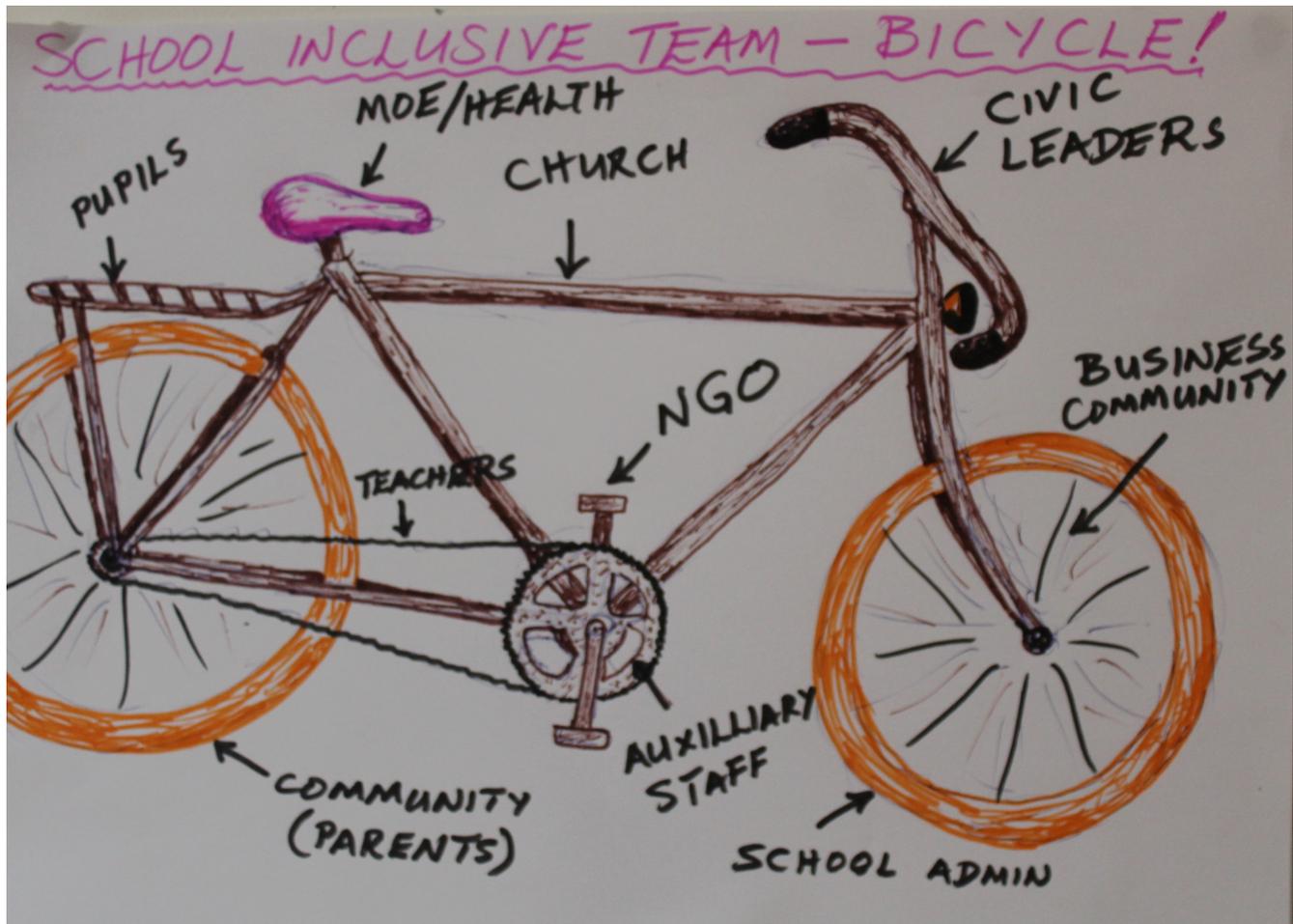


Learning review of the NAD-supported inclusive education teacher training pilot programme in Zambia

Report



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Acronyms

AHDI	Archie Hinchcliffe Disability Intervention
CBID	Community-Based Inclusive Development
CBR	Community-Based Rehabilitation
CDC	Curriculum Development Centre
CWAC	Community Welfare Assistance Committees
DEB	District Education Board
DEBS	District Education Board Secretary
DESO	District Education Standards Officer
DPO	Disabled People's Organisation
DRCC	District Resource Centre Coordinator
DRW	Disability Rights Watch
EENET	Enabling Education Network
EFA	Education for All
ESO	Education Standards Officer
HT	Head Teacher
IECo	Inclusive Education Coordinator
IEP	Individual Education Plan
INSET	In-Service Training
MoGE	Ministry of General Education
MoHE	Ministry of Higher Education
NAD	Norwegian Association of Disabled
NFU	Norwegian Association for Persons with Intellectual Disabilities
Norad	The Norwegian Agency for Development Cooperation
NGO	Non-Governmental Organisation
PEO	Provincial Education Officer
PESO	Provincial Education Standards Officer
PRCC	Provincial Resource Centre Coordinator
PT	Principal Trainers
PTA	Parent-Teacher Association
SEAZ	Special Education Teachers Association of Zambia
SESO	Senior Education Standards Officer
SEO: TED	Senior Education Officer: Teacher Education

SIC	School INSET Coordinator
SIT	School Inclusion Team
ToR	Terms of Reference
ToT	Trainer of Trainers
TTC	Teacher Training College
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UNCRPD	United Nation Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
UNZA	University of Zambia
ZAPCD	Zambia Association of Parents for Children with Disabilities
ZAEPD	Zambia Association on Employment for Persons with Disabilities
ZIC	Zonal INSET Coordinator

Executive summary

i. Background

Programme context

According to the World Bank, children with disabilities constitute 30-40% of the current 121 million primary and lower secondary aged children who do not attend school.¹ Worldwide, children with disabilities are more likely than their peers to be left out of the formal schooling system or to drop out of school before finishing their primary or secondary education.² Education systems consistently fail to develop necessary structures to meet the specific needs of children with disabilities. Many children with disabilities who attend school face barriers to access and are excluded from classrooms, which results in them failing or dropping out of school.^{3 4}

Despite various international conventions and frameworks, including the UN Convention on the Rights of the Child, Convention on the Rights of Persons with Disabilities and the Sustainable Development Goals, most children with disabilities, particularly those in developing countries, continue to experience barriers to educational access, participation and achievement due to weak political will, poor policy implementation and inadequate monitoring and review.⁵

In 2011, the Zambian government revised its Education Act to concentrate on inclusive education. A pre-study recommended that NAD should assist with this shift in focus. From 2016, NAD has collaborated with the Zambian Ministry of General Education (MoGE) to pilot inclusive teaching and learning practices with technical support from Enabling Education Network (EENET).

Programme overview

The participatory teacher training programme in Zambia has focused on creating contextually relevant teacher training materials that are co-developed and co-owned by education stakeholders. A key component of the programme has been the development of a core group of skilled and confident principal trainers (PTs) who provide in-service training to teachers (initially in six selected pilot schools) and to trainee pre-service teachers, and who proactively upgrade and update the training modules based on their experiences and critical reflections.

¹ Peters, S. (2003). Education for all: Including children with disabilities. Education Notes, World Bank. Mizunoya, S., Mitra, S., & Yamasaki, I. (2016). Towards inclusive education: The impact of disability on school attendance in developing countries. New York: UNICEF Office of Research-Innocenti Working Paper

² UNESCO. (2009). Policy guideline on inclusion in education. Paris: UNESCO.

³ International Commission on Financing Global Education Opportunity. (2016). The learning generation: Investing in education for a changing world.

⁴ United Nations Children's Fund & Ministry of Education, Arts and Culture. (2015). The school drop-out and out-of-school children report – a national review 2015. Windhoek: UNICEF.

⁵ United Nations Education, Scientific and Cultural Organization. (2009). Policy guideline on inclusion in education. Paris: UNESCO.

Collaboration is another essential component of the programme, promoting peer support among teachers, collaboration between in-service and pre-service training, and problem-solving collaborations between school and community stakeholders primarily through the development of school inclusion teams (SITs). Observer roles were also developed to enhance critical reflection and learning among actors across the education system. The programme has worked closely with MoGE throughout, at district, provincial and national levels, aiming to ensure government understanding and ownership of the inclusive education training approach. It is anticipated that the training developed by this partnership will be used in all teacher training colleges (TTCs), universities, district and zonal resource centres for pre-service and in-service teacher training effective from 2020, after development of a revised teacher training curriculum.

The learning review

This review focused primarily on investigating various assumptions about inclusive education and teacher training that underpin the programme's theory of change (Appendix A). This meant examining the effectiveness of training and support given to PTs, pre-service teacher training students in higher education, in-service teachers and SITs in six pilot schools. The review also looked more briefly at practical programme management issues. A mixture of document review, interviews and focus group discussions yielded extensive data. Quantitative and qualitative analysis revealed the main lessons learned, which can be used for sustaining, expanding and improving the programme in Zambia, and implementing a similar approach elsewhere.

ii. Key lessons learned

Teachers: confidence

Evidence indicated that teachers' understanding of and confidence in supporting learners' needs, especially learners with disabilities, grew considerably as a result of the training. Teachers were empowered and supported by working in teams with their colleagues. The programme's interactive training methodologies made teachers feel valued; encouraged them to implement new skills in the classroom, including curriculum differentiation and group work; and motivated them to deliver home-based learning for children unable physically to access schooling due to illness or disability.

Teachers: action-based research skills and problem-solving

The training gave teachers the tools to critically identify, prioritise, and deal with challenges in their communities and classrooms. As a result, teachers became more proactive in taking responsibility for supporting learners who were vulnerable and excluded from schooling in their own communities. Teachers were also better able to recognise systemic barriers to the inclusion of learners with disabilities, in line with global best practice.

Teachers: collaboration

Teachers reported greater confidence in collaborating with colleagues as a result of training, but PTs felt these skills needed further consolidation to improve the quality of collaboration

between teachers. High staff turnover in schools meant PTs often used valuable time repeating trainings for new teachers.

Teachers highlighted their continued lack of Zambian Sign Language and Braille reading skills, but all noted that they had not sought assistance from the MoGE or disabled people's organisations (DPOs) who support Deaf and visually impaired people, or attempted to find sign language resources for themselves. Facilitating connections between teachers and the MoGE/DPOs should be a future priority.

Local community groups had strengthened links with schools and teachers, helping for instance to address challenges with school transport, improving access to funding, equipment and infrastructure improvements, and providing local services such as physiotherapy.

Learners: improved presence, participation and achievement

Evidence indicated that community awareness and teacher training contributed to increased access to education for children with disabilities. However, other inclusion challenges such as removal of boys from school for the six-month period of initiation into adulthood continued. Teachers were largely unsuccessful in their efforts to tackle this, despite government discouraging the practise.

Evidence assessed during the review, such as observers' reports and photographs, indicated an overall increase in the participation of learners with disabilities in pilot schools, including interaction between learners with and without disabilities inside and outside the classroom. However, other evidence highlights that improvements are still needed regarding academic participation of learners with disabilities. No significant improvements in the academic results of learners with disabilities were found, but this is to be expected given the relative brevity of the programme so far.

Due to funding shortfalls, many learners had not received assistive devices for making learning accessible. There remained also a lack of understanding among MoGE staff of the need for and approaches to adaptations to assessments. Some progress was made with the development and implementation of individual education plans (IEPs) for learners with disabilities.

Trainers: confidence, competence and innovation

The PT teams were found to be a key factor in the success of the programme. The composition of the teams helped to increase trainers' confidence, competency and innovation through learning together, observing each other train, identifying each other's strengths and weaknesses, and jointly planning training sessions. Consequently, PTs have become recognised by schools and MoGE officials as inclusion specialists and problem-solvers.

PTs are better able to deal with daily inclusion challenges in their working environment and have been using skills and ideas to improve inclusive practice in their own schools, universities or colleges, not just in the six pilot schools.

Trainers: action research

The review found that PTs demonstrated strong knowledge and application of action research principles and approaches. PTs shared how they used action-based research principles during their training with teachers, but also in their own workplaces, implementing inclusive education in curricula at their own institutions.

Trainers: challenges

The review highlighted concerns about the capacity of PTs to carry out their training duties alongside other work and family commitments. During the four-year programme period, some of the original 27 PTs had left the role: some members were replaced as they left their jobs or died, and some, such as additional lecturers, joined when initial observations noted the need to strengthen the important role of pre-service pedagogues (methodologists) in the sustainability of the programme. Six of these moved roles to become mentors to observers. However, this downsizing of the pool of PTs was considered positive by stakeholders, as the remaining PTs were those who were fully committed and capable.

Other stakeholders: School Inclusion Teams

Evidence indicated that SITs have been effective in bridging the gap between community, home and school, and have enabled teachers to access support and find solutions to inclusive education challenges. SITs were considered by stakeholders to have played a major role in improving inclusion at school level, particularly infrastructure accessibility.

Other stakeholders: programme ownership

Local knowledge of the context, stakeholders and ways of working have been critical to the success of the programme. In particular, being able to identify appropriate people with whom to work and having knowledge and understanding of ways of working in the MoGE and DPOs were major assets.

Careful identification and selection of a diverse team of PTs led to local ownership of the programme. The participatory approach to developing training materials with PTs strengthened their ownership of the training process and made delivery more effective.

Involving curriculum specialists from the MoGE as PTs and observers made them aware of the training content, methodologies and materials and has expedited approval of the training modules at national level. The full engagement of NAD staff with the MoGE on this programme was welcomed by officials who noted that this is not a common approach.

Additional issues

Evidence gathered during the review highlighted that teacher training institutions remain inaccessible to students with disabilities, in terms of culture (stigma and discrimination) and/or lack of capacity and equipment to accommodate the needs of learners with disabilities.

Beyond the group of PTs, some other lecturers working in teacher training institutions are resistant to inclusive education methodologies, believing it is not within their remit to use or promote these approaches.

It was clear from the review that student teachers have not received adequate pre-service training in inclusive education, as the programme has not yet moved into the phase where this will be a core focus, and they will require more training and guidance to support learners inclusively in the education system.

iii. Summary of recommendations

A full set of recommendations can be found at the end of each chapter in the report. Below is a very brief summary of recommendations for actions that should be sustained and/or intensified for the continued success of the programme.

Teachers and teaching

It is vital that programme partners keep promoting reflection, learning and sharing among teachers to develop an inclusion-oriented problem-solving culture in schools. Action research, mentoring, digital peer-to-peer and self-study approaches should be used to support this.

Training gaps need to be continuously filled, to ensure new staff are trained in inclusive approaches when they join a school and all teachers receive refresher training so they do not lose skills or confidence.

Programme partners need to keep promoting and demonstrating collaboration among/between teachers, SITs, school inclusive education co-ordinators and other relevant stakeholders, such as those from non-governmental organisations (NGOs), DPOs, universities and TTCs who can offer specialist support, knowledge, training, advice as well as materials and devices.

Collection and analysis of data remains crucial going forward, to identify achievements and gaps in the inclusion of children with disabilities in schools. This could include disaggregated data on (re)enrolments, on absenteeism (among learners and teachers), on staff turnover, on academic and non-academic achievement standards, on learner, teacher and parent satisfaction, and so on.

The programme and its PTs have a role to play in supporting teachers to advocate for changes they have identified as necessary but cannot fully implement themselves, such as reforming the system for examinations and assessment. This is critical for teacher motivation as well as delivering the changes needed.

Trainers and training

It is vital that programme partners keep helping PTs to build their technical strength and confidence, maintaining support for their continued learning as training practitioners and as action researchers. Low-cost options include providing mentoring, information and

resources, meetings and peer-to-peer exchange. It is also necessary to provide clarity on the future role of PTs beyond the initial NAD-funded programme phase.

Better ways to support PTs' workload challenges need to be found, for instance by ensuring PTs' line managers are fully on-board and supportive of the additional role their staff member has taken on; that they understand exactly what the PT is doing and why and the benefits; and that the benefit to the PT's own core work is made explicit to their line management.

Despite the positive results so far, programme partners must keep aiming for better, and must continuously monitor and make improvements to teacher training on inclusion. This means also continuing to share the experience of the effectiveness of long-term participatory approaches.

As the MoGE and the Ministry of Higher Education (MoHE) direct teacher trainers to follow and deliver the teacher training curriculum, then the pre-service teacher training curriculum needs to be revised, with inclusive education concepts, theories and practice fully integrated into the teaching and learning methodology promoted across all teacher education programmes. Effective inclusive education practice cannot be realised if gaps remain in the existing teacher training curriculum or it is just grafted onto the curriculum as an additional unit of study.

School Inclusion Teams

Programme partners should keep developing SITs to play a useful role in supporting inclusive education-related change at school community level. SITs have the potential to do far more in terms of creating awareness of disability, educational rights and importance of education; linking with community-based resources that can help improve schools; supporting and encouraging parents of children with disabilities to bring their children to school; encouraging learners who have dropped out to return to school; and solving diverse challenges faced by learners within their communities.

Ongoing learning within and between SITs needs to be encouraged and supported, providing opportunities to refresh and expand their understanding of inclusive education and practical solutions to inclusion barriers. SIT membership development needs to be encouraged, to bring in new members from diverse backgrounds with different skill sets.

Advocacy pressure by stakeholders on MoGE, regarding inclusion funding, should include pushing for SIT funding.

1. Background and context of the current review

1.1. Global context

People with disabilities constitute approximately 15% of the world's population and this figure is expected to increase.⁶ Worldwide, children with disabilities are more likely than their peers to be left out of the formal schooling system or to drop out of school before finishing their primary or secondary education.⁷

A World Bank study indicates that children with disabilities constitute between 30% and 40% of the current 121 million primary and lower secondary aged children who do not attend school.⁸ ⁹ Furthermore, children living in developing countries are more likely to become disabled, face consequent discrimination, experience limited access to social services, and be underweight for their age and size.¹⁰ Many children with disabilities who attend school face barriers to access and are excluded from classrooms, which results in them failing or dropping out of school.¹¹ ¹² Education systems consistently fail to install the necessary structures to meet the specific needs of children with disabilities. Consequently, they are routinely denied equitable opportunities to access education compared to their non-disabled peers.

