclusions

Although there are more children with disabilities in schools in Malawi than in previous years, there is still much to be done to ensure the remaining out-of-school children with disabilities are able to access their right to an education. Many barriers remain to ensure those in school attend consistently and receive a quality education. Barriers include consistent means of transport to school, teachers with appropriate training and skills to teach all children, an awareness of disability within the community, and additional inclusive-education efforts on the part of schools. However, much progress also has been made, such as the use of School Improvement Grants (SIG) specifically to improve inclusive education efforts and an increase in instructional strategies by teachers who allow all children to thrive. The literature indicates that most teachers seem committed to supporting children with disabilities in their classrooms and are vocal about their need for additional training.

Cited Resources

- Alavi, Y., Jumbe, V., Hartley, S., Smith, S., Lamping, D., Muhit, M., ... & Lavy, C. (2012). Indignity, exclusion, pain and hunger: the impact of musculoskeletal impairments in the lives of children in Malawi. *Disability and rehabilitation*, 34(20), 1736-1746.
- Banks, L. M., & Zuurmond, M. (2015). *Barriers and enablers to inclusion in education for children with disabilities in Malawi*. Oslo, Norway: Norwegian Association of Disabled.
- Braathen, S. H., & Loeb, M. E. (2011). "No disabled can go here...": How education affects disability and poverty in Malawi." In A. Eide & B. Ingstad (Eds.), *Disability and poverty: A global challenge* (pp. 71-93). Bristol, United Kingdom: Policy Press.
- Braathen, S. H., & Munthali, A. (2016). *Disability and education: Qualitative case studies from Malawi*. Retrieved from <https://www.sintef.no/publikasjoner/publikasjon/?pubid=CRISTin+1435635>
- Brossard, M., Coury, D., & Mambo, M. (2010). *The education system in Malawi*. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/Education_System_Malawi.pdf
- Chandna, A., & Gilbert, C. (2010). When your eye patient is a child. *Community Eye Health*, 23(72), 1-3.
- Chavuta, A., Itimu-Phiri, A. N., Chiwaya, S., Sikero, N., & Alindiamao, G. (2008). *Shire Highlands Education Division - Malawi baseline study report*. Retrieved from <https://www.eldis.org/document/A58698>
- Chilemba, E. M. (2011). *A critical appraisal to the right to primary education of children with disabilities in Malawi* (Master of Laws Degree thesis, University of Pretoria). Retrieved from https://etd.uwc.ac.za/xmlui/bitstream/handle/11394/1555/Chilemba_LLM_2010.pdf?sequence=1&isAllowed=y
- Chilemba, E. M. (2013). The right to primary education of children with disabilities in Malawi: A diagnosis of the conceptual approach and implementation. *African Disability Rights Yearbook*, 1, 1-25.
- Chilemba, E. M. (2014). Malawi. *African Disability Rights Yearbook*, 2, 207-226.
- Chimombo, J. (2005). Quantity versus quality in education: Case studies in Malawi. *International Review of Education / Internationale Zeitschrift für Erziehungswissenschaft*, 51(2/3), 155-172. doi: 10.1007/s11159-005-1842-8
- Chitiyo, M., Odongo, G., Itimu-Phiri, A., Muwana, F., & Lipemba, M. (2015). Special education teacher preparation in Kenya, Malawi, Zambia, and Zimbabwe. *Journal of International Special Needs Education*, 18(2), 51-59. doi: 10.9782/2159-4341-18.2.51