Sustainable Development Goal 4 (2015) calls for an inclusive and equitable quality education system to be in place globally by 2030.¹³ Accordingly, children and adults with disabilities should have access to education at all levels, including vocational education and training within environmentally inclusive facilities. Nations have been encouraged to adopt and implement international conventions such as the United Nations Convention on the Rights of the Child¹⁴ (UNCRC, 1989) and the United Nations Convention on the Rights of Persons with Disabilities¹⁵ (UNCRPD, 2006), and inclusive education policies such as the Salamanca Statement¹⁶ (1994) and the Dakar Framework for Action¹⁷ (2000). Some of these will be discussed briefly.

The UNCRC includes 54 Articles covering all aspects of a child's life. It sets out the civil, political, economic, social and cultural rights that all children around the globe are entitled

⁶ World Health Organization. (2011). World report on disability. Geneva: WHO/World Bank.

⁷ UNESCO. (2009). Policy guideline on inclusion in education. Paris: UNESCO.

⁸ Peters, S. (2003). Education for all: Including children with disabilities. Education Notes, World Bank.

⁹ Mizunoya, S., Mitra, S., & Yamasaki, I. (2016). Towards inclusive education: The impact of disability on school attendance in developing countries. New York: UNICEF Office of Research-Innocenti Working Paper

¹⁰ UNICEF & University of Wisconsin. (2008). Monitoring child disability in developing countries: results from the multiple indicator cluster surveys. New York: UNICEF.

¹¹ International Commission on Financing Global Education Opportunity. (2016). The learning generation: Investing in education for a changing world.

¹² United Nations Children's Fund & Ministry of Education, Arts and Culture. (2015). The school drop-out and out-of-school children report – a national review 2015. Windhoek: UNICEF.

¹³ United Nations. (2015). Sustainable Development Goals. New York: UN.

¹⁴ United Nations. (1989). Convention on the Rights of the Child. New York: UN.

¹⁵ United Nations. (2006). The Convention on the Rights of Persons with Disabilities. New York: UN.

¹⁶ UNESCO. (1994). The Salamanca Statement and Framework for Action on Special Needs Education. Paris: UNESCO.

¹⁷ UNESCO. (1990). The world declaration on education for all and framework for action to meet basic learning needs. Paris: UNESCO.

to. In addition, it states how adults and governments are required to work together to ensure all children are able to enjoy all of their rights (UN, 1989).

The purpose of the UNCRPD and its Optional Protocol, is to promote, protect and ensure full and equitable enjoyment of all human rights and fundamental freedoms by all people with disabilities. Article 7 speaks to the rights of children with disabilities, while Article 24 states that children with disabilities should not be discriminated against, and also that they should be able to participate in the general education system. In addition, the Article proclaims the right to inclusive education and prescribes the steps that must be taken to ensure that this takes place (UN, 2006).

In 1994, representatives of 92 governments and 25 international organisations attended the World Conference on Special Needs Education, which was held in Salamanca, Spain. The outcome was the Salamanca Statement and Framework for Action, calling for an inclusive education system of education for children with disabilities (UNESCO, 1994).

Education for All (EFA) is a global movement that aims to meet the learning needs of all learners, led by the United Nations Education, Scientific and Cultural Organization (UNESCO). At the World Conference on EFA held in Jomtien, Thailand, in 1990, goals were established and a report was developed. However, EFA was only formally adopted at the World Education Forum held in Dakar, Senegal, in 2000. Here, 164 governments pledged to achieve EFA and identified six goals that were to be achieved by 2015 (UNICEF, 2000).

Despite these international policies and legislation, most children with disabilities, particularly those in developing countries, continue to experience barriers to educational access, participation and achievement due to weak policy implementation, coupled with inadequate monitoring and review.¹⁸

1.2. Zambia context and programme background

1.2.1. Recent history

The Norwegian Association of Disabled (NAD), together with the Norwegian Association for Persons with Intellectual Disabilities (NFU – which has now phased out the majority of its international work), conducted an exploratory study in 2008 to gain understanding of the disability landscape in Zambia. Utilising the results from the study, NAD and NFU collaborated with several government departments and umbrella disabled people's organisations (DPOs) to formulate a framework that would guide a small pilot programme of grants and capacity-building to run from 2009 to 2011.

The objective of the pilot programme was to explore, interact with, and gauge the capacity and potential of historical and new stakeholders. The key focus of the programme was to provide technical support as well as small development grants to various stakeholders in the Zambian civil society and government sectors.

¹⁸ United Nations Education, Scientific and Cultural Organization. (2009). Policy guideline on inclusion in education. Paris: UNESCO.

In 2012, NAD incorporated the Community-Based Inclusive Development (CBID) strategy into its activities. With its roots in Community-Based Rehabilitation (CBR), which is guided by the six principles of inclusion, participation, sustainability, empowerment, self-advocacy and creating a barrier-free environment, the CBID approach highlights the need, and goal, of NAD to develop the capacity of collaborating DPOs and government partners. In turn, this should enhance their ability to achieve key programme targets in a sustainable manner before support is phased out.

To explore the possibility of incorporating an inclusive education component as part of its CBID programme in Zambia, NAD conducted a pre-study in 2015. The study revealed that Zambia had been striving to provide education to children with disabilities for many years, predominantly through a number of special schools and units located throughout the country. By 2009, there were approximately 85 special education schools, 260 special education units (i.e. integrated schools), 232 special education classrooms, as well as an unspecified number of 'inclusive classrooms'. However, there were only 1000 qualified specialist teachers, which was way short of the amount required to accommodate the many learners with special education needs in the country.

An opportunity arose in 2011 when the Zambian government revised its Education Act to concentrate on inclusive education, and the pre-study recommended that NAD should assist with this shift in focus. Consequently, as of 2016, NAD has collaborated with the Zambian Ministry of General Education (MoGE) to pilot inclusive teaching and learning practices across six preselected schools. NAD also works closely with the Enabling Education Network (EENET), which provides technical support and expertise to the programme.

1.2.2. Current situation regarding NAD's programme

The process to date has included the creation of eleven inclusive education teacher training modules.

The following teacher training modules have been developed:

1. An introduction to inclusive education
2. School Inclusion Teams
3. Identifying out-of-school children
4. Screening and identification of learning needs
5. Creating individual education plans
6. Exploring the role of a school inclusive education coordinator
7. Promoting active learning in the classroom
8. Developing learner participation
9. Including learners in transition
10. Including learners with intellectual and/or developmental impairments, and
11. Making teaching and learning aids from locally available resources.

NAD and EENET have assisted in creating contextually relevant training materials that are co-developed and therefore co-owned by the key education role players. This has enabled the development of a core group of skilled and confident principal trainers (PT). These PTs have the capacity to deliver training to teachers during in-service training (INSET), to trainee teachers in their pre-service settings, as well as upgrade and update the modules and the training as required. In line with the CBID strategy, NAD supports a teacher training approach that favours practice over theory, promotes learning-by-doing, and develops the capacity of teachers to be innovative, flexible and critically reflective problem-solvers.

NAD also encourages a teacher capacity-building process that incorporates the fundamental aspect of collaboration and installs support structures to ensure teachers do not struggle with inclusion challenges on their own. NAD promotes maintaining a close link between in-service teacher training and pre-service training.

Moreover, learners with disabilities, along with parents/caregivers, teachers and volunteers are engaged as active participants, facilitators and key sources of knowledge in the process, rather than as passive recipients or providers of help. A unique component within the inclusive education programme, titled *pushing boundaries*, was established to pay attention to learners with intellectual disabilities. It consists of four key phases – initial professional development; refining the focus/guided inquiry; action research and documentation (which emerged organically from the content of the training modules), and the training.

It is encouraging that the disability movement in Zambia organises an annual, multi sectoral, national inclusive education symposium focused on developing a supportive community of practice. Several PTs, DPOs, senior MoGE officers and other stakeholders in quality education have participated in and facilitated aspects of these symposiums that have been held for the past four years (2016 – 2019).

The MoGE, through its Curriculum Development Centre (CDC), carried out a detailed three-day review process in May 2019 to evaluate the teacher training modules, with a key criterion being their appropriateness for use in Zambian teacher training institutions. The first seven finalised modules were approved by the CDC (please see modules 1 –11 listed earlier). NAD and EENET planned to complete the remaining four modules before the end of 2019, and these will then be reviewed for approval. The Zambian government has recommended that the approved modules be used in all teacher training colleges (TTC), universities, district and zonal resource centres for in-service teacher training effective from 2020, after development of a revised curriculum.

A range of education stakeholders have expressed interest in adopting the same approach and inclusive education material developed by NAD and EENET in Zambia. Consequently, NAD seeks to record lessons learnt from the programme over recent years, to help inform these and other stakeholders.

The following table illustrates the various stakeholders involved in the programme:

Stakeholders	Composition	Roles
External trainer	Duncan Little and other specialists from EENET.	Conduct training, compile reports, collaborate with NAD, etc.
Principle Trainers	Head teachers, teachers, MoGE officials from differing levels and departments, lecturers from TTCs and universities, etc.	Receive training on all modules, customise training modules, deliver training, and compile reports.
Observers	MoGE officials, DPO representatives, community development, social welfare and health officers	Receive selected training on module activities and action research, conduct annual monitoring visits to schools. Compile reports on their findings.
School Inclusion Teams (SITs)	Teachers, community members, DPOs, parents of learners with disabilities and non-disabled learners, parent organisations, parent-teacher association (PTA) members, school inclusive education coordinators (IECos), other social sector stakeholders depending on the schools' needs.	Receive training, customise training modules, deliver training, compile reports, and assist with modules' action research activities.
School IECOs	One selected teacher based in each pilot school (need not be a special needs education teacher).	Receive training on all modules, support teachers in their school to implement inclusive education, SIT member, and provide training to new teachers.
MoGE	Various MoGE official representative of National, Provincial and District level including District Education Board Secretary (DEBS), curriculum advisers, District Resource Centre Coordinators (DRCCs), etc.	Participate in training as part of the PT and observers (selected officials) teams, attend the annual inclusive education conferences, review the modules and get them approved.
Other Stakeholders	Various community members including leaders, and religious organisations, DPOs, parent organisations, NGOs, PTAs and other Ministry departments (such as community	Receive training via the SIT, participate as SIT members (some), partner with and support schools, encourage parents to enrol their children in schools, find children with disabilities in their communities, find solutions to the challenges facing learners and schools; promote home-based

	development, social welfare, health), etc.	education for learners with severe disabilities who cannot come to classrooms
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This programme review deals with Phase One of the programme, namely the pilot training and support of PTs, pre-service teacher training students in higher education, and in-service teachers in six pilot schools. Also included in this phase and in the six pilot schools was the development of SITs comprised of parents of learners with disabilities, those with non-disabled children, teachers, learners, parent organisations such as PTA members, parent support groups, DPOs, community leaders and others who support schools in different capacities (i.e. from churches, community health clinics, local business owners).

Each of the six pilot schools will have a different SIT composition based on the needs of the school, as well as the strengths and skills of the individual SIT members. The aim of these SITs is to provide disability sensitisation to communities, encourage parents to send their children to school, as well as work with learners, families and schools to re-integrate learners who had dropped out of school, support learners and teachers to find solutions to certain challenges that are identified through action-based research. These SITs received training on certain modules that were relevant to their needs.

NAD managers and NAD documents indicate that Phase Two (planned for the future), would be rolled out to other schools in Zambia following findings of this review, together with other factors such as MoGE ownership and NAD funding.

The majority of the six pilot schools are Zonal Schools, and their Head Teachers (HTs) are Zonal Heads (classified by the MoGE), with two hosting the DRCC and another hosting a Zonal Resource Centre. These schools are consequently already functioning as resource schools to ten other schools in their surrounding areas: zonal clusters. The DRCCs, who are responsible for in-service teacher training in each district, are strategically included as PTs in the training. They are therefore capacitated to conduct and rollout the training to each of the ten schools surrounding each of the pilot Zonal Schools in particular, and the rest of the district, progressively. The teachers and the HT from each of the six pilot schools will also assist in supporting the DRCC and stakeholders being trained in the new schools.

Currently the National MoGE has a team of National Trainers who provide training to in-service teachers, usually during school holidays. While none of these trainers have received NAD training, two key national level officers in charge of primary and secondary in-service education have been exposed to in-depth learning visits as part of the programme. Both officials have participated in some observations, annual participatory reviews as well as the national inclusive education symposiums. Meetings between NAD and National and District MoGE officials have resulted in a plan to have the current PTs 'buddy-up' with and train the National Trainers in the content of the NAD modules, so that they can rollout training across Zambia going forward.

2. Objectives and scope of the learning review

2.1. The audience

This learning review of the teacher training programme in Zambia has two main audiences: one internal to Zambia and the other external across other countries.

2.1.1. The Zambia audience

The programme to date has focused primarily on in-service training and the learning review has been conducted at the end of the current funding period. Further funding from 2020 will focus on: supporting the transfer of the training into pre-service contexts (a step that has started but which needs more support); the revision of the teacher training curriculum to ensure that the agreed inclusive education content is institutionalised nationally; and providing less intensive support to PTs who are rolling out the training approach in new neighbouring districts and nationally. Lessons from the review will be used to inform these follow-up stages and also to inform and motivate other organisations who are expressing an interest in using the approach in other parts of Zambia.

Additionally, there are plans by NAD to provide technical support to government as it develops a new CBID district in rural Lusaka province, to consider adding pilot inclusive schools as well, whose number will be determined after a baseline survey has been done.

2.1.2. The global audience

The teacher training approach used in Zambia and its sister programme in Zanzibar has already attracted significant attention from other organisations within the Atlas Alliance (an umbrella for Norwegian DPOs working internationally), including several organisations that NAD will collaborate with, from 2020-2024, following the success of a new funding application to The Norwegian Agency for Development Cooperation (Norad) in mid-2019. The review provides critical lessons that these organisations can learn from when adapting the approach for their programmes in other countries.

2.2. Objectives

The learning review had two broad objectives:

- A. To review the logic of the programme's theory of change, by investigating the key assumptions upon which the theory of change was based;
- B. To review and learn transferrable lessons from the practical aspects of the programme (for example, the planning, management, monitoring and documentation of the programme).

2.3. Research questions

A. Investigating the programme's theory of change

The teacher training programmes supported by NAD in Zambia and Zanzibar were based on a simple theory for the most effective ways to bring about change with regard to building teacher capacity in inclusive education. The diagram in Appendix A summarises the main hypothesised pathway of change. Using the assumptions shown in this pathway, the five areas, which are included in the following paragraph, were investigated in the Zambia inclusive education teacher training programme learning review. The review highlights key findings and analyses, and provides recommendations for improvements or changes in relation to these five areas. A full breakdown of all questions, including sub-questions asked during interviews can be found in Appendix B.

- Area i: The role of the teacher training programme and the success of the approach in building teachers' confidence and competence as inclusion-oriented problem-solvers.
- Area ii: The role of the programme and the success of the approach in developing a cadre of confident, competent, innovative inclusion-oriented teacher trainers – known as PTs.
- Area iii: The role of the programme and the success of the approach in encouraging trainers to be actively involved in developing teacher training on inclusion, and to own the training and take responsibility for ongoing development, improvement and roll-out.
- Area iv: Teachers work more inclusively and are better able to provide quality education when they work collaboratively with each other and with other stakeholders.
- Area v: Training on inclusive education at in-service level will not have sustainable positive effects in the education system unless there are accompanying changes happening within pre-service teacher training.

B. Investigating practical matters regarding the planning, management, monitoring and documentation of the programme

While this review focused primarily on learning about the chosen approach to teacher training and investigating the assumptions about how best to facilitate teachers to become committed and skilled inclusive practitioners, it also briefly reflected on how the programme was managed. There is a lot of interest in the approach. Learning about how best to plan, manage, monitor and document this kind of programme may assist in ensuring that similar programmes are implemented effectively and efficiently in future.

The key guiding questions were:

- Was there a clear plan or vision at the start of the programme? If not, how did the plan or vision evolve?
- Who was involved in the planning? How were they involved? Were any individuals or stakeholder groups not involved, that should have been involved? What consequences ensued as a result of their lack of involvement in planning?
- Was the programme planned to ensure alignment with national and global commitments? If it was, how well does it align to these commitments?

- Was the overall management of the programme effective (for example, in terms of clarity of roles and responsibilities, performance of duties, and so on)? In what ways could management systems have been improved? Who was involved in managing the programme? Was anyone not involved who should have been? What consequences ensued as a result of their lack of involvement in management?
- What monitoring mechanisms were in place? Was anything missing that should have been included? How could monitoring be improved? Who was involved in monitoring the programme? Was anyone not involved who should have been? What consequences ensued as a result of their lack of involvement in monitoring?
- What documenting mechanisms were in place? Was anything missing? How could documenting be improved? Who was involved in documenting the programme? Was anyone not involved who should have been? What consequences ensued as a result of their lack of involvement in documenting?

3. Conceptual basis for the review

This programme review made use of both qualitative and quantitative methodologies to achieve the review objectives as made explicit in the Terms of Reference (ToR). A variety of methods were used to collect data. These included document analysis via a desk review, as well as field visits with key participants where individual and focus group interviews took place to gather data.

3.1. Desk review

The consultant conducted a review of available programme and related documentation, both to inform the methodology design and research questions, as well as to extract data for analysis. The document review included, but was not limited to:

- Training modules that had been finalised;
- Training modules that had been developed or tested;
- Reports from PTs about their trainings;
- Reports from trainers and teachers about the action research they had conducted, linked to the training;
- Reports from pre-service TTCs relating to piloting of some modules;
- Documentation relating to curriculum department approval of modules (for example, their feedback on modules);
- SIT reports;
- Inclusive education pre-study report;
- *Pushing boundaries* methodology and phase 4 documentation report;
- 'Leave no child behind' document;
- Inclusive education symposium reports;
- Education Act of 2012 (under review);
- Education Policy (not yet finalised);
- Disability Act no.6 of 2012.

The above-mentioned documents and policies assisted in the formulation of questions that were asked during the individual interviews and focus groups interviews. These were aligned to the requirements of the ToR and assisted in the formation of themes for the analysis of the data in this final review report.

3.2. Guiding principles

We performed our review according to guidance outlined in the Helsinki Declaration of 2013, as well as the UNCRPD (2006) relating to disability research ethics that are located within the wider research ethics framework. Ethical principles require that any research

involving human subjects is framed and conducted in a way that has respect for inherent dignity, individual autonomy and independence of participants. Principles include:

- **Using a strengths-based approach:** In all situations, there are things that are already working well; we use these positive situations as starting points for making recommendations and addressing challenges and barriers.
- **Promoting participation and inclusion:** Research and review approaches need to respond to diversity and apply methods that are free from bias, taking into consideration the backgrounds of participants, including their age, culture and abilities.
- **Protection of the vulnerable:** We always follow protection principles relating to all interactions we have with children, young people and vulnerable adults.