- Croft, A. (2006). Prepared for diversity?: Teacher education for lower primary classes in Malawi. In A. W. Little (Ed.), *Education for All and multigrade teaching: Challenges and opportunities* (pp. 103-126). Netherlands: Springer.
- Crum, S. (2014). *Discrimination against disabled persons in Malawi and the United States: A comparative study* (Honors thesis, University of Dayton). Retrieved from https://ecommons.udayton.edu/uhp_theses/15/
- Devendra, A., Makawa, A., Kazembe, P. N., Calles, N. R., & Kuper, H. (2013). HIV and childhood disability: A case-controlled study at a paediatric antiretroviral therapy centre in Lilongwe, Malawi. *PLoS One*, 8(12), 1-9. doi: 10.1371/journal.pone.0084024
- du Plessis, J. (2003). *Rainbow charts and C-O-C-O-N-U-T-S: Teacher development for continuous assessment in Malawi classrooms*. Washington D.C.: American Institutes for Research.
- Duke, R., Ameh, S., Nwagbara, E., Lewallen, S., & Courtright, P. (2013). Challenges faced by key informants practicing case finding for vision loss in children: The experience in Cross River State, Nigeria. *International Health*, 5(4).
- GIZ. (2019a). *Capacity assessment for inclusive education in primary schools in Malawi: Capacity assessment report*. Not available online.
- GIZ. (2019b). *Capacity assessment for inclusive education in primary schools in Malawi: Literature review and case studies*. Not available online.
- Hayes, A.M., Turnbull, A.P., & Moran, N. (2018). *Universal design for learning to help all children read: promoting literacy for learners with disabilities*. United States Agency for International Development and Global Reading Network. Retrieved from https://www.edulinks.org/sites/default/files/media/file/Literacy%20for%20All%20toolkit_v4.1_0.pdf.
- Hagen, C. (2016). *Barriers to education for youth with disabilities in Malawi: A qualitative study of policy and practice in urban and rural areas*. Norway: Norwegian University of Life Sciences.
- Hughes, E., Chitiyo, M., Itimu-Phiri, A., & Montgomery, K. (2016). Assessing the special education professional development needs of northern Malawian school teachers. *British Journal of Special Education*, 43(2), 159-177. doi: 10.1111/1467-8578.12128
- Hummel, M., Engelbrecht, P., & Werning, R. (2016). "2.1 Developing an Understanding of Inclusive Education in Malawi." *Keeping the Promise? Contextualizing inclusive education in developing countries*. 29-46.
- Kalua, K. (2016). *Comparison of effectiveness of using trained key informants versus health surveillance assistants in identifying blind and visually impaired children in Malawi*. (Doctoral thesis, University of London).

- Kalua, K., & Barrows, J. (2011). *Finding community solutions to improve blind and visually impaired children's access and acceptance to surgery, optical correction, and follow up in southern Malawi*. Retrieved from https://www.researchgate.net/publication/258475396_Finding_community_solutions_to_improve_access_and_acceptance_of_cataract_surgery_optical_correction_and_follow_up_in_children_in_Malawi
- Kamchedzera, E. T. (2008). Special needs teacher education (SNTE) in Malawi: Present status and trends. *International Journal of Knowledge, Culture, and Change Management*, 8(1), 247-252.
- Kamchedzera, E. T. (2010). *Education of pupils with disabilities in Malawi's inclusive secondary schools: policy, practice and experiences* (Doctoral dissertation, University of Warwick).
- Kelly, A., Ghalaieny, T., & Devitt, C. (2012). A pilot study of early intervention for families with children with or at risk of an intellectual disability in northern Malawi. *Journal of Policy & Practice in Intellectual Disabilities*, 9(3), 195-205. doi:10.1111/j.1741-1130.2012.00354.x
- Kunje, D. (2002). The Malawi integrated in-service teacher education programme: An experiment with mixed-mode training. *International Journal of Educational Development*, 22(3-4), 305-320.
- Kvam, M. H., & Braathen, S. H. (2008). "I thought...maybe this is my chance": Sexual abuse against girls and women with disabilities in Malawi. *Association for the Treatment of Sexual Abusers*, 20(1), 5-24.
- Loeb, M., & Eide, A. H. (2004). Living Conditions among people with activity limitations in Malawi. A national representative study. SINTEF Rapport.
- Lorenzo, T., van Pletzen, E., & Booyens, M. (2015). Determining the competences of community based workers for disability-inclusive development in rural areas of South Africa, Botswana, and Malawi. *Rural and Community Health*, 15, 1-15.
- Lynch, P., & Lund, P. (2011). *Education of children and young people with albinism in Malawi*. Retrieved from <http://albinism-in-africa.com/wp-content/uploads/2014/10/Information-for-Teachers.pdf>
- Lynch, P., & McCall, S. (2010). Impact of educational inclusion on children with visual impairment in Malawi. *The Educator*, 22(2).
- Makuwira, J. (2013). People with disabilities and civic engagement in policy making in Malawi. *Development Bulletin: Challenges for participatory development in contemporary development practice*. (75). 66-70.
- Malawi Institute of Education (MIE). (2017). Initial Primary Teacher Education: Education Foundation Studies, Module 2.
- Malawi National Statistics Office (2019). *2018 Malawi Population and Housing Census: Main Report*. Retrieved from:

http://www.nsomalawi.mw/images/stories/data_on_line/demography/census_2018/2018%20Malawi%20Population%20and%20Housing%20Census%20Main%20Report.pdf

Masulani-Mwale, C., Mathanga, D., Silungwe, D., Kauye, F., & Gladstone, M. (2016). Parenting children with intellectual disabilities in Malawi: The impact that reaches beyond coping? *Child: Care Health and Development*, 42(6), 871-880. doi: 10.1111/cch.12368

Ministry of Education. (2013). *Education Management Information System: Education statistics 2013*. Lilongwe, Malawi.

Ministry of Education, Science, and Technology. (2017). *National Strategy on Inclusive Education 2017-2021*. Retrieved from <http://rodra.co.za/images/countries/malawi/policies/Inclusive%20Education%20Strategy-2017-2021.pdf>

Ministry of Gender, Children, Disability and Social Welfare. (2014). *Malawi Country Report: Implementation of the Beijing Declaration and Platform for Action (1995) and the Outcomes of the Twenty Third Special Session of the General Assembly (2000) in the Context of the Twentieth Anniversary of the Fourth World Conference on Women and the Adoption of the Beijing Declaration and Platform for Action 2015*.

Mkandawire, M. T., Mahlape, S. P., & Tseeke, R. (2016). A comparative assessment of special education situations between Lesotho and Malawi. *International Journal of Education and Research*, 4, 171-184.

Mkwezalamba, S. K., (2019). Primary school head teachers' survey on inclusive education in Malawi: Survey data analysis report. Unpublished as part of *The Report on Capacity Assessment for Inclusive Education in Primary Schools in Malawi (March 2019)*.

Munthali, A. (2011). *A situation analysis of persons with disabilities in Malawi*. Retrieved from <https://www.medbox.org/a-situation-analysis-of-persons-with-disabilities-in-malawi/download.pdf>

National Statistical Office Malawi. (2008). *Malawi population and housing census*. Retrieved from http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=106%3A2008-population-and-housing-census&catid=8%3Areports&Itemid=1

Nishimura, M., Ogawa, K., Sifuna, D., Chimombo, J. P. G., Kunje, D., Ampiah, J., Byamugisha, A., Sawamura, N., & Yamada, S. (2009). A comparative analysis of universal primary education policy in Ghana, Kenya, Malawi, and Uganda. *Journal of International Cooperation in Education*, 12(1).

Paget, A., Mallewa, M., Chinguo, D., Mahebere-Chirambo, C., & Gladstone, M. (2016). "It means you are grounded"—caregivers' perspectives on the rehabilitation of children with neurodisability in Malawi. *Disability and Rehabilitation*, 38(3), 223-234. doi: 10.3109/09638288.2015.1035458