3.3. Methodology details

A mix of data collection methods were used, including a review of the relevant and available documents and statistics, and collection of information from relevant stakeholders during the fieldwork. The review elicited a mix of quantitative and qualitative evidence.

3.3.1. Quantitative data

Quantitative statistical data were collected from annual reports, personal interviews with HTs, MoGE officials, NAD management staff, and EENET Senior Trainers and Managers. Data collected included: statistics on the number of schools; teachers; learners with and without disabilities included in the programme; category and number of participants trained, and location of participants. This quantitative data was used to verify, justify, and motivate qualitative data.

3.3.2. Qualitative data

Qualitative data was collected from two main sources, namely focus group discussions and individual interviews. Focus group discussions took place with a group of participants. Individual interviews were conducted in person for interviewees in Zambia, and via Skype or WhatsApp calls with interviewees in the United Kingdom. Focus group discussions and individual interviews lasted between five and 70 minutes and were led by the detail of feedback that participants wanted to share. An interview schedule with predetermined, open-ended questions based on the review themes made explicit in the ToRs was used. Appendix B contains the questions that were asked.

All interviews were conducted in English. Where required, questions asked during interviews with parent group organisations were translated into the local Zambian language, using the services of an interpreter who was not associated with the programme. This was done to ensure accuracy and non-bias. Participants' responses were then translated back into English by the same interpreter. Participants over 18 years old were required to sign a consent form giving the consultant permission to conduct the interviews. Written permission to interview participants younger than 18 was obtained from parents or guardians before interviews commenced. An information letter was provided to participants before the commencement of interviews, and was fully explained to them. Where a translator was used, each sentence within the letter was translated. This enabled all participants to be aware of their rights in

the process, as well as what the programme entailed. All interviews and discussions were digitally voice recorded, with permission by participants, and the data was transcribed.

3.4. Selection of sites

Selection of research sites was based on the intention to include a range of types of schools in the programme, based on the following locational classifications:

- Deep rural: Nakowa Primary (Zimba District);
- Peri-urban: River View Primary (Kazungula District);
- Urban: Shungu Primary (Livingstone District).

Additional days were included to visit other stakeholders in each area, including Choma and Monze, and a trip to interview stakeholders at the University of Zambia and surrounding areas in Lusaka (see interview schedule Appendix C for detailed information). NAD managers had ensured that information letters were sent to all MoGE officials as well as schools beforehand, and that all stakeholders were willing to be interviewed. Dates and times that were suitable and appropriate in terms of starting times, hours available, length of interviews or discussion, and travel to locations were confirmed before the interviews took place.

3.5. Participant sample

Data was collected via individual interviews and focus group discussions with a range of stakeholders involved in the programme. A breakdown of participants and the motivation for their inclusion is included as follows (a full breakdown of all participants is included in Appendix D):

Stakeholders to meet	Reason for meeting them
PTs ¹⁹ (in-service and pre-service), as well as teachers, HTs, learners with and without disabilities, members of SITs and parents, in three pilot schools and their surrounding communities	PTs can explain how they deliver the training; the teachers can explain how the training impacts on the way they now teach. Learners with and without disabilities can inform the evaluator on the impact of the training. Members of the SIT and parents can explain what changes they observe in the learners and how they contribute to the programme. They can also identify the collaboration among the trainers, the teachers, the learners and the community.

¹⁹ This includes lecturers from universities and teacher training colleges (TTCs) – Southern Province, pilot school HTs and specialist teachers, District Education Standards Officers (DESOs) and District Education Resource Centre Coordinators (DRCCs), and representatives from several other key institutions.

DPOs and other organisations representing other children vulnerable to exclusion from school, representing the beneficiary target groups	To gather their understanding of inclusive education and its effect on the learners, and to assess the collaboration among stakeholders.
CDC, which is the government agency responsible for all matters related to the curriculum for schools and colleges, and the lead agency on the inclusive education teacher education	CDC staff can offer their perspective on the training modules, identify gaps (if any), and explain how the modules fit into the teacher training curriculum and how it will be rolled out.
MoGE Directorate of Inclusive and Special Education	It is appropriate to consult the department in charge of inclusive and special education in the country.
Education Standard Officers (ESOs) at Provincial and District level	They have played a role in the monitoring teams during training of trainers (ToT) workshops and in-service teacher training.
Relevant higher education institutions, the University of Zambia and Charles Lwanga College of Education	They have trained pre-service teachers.
Other relevant national authorities	The programme must align to required national principles and policies.

Participant sectors

Ministry of General Education (MoGE) and Government Departments
National level
<ul style="list-style-type: none"> • Curriculum Development Centre (CDC) • Senior Education Standards Officer (SESO) • Senior Education Officer: Teacher Education (SEO: TED)
Provincial level
<ul style="list-style-type: none"> • Provincial Education Officer (PEO) • Provincial Education Standards Officer (PESO)
District level
<ul style="list-style-type: none"> • District Education Board Secretary (DEBS) • District Education Standards Officer (DESO) • District Resource Centre Coordinator (DRCC) • School In-service Coordinator (SIC) • Zonal In-service Coordinator (ZIC) • Community Welfare Assistance Committees (CWAC)
School-based participants
<ul style="list-style-type: none"> • Parents Teachers Association (PTA) • School Inclusion Team (SIT) • Teachers • Head Teacher (HT)

Pre-Service participants
<ul style="list-style-type: none"> • Teacher Training Colleges (TTCs) • Universities
DPO and NGO participants
<ul style="list-style-type: none"> • Zambia Association of Parents for Children with Disabilities (ZAPCD)

3.6. Details of activities in the field

3.6.1. Interviews

The consultant conducting the interviews adhered to NAD policies relating to ethical guidelines and safeguarding before visiting the programme. During the field work, semi-structured interviews were used with individuals such as HTs, MoGE officials, EENET staff, NAD staff and others identified in the interview sample.

3.6.2. Focus group discussions

Focus group discussions were conducted primarily with children with and without disabilities, teachers, parents, representatives from other education-focused NGOs, MoGE officials, and teacher training personnel. Focus group discussions were guided by the same semi-structured interview questions related to the inclusive education programme, and the review outcomes.

3.6.3. Questions

The consultant used guiding questions, based on the overall research objectives, to stimulate discussion during the interviews and focus group meetings. This enabled participants to focus on additional topics they considered to be relevant related to the inclusive education programme. See Appendix B for a full breakdown of questions used.

3.7. Presentation of the findings

At the end of the field work, preliminary findings were shared and discussed with the Zambian NAD managers during a half-day workshop at the NAD office in Livingstone on Thursday 3 October 2019. This workshop involved:

- Sharing of early feedback regarding the initial findings, with opportunity for discussion, and for NAD managers to offer alternative interpretations and fill remaining information gaps.
- Reflection on the key elements for a quality inclusive education programme, and which elements have been achieved or still need to be achieved in Zambia. This was based around the concept of inclusive education as a twin-track process.
- Reflection on what needs to be done and by whom (in subsequent years) to ensure that all the key elements for quality inclusive education continue and that the programme is sustainable after the completion of this programme.

4. Findings

This learning review had two broad objectives which were taken from the NAD ToR:

- First, to review the programme's theory of change;
- Second, to investigate practical matters regarding the planning, management, monitoring and documentation of the programme.

The findings of this learning review are presented according to each objective and include sub-questions. It is important to identify and document areas of the programme that are working well, so that they can be used as examples of successful case studies and a guide for best practice within Zambia as well as other countries and organisations wishing to provide similar training. Equally important is identifying and documenting challenges relating to the programme, and making suggestions on how these can be addressed and prevented. As there are six schools involved in the pilot programme, the learnings from this review will assist in strengthening the programme so that it can effectively be rolled out to other schools across Zambia. In addition, the findings can be used as a guide to other countries that are supported by NAD, and other stakeholders such as governments and NGOs who may want to implement the programme or similar programmes going forward.

A. Investigating the programme's theory of change

The teacher training programmes supported by NAD in both Zambia and Zanzibar were based on a simple theory for the most effective ways to bring about change with regard to building teacher capacity in inclusive education. The diagram in Appendix A summarises the main hypothesised pathway of change. Using the assumptions shown in this pathway, the following five areas were investigated in the Zambia inclusive education teacher training programme learning review:

1. The role of the teacher training programme and the success of the approach in building teachers' confidence and competence as inclusion-oriented problem-solvers
2. The role of the programme and the success of the approach in developing a cadre of confident, competent, innovative inclusion-oriented PTs
3. The role of the programme and the success of the approach in encouraging trainers to be actively involved in developing teacher training on inclusion, and to own the training and take responsibility for ongoing development, improvement and roll-out
4. Teachers work more inclusively and are better able to provide quality education when they work collaboratively with each other and with other stakeholders
5. Training on inclusive education at in-service level will not have sustainable positive effects in the education system unless there are accompanying changes happening within pre-service teacher training.

The review highlights key findings and analyses, and provides recommendations for improvements or changes in relation to these five areas.

The following section reviews the training programme from the perspective of addressing general teacher challenges. Teachers and other stakeholders working with teachers were asked about their confidence and competence to be inclusion-orientated problem-solvers.

4.1. Teacher confidence and competence as inclusion-orientated problem-solvers

This section examines the ToR question relating to whether teachers were willing and able to use the action-based research skills and problem-solving techniques that they had learned during the training in their own lives and teaching practice.

In order to assess the results of the teacher training programme, and the success of the approach to building teachers' confidence and competence as inclusion-orientated problem-solvers, the consultant aimed to answer the following questions:

- Does the in-service training designed and delivered through this programme enable teachers to become more confident and competent problem-solvers? If so, how does it achieve this?
- What evidence is there of increased or improved problem-solving by teachers? In what areas of their work has problem-solving increased or improved?
- What have been the results of teachers' increased or improved problem-solving?
- Are any of these results linked (or potentially linked) to improvements in presence, participation and/or achievement of diverse learners in schools, with a particular focus on learners with disabilities? What is the evidence?
- What examples or vignettes can we document that illustrate innovative, inclusion-oriented problem-solving by teachers?
- What evidence is there of teachers collaborating with each other and with other stakeholders (for example, parents, learners and DPOs) to identify and solve inclusion-related problems? What have been, or appear to be, the results of these collaborations?
- Is there evidence of teachers not improving or reporting that there is no improvement in problem-solving skills or confidence? What might be the reasons for this?

Data obtained from individual interviews and focus group discussions with teachers, PTs, as well as other stakeholders revealed the following improvements as a result of the programme.

Increased teacher confidence

The evidence suggested that gaining accurate information about disability through the teacher training programme made teachers a lot less fearful of disability. The participants felt they had developed a deeper understanding of disability and as a result they were more open to accepting a disabled learner in their classrooms. One teacher shared:

“Before, we thought disability was a curse, but now we know better.” (*Teacher*)

It also emerged that all the teachers from participating schools attended the training together. Consequently, they each felt part of a supportive team and that they could ask for

assistance from each other, their HTs and the PTs. The HTs from the six pilot schools, however, were deliberately not involved in training their own teachers, and were thus able to reflect more objectively on the changes they observed among teachers from different schools that they had trained. They reported that they could see the positive difference that the training had made to teachers from their own schools in terms of increasing their confidence and problem-solving skills.

The training was conducted in an interactive manner, as opposed to being trainer-led, and the teachers testified that this method helped them realise the skills and talents they already possessed. Furthermore, having the opportunity to share their experiences of implementing the skills they had gained from the previous training at the start of each new module, made teachers feel that their opinions mattered. The process gave them the confidence that they had something valuable to offer. It also encouraged and motivated them to start incorporating new skills, such as curriculum differentiation and using group work to enhance learning, in practical ways within their own classrooms. Teachers described how they had gained a better understanding of the different individual needs of their learners with disabilities, and how they were able to apply the new skills learned during their training to increase the participation and positive involvement of these learners. In turn, witnessing the positive effect on their learners' participation and involvement gave the teachers more confidence in their new-found abilities. The academic results reinforced this increase in learner participation. Teachers also reported that they felt more able and willing to conduct 'home-based' lessons for disabled and ill children in their communities, especially when they realised that these learners also had the right to access education. Overall, teachers felt more confident and competent, and were motivated to continue implanting the training programme.

The following section examines whether, as a result of the training, there was an increase in teachers' ability to use action-based research skills and problem-solving techniques within the six pilot schools.

4.1.1. Ability to use using action-based research skills and problem-solving techniques

Teachers shared that the training gave them the tools to be able to critically identify, prioritise, and deal with challenges in their communities and classrooms. They expressed that this process could be done individually as teachers, or collaboratively as a team, and how this process made them feel less overwhelmed and more willing to deal with issues:

“Before, we would just say, ‘it’s the Head Teacher’s responsibility.’ Or, ‘the Ministry must make the problem better.’ Now we understand that we have so much say and do. We know what our children and people need. We cannot sit back.” (Teacher)

Examples of challenges provided by teachers

During focus group discussions with teachers, they were asked to identify some of the challenges for them, the learners they teach, as well as those located within the communities that the learners come from. They were asked to include challenges relating to the six pilot schools, as well as schools not included in the programme. This was done to understand the extent to which teachers had acquired or developed inclusion-orientated problem-solving skills as a result of the training. By determining whether, or to what extent, stakeholders were aware of, and able to identify extrinsic and intrinsic barriers, the consultant would start to construct a picture of the results of the training programme. This is in line with the action-based research principles – which run throughout the programme – of being able to identify barriers, in order to prioritise and find solutions to challenging situations or problems.

Teachers were very reflective and highlighted the following general Zambian educational challenges, general school challenges, general learner challenges, learner with disability specific challenges, as well as general teacher challenges:

General Zambian challenges

A key prevailing challenge is that Zambia is currently experiencing one of its worst droughts in 50 years. Another key challenge at national level is that insufficient teaching posts have been allocated by the MoGE and this has resulted in big class sizes and many newly qualified teachers not being able to find work.

General school challenges

Inadequate teacher training and accessibility emerged as the two major challenges among schools in Zambia.

The participants explained how there were many teachers who have not been adequately trained in general teacher education methodologies, teaching strategies, and so on. Furthermore, newly qualified teachers did not have the skills that matched the real school environment. Coupled with this, teachers faced large class sizes, sometimes up to 70 learners, as well as a general lack of resources and teaching and learning materials within schools.

Teachers explained that from a built environmental point of view, many schools are simply physically inaccessible for many learners with disabilities, lacking facilities such as wheelchair ramps, suitable surfaces and accessible toilets. Furthermore, the natural environment also provides a challenge in the rainy season when rivers are difficult or impossible to cross. There may also be long distances between home and school and these factors negatively impact on learners being able to get to and from school.

General learner challenges

The participants described a range of learner challenges relating to health, culture, awareness of the importance of education, the environment and perceptions of other learners.

To begin with, many girl children experience early/arranged marriages, pregnancy and/or menstrual hygiene challenges which often results in their temporary or total dropout from school. On the other hand, some boy children drop out of school to look after their fathers' cattle, sheep and goats. These factors arise from a general lack of value placed on education by parents, many of whom had no formal education themselves. This has created a perception within the community that formal education is not important. Furthermore, learners who have already dropped out of school are sometimes idolised and seen as being 'cool' by other learners, which encourages them to drop out of school as well.

In terms of the environment, teachers noted that some areas have specific challenges which have led to increased dropout rates. For example, some schools are located close to border crossings and truck stops, bars and taverns with gambling machines and learners drop out from school to spend their time selling sweets to drivers and/or other activities, such as engaging in sex work.

Learners with disability-specific challenges

Teachers said there are many obstacles facing learners with disabilities. The main challenge related to prevailing attitudes towards people/learners with disabilities. To begin with, many parents held negative attitudes towards their children with disabilities and did not see the point in providing them with an education. This viewpoint extended to a number of schools who rejected learners who had a disability.

The participants also explained that there were a number of special schools for learners with disabilities but most of these were full and had long waiting lists. Furthermore, these schools were often far from the families and communities of learners with disabilities and therefore it was expensive (transport, food and hostel fees) for parents to send them there. For example, in all three pilot districts where the six pilot schools are located (namely Kazungula, Livingstone and Zimba), not one has a special school. In the whole of the Kazungula district, there is only one unit class located in a mainstream school at the far end of the district.

It also emerged that people with disabilities who had completed their education at vocational schools struggled to find employment as a result of stigma towards their disability, especially if they had an intellectual, learning or psychosocial disability. Consequently, there were few, if any, positive role models who could motivate learners with disabilities to study hard towards becoming a professional such as a doctor or teacher.

Finally, teachers found that among the learners with disabilities who were accepted to inclusive schools (not those within the six school pilots), many experienced stigma and separation within the school, and were also bullied and teased by fellow learners during class and playtime.

General family challenges

The participants described a range of challenges, relating to education and external factors that had a direct impact on the families of learners with disabilities. To begin with,

despite 'Free Education' legislation being passed, schools do not get the same funding from the MoGE that they previously received. As a result, PTAs have to collect money from parents and those who do not pay, do not get the report cards of their children, who may also be asked to leave the school if payments are not made.

Looking at external factors, teachers explained that the impact of the prolonged drought has led to an increase in arranged marriages because parents wanted to obtain *lobola* (the dowry of the bride) and livestock in exchange for their daughters. Several civic and traditional leaders as well as paralegal officers are actively making punitive measures to discourage early marriage in different chiefdoms. Other factors included parents and their families fleeing neighbouring countries as refugees, as well as the impact of HIV/AIDS, where parents may be ill and families are headed by children. Finally, and also relating to prevailing attitudes described earlier, some parents feel ashamed about having a child with a disability and hide them from public.

General teacher challenges

Teacher-related challenges mentioned during the review included inadequate training and prevailing attitudes towards disability. Many teachers still hold a negative view towards learners with disabilities. Some of them were fearful, believing that disability was a curse. Other teachers believe that learners with disabilities have no place in inclusive schools and must stay in special schools where they could be taught by specialist teachers.

Irrespective of their attitudes towards learners with disabilities, it emerged from the respondents that they think most teachers, particularly in non-pilot schools, simply did not have the skills and/or confidence to meet the needs of all learners in their class. Furthermore, most teachers were using teacher-led methodologies within the class and they urgently required training on learner-centred methodologies and best practice.

Pilot school challenges

When it came to identifying specific challenges relating to the six pilot schools, teachers provided many examples, including:

The need to improvise handles on toilet covers; need for additional toilets (the ratio of learners to toilet in one school was 51:1); high learner to book ratios, with eight learners sharing one book at Luyaba School; erratic water supply in some of the pilot schools; inadequate teaching materials and resources (i.e. no blackboards in certain classrooms, or repainting of faded blackboard required at Nakowa Combined School); lack of desks and chairs in some classrooms for both teachers and learners (the majority of the 64 learners in a grade 4 class at Luyaba Primary were required to sit on the cement floor); high absenteeism rates in some classes (22 learners were absent from one class at Katapazi School); a lack of sign language training and Braille materials for teachers; large cracks in cement floors in some classrooms become a tripping hazard; while ramps had been built, giving learners access to certain classrooms, many administrative areas and offices still remained inaccessible to wheelchairs users.

"There is no electricity in some classrooms, making it difficult for learners who have challenges with sight." (*Teacher*)

The many identified issues demonstrate that teachers were well aware of the challenges facing Zambia, schools, teachers, families and communities, that impact on the education of all learners. The range of challenges they identified indicated that they are aware of the numerous systemic barriers to inclusion and do not purely locate challenges within individual learners. This is in line with global interpretations of inclusive education, including the UNCRPD and the Salamanca Statement, that were both discussed earlier in this report. In addition, the range of ideas and solutions offered by stakeholders during the review shows that teachers have developed a solid familiarity with action-based research techniques.

Teachers spoke of how they were more willing to use action-based research skills, as they had applied the skills practically during multiple activities within the training, and observed and experienced the benefits. They noted that the practical activities included in the training assisted in building their confidence, which motivated them to use the skills in their classrooms as well as during their daily lives. Teachers reflected on action-based research:

“I could see it working. It wasn’t just from a book, or just reading about it. We did it and experienced it and saw it work.”

“At first we were nervous about trying new things. Especially those of us who have been teaching for many years. The training made us use the new ways. We had to try. Now we see it working and use them in our classrooms.”

As a result of the action-based research techniques taught during the training, teachers shared that they now took ownership of situations that they previously would have passed on to others ‘more qualified’ than them, or who were deemed to be the specialists (i.e. the Specialist Teachers).

“I now understand that it is my responsibility to make sure the children in my community get help. We now do home visits to children in our communities and they are so happy to see us. We feel important and it makes my heart happy to help those who can’t come to school.”

PTs noted that the teachers were more willing to try new things and that they observed, as the training progressed, an improvement in teacher participation and involvement in the training. They attributed this to the problem-solving skill activities included in the training.

“They [teachers] saw how important they were in making decisions, not just leaving them to their Head Teachers or Ministry to make better.”

When asked if they had any ideas for trying other techniques, and if they were willing to try to implement these in their classrooms, teachers shared that they did not feel the need to, and were focussing on implementing and gaining confidence in the current ones they had recently learned about. However, they were open to trying new techniques.

The following section relates to the ToR question examining whether, as a result of the training, teachers collaborate with each other, as well as other stakeholders.

4.1.2. Collaboration

Teachers were asked if they collaborated with each other as well as other stakeholders (including parents, learners and DPOs) to identify and solve inclusion-related problems, and what they felt the results and impacts of these collaborations were. In addition, the

consultant was interested in determining if there was evidence of teachers not improving in problem-solving skills and confidence, and if so, what the reasons might be for this.

Teachers shared that because they were encouraged to collaborate with each other during the training sessions, they gained an understanding of their own, as well as their colleagues', strengths and challenges:

“We now know who is stronger at certain areas, so we call on them to help.”

However, some PTs felt that while the teachers they had trained were more willing to collaborate, others felt that more time was needed to fully assess the teachers' collaboration skills. One PT team shared that this was an area that the teachers from their pilot school still found challenging, but that they were hopeful that this would improve as teachers gained confidence.

One concern raised by PTs working in one school, was the issue of the school's high staff turnover. They spoke of the need to spend substantial time at the start of each new module, re-capping the previous module content with new teachers. While the programme makes provision for new staff members attending the training, some PTs shared that those teachers already trained, together with the newly appointed School IECos, should be working with new teachers in between modules by training and supporting them. During school visits, the consultant observed that in some schools this was not taking place and that it placed additional challenges and pressure on the PT teams.

When it came to collaborating with other stakeholders outside the school environment, some teachers were quick to state that they required the skills that certain stakeholders could offer in supporting some of the learners in their classes, but admitted that they had not made an attempt to make contact. An issue raised several times was the lack of Zambian Sign Language and Braille reading skills. Many teachers noted that not being able to sign or understand Braille was a challenge when trying to accommodate Deaf and visually impaired children. When asked whether they had sought assistance from the MoGE or DPOs who support Deaf and visually impaired people, all admitted that they had not. They had also not attempted to find sign language resources in the form of books or electronic resources.

However, during interviews and discussions, it became apparent that all of the pilot schools have been actively supported by their local communities which was one of the reasons that they were selected to be part of the programme. Examples of collaboration included:

- The teachers from Nakowa work with a private commercial farmer who assists with providing transport for some of their learners who reside far from the school.
- Shungu has partnered with an international airline carrier who sponsored computers.
- Nakatindi has partnered with a hotel group for funding, as well as having partnered with a British charity that provides bicycles to assist with learners travelling long distances to get to school.
- International charities have also assisted schools with food and nutritional training, classroom and laboratory construction as well as sponsorship of a school bus.

- NAD partners working near pilot schools (ZAPCD, Zambia Association on Employment for Persons with Disabilities (ZAEPD), Archie Hinchcliffe Disability Intervention (AHDl), etc) have formed parents support groups that support parents to take their learners to school, provide basic and localised physiotherapy services within their communities.

Participants, including NAD staff and SITs, noted significant improvements as a result of training partners (including ZAPCD, ZAEPD, AHDl) and SITs. This can be seen, for example, in the development of parent support groups as well as better collaboration between health care workers and parents of children with disabilities. Parents of children with disabilities shared that, while sensitisation was difficult, they could see a positive change in how their local communities treated their children.

The following section relates to whether there was improved presence, participation and achievement of children with disabilities in the classes where teachers had received training within the six selected pilot schools. This can help to indicate the extent to which teachers have developed and started to use practical problem-solving skills.

4.1.3. Improved presence, participation and achievement

Stakeholders, including teachers, HTs, MoGE officers, SIT members, parents, DPOs and NGOs were asked whether, as a result of the problem-solving skills taught during the training programme, they felt there had been an improvement in the presence, participation and achievement of children with disabilities in the six pilot schools. Statistics obtained from the baseline study conducted in 2015/2016 before the programme began, together with data obtained by the Zambia NAD office from each of the pilot schools illustrates the improved presence of learners with disabilities in the six pilot schools (see below). It should be noted that the decline from 322 to 257 learners with disabilities between 2018 and 2019 does not demonstrate a failure of the programme. It highlights that inclusion is a slow process and that there will inevitably be increases and decreases in learner numbers along the way, for many reasons.

Number of learners with disabilities enrolled at each pilot school

Pilot School	Baseline 2015/6			2017			2018			2019		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Shungu	13	11	24	58	69	127	61	71	132	33	31	64
Nakatindi	9	13	22	40	45	85	17	13	30	25	21	46
Luyaba	10	14	24	18	25	43	14	7	21	18	10	28
Nakowa	7	5	12	7	5	12	35	22	57	13	18	31
Riverview	12	15	27	15	18	33	23	32	55	25	36	61
Katapazi	7	11	18	7	11	18	15	12	27	8	19	27
	58	69	127	145	173	318	165	157	322	122	135	257

Presence

The enrolment statistics indicated a general increase in the number of children with disabilities, as well as those who were re-enrolled after dropping out. The evidence suggests

that this is a result of improved education about the rights of children with disabilities, as well as sensitisation to disability conducted by SIT members and parent organisations within their communities. Teachers also reported that they had become open to accepting and accommodating learners with disabilities in their classrooms.

However, attendance had not improved everywhere. In the Nakowa Combined School monitoring visit report, high absenteeism was highlighted as a major concern:

“In a class of 41 learners, 10 boys and two girls were absent on day of visit. This is about 29% absenteeism.”

This review also discovered that in some schools, learner presence was negatively impacted by the Mukanda traditional coming-of-age ceremony that male learners are required to attend for approximately six months. According to Senior NAD staff, in 2019, the Mukanda tradition in Livingstone was discouraged by government, in consultation with traditionalists, until a common solution was found to safeguard the education and health of those being initiated. During an intervention programme instigated by teachers at one of the pilot schools, teachers who tried to follow up with these boy learners reported that they were confronted with,

“resistance and threats towards the teachers.” (*Teacher*)

During interviews, Mukunda was specifically highlighted as an issue that PTs have been speaking about for the last three years as it negatively impacts on some boys’ schooling.

Participation

The review found a generally positive increase in the participation of learners with disabilities in the pilot schools. To begin with, information contained in observer reports stated that learners with disabilities were participating in all aspects of schooling. Photographs showed examples of learners sitting, using apparatuses, playing and learning with learners without disabilities. In some of the pilot schools, during the lunch break and after school, the consultant also observed many children with disabilities participating and interacting with their friends and not being isolated or excluded in separate areas or classrooms. It should be noted that unfortunately, this observation only took place in the playground and not during teaching because the trained teachers were all participating in training at the time of the consultant’s visit, so she was unable to observe teachers in class teaching.

It was encouraging that other review participants, not employed by the MoGE, noted a marked increase in inter-learner participation in the playground, between classes, as well as walking to and from school. However, a number of Deputy HTs, SESOs and DESOs shared that they still have a way to go towards increasing the academic participation of learners with disabilities in all schools, including those in the six pilot schools.

Achievement

From an inclusive education view, it is important, when examining learner achievement, to focus not only on formal tests, assessments and examinations, but also on day-to-day learner achievement. It is for these reasons that the findings have been separated into

formal academic achievements (relating to formal tests, assessments and examinations), and day-to-day achievements.

Formal academic achievements

The review did not uncover any significant improvements relating to formal learner achievements. However, it is important to note that the programme is still very new and therefore it would be unreasonable to expect any notable changes in the academic results of learners with disabilities. It is also important to note that the rest of the education system has not yet accommodated their individual needs. In that regard, a lack of budget allocation and funding has meant that not all learners with disabilities have access to the assistive devices that they require, this includes both individual devices as well as education materials.

“Assessment is still challenging due to a lack of resources. Braille paper as it is too expensive, there are no computers, and not all Ministries fully are understanding or supporting accommodations especially during examinations and tests.” (*DEBS comment*)

There was also still confusion surrounding accommodations for examinations, such as providing adapted examination papers, allocating additional time and separate assessment venues for examinations, or providing the optional services of a scribe and/or reader, as well as oral examinations. A number of the participants explained that MoGE officials were still unclear about exactly what was required for these accommodations and also highlighted the need to adapt assessments, examinations (particularly the National Examinations) and tests.

“We still have a way to go to get it right.” (*HT who was a PT*)

“We need to adapt them to make them more learner friendly.” (*ESO who was responsible for assessments and examinations*)

According to a Senior NAD staff member,

“Clarity on academic assessments has been clear for many years in special schools and units; clarity in inclusive school is gradually becoming clear as well. Schools need to complete some forms to notify the authorities on the learners with disabilities they have, main difficulties they face and how it affects their learning, etc. The challenge with assessments being done currently is that they are focussed on ‘medical approach’ rather than rights approach, etc.”

This statement above demonstrates while there are tools available, in some instances staff are not using the tools, while others are not aware that they exist.

However, it was encouraging to see that some participants felt that change was beginning to happen at systemic level and this is testament to the success and positive impact of the training programme so far.

“We are starting to see a paradigm shift from National to District filtering down to schools.” (*PT*)

Furthermore, a number of ESOs exhibited a good understanding of the processes needed for providing assessment accommodations, while DEBS officers shared the importance of early identification and prioritising immediate support as an intervention within inclusive education.

“We need to ensure that full assessments of individual learners take place first so that we understand their individual needs. We cannot give all learners with disabilities the same accommodations. We need to tailor them to the individuals’ needs.” (ESO)

“The difficulty happens if no early intervention is given. We need to assess and identify learners early. All stakeholders need to work together to ensure that this happens.” (DEBS officer)

Day-to-day learner achievement

Within an inclusive education framework, day-to-day learner achievement should be included in learner achievement.^{20 21} This could include activities such as learners narrating the events of the day, or illustrating a story using drawings instead of words. It is important that teachers in the pilot schools use the skills they learned from the module dealing with developing Individual Education Plans (IEPs) for learners requiring additional support. Here, they are required to establish what the learner is able to do and what they find difficult, and develop a plan to assist them in achieving appropriate learning goals. During interviews with teachers, they were able to inform the consultant of what these were. According to some reports from trainers and feedback given to the presenters after the training sessions, some progress has been reported in this area.

Reflections

Evidence suggests that there has been an increase in teacher confidence and competence and that they have gained skills for using inclusive teaching methodologies. The fact that teachers are able to use, and some appear to be routinely using, action-based research skills in their teaching and planning (from identifying, to prioritising, and finding possible collaborative solutions to challenges) indicates that the training process developed by NAD and EENET is making progress towards the desired change posited in the theory of change. Rather than just being able to repeat facts learned in a workshop – as often happens in traditional cascade trainings – the teachers here, who have engaged in long-term action-oriented training, appear more able and confident to turn ideas into useful changes that benefit their learners.

Teachers appear to be collaborating well among themselves as well as with their PTs and SITs, to make practical changes to support learners. While partnerships have been seen within the pilot schools, their local communities as well as international charities, it is important that these relationships are fostered and new partnerships are developed in order to be sustainable. Without sustainable partnerships, the long-term progress may be limited. In critiquing this progress gap, however, it must be remembered that the training programme is still relatively new and that most teachers probably do not have existing experience of reaching out to non-school actors for help with teaching and supporting their learners. This could be a new way of working for most teachers and the practicalities of how to do it may be unclear. It also potentially reveals to the outside world that teachers have knowledge and skill gaps – something they may be nervous to do. Inevitably, therefore, such collaborations between teachers and external actors need

²⁰ Zheng, C., Gaumer Erickson, A., Kingston, N.M., & Noonan, P.M. (2014). The relationship among self-determination, self-concept, and academic achievement for students with learning disabilities. *Journal of Learning Disabilities, 47*(5), 462-474.

²¹ Miciak, J., Taylor, W.P., Denton, C.A. & Fletcher, J.M. (2015). The effect of achievement test selection on identification of learning disabilities within a pattern of strengths and weaknesses framework. *School Psychology Quarterly, 30*(3), 321.

more time and support to evolve than has been available in the life of the programme so far.

Enrolment statistics show that there has been an increase in the presence of learners with disabilities in the pilot schools. For many inclusive education programmes this numerical change is the end goal. However, the NAD programme set itself more comprehensive quality-change related goals, beyond access. The information and photographs from observer reports and data obtained during interviews, point to some improved participation of learners with disabilities since the teacher training programme started. However, teachers still find it challenging to support all learners' participation and ensure they have well-rounded achievement. This is not surprising given that a training programme like the NAD/EENET training can only go so far with equipping teachers with new teaching and assessment skills. Foundations for innovative teaching practice are laid and strengthened through teachers' core training, which this programme does not have the mandate to reform (despite making in-roads into influencing change in pre-service training – see Section 4.5). In-service teachers will inevitably need ongoing support and further learning and training opportunities to help 'underpin' any foundations that were not fully laid during their pre-service training.

Recommendations relating to developing a cadre of problem-solving inclusive teachers

Keep promoting reflection, learning and sharing

Inclusion-oriented problem-solving needs to become a culture in schools, not just something that teachers learn to do during a training. There is evidence that the pilot schools are developing such a culture, but to keep moving forward with changes to presence, participation and achievement, teachers, HTs, school IECos and SITs need to be supported and encouraged to keep reflecting on and tracking their practice, recording and sharing what is working and in what areas they need more support. NAD/EENET may be able to continue offering action-research related support to schools via the provision of ongoing technical support and mentoring to the PTs. Additional mechanisms for motivating school stakeholders to reflect, learn and share could also be developed (collaboratively with the PTs) in the next or future phases. This might include encouraging greater use of online/social media platforms or providing small funds for periodic mini-symposia (like the national one that happens every year, but cluster/zonal or district level instead). There could even be support for a zonal/district newsletter or similar which offers school stakeholders an opportunity to share their experiences of being inclusion problem-solvers. Options for more self-study and peer-study activities, to supplement the module-based training, could also be explored (and co-designed with PTs), so that the module training becomes just an initial step in a life-long journey of professional learning about inclusion for the teachers.

Keep filling training gaps

DRCCs in charge of in-service teacher training in each district need to ensure that new teachers who start working in the pilot schools have access to the inclusive education training modules, and that all teachers receive refresher training so that they do not lose the skills or confidence acquired so far. NAD can advocate for DRCCs to take greater

responsibility for this role, so that school IECos and PTs alone are not shouldering the challenge of training newcomers in participating schools.

Keep developing SITs

The evidence suggests that SITs are playing a useful role in supporting inclusive education-related change at school community level. It also indicates that SITs are still new and 'finding their feet' and so they still have the potential to do far more in terms of creating awareness of disability, educational rights and importance of education; linking with community-based resources that can help improve schools; supporting and encouraging parents of children with disabilities to bring their children to school; encouraging learners who have dropped out to return to school; and solving diverse challenges faced by learners within their communities. NAD/EENET should continue to monitor SITs, via the school IECos and PTs, to understand how their roles are evolving, the challenges they are addressing and what ongoing capacity needs the SIT members have in order to perform their inclusion problem-solving role better. NAD/EENET could then support ways to fill these capacity gaps, either through direct assistance or advocating for other actors to assist.

Keep promoting and demonstrating collaboration

Collaboration is vital between teachers, SITs, school IECos and other relevant stakeholders such as those from NGOs, DPOs, universities and TTCs who can provide specialist support, knowledge, training, advice as well as materials and devices. To improve this wider collaboration, NAD can take direct action to help facilitate connections and relationships, and it can take less direct action by supporting teachers to develop their own outreach skills and confidence. Directly, NAD could inform DPOs with which it works or has connections about the teacher training programme, and encourage – or directly facilitate – them to start engaging with the participating schools (e.g. by offering teachers Zambian Sign Language training and guidance on obtaining and using assistive devices; by facilitating links with TTCs offering skills to assist learners with learning disabilities; and by facilitating links with parent organisations so teachers can learn about possible home-based programmes for learners unable to attend school). NAD could also support PTs, SITs, school IECos, DRCCs, etc, to develop local resource databases, listing DPOs, NGOs, private and other entities that have relevant skills and resources for schools to draw on when tackling inclusion challenges.