- Rose, P. (2003). Community participation in school policy and practice in Malawi: Balancing local knowledge, national policies, and international agency priorities. *Compare: A Journal of Comparative Education*, 33(1), 47. doi: 10.1080/03057920302597
- Salmonsson, A. (2006). *Disability is not inability: Baseline study towards inclusive education In Blantyre, Balaka, and Muchinga Districts in Malawi*. Retrieved from https://nanopdf.com/download/disability-is-not-inability-enabling-education-network_pdf
- Save the Children. (2008). *Vision and hearing screening in schools Successes and lessons learned from Mangochi District, Malawi*. Retrieved from <http://www.schoolsandhealth.org/Shared%20Documents/Downloads/Vision%20and%20hearing%20screening%20in%20schools-%20Successes%20and%20lessons%20learned%20from%20Mangochi%20District,%20Malawi,September%202008.pdf>
- Save the Children. (2010). *School health and nutrition manual: A guide on how to implement programs in Malawi*. Retrieved from <https://hivhealthclearinghouse.unesco.org/library/documents/school-health-and-nutrition-manual-guide-how-implement-programs-malawi>
- Sheerin, E., & Weedle, S. (2015). Transfer of skills and knowledge to rural Malawi. *Learning Disability Practice*, 18(3), 22-24. doi: 10.7748/ldp.18.3.22.e1628
- Suka, A. (2006). *Violence against girls who are blind and visually impaired in schools in Malawi*. Retrieved from <https://wunrn.com/2008/08/malawi-violence-against-blindvisually-impaired-girls-in-schools-in-malawi/>
- Tataryn, M., Chokotho, L., Mulwafu, W., Kayange, P., Polack, S., Lavy, C., Kuper, H. (2015). *The Malawi key informant child disability project*. Retrieved from https://www.ndorms.ox.ac.uk/files/research-groups/kim_malawi-report.pdf
- Tataryn, M., Polack, S., Chokotho, L., Mulwafu, W., Kayange, P., Banks, L. M.,...Kuper, H. (2017). Childhood disability in Malawi: A population based assessment using the key informant method. *BMC Pediatrics*, 17(1), 198. doi: 10.1186/s12887-017-0948-z
- United Nations Educational, Scientific, and Cultural Organization. (2008). *Education for all by 2015: Will we make it?* Retrieved from <https://en.unesco.org/gem-report/report/2008/education-all-2015-will-we-make-it>
- United Nations Educational, Scientific, and Cultural Organization. (2013). UIS. Stat, Education, Malawi. Survival rate to the last grade of primary education, both sexes (%), for. Retrieved from: <http://uis.unesco.org/en/country/mw>
- United Nations Educational, Scientific, and Cultural Organization. (2018). UIS. Stat, Education, Malawi. Number of pupils per teacher. Retrieved from: <http://uis.unesco.org/en/country/mw>
- USAID (2019). "Reading for All Malawi (REFAM): Report on mapping of Disabled Persons Organizations and other organizations working with learners with disabilities in Malawi".

- United States Agency for International Development. (2013). *Country development cooperation strategy 2013-2019*. Retrieved from https://www.usaid.gov/sites/default/files/documents/1860/CDCS_Malawi_September_2019_rev508comp.pdf
- van Dijk, K., & Courtright, P. (2000). Barriers to surgical intervention among blind and low vision children in Malawi. *Visual Impairment Research*, 2(2), 75-79. doi: 10.1076/vimr.2.2.75.4425
- World Bank. (2018). Malawi Human Capital Index. Retrieved from: https://databank.worldbank.org/data/download/hci/HCI_2pager_MWI.pdf
- World Health Organization. (2010). Community-Based Rehabilitation: CBR Guidelines. Retrieved from: <https://www.ncbi.nlm.nih.gov/books/NBK310927/>
- Yates, C. (2008). *Keeping children in school: A review of open education policies in Lesotho and Malawi*. Retrieved from <https://www.gov.uk/dfid-research-outputs/keeping-children-in-school-a-review-of-open-education-policies-in-lesotho-and-malawi>
- Yousafzai, A. K., Lynch, P., & Gladstone, M. (2014). Moving beyond prevalence studies: Screening and interventions for children with disabilities in low-income and middle-income countries. *Archives of Disease in Childhood*, 99(9).