Indirectly, NAD/EENET could review the training modules to see if/where more explicit or supportive messages and advice could be provided to guide teachers on making links with external support systems. There might be additional small training or action research activities that could be added, which specifically focus on helping teachers, SITs and school IECos to build useful relationships with DPOs, NGOs and other actors.

Keep collecting data

In order to understand whether and to what extent the teacher training is helping teachers to become effective problem-solvers who make appropriate changes towards inclusion, data needs to be regularly collected and analysed – beyond the life of the pilot period. This could include disaggregated data on (re)enrolments, on absenteeism (among learners and teachers), on staff turnover, on academic and non-academic achievement

standards, on learner, teacher and parent satisfaction, and so on. On a basic level, school-level data helps those in the school to remember what they have done and recognise the changes and impacts they are having. Such data can also help NAD and others to keep advocating (with government and non-government stakeholders) for this sort of longer-term practice-based teacher training to become the norm. The data could keep illustrating that this sort of training approach contributes to change in school-based practice more concretely than other types of in-service training. Evidence and case studies can inform and motivate District, Provincial and National MoGE officials and stakeholders in other schools/districts who may need reassurance that the teacher training approach will work, that it is cost-effective, that it can be budgeted for, etc. NAD can take a lead in ensuring there are mechanisms in place for documenting data and case studies in participating schools, but also ensure that PTs, SITs, school IECos, DRCCs, etc, embrace their vital ongoing role as data collectors and documenters.

Support teachers to advocate for changes they have identified but cannot fully implement themselves

Through action research, teachers identify diverse challenges, many of which have solutions beyond their power, such as reforming the system for examinations and assessment. Training teachers to be problem-solvers can leave them frustrated if there are lots of problems they feel they cannot do anything about.²² NAD/EENET can play a role in supporting stakeholders within participating schools to take these sorts of problems to the next level. For example, while NAD supports school/community-led advocacy through their national inclusive education symposiums, the MoGE still need to examine and re-look at the exam and assessment system changes that are required to fairly and accurately assess all learners. While the teachers based in the pilot schools are aware of the importance of non-formal assessments and measuring learners' day-to-day achievements, the MoGE still need to show commitment and support teachers using this form of assessment. NAD could also collaborate with other education actors (e.g. mainstream NGOs) on advocacy and on training (or pushing for the training of) all levels of MoGE regarding learner-centred, inclusive assessment and exams. Similarly, NAD could support participating schools to engage in advocacy and outreach to secure funding or other assistance in relation to the provision of assistive devices for their learners, since lack of devices and equipment may be a challenge that teachers identify and then feel demotivated by being unable to solve themselves. This all connects with supporting teachers, SITs, school IECos, etc, to improve their collaboration skills and confidence.

The following section discusses whether, as a result of the training, there has been an increase in the overall confidence, competence, innovation and problem-solving skills among the six teacher training PT teams.

²²The new DPO capacity building on inclusive education that will be developed over the next two years in Uganda (under the Norwegian consortium Together for Inclusion programme) aims to address this, through making sure that DPOs are well versed in what inclusive education is and/or can become, and can help advocate for necessary system changes identified at school level

4.2. The role of the programme and the success of the approach in developing a cadre of confident, competent, innovative inclusion-oriented Principal Trainers

To examine whether there had been an improvement in PTs, the following questions were asked during interviews and focus group discussions:

- Are the PTs considered to be and/or do they consider themselves to be confident, competent and/or innovative with regard to providing in-service training on inclusive education? To what extent? What evidence supports this? What evidence do they cite?
- In what areas are PTs still lacking confidence, competence and/or innovation regarding their role in providing in-service training on inclusive education?
- Is there evidence that PTs understand and embed action-based research principles into the in-service teacher training and teacher professional development that they facilitate and monitor?
- Do teachers feel they are receiving in-service training that motivates them to be inclusive and/or that helps them to build their inclusion-oriented problem-solving skills? Why or why not?
- What do teachers think about the PTs (their skills, approach to facilitation, and so on) and the training?

4.2.1. Confidence, competence and innovation

Stakeholders were asked to reflect on the composition and suitability of the PT teams. They highlighted that the PT teams were a factor in the success of the programme. PTs noted that the composition of the PT teams helped to increase their confidence, competency and innovation because they could learn together, observe each other train, identify each other's strengths and weaknesses, and plan their training sessions more effectively. MoGE officials and NAD managers explained that PT group members were carefully selected based on each trainer's qualifications, experience and attitude. Selection also ensured representation from various stakeholder groups.

"They are from all areas. From pre-service, in-service, to schools and Ministry." (*DEBS officer*)

"They have a mixture of differing people. Not just all from the Ministry." (*Teacher*)

One HT who was one of the PTs explained that she was now able to use problem-solving skills acquired during the training in her own school, and remarked on how this was working well. Another group of teachers felt that having a teacher in the team of PTs was beneficial:

"having her [teacher] as part of the trainers was good. We listened to her as she is just like us. I mean, she deals with the same issues in her school that we are going through."

The responses from a range of participants revealed that as a result of the programme, PTs felt, and were perceived by others, as being more confident, competent, innovative, and thus better inclusion-orientated trainers and problem-solvers. A number of schools were approaching the PTs for advice, regarding them as 'inclusion specialists'. It was also encouraging that MoGE officers at various levels and departments recognised that PTs were able to add value to the inclusion process.

This newfound respect and value among the various stakeholders and their communities had a significant impact on the self-esteem of the PTs and they took on the responsibility of their role with pride.

“They see us as a resource and ask us questions that they wouldn’t have done before.” (PT member)

“We are now seen as champions. We have been invested upon.” (PT member)

A teacher who was a member of a PT team shared that being selected to train other teachers:

“...made me feel so important and made me feel valued and special. It really boosted my confidence. We don’t get paid and it takes time and much energy, but it is so worth it. I have got so many new skills.”

Lecturers at TTCs and universities also explained how they felt more confident to implement new skills in their own lectures after attending PT training, or having witnessed the training being conducted by the EENET Consultant with their students and the consequent benefits.

Competency

Besides a significant increase in confidence, PTs also shared that the skills they acquired – through participating in the interactive training facilitated by the EENET Consultant, facilitating the training with the teachers in the pilot schools, and developing and critiquing the training modules – all combined to improve their competence in two key areas. Firstly, it improved their competency as trainers, and secondly, it gave them the tools to deal with the daily challenges of their working environment.

The PT teams were purposefully representative of different sectors, including pre-service teacher training, in-service teacher training, various departments and specialities within the MoGE (such as curriculum and assessments), and some were school-based, e.g. the pilot school HTs. This meant that they were able to understand each of their different roles and responsibilities in supporting the inclusive process. Working together as a team allowed them to establish each other’s individual skills and competencies, which proved to be beneficial in the training as well as understanding who to contact when the need arises.

“Working together as a team, we know each other’s strengths, so during training, we know who is better at [giving] ice-breakers, facilitating activities and doing presentations. It works really, really well. We are a great, strong team.”

During interviews, PTs expressed that, while some of them did not have ‘formal specialist inclusive skills’ or ‘special education qualifications’ at the start of the training, that they felt confident to develop the modules, present the training, as well as implement the skills.

“[PTs] were purposefully selected based on their personalities, willingness to learn, lead, and influence others. They were not selected based on their qualifications or experience with ‘Special Needs’ or disability.” (NAD Senior Manager)

Stakeholders expressed that they felt that PTs were motivated and willing to try new approaches, adapting certain activities, based on the needs of the teachers in their pilot schools. While some PTs expressed that it was challenging to inspire some teachers (especially those who had special education qualifications) to make the shift from special

education to inclusive education, they remained positive and certain that change was possible:

“... of all those we train, the ones with special education backgrounds were the most difficult to train. They had such set ideas. They kept saying, ‘what about the special needs children?’, ‘they [children with disabilities] cannot do this’, or ‘special schools are important and have their place in inclusive education’.” (PT)

Another PT who was a lecturer, shared that this was the same at her TTC where the lecturers with the special education background were,

“...resistant to change and worried that they would lose their jobs and their power.”

As a result of the skills they had acquired during the PT training, lecturers from TTCs and universities felt more competent and confident to use the skills learned in their own lectures. They shared that observing their third or final/fourth-year students, after these students had received the three-day training session, gave them (the lecturers) additional confidence to try implementing new inclusive teaching ideas they recalled from their own training. Lecturers reported that seeing the positive impact the training had on their students, and how enthusiastic and motivated they were to use the skills with children during their teaching practice in schools, as well as when they had qualified, was an additional motivator. A number of lecturers shared that the training encouraged them to build relationships with their students to understand their needs. This, they said, would be useful going forward, as they would be better able to teach students and meet their learning needs.

“As a result of the training, I decided to try get to know my students. This is difficult, as lecturers you are expected to build a wall between yourself and your students. They mustn’t get too close. I took one of my students who had been failing my course aside. I asked her how she was doing. I was surprised when she shared that she was a refugee and that English was very, very difficult for her. I felt so bad as I only saw her failure. I never made the time to understand why. Unfortunately, it is too late for her, but going forward, I will make the effort to understand my students and how I can best help them.” (Lecturer)

When asked whether they felt the recent ‘downsizing’ and ‘restructuring’ of the PT core teams supporting each school was appropriate, there was overwhelming support for this move. PT team members expressed that this was a good thing, as,

“... it weeded out some of those less motivated and productive members.”

Others mentioned that,

“... smaller is better. Some were doing nothing, didn’t fully commit, just give excuses for not coming.”

Another participant expressed how the teachers at his pilot school spoke of how they preferred having a smaller group of PTs as they developed a closer bond and relationship of trust.

Innovation

Several PTs who were not teachers in the pilot schools shared that they were implementing some of the learning skills that they learned during the PT training in their own working environments. For example, a lecturer at a TTC shared how, as a result of the PT training, he is trying new teaching methods with his students and how he feels this benefits him, as well

as his students. He hoped that his students would follow his example and apply these skills in their own classrooms after they graduate as newly qualified teachers.

A Deputy HT of a school that is not included in the six pilot schools, who works as an Observer, shared how she felt that she could not wait for the MoGE to officially select her school to be a part of the future training programme. She saw the benefits of the programme for the pilot school she monitors and supports, and how much the school was transforming. Consequently, she started implementing the new skills she learned from the programme in her own teaching, as well as informally training other teachers in her school, and noted how they were also benefitting.

Challenges to building confidence, competence and innovation among PTs

During interviews with PTs and a few other stakeholders, some mentioned that they were concerned about the capacity of all PTs. While they were passionate and motivated to conduct the training, they noted that it involves planning, additional work and time away from their families, and they were required to simultaneously complete their 'day jobs', which they were paid to do (i.e. lecturer at a TTC or university, or manage a school as a HT). At times there were,

“... clashes at work. We expect them [PTs] to come to training but they have to work. They have pressure from their universities, colleges or within the Ministry.” (*Ministry official*)

Some stakeholders were concerned by the challenge surrounding some PTs' commitment to conduct trainings in schools. While all training dates were carefully planned months in advance to ensure full participation of the PTs in the team and to ensure timing was suitable for schools (i.e. no clashes with examinations, public holidays, and so on), some PTs still withdrew from conducting trainings at the last minute. When asked for possible reasons for this, respondents noted several possibilities:

“It could be because of communication challenges with their managers back at work who may have forgotten that they committed, or from poor time management. Maybe they forgot to put it in their diary, or possibly 'turf-war' or professional jealousy.” (*Training participant*)

While the composition of the PT groups was carefully and purposefully selected, the programme also allowed for flexibility and changes to the PTs as required. For example, the original whole group of PTs totalled 27 members. However, over the four-year period, some members were replaced as they left their jobs or died, some were moved from being part of the core PTs to different roles based on their performance and skill sets within the programme, and some, such as additional lecturers, joined when initial observations noted the need to strengthen the important role of pre-service pedagogues (methodologists) in the sustainability of the programme. Seven of the original PT group left, and of these, six left to become mentors to the observers. The reasons for PTs leaving or for being replaced were varied. Some PTs shared that some members were not as committed as was required, were not performing their roles or duties adequately, some had better talents that could be used in other areas of the programme (i.e. training of monitors (e.g. the observers)), while others found the additional workload of having to balance their regular jobs with the additional commitments as PTs challenging.

The flexibility and downsizing of the PT group illustrated how the PTs, together with relevant stakeholders such as the Zambian NAD team and the EENET Consultant, developed suitable

reactive solutions when change to the PTs became necessary. An example of this was where a PT member who was an MoGE official was moved from her current position within her district, to another district that was further away. Collectively it was decided that she would no longer be able to fully commit to her PT role and therefore she stepped down as a PT member. However, this was not a significant loss, rather she would be able to share her knowledge and experience of the programme in other districts and possibly play a role in the future roll-out of the programme.

The following section examines the PTs' understanding of the action-based research principles and the extent to which they or other stakeholders feel that they have been effective in implementing these principles in their training of teachers.

4.2.2. Understanding of action-based research principles

Interviews with PTs showed that they clearly understood the action-based research principles. For instance:

“it is about identifying the difficult areas, deciding which are the most important to deal with, and then coming up with a plan to fix them.”

They spoke about the need to collaborate to find solutions to identified challenges:

“The training has shown us how we must all work together and that we are all important in finding solutions to our country's challenges.”

When asked if they could share some examples from the training, PTs were all able to provide practical and school-specific examples. They were able to include examples of barriers and challenges from various areas, including school, learner, family and community, and provide suggestions that were context-specific and achievable. Some examples included the need to collaborate with other stakeholders:

“We now understand that we can make a difference and help if we work together. We didn't do that before [the programme] but now we see how important everyone is.” (PT)

“We all have differing strengths and sometimes others in our group are better at giving certain training. They have better examples that they can use to help teachers understand.” (PT who is a HT)

While PTs were able to share how they used action-based research principles during their training with teachers, they also spoke of how they were using the principles in their own workplaces. A lecturer from a TTC shared how she used this in getting the inclusive education training into the curriculum at her institution. Others from a university shared,

“I can now see how the skills can help me with my students in my lectures. They [students] are responding and taking ownership of their own studies.”

“Yes, me too. One of my students told me they are going to use action research when they do their practical teaching next year in schools. They can see the benefits and want to try use it.”

During focus group discussions with teacher training students in colleges, they confirmed that they wished to use the principles they had been taught in their future teaching practice.

The examples cited show that PTs not only understand the action-based research principles but see the positive benefits to the teachers they train in the pilot schools, as well as in their

workplace environments. In addition, teachers felt that the composition and skills of the PTs was appropriate.

Reflections

The evidence indicates there has been an increase in PT confidence, competence and innovation. They have gained skills and inclusive teaching methodologies and an understanding of their own and other PTs' strengths, developed improved 'status' among their peers, and improved their ability to use the skills in their own workplaces. This offers a contrast with many in-service teacher training programmes through which rapid cascade style approaches leave the 'master trainers' barely more than one step ahead of the teachers and only able to repeat what the training module says. In the NAD/EENET approach, trainers are developing the capacity to take technical control over trainings, which is a positive sign for sustainability longer term – trainers are more likely to have the skills and will to improve teacher training without external assistance.

Perhaps inevitably, the more intensive and hands-on role of the PTs, which is bringing noticeable benefits in terms of training outcomes, is also bringing some challenges, not least the difficulty of PTs fulfilling their training roles whilst maintaining their regular workplace duties and responsibilities. The extra workload carried by 'master trainers' is a common problem in many training programmes, and the PTs here are doing far more work than a typical cascade training 'master trainer'. It may be a sign of the high calibre of the PTs and the quality of the training approach that so many PTs have kept going with the work despite the extra workloads and challenge of balancing commitments. But it is important that PTs' dedication is not taken for granted.

The PTs appear to have developed a good understanding of action-based research and use it in their teacher training. The fact that they are also using it in their own teaching, lecturing and planning in their workplaces, beyond the NAD training programme, indicates the extent to which the PTs have recognised the benefits of working in such a critically reflective and analytical way. It also indicates that the training approach has been successful in influencing changes in trainer/training culture, as the PTs are not just 'doing what they are told' but are applying lessons learned in other educational contexts.

Recommendations in relation to developing, maintaining and supporting a cadre of confident, competent, innovative inclusion-oriented PTs

Keep helping PTs to build their technical strength and confidence

Once PTs have been trained on all 11 modules in the current programme, there should be a process of maintaining support for their continued learning as training practitioners and as action researchers. Just like teachers need refresher training, so PTs will need future opportunities to refresh their learning and add new ideas and skills. NAD/EENET should maintain contact with the original cadre of PTs, even after the organisations have moved on to support the development of the process in other places with other PTs. This ongoing 'light' engagement might involve, for instance:

- Facilitate a mentoring process to help motivate and assist PTs with problems they are struggling to resolve individually or as a team;

- Ensure the PTs are well connected with EENET’s free-to-use global information network and stay up to date with the free resources that are available to them;
- Support periodic opportunities for all PTs to meet and share training and action research experiences and ideas;
- Support ways to share PT and teacher action research and results, to motivate them to keep using and improving this approach;
- Listen regularly to PTs’ views on how the training module roll-out is going and their suggestions for more substantial changes/additions that may require external support.

Such ongoing engagement does not have to be a big-budget commitment, but is an element of ‘after care’ that is absent from most inclusive education training programmes. The NAD/EENET collaboration is ideally placed to demonstrate how a small investment in supporting ongoing professional learning for PTs could have significant results. It is also vital that learning about the approach continues. Even if this review is indicating that the approach to inclusive education training is currently working well, what happens to PTs two years or five years down the line?

Find better ways to support PT workload challenges

While the current cadre of PTs in Zambia are coping relatively well with the multiple workload challenges, cracks have appeared and tensions do exist which should not be ignored. Going forward, other PTs (in Zambia and other contexts) may be less resilient, less enthusiastic or less able to negotiate compromises with their ‘day job’ management. As more cadres of PTs evolve, NAD/EENET may need to focus more efforts on ensuring PTs’ line managers are fully on-board and supportive of the additional role their staff member has taken on; that they understand exactly what the PT is doing and why and the benefits; and that the benefit to the PT’s own core work is made explicit to their line management (e.g. if a PT is a college lecturer then by being a PT he/she is developing skills that will make him/her a better lecturer, which brings benefit to their core work and to the whole college). Improving PT managers’ approval and support of the PT workload could come from three sides: NAD/EENET could have dialogue directly with the managers; NAD/EENET could build PTs’ skills and confidence to ‘sell’ their PT role to their managers/colleagues; and finally given the approval of the modules by the CDC, the modules are expected to be gradually rolled out in more areas throughout Zambia and that PT manager approval could come from the MoGE. In addition, the MoGE could ask the PTs to assist in facilitating national events, as long as permission is granted by their managers (i.e. DEBS, TTC/university principals).

The following section examines the role of the programme and the successes of the approach in encouraging trainers to be actively involved in developing teacher training on inclusion. In addition, it examines to what extent trainers take ownership of the training and responsibility for its ongoing development, improvement and roll-out.

4.3. The participatory development of the programme and the success of the approach

4.3.1. The participatory process

The review sought to examine the role of the programme and the success of the approach in encouraging trainers to be actively involved in developing teacher training on inclusion. Stakeholders including SIT members, MoGE officials, NAD managers as well as PTs were interviewed. During interviews, stakeholders were asked whether they felt PTs owned the training and were responsible for its ongoing development, improvement and roll-out.

The importance of effective local management

The PTs played a significant role in the development of the in-service training. However, substantial thought and planning went into the selection of the PTs as a first priority. This sensitive process was possibly a result of the experience of the Zambian NAD Senior Manager. During more than ten years' experience in CBR work within Zambia, he had built and maintained long-standing relationships with key stakeholders within the CBR and inclusive education field. Using this 'inside knowledge', he knew which people from various sectors would be most suitable for the programme. During interviews, he recalled that meeting and fostering a relationship with the Chief Curriculum Specialists and the Director of Curriculum had assisted in eliciting their buy-in for the programme. These officials concurred with this viewpoint during their own interviews. Senior Education Officers at National and Provincial levels spoke of how they were fully consulted in all areas of the programme, including the development of the modules, the delivery and roll-out of the training, as well as its monitoring and evaluation. This NAD manager's accumulated experience enabled him to select three other Zambian NAD managers who were well suited to the needs and context of the various aspects of the programme.

Having a local Zambian NAD team provided the advantage of NAD Norway gaining a first-hand understanding of the contextual needs and background of how things are 'done' in Zambia. Interviews with the Zambian NAD team members revealed their extensive understanding of processes within MoGE departments and how best to involve the MoGE. Their in-depth knowledge of the NGO and DPO sectors further benefited the programme in understanding how the sectors work. Finally, the NAD Senior Manager's long service with NAD (more than ten years) meant that he understood NAD policies and procedures, and could merge his knowledge of all the different sectors.

Careful selection of Principal Trainers

Using the NAD management's insights into key stakeholders, the EENET Consultant and the Zambian NAD team, in consultation with various MoGE officials, were able to select potential PTs carefully:

"The Principal Trainers were made up of teachers, Head Teachers, people from all levels and areas of Ministry, in-service trainers, as well as pre-service trainers." (*NAD manager*)

On page 12 of the Report of Inclusive Education, Training of Trainers Zambia Workshop 2016, there are photographs showing the EENET Consultant, together with CBR staff,

mapping out the selection of possible PTs in each school. This further demonstrates that the selection of PTs was done in a collaborative manner.

As a result of the careful selection and diversity of the PT group, many stakeholders located within the National, Provincial and District level of MoGE shared how they felt that this programme was fully owned by Zambian stakeholders:

“We were all involved in developing the training modules. They had all the right people from curriculum, lecturer, specialists, everyone. We are very happy with the programme.”

Another Provincial MoGE officer shared how he felt the programme would work going forward as it was developed by Zambians at all levels and is,

“...fully localised to the Zambian context.”

Principal Trainers’ role in developing the training

All PTs were fully involved in the process of developing the in-service training. The starting point was for PTs to experience being active trainees. They were trained by the EENET Consultant (for some modules he was accompanied by an additional topic specialist). The training was experiential – PTs went through exactly the same activities and learning processes that their teacher trainees would later go through. As a result, PTs noted:

“We really benefitted from doing the activities, not just reading about how they are done, or being told how to do them. We understand how our teachers feel when doing them now, as we did them too.”

They spoke of how this approach assisted them in fully understanding the concepts in each module:

“We were also encouraged to ask [the EENET Consultant] questions if we didn’t understand.”

“Yes, we realised that if we don’t understand, we should take responsibility and ask. He [EENET Consultant] always helped us to understand. Sometimes we only realised that we didn’t fully understand only when we had to do activities. These really helped.”

PTs explained that, after each module, they were encouraged to reflect and make suggested changes for improvement to the module:

“At the start of each new training we spent time looking at what changes we felt were needed to make them [the modules] better.”

“This was participatory training and we gave [the EENET Consultant] feedback on how we thought it could be improved.”

The multi-sectoral composition of the PT group maximised the range of opinions and specialist knowledge they could provide. Rather than taking the module for review by each sector (curriculum specialists, HTs, DRCCs, etc.), this approach ensured that diverse stakeholders collectively had an active role in the development and evaluation of each module:

“We are not passive. There are now at least three points of reflection. Principal Trainers, schools and learners too.” (*HT within the group*)

During focus group discussions, PTs were asked whether they felt the modules and training were suitable for the Zambian context. Responses included:

“Oh yes! [The EENET Consultant] came with the modules from other countries. We looked at them and made some changes to make them ours.”

“Yes, but it was also important to keep some of the examples from other countries in our modules. We need to make sure our teachers know what is happening in other countries.”

A Head Teacher PT noted that,

“... we can also show others what we are doing well”.

She wanted to illustrate her satisfaction with the modifications the group had made to the programme, and indicate that it could be used to assist other stakeholders going forward.

When asked about ownership of the programme, all consulted stakeholders at all levels, not just the PTs, unanimously indicated that it belonged to them. For instance:

“This is our training for us and our schools.” (*Teacher*)

“While [the EENET Consultant] came with the programme, we customised it and made it ours.” (*Ministry official*)

Such comments, and the frequent reference to ‘our’ training throughout interviews with various stakeholders, suggests a high level of buy-in for the development of the training and its modules.

While conducting training with teachers, each group of PTs had relative autonomy to select activities they felt would be most beneficial to the specific group of teachers. There was flexibility within the modules to allow for customised content and drawing on PTs’ individual strengths:

“Sometimes during our training we think of a different example from some of our experiences and we use [it]. If we feel it worked, we share it back with our team during our next training session [Principal Training session].”

Other PTs noted that feedback on what other PTs were doing with their schools gave them ideas they would consider implementing in their own training.

When asked about the customisation of the modules and training, teachers from the pilot schools, Ministry officials at various levels and different specialisations, all shared that it was not just the PTs who were responsible for the customisation:

“The trainers ask us for feedback during our training. They see what is working and what they can do differently. They then made changes.” (*Teacher*)

Ministry officials spoke of how they were involved in the development:

“Our curriculum specialists add their thoughts and expertise to the modules.”

Others spoke of the CDC meeting where various stakeholders came together to review the modules, and add their input and recommendations, before they were accepted for use more widely in Zambia.

“We all worked together. At the end of the workshop we were all happy with the content and it was approved.” (*Senior manager within Provincial MoGE*)

However, PTs’ perceptions regarding the continuation of the programme and ongoing training roll-out, indicates that this is an issue requiring further clarification.

Additional knock-on benefits of the participatory approach to training development

Evidence suggests that the participatory development process has brought wider benefits than just improving the quality or relevance of the training modules.

Regarding the question of wider systemic change within teacher training, findings suggest change has occurred in various sectors, as a result of the multisectoral and multi-disciplinary composition of the PT team. As mentioned earlier, HTs and teachers from the training team spoke of how they made use of skills acquired during the training, and drew on feedback from others during the training, to support practical changes in the pilot schools and among the teachers and learners in their own schools.

PTs who are lecturers from TTC and universities shared how they use some of the training strategies in their own workplaces, such as when teaching students, and that consequently some of their students plan to use the skills or approaches during teaching practice and in their own future classrooms.

However, focus group discussions with PTs did not yield much information from participants who were MoGE officials regarding any impact the training had in their workplaces. The only feedback was from a PT who was responsible for in-service teacher training:

“I use the strategies in training with the teachers I support. Not just on inclusive education but the other areas that I am responsible for.”

The impact of a participatory approach to training development on wider approval of the training

Curriculum specialists from MoGE and Ministry of Higher Education (MoHE) have been involved as PTs and observers, making them aware of the training content, methodologies and materials. According to a NAD Senior Manager, this ensured that obtaining approval for the modules was far quicker than if these important stakeholders had not been included in the training development process. A PT who was located within pre-service compared his previous experiences of involving the curriculum specialists:

“Before we just give it [training modules for approval] and wait miserably for feedback. Now we do things so differently.”

When asked what factors resulted in the change, the respondent noted the importance of involving these specialists in the programme and NAD’s local relationship-building with the MoGE and MoHE.

A number of senior officers from National MoGE shared that there were substantial differences between the NAD-supported training and that being conducted by other organisations working on inclusive education in Zambia:

“There are others trying to do similar work but they do not pass through our offices. They don’t get our permission. We don’t know what they are doing, what they are training. We need our schools to get the correct information. This is a very big challenge. NAD are the only ones who did it the right way.”

Senior MoGE officers spoke of how they were very happy with the approach NAD used by involving them in all areas of their programme:

“They invited us to a sensitisation workshop, we review their documents, we are fully involved, we have no challenges with NAD. They are even helping to correct another programme that did not work.”

When asked about the process of integrating the programme into the teacher training curriculum, interviews with the NAD Senior Manager and various senior MoGE officials at National, Provincial and District level, revealed opinions that the ‘correct processes’ had been followed. Respondents explained that strategic interventions were put in place for the approval of the programme from the Chief and Director of MoGE who equally attended the in-depth modules review and approval process. The review took the form of a three-day workshop involving curriculum specialists, e.g., from the CDC, and other senior managers from MoGE, methodology specialists from The University of Zambia (UNZA) and selected PTs who constantly helped give feedback on the content and methodology used in developing the modules. Approval for the first seven modules was given in May 2019 and the last four modules were approved in December 2019. NAD Zambia management will follow up the letters of approval for each module from the office of the Permanent Secretary, MoGE, in early 2020.

“We attended a three-day workshop where all curriculum officials were invited and were consulted.” (*Senior Provincial official*)

The NAD Senior Manager also spoke of this workshop and added that NAD and the Director of MoGE carefully planned how the workshop would run:

“Together we decided which key stakeholders should be included. It was decided to give the Director the opportunity to open the workshop and express his commitment to the process of inclusive education and full support of the programme. He informed them of their role in evaluating and approving the curriculum.”

When asked for examples of what commitment was shown by the Director, the following was shared by the NAD Senior Manager:

“He said in his speech, ‘You are here to approve this curriculum, the first and only modules on inclusive education in Zambia. You are not here to check spelling; rather evaluate the core content. We want to leave with it approve.’”

According to two PTs involved in this workshop:

“In addition to the curriculum specialists hearing of the Director’s and country’s commitment to the programme and inclusive education, key stakeholders were included in the workshop including instrumental and passionate head teachers from some of the pilot schools, District Level Resource Centre officials and lecturers from the University of Zambia and Charles Lwanga College.”

The NAD Senior Manager noted that the workshop also included the EENET Consultant who took the curriculum advisers through the roadmap of the programme. A multi-disciplinary team of curriculum advisers led by curriculum specialists from MoGE-CDC constituted to review and consider approving the submitted modules.

During interviews, PTs noted that:

“This investment in the curriculum advisors really assisted in sharing the knowledge of the programme, encourage them to actively participate in the process as well as assist in developing and approving the modules.”

When stakeholders were asked for their opinion on the differences between the NAD programme and those previously or currently being conducted by others in Zambia, they had a great deal to share regarding the number of schools and teachers trained, the model used, the monitoring and evaluation, as well as the sustainability of these programmes. The following examples of the challenges with other programmes were given:

“They [other organisation] included too many schools. 100 schools scattered across Zambia were selected. This was not suitable as the programme was under pressure to include as many schools and teachers as possible. They were only chasing the numbers.” *(PT member)*

“Cascade training used. One teacher from each school would attend training and then be expected to provide the training to the remaining teachers back in their schools. The same teachers were never given more than one training session as a new teacher would be selected by the Head Teacher to attend each new training session. This was not suitable. There was too much pressure placed on the individual teacher to deliver the training by herself with no support from her colleagues. They [teachers] only received limited knowledge in one area so were still not ‘experts.’” *(NAD manager)*

“Teachers who were not selected to attend the training would expect those trained teachers to teach learners with disabilities as they had more knowledge. This resulted in negative power dynamics, ‘she was selected and favoured by the Head Teacher over me’.” *(MoGE senior official based within the Province)*

During interviews, stakeholders spoke of a lack of systems change amongst other programmes:

“These lacked a focus on systems change and long-term capacity building. Their focus appeared to be on implementing the training in schools and not working and empowering the educational system as a whole.” *(PT member who was also a senior MoGE official)*

Participants felt that many of these other programmes were purely focussed on NGOs and DPOs.

“These programmes focussed on capacity development of NGOs and not the education system as a whole. They had limited or no engagement and relationship building with universities, colleges, or Ministry.” *(NAD manager)*

Finally, time factors for the other training programmes were raised as a concern among some of the other programmes.

“The time scale for delivery and implementation was too short. Donors ‘pull-out’ after a very short time with limited long-term investment.” *(PT)*

A NAD manager equated a recent programme from another organisation to an aeroplane flight and how the programme was conducted too quickly and would not be sustainable:

“They are like a jumbo-jet. Just as you get in the air the pilot says put on your seatbelts as we are landing.”

Reflections

The evidence presented in this section relating to the programme's participatory approach to training development illustrates the positive impacts that this teacher training programme has, in comparison to traditional top-down cascade approaches. This pilot shows that there is a viable alternative to cascade training and that all levels of stakeholders appear to appreciate the investments made in such a participatory process and recognise its benefits.

While this programme is being conducted on a relatively small scale, and is a relatively small funded initiative, the results demonstrate that the programme has managed to make significant progress with multi-level MoGE buy-in. Many NGO-led inclusive education training programmes remain small, isolated pilots because they only focus on involving and training local NGO or DPOs. Many of these programmes do not elicit MoGE involvement, permission and buy-in as some perceive system-level buy-in or change as being a challenge that lies beyond their capacity. However, this pilot has shown that it is possible to obtain MoGE buy-in, participation, support and ownership if certain steps are followed. These may include:

- Appropriate relationships are built between donor and MoGE and other key-stakeholders.
- Awareness of the programme and evidence from other successful programme roll-outs is available.
- An understanding of the specific needs of the country is required, and customisation of the programme is needed.
- The programme is developed in a participatory manner, involving all relevant stakeholders.
- The correct country-specific protocols and procedures are understood and followed.
- Permission to conduct the training and approval of the materials is gained from the MoGE.

Recommendations regarding the success/effectiveness of the participatory approach

Keep aiming for better

This participatory approach to developing training appears to work well, but it is important for NAD and EENET to maintain a critically reflective position and not become complacent. The approach may be working better than other training approaches in the past, but it could still continue to work better in the future and constant focus on improvement must be maintained.

Keep sharing the experience

Encouraging governments and NGOs to adopt a long-term participatory approach such as this is not easy – hence the preponderance of short-term, cascade trainings dominated by a focus on quantity not quality. NAD and EENET appear to be breaking the mould and it is vital for these experiences to be publicly documented and shared. This has started to

happen recently (e.g. website pages, group Facebook page, WhatsApp groups, journal article) and needs to be maintained.

The following sections (4.3.2 to 4.3.3) highlight some of the challenges that participants felt require attention if and when the programme rolls out to other schools.

4.3.2. Duration of training

Several PTs expressed a wish for an expanded number of days to train teachers:

“While we know that it is important, we lose half of the first day with reflection on the last module and what changes are suggested. The last day is just a half-day so while it may be a three-day training, we don’t have three days to cover the module. We would love at least an extra day.”

Both PTs and teachers from the pilot schools indicated that having additional days would allow them more time to cover all or more of the activities, as well as to give reflective feedback.

“We break them into groups to do activities. We feel that it is important for each group to report back but with so many teachers and so many groups, this takes a lot of time. We have to cut back on other activities as a result which is not good.”

“We feel bad, but sometimes we run out of time to get feedback from all groups. We wish we had more time so that all groups could share. They have important feedback to give.” (*PTs working in pilot schools with large numbers of teachers*)

However, PTs noted that time constraints had enabled them to develop and enhance their time management skills that they had not developed prior to the training:

“Now we maximise each and every minute of the training. We also learn to make sure that if we cannot get feedback from all groups during this exercise, that next exercise we got them to share.”

Senior MoGE officials were asked about the duration of the training and whether they felt opportunities existed for extending the number of training days. They indicated that this would be difficult:

“While we understand that the programme is important, this is not the main focus of teachers. We cannot have them out of the classroom for too long. They have to teach. Also, this is not the only training teachers get. There are many other programmes being rolled out.” (*Senior Ministry manager*)

Recommendations

NAD could explore the possibilities for extending training times in the roll-out of future training, and this should be considered and discussed among all stakeholders, in particular the MoGE. If this is an option, then careful planning and budgeting should take place (i.e. strategic motivation and justification for additional training days should be made by NAD and senior MoGE officers; the MoGE department responsible for budgeting of training should be consulted). Careful analysis of the impact of additional training days on the school and learner needs should take place when teachers attend training (i.e. who will be responsible for looking after learners; what work they are expected to complete).

Keep fine-tuning PTs' skills

If additional training days are not feasible, then the following suggestions might assist PTs in continuing to improve the efficiency of the training time they have available:

Ensure that sufficient PT training focuses on:

- Continuously improving and refining planning and time-management skills;
- Continuously developing adaptation skills, finding different ways to facilitate activities in time-efficient but still participatory ways;
- Continuously fine-tuning needs assessment skills, so PTs can effectively target teachers' learning need;
- Discussing ideas for self-study innovations – ways in which the PTs could encourage and support teachers to keep learning outside of formal training sessions.
- Developing ways for PTs to work with DRCCs to design strategies for incorporating inclusive messages into other in-service training programmes. This would ensure that teachers get a sustained message, even if there is no more time available for dedicated inclusive education workshops.

4.3.3. Role of the Principal Trainers

Confusion over geographical extent of role

Interviews with PTs indicated some confusion as to their role regarding wider or national roll-out of the training programme (also known as 'Phase Two'). Several PTs shared that they were told by the MoGE that they were responsible for providing inclusive education training throughout Zambia, but then they were not included in inclusive education training programmes being conducted in other districts:

“We are confused as they [the Ministry] told us that we are the Master Trainers but we heard that there is other inclusive education training happening in places like Lusaka. We were not informed or involved. We want to know why?”

Some PTs shared that they had heard that EENET's consultant was also involved in the other training taking place in Lusaka and this was why they thought it was the same programme. Discussions with Zambian NAD managers revealed that the training the PTs were referring to in Lusaka may be Leonard Cheshire's inclusive education programme, to which EENET's consultants are also providing technical assistance.

Interviews with various MoGE officials as well as NAD and NGO officers regarding the “other inclusive education training roll-out programmes” mentioned by PTs reinforced the suggestion that this refers to Leonard Cheshire's inclusive education programme being rolled out in other districts of Zambia. In on-going discussions with the NAD senior manager, the MoGE, with support from NAD, the World Bank and Leonard Cheshire, plans to constitute a nationally representative cadre of PTs. The new national level PTs will be representative of the Zambia education sector's geographic, technical and thematic needs related to inclusive education teacher training at pre-service and in-service levels. At the PT level in Phase Two, senior officers in the MoGE would like to see representation from the current PTs, 14

government-funded TTCs, UNZA, key directorates and/or departments within MoGE (standards, curriculum, early childhood, resource centre coordination and teacher education); and eminent inclusive education specialists with vast experience in inclusive education from other past and current programmes in Zambia.

Inconsistent name for the trainers

Some PTs used the terms ‘Master Trainers’ or ‘Expert Trainers’ when referring to their role. EENET deliberately chose not to use the term ‘Master Trainer’ due to potential gender inequality connotations, preferring to use the term ‘Principal Trainer’. That some trainers still refer to ‘Master/Expert Trainers’ may simply be a translation miscommunication. Or it may be because the decision to use Principal rather than Master was made after the start of the programme, when the modules started to be edited more stringently. The use by some trainers of the words ‘master’ or ‘expert’ is not therefore interpreted by the consultant as an attempt to be seen as ‘superior’ or ‘better than’ others.

Indeed, interviews with all PTs showed their high level of awareness of their role within a supportive team, all having equal roles and responsibilities for implementing inclusive education:

“We are all part of making it [inclusive education] work. We are all responsible, teachers, parents, Ministry. All of us have a responsibility to work together to make it [inclusive education] work.” (PT)

Confusion over future roles

Another issue that was raised by PTs was the concern about what their role would be after the pilot concluded:

“We thought we would be responsible for the roll-out to other schools in areas such as Lusaka.” (PT)

It appeared there may be confusion regarding what the NAD Senior Manager and some senior MoGE officers referred to as Phase Two of the programme, and the role of the current PTs in this phase.

Phase Two, included in the NAD short- to medium-term plan, involves shifting geographic focus to a district closer to Lusaka, to also test the introduction and replication in a new area (NAD’s full CBID programme, including inclusive education). This will be complemented by a phase out/over period in the Southern Province, with the aim of MoGE rolling out the training in surrounding schools (known as zonal cluster schools). Funding for this roll-out in ten schools around each pilot school will not be provided by NAD. Rather, the training will be conducted by PTs who, as a result of the training, now have the skills to provide training as part of their day-to-day work, e.g. the DRCCs.

As discussed above, the current six pilot schools would become ‘resource schools’ to the ten zonal schools in their areas. The current pilot school teachers, together with the PTs, would assist the ten zonal schools (more or less depending on existing school numbers, zones or clusters designated officially by each DEB) with training and support in the roll-out of the training programme as part of their regular jobs. NAD senior managers were clear that the

current PTs would be responsible for assisting with rolling out the inclusive education training programme to these additional 60 schools over the next five years (2020-2024) using resources from within each DEB. According to interviews with a senior NAD staff member, such an initiative has already taken place where they have supported Plan International to train its volunteers and teachers in their catchment areas in inclusive education in Luapula province bordering Congo DRC and Central Zambia, Chibombo district. There are future plans for teacher/PT exchange learning between the Leonard Cheshire programme, Eastern province, and the programme in southern Zambia supported by NAD.

Current PTs will not be required to travel to other areas such as Lusaka to train schools, as their responsibilities are to strengthen and support each of the current six pilot schools to become a resource to the ten schools in their area. Going forward, new PTs would be trained to support schools in other districts, widening the pool of 'inclusive education champions'. However, as the national level roll-out starts, led by the MoGE, some high-performing PTs from NAD's pilot and some pilot school teachers may become involved as co-trainers, supporting for instance the planned new pilot in a Lusaka rural district or supporting other programmes managed or supported by other NGOs or the MoGE.

Senior MoGE officials shared that PTs involved in programme roll-out were,

“still required to continue with their day jobs as lecturers, teachers, Head Teachers for example.”

However, due to their current skills and the impact they have in their current positions (e.g. as lecturers within TTCs or universities) they are given permission to travel to other districts, such as those within the Copperbelt regions, by the Provincial Education Officer or the Permanent Secretary. The close working relationship and trust between NAD and MoGE means that permission for PTs to travel and provide training has never been denied.

Recommendations

Improve communication about other programmes/organisations

It can be confusing for stakeholders when multiple organisations are working in the same sector on very similar initiatives. While NAD and EENET are in a position to see the bigger picture of the various NGOs engaging in inclusive education in Zambia and understand where the boundaries of each organisation's mandate lie, PTs, teachers, etc, are unlikely to have access to such information. NAD and EENET should find a way to clearly explain the geographical and methodological boundaries of their programme, and keep PTs informed about other similar programmes that may be making headlines locally or nationally. This will help reduce the risk of confusion and frustration, which can negatively impact stakeholders' motivation.

Improve communication about the programme's future plans

NAD and EENET should ensure that they clearly explain PT roles relating to future training (who they will be responsible for, what training they will be doing, where and for whom). The consultant recommended that should be done at the PT training session in December 2019, backed up with a very brief reference document.

Efforts to clarify PTs' future roles should include an explanation that the MoGE National Trainers will be trained and that some PTs may be asked to 'mentor' or 'pair' with these MoGE officials, to ensure that the National Trainers can provide training in other parts of Zambia going forward.

Maintain a level of support for PTs

Going forward, the PTs have a significant workload ahead, supporting the ten schools around each of the six pilot schools. NAD and EENET should maintain a level of support for the PTs, even if the priority is shifting to focus on supporting pre-service developments.

Encourage use of 'principal trainer'

This is not a big issue, but NAD and EENET can keep encouraging stakeholders to refer to 'principal trainers' rather than 'master' or 'expert trainers'. This can be done through ensuring consistent use of the terminology in all communications and documents.

4.3.4 Teachers' views on Principal Trainers

During interviews with teachers, they were asked what they thought about the PTs' skills and approach to facilitation, as well as the training they received. They were asked to specifically reflect on whether they felt the training helped them to build their inclusion-orientated problem-solving skills and to provide examples to illustrate their feedback.

Teachers expressed that they were happy with the composition of the PT groups:

"They were not just made up of specialist, or outside trainers, or Ministry officials. They had a good mix of people. This helped us learn."

A number of teachers shared how having teachers as PTs was important:

"They showed us that even teachers can do training for other teachers. It doesn't have to just be trainers."

Another shared, how having teachers included as trainers ensured that the training was suitable:

"Because they are teachers, they make sure that we can do it in our classrooms. Some trainers from other trainings don't have school background so some of their examples aren't suitable to us [teachers]. We take them [PTs] more seriously, as they are like 'one of us.'" (*Teacher*)

Teachers shared that the majority of PT members were motivated, had the skills required to train, and were what they called "good trainers", and were easy to understand. However, teachers expressed that a few PT members were not that committed and some,

"...didn't have the way to keep us focussed all the time." (*Teacher*)

However, teachers unanimously agreed that this situation had improved since the PT groups had been downsized or refined:

"We think it is a good thing that the trainer groups are smaller. These ones are really committed and we like how they train us. They understand how we learn best, and really know our styles [of learning]. They joke with us but also teach us well." (*Teacher*)

When asked why they felt this way, the teacher shared that this was because,

“... They have been with us for all those years. They understand and get us. They know which of us are lazy [laughs].”

The following section examines whether, as a result of the training, teachers work more inclusively and are better able to provide quality education to their learners. In addition, it explores whether teachers are now working collaboratively with other teachers, as well as other stakeholders.

4.4. Teacher collaboration with each other and with other stakeholders through the School Inclusion Teams (SITs)

During interviews, all stakeholders were asked whether they felt that the training programme supported teachers to avoid working in isolation with regard to inclusive education. In addition, they were asked about the role and impact of the SITs based in each of the pilot schools. This section relating to teacher collaboration is separated into two sub-sections. The first focuses on teacher collaboration via the SIT, while the second looks at peer-to-peer collaboration between teachers.

4.4.1. The role and value of SITs

Each of the six pilot schools has a SIT made up of a variety of stakeholders including teachers, parents, children with and without disabilities, civic leaders, community development assistants, business owners, health workers and others who play a role in supporting the school. Teachers from the pilot schools spoke of how the first two modules (*An introduction to inclusive education* and *School Inclusion Teams*) provided them with a good understanding of the need of the SITs within an inclusive framework. Teachers were able to provide practical examples of the benefit of the SITs:

“At the start they were sceptical and worried about the results going down. Some worried about catching it [disability] but that has all changed. Their attitudes have changed. They are more accepting. We had to be firm.”

“They have been valuable in finding out-of-school children in our communities.”

“They find the children, work with parents to bring them to school and we encourage them to come to our school.”

“They work with the religious/cultural leaders to educate them that disability is not a curse. This is very important in our rural areas as it's still strong there.”

In addition, teachers shared that the training modules and practical activities showed them how using this structure can assist them in accessing support and finding solutions to inclusion-related challenges. An example was giving by teachers who shared that collaboration between themselves and the SIT at their school assisted in accessing support for children who were not able to attend school:

“If we [teachers] have sick or badly disabled children in their homes, they [SIT] tell us and we go help them.”

Teachers at another pilot school shared that collaborating with the SIT assisted in bridging the gap between school, home and their communities:

“We always knew about the sex work of some mothers and girls at the truck crossings, but didn’t know that we can make a change if we work together. We always thought that school is school, and home is home.”

PT members shared that the training for SIT members on their roles and responsibilities, that was given by those members who were teachers within the inclusive education framework was crucial:

“they [SITs] needed the training as much as teachers did. We cannot train the teachers without including training for the SITs. They all have to work together to support each other and the children.” *(PT)*

Another PT member reported:

“They [SITs] were given full training on their roles and responsibilities. They now understand how they fit in with inclusive education. It is different from the other parent-teacher group [PTA/School Governing Body] but they work with them. They are responsible for implementing inclusion.”

Interviews with SIT members revealed their clear understanding of their role. When asked about the composition of the SITs it became clear that careful thought had gone into the selection of members within each school:

“We have a small group. Parents from different backgrounds. Some have disabled children, others have businesses and some are traditional leaders.” *(SIT member)*

MoGE officials at Provincial and District level who had received the training via being part of the SIT indicated that they saw the benefit and need for SITs in schools. They were fully supportive of SITs and spoke of how they had an important role in supporting teachers, HTs as well as learners:

“We have policies about parental involvement and collaborative practices and this [SIT] fits with this.” *(Senior MoGE official)*

Interviews with teachers, PTs and SITs, along with perusal of the detailed observer monitoring reports, reveal extensive examples of inclusion-related improvements made by the SITs. Respondent evidence suggests the SIT member training raised significant awareness around issues of school accessibility. As a result, SIT members and PTs reported that many of the pilot schools had built access ramps, adapted or built new accessible bathroom facilities, and created plans on how they hoped to increase accessibility and access going forward. When reviewing PT reports, numerous images and written examples of improvements in terms of access were seen. For example, the Nakatindi pilot school report included images of two access ramps being constructed, one to give learners and teachers access to a toilet, the other to the water point.

SIT members reported that they were not able to assist with school transport for learners who travel long distances to get to school. However, with MoGE officials at all levels being involved in the programme, they were able to feed information back to their superiors within the Ministries as well as others. One teacher mentioned, during interview, that a possible solution may be to network with NGOs working within African contexts. He mentioned that he had heard about an NGO that provides bicycles.

“Bicycles would prevent learners from arriving at school late or them being too tired from walking long distances to concentrate at school.” *(SIT member)*

The examples provided in the reports also illustrated how collaboration was taking place. For example, in the Nakatindi 2017 report there are images showing that the PTA and SIT strategy is about how to level the ground surrounding the school and create a pathway to the toilets.

According to stakeholders interviewed, as a result of their involvement in the training, MoGE officials and SIT members are now more aware of the learning and inclusion barriers relating to children and their families migrating from war-torn countries to seek refuge across the border in Zambia:

“Before they [MoGE officials] were not aware of the grassroots issues that these children experience coming into our classrooms.” (*PT*)

SIT members spoke of the need of all stakeholders to work with parents, learners and local communities to find solutions to help refugee children get into and adjust to Zambian schooling. During a focus group interview with SITs a teacher shared,

“...many of the refugee children are traumatised from leaving their families or having fled their country of birth. They need counselling.”

He spoke about the need for trained counsellors, the current lack of counsellors and therapists in Zambia, and the possibility of networking with NGOs working with refugees to assist in this regard.

During interviews, stakeholders mentioned the need for collective solutions to re-integrate learners who had dropped out of school. SIT members shared that they work in communities and hear about learners who have dropped out in their areas:

“We hear about them from community members. They tell us about them and we tell the schools.” (*SIT member*)

However, HTs spoke about the challenges they face when some learners who drop out are perceived by their peers as ‘cool’ or ‘prestigious’:

“...the other learners see them as the ones with money and nice things as they get money from selling sweets to the truck drivers at the river crossings.”

“They [learners who have dropped out] don’t see the long-term value of completing an education.” (*Teacher*)

Another SIT member shared that some learners who have dropped out of school pressurise others to drop-out too:

“There is a group who are like bullies. They show the others only the short-term benefits like new shoes from selling sweets. We need to work together to educate children not to drop out.”

“We need to find ways to keep children in school. Parents need to be educated that their children must stay and finish, as it is hard to get a good job without schooling. Many of them didn’t finish so don’t motivate them [their children] to stay.” (*PT members*)

4.4.2. Challenges with SITs

When asked about challenges, SIT members highlighted the need for assistive devices, materials and resources to help teachers, children in the classrooms, and the school as a whole. Budgets for such devices and resources were mentioned as a challenge, especially

with the new policy on ‘free schooling’ which resulted in less financial support being provided to schools by the parents, as government significantly reduce annual fees for primary and secondary levels. When asked whether they were aware of NGOs and DPOs within Zambia who could possibly be approached to provide assistance, SIT members shared that they were not aware of them, and as a result, they had not made contact. While numerous examples of collaborative improvements were provided between SITs and other sectors including NGOs, it is important that these relationships are fostered and developed in order for them to be sustainable going forward.

While collaboration was seen between SITs and others within their communities, MoGE officials indicated that an additional challenge was that different Ministries still worked in silos.

“Health are quick to say its Ministry’s [of General Education] responsibility, and Ministry are quick to say its Health’s responsibility, and our children slip through the cracks.” (*Parent of a child with a disability*)

However, some SITs and PTs shared that some SITs were more active than others. When asked for reasons, a PT shared,

“They [SIT members] all have family and work responsibilities. It’s not like they don’t want to go to meetings. They are just busy. They still really try to help.”

Interviews with teachers, HTs and information in observer reports revealed some SIT-related challenges included:

“Some don’t hold meeting frequently to discuss their plans concerning inclusive education, they don’t have a specific meeting time.” (*PT*)

“The SIT did not have a laid-out plan of action to engage the community on matters concerning the school. They alluded to lack of resources.” (*PT*)

Despite SITs helping to develop intervention strategies and providing educational advice, some parents are still reluctant to send their children to school:

“One family still has four out-of-school learners despite being talked to.” (*Teacher*)

Other SITs shared that sometimes they lacked capacity and members with suitable skills to assist schools with specific challenges. One example provided was the SIT’s lack of a person with strong fundraising skills who could assist in raising funds to help parents of children with disabilities purchase school uniforms.

The following section discussed peer-to-peer collaboration as a way for teachers to avoid feelings of isolation when facing inclusion-related challenges.

4.4.3. Peer-to-peer collaboration

While Section 4.1.2 provided information on teachers’ collaboration with other stakeholders, this section specifically focuses on peer-to-peer (teacher-to-teacher) collaboration. During focus group interviews, teachers at the pilot schools were asked whether, as a result of the training they received, they used peer-to-peer collaboration to access support when dealing with inclusion-related challenges. HTs as well as observers shared that, as a result of the training that focussed on teacher collaborative lesson planning activities, they had seen an improvement among teachers who were now planning their

lessons together and sharing ideas and resources within their own schools (remembering that the HTs were not involved in training their own teachers, so were therefore not biased).

“We sit down together now and plan what we are going to teach. This makes it much easier to do our lesson plans.” *(Teacher)*

Teachers shared that they were using team-teaching within their classrooms:

“We now sometimes team-teach where one of us gives the lesson to two classes while the other teacher helps.”

Teachers explained that because they were required to participate in a range of interactive and participatory activities with other teachers during their training, this resulted in them learning about each other’s strengths and skills. When asked about what new techniques they were using as a result of the training, teachers shared:

“We use group-work techniques, gallery walks, pair activities.”

“We were encouraged to work together in groups with our peers. We got to know each other well over the years now.”

“Now we ask other teachers who are better in some areas to help us and then we help them with other lessons.”

However, PTs including HTs and two senior MoGE managers shared that they felt more peer-to-peer collaboration was needed and ongoing monitoring and support was needed for teachers:

“I worry that now teachers are motivated and working well together, but I worry as new teachers come, older one leaves, and the momentum from the training slows down when all the modules are finished.” *(PT who was a HT)*

Reflections

Evidence suggests that the two modules most relevant to SITs provided suitably practical activities that have enabled teachers/schools to establish SITs and ensure that SIT members start taking appropriate concrete actions to support the inclusion-related needs of the school and learners. In the relatively short time of the programme, it is encouraging to hear/see multiple examples of practical actions being taken by SITs. The range of actions is also impressive – SITs have not limited themselves to identifying and solving the most obvious infrastructure challenges but have begun tackling tricky issues such as the problems facing refugee learners.

It is not surprising that the SITs still report challenges with resources and with accessing the expertise to deal with some inclusion barriers. Creating a SIT is not a recipe for instant change. Continued pro-active outreach to NGOs and DPOs is needed for the sustainability of the programme. Planned training of DPOs in the forthcoming period will also assist in strengthening these links. This represents a new way of working that inevitably needs greater and longer-term support to evolve. The SIT concept is still new in schools and communities, but over time – if they continue to receive practical and motivational support – the role and reputation of SITs may enable them to attract members with more diverse and more specialist skills. In turn this may help with the current challenges of inactivity in some SITs – the more members they have with a range of different skills, the

less pressure there will be on individual members, so if some members take a break from attending, others can step up instead.

The teacher peer support levels appear encouraging, both in terms of supporting each other with problem solving and with improving teaching practice. This is often one of the biggest missed opportunities in schools. Every team of teachers potentially holds so much experience and knowledge, but it has limited use if it is not shared. This knowledge must be pooled and shared. Methods for peer support among teachers is often not taught in pre-service and is not part of the school culture. It takes time for a school to develop a culture of openness and collaboration, and for this to become so embedded that it survives the numerous challenges facing schools. Therefore, the concerns of some stakeholders that nascent peer support cultures could disappear again from pilot schools are valid.

Recommendations relating to SIT and peer collaboration

Keep supporting ongoing learning within and between SITs

Just like PTs and teachers, SIT members will need continuous opportunities to refresh and expand their understanding of inclusive education and practical solutions to inclusion barriers. NAD and EENET working with DRCCs should develop ideas for how SITs can keep receiving learning support.

Self-learning is going to be important for all SITs – action research will help them document and learn from their own experiences, and if inter-SIT sharing activities are stimulated by NAD/EENET, DRCCs, observers, etc, then SITs can learn from each other too. SITs could be encouraged or facilitated to visit each other within their zones, or to have SIT buddies (two or three SITs that work closely together and even swap expertise and resources).

Other learning opportunities for SITs should be supported. These do not have to be high-budget options and could include funding SIT members to attend the annual national inclusive education symposium; ensuring SITs are aware of and know how to use EENET's extensive free materials, with EENET continuing to provide hard copies if online access is limited; encouraging SITs to use social media groups to discuss issues or access information. As NAD's programme evolves, higher-budget options including exchange study visits to SITs in other countries could even be considered.

Keep motivating SIT membership development

Through continued support via PTs, NAD/EENET should keep encouraging SITs to find new members, from diverse backgrounds and with different skill sets. NAD/EENET could work with one or two of the most active SITs to document in detail their team composition, activities, progress, and advice for other SITs regarding developing and maintaining membership. This could lead to a simple guidance document that schools could use to tell stakeholders about the SIT concept and encourage relevant people to participate.

Maintain lobby pressure on MoGE in regard to inclusion funding

Long term, SITs need financial support. While every SIT can work on making low/no-cost reasonable accommodation adaptations using whatever resources are currently available, for the SITs to have real impact on inclusion they also need access to funding for more substantial and sustained changes. Such support can never be just NGO/DPO responsibility long-term which is why NAD/EENET and Zambian DPOs, alongside the teacher training programme, need to maintain advocacy pressure calling for sustainable government funding for inclusion. SITs and Zambian DPOs could be trained and supported to have a strong voice in such advocacy. They are on the front line, they have diverse school-community membership (ideally also including learners themselves), they are documenting valuable evidence regarding problems and solutions – they are powerful advocates-in-waiting.

The following section explores the impact of the training on pre-service teacher training at TTCs and universities. This is based on the assertion that training on inclusive education at in-service level will not have long-lasting positive effects in the education system without accompanying changes within pre-service training.

4.5. Pre-service teacher training

In order to examine how and to what extent the programme has engaged with bringing about change in pre-service training, as well as what the results have been so far, interviews were conducted with lecturers from TTCs and universities. In addition, final-year teacher training students were interviewed, as they had received a three-day inclusive education training session, based on the programme modules, and were taught by the EENET Consultant.

Currently the teacher training programme is being rolled out primarily at in-service level, with some engagement at pre-service level. However, the NAD Strategic Plan documentation indicates that the medium to long-term plan – from a diversification, sustainability and cost-effectiveness point of view – is to focus on pre-service teacher training students. To date, only teachers in six pilot schools have received the complete package of inclusive education training. Going forward the NAD Strategic Plan presents an ambitious intention for the modules to be integrated into the curriculum at all TTCs and universities across Zambia. This will enable all teacher training students to acquire inclusion-related skills and knowledge, apply these in their early practice in schools once qualified, and thus spread new ideas and practices, achieving a wider impact than pilot school based in-service training alone.

4.5.1. Reported changes and collaborations

As a result of the inclusion of certain lecturers from some TTCs and universities within the PT groups, as well as the pilot three-day inclusive education overview training being given by the EENET Consultant to 50 third- and fourth-year student teachers at UNZA, and PTs delivering to selected students at two TTCs and one university, awareness of the programme has developed within some pre-service teacher training institutions.

Interviews with EENET consultants and Director, as well as Zambian NAD Senior Manager, revealed that a deliberate decision to include lecturers with no or little experience in special education had been taken. Instead, lecturers influential in curriculum development and pedagogy had been selected, on the assumption that their engagement is what is most needed for systemic and sustainable change in teachers' attitudes and practices. When Zambian NAD managers and PTs were asked for details of the composition of the PTs, they confirmed that no special education lecturers were included. During preparatory discussions with the Zambian NAD team regarding the interview schedule, the consultant was originally surprised to see the inclusion of a lecturer who has a visual arts background being included in the core PT group. During an interview with this lecturer, it became apparent that he was one of the strongest and most passionate about inclusive education, and most influential in getting the modules approved within the CDC review process.

During interviews with lecturers as well as the Zambian NAD Senior Manager, it was revealed that there are currently two options for getting a formal inclusive education module approved into the teacher training curriculum at TTCs and universities in Zambia:

1. TTCs partner with universities (known as 'twinning'): Here a separate course (including content and materials) gets developed and approved by lecturers and specialist lecturers at both the college and university. It is then presented to the university Dean, who presents it to the Senate of the university via the Vice-Chancellor. Once approval has been granted, the module is submitted to the MoHE Authority Board specialising in curriculum. This process is preferred by lecturers as the process is relatively quick, and students who have opted for the course obtain a qualification that is endorsed by both the college and university.
2. The college submits the proposed course to three separate bodies: The Examination Council of Zambia, the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) based within MoHE Department of Curriculum, and finally the MoHE Authority Board. This process takes far longer as they are separate departments.

However, some TTCs and universities felt that neither of these pathways was the most strategic and beneficial way to integrate inclusive education into their institutions. This demonstrates that some lecturers want inclusive education training to be given to each and every student as part of their general training. Some lecturers expressed that it was better to introduce elements of inclusive education into various subjects:

"We would rather have inclusive education being included across all teaching and learning areas. That way it will be taken more seriously."

"This way, more lecturers would take it seriously. At the moment some feel, 'that is only for the specialist to teach. It isn't for me.' They don't understand that it should be used by everyone."

Other lecturers spoke of how inclusive education should not only be limited to teacher training courses, departments or faculties:

"It should be included in medicine, arts, science, everywhere. Not just as an add-on elective subject, [but] a compulsory in all courses."

As a result of the programme, 14 TTCs and six universities plan to introduce inclusive education into the curriculum within their School of Education departments beginning in year 2020 – the majority as new courses, while the rest have integrated the issue into other

teacher training subjects. In addition, NAD has provided the CBR/CBID core training, content and guidance to faculties of medicine, rehabilitation sciences (Physio, OTs, Orthotics/Prosthetics, etc) to inform new curricula development and usage (2018-2019). So far, UNZA and two other national colleges training social workers and community development workers will offer Bachelor and Master's degrees in CBID/Disability and Human Rights effective from 2020. It is important that this knowledge be shared with lecturers so that the comments made in the above quotation are addressed.

Interviews with lecturers, MoHE officials, and NAD managers revealed an expectation that all 11 training modules would be ready and integrated into the teacher training curriculum in early 2020. Some TTCs have been strategic in accrediting their new inclusive education courses, via collaboration and joint accreditation with universities. During an interview, a Senior MoGE officer shared:

“Two lecturers from Charles Lwanga College were part of the Principal Trainer team from its inception. As a result of their involvement in this training, the skills and knowledge they acquired, and their passion for inclusive education, they have been instrumental in getting inclusive education modules accepted and included as an official course into their college. As of 1 January 2020, inclusive education will now be offered as a compulsory subject for first to third year teacher training students.”

During interviews, various MoGE, NAD managers, and lecturers and principals spoke about collaboration between institutions, and attributed this to the training. An example of this is Charles Lwanga TTC and the University of Zambia sharing – or what they call ‘twinning’ – their Bachelor of Education inclusive education course.

“After our training we now work together with other institutions to get more teachers trained in inclusive education. We have to come up with plans and not work by ourselves. This was hard as before we would worry about our student numbers dropping if they [students] went to the other institution.” (*Lecturer*)

Lecturers and NAD managers shared during interviews that lecturers and the principal of the TTC were finding creative and practical ways to upskill teachers through using distance education which includes inclusive education as a compulsory subject.

“We realised that current teachers are not able to take three years off work to complete a Bachelor of Education, so have developed a three-year distance course to upskill teachers.” (*Lecturer from the Charles Lwanga TTC*)

As mentioned earlier, the college has ‘twinned’ its qualification via accrediting their Bachelor of Education course through the University of Zambia.

“This is encouraging more teachers to study as they receive two stamps on their graduation certificates from both institutions. They [teachers studying] say that this helps them get good jobs as they have qualifications from both.” (*Lecturer*)

The consultant asked the lecturers and principal of the TTC for the structure of the training. They explained:

“The teachers are required to attend one month of face-to-face lectures once a year over the three-year period. This month coincides with school holidays to accommodate their teaching commitments.”

This demonstrates that the lecturers had carefully planned the programme and were taking the needs of the teachers into consideration. Other lecturers spoke of the importance of using technology during distance education:

“Another benefit of the training is that we give the students virtual lessons, course materials, activities and assignments which they can practically use and implement in their classrooms during the months that they are not at college.” (*Lecturer*)

When interviewing lecturers from TTCs and universities who were not part of the PT teams, some commented that observing the EENET Consultant facilitating the three-day training with final-year students had motivated them to use some of the techniques in their lectures, as they saw how well the students had responded to the training methodology.

4.5.2. Teacher training colleges and university challenges

Poor support for students with disabilities in colleges and universities

As a result of the training (PT training and three-day pre-service training), respondents reported greater awareness among lecturers, principals and some managers regarding the rights of disabled students to be accepted and accommodated in higher education institutions. However, many colleges and universities still only accept students with what principals managing the colleges/universities referred to as ‘mild’ disabilities (restricted growth/short stature, crutches, low-vision, hard of hearing). According to two interviews, institutions interview prospective disabled students but say they are not able to enrol them. They are required by college rules to refer them to ‘special colleges’ for disabled students as they cannot be accepted in their colleges or universities. The few disabled students who have been accepted, are reportedly registered but then not provided with reasonable accommodations or support. Within colleges and universities, older buildings are not fully accessible; and while newer buildings have ramps and pathways there is a lack of maintenance so some are no longer fully accessible. Respondents noted that there are no accessible bathrooms, or clear paths to hostels.

Some respondents also indicated that the senior management in colleges and universities do not fully understand the issues surrounding inclusive education.

“We have one student who is Deaf. There is only one student who can sign for him, but if she is away, he doesn’t understand. Another student gives him her notes from the class. These comes from the individual students who want to help.” (*Student from UNZA*)

While the programme is new and will only be fully introduced in certain higher education institutions in 2020, lecturers and some MoHE officials noted that there has been a small shift in how disability is seen and that there is hope for disabled student inclusion in the future.

Not all teacher training lecturers are on board

To some lecturers in the colleges and universities, inclusive education is still seen as the same as special education. Inclusive education in some institutions therefore remains disability-focussed and only lecturers with special education qualifications are responsible for giving the lectures. Inclusive education is included in a special education module, and other lecturers believe that they are not responsible for integrating inclusive education

principles into their lectures. Respondents reported a fear and lack of participation and 'buy-in' from special education lecturers. It was noted that only a few methodology lecturers were included in the training provided by NAD/EENET.

"The lecturers believe they are not responsible for inclusion as they don't have the training or qualifications. They say, 'you must teach them. It's not my job. I am not being paid to do this [inclusive education]'." (Lecturer)

Interviews with stakeholders revealed that the lecturers who appeared most resistant to integrating inclusive education throughout faculties, departments and subject areas, were those who had special education qualifications or who were responsible for special education disability-focussed modules. While PTs had been carefully and purposefully selected based on their skills and ability to pioneer the training across disciplines, and not necessarily based on their specialist disability knowledge or qualifications, their selection appeared to cause some friction in some institutions. However, lecturers shared that this perceived resistance and friction did not dampen the spirits of those lecturers who were trained as PTs. They reported that change would take time and they had to be patient.

"We know there are no quick fixes and that their attitudes will take time to change. We have to keep working hard. We think that as more other lecturers see the positive impact of doing things in this way and start teaching using the skills, they will inspire those specialist ones to change. They will see the students' responding better, marks improving and less stress. It is going to take time." (PT/lecturer)

The training has assisted in clarifying within the institutions that inclusive education is,

"...not just a new name for special education as most of us thought before the training."
(Lecturer)

Lecturers now know that inclusive education is about all learners, and that they are responsible for modifying their own teaching in order to meet the needs of all students in their classes.

"Inclusive education is not just about disabled children in schools. It's also about our students in our classes." (PT lecturer)

However, due to the ongoing work conducted by NAD the relationship between higher education institutions and specialist teachers/lecturers is reported to be improving. An example provided by a Senior NAD staff member was a one-day sensitisation workshop for all specialist teachers in all the three pilot districts. The training explored the definition of inclusive education and special education, looked at the current situation in Zambia regarding inclusive education and special needs education, and at contemporary inclusive education understanding globally, regionally and nationally, and discussed the potential role of specialist teachers in pilot and non-pilot schools to support and mentor other mainstream teachers in areas of their expertise, e.g. teachers specialised in training deaf, blind, intellectually/developmentally impaired learners, etc.

In addition, a Zambian NAD senior staff member has been invited to attend three conferences in Zambia organised by the Special Education Teachers Association of Zambia (SEAZ) at which he was given a slot to present a paper on emerging issues in the field of inclusive education in Zambia. NAD also sponsors teachers from pilot schools to attend these conferences, enabling both specialist teachers and non-specialist teachers to share their experiences in implementing inclusive education. In the past two years, it has been reported

that four specialist teachers had visited the pilot schools in order to conduct inclusive education Master's level research. As a result, the relationship is reported by NAD senior staff to be gradually improving, and that, despite the issue of 'professional jealousy,' the buy-in from the specialist teachers relating to inclusive education is improving.

Teacher training students have received insufficient training so far

So far, student teachers have only received three days of inclusive education training in their final (third or fourth) year. Consequently, respondents noted that students lack knowledge and skills on identifying and assisting all learners. Many have only a superficial understanding of inclusive education – some basic theory knowledge but not practical skills. Currently there is no exposure during teaching practice to examples of fully inclusive classrooms. Some student teachers noted that they saw learners with disabilities in their mentors' classrooms during their teaching practice, but these learners were excluded and not provided with reasonable accommodations. Student teachers also lack exposure to adults with disabilities as role models or advice-givers.

4.5.3. Engagement in other areas of the education system

When stakeholders were asked whether the training programme has impacted on other areas of the education system, including examinations, teaching and learning materials, very few examples were provided.

A senior MoGE official who was a member of the PT group (backed up by a few other stakeholders) spoke of the timeframe of the programme in this regard:

"The programme is still new, and still to be fully absorbed into the curriculum. I think that when it is fully integrated, other areas of the education system will see it working, and this will help it to be spread."

However, as a result of the training, teachers, HTs and various MoGE officials spoke of the need for more training and a better understanding relating to assessment and learner evaluation:

"We still need help with assessments. The Ministry also needs more training on how to support us too. We need resources as we know that it's not just about giving them [learners with disabilities] extra time." (*Teacher*)

Upon examining the modules and speaking to the EENET Consultant and NAD managers, the consultant learned that the area of assessment was due to be covered in the final modules at the end of 2019.

NAD did not conduct its programme activities in isolation. For example, the annual Inclusive Education Symposium that has been held annually for the last four years (2016-2019) is organised by Disability Rights Watch (DRW) in close collaboration with the MoGE and NAD. The keynote speakers and expert panellists are carefully selected by DRW and NAD in consultation with MoGE, and include influential people representing various sectors, such as: five people with disabilities representing DPOs; high-level officials from the MoGE; civil society organisations; and lecturers from UNZA.

Reflections

Bringing about change in pre-service teacher training to ensure it includes inclusive education is the medium- to long-term plan of NAD's programme. This has been decided from a diversification, sustainability and cost-effectiveness point of view. NAD's Strategic Plan aims, eventually, to get the training modules integrated into the curriculum of all TTCs and universities across Zambia. In recent years there has been a growing awareness globally of the need for substantial change in pre-service training if we are to develop inclusive education systems, but NAD's programme still represents a significant departure from the norm for NGO training programmes which predominantly focus on relatively short-term in-service training.

NAD also started with in-service training, but from day one the programme insisted on including pre-service training personnel, from core roles in curriculum development and pedagogy, in the process. This decision now appears to be yielding positive results in terms of the levels of buy-in for the training within TTCs and universities – evidenced for instance by the numbers of institutions that are starting to incorporate inclusive education training and by the inter-institutional collaborations emerging.

The bulk of the programme plan up to 2019 has still focused on in-service training development and roll-out, so to date relatively few student teachers in TTCs and universities have participated directly in trainings facilitated by EENET or the PTs. This aspect of work has only been lightly tested. Inevitably, there remain significant gaps and challenges to be addressed in pre-service training and student practice, and in the attitudes of many lecturers, not least the barriers preventing persons with disabilities from enrolling and participating as student teachers. Arguably, however, despite the limited direct training so far, many student teachers have already benefitted from their lecturers receiving PT training and starting to weave what they have learned into their college/university teaching.

NAD seems well-positioned now to move forward with more pre-service focused support (while maintaining a degree of involvement in in-service). NAD's move from an in-service to a pre-service focus can be seen as a fairly smooth continuum of engagement, unlike other organisations who might move clumsily from supporting a totally in-service programme to a totally pre-service one.

Recommendations relating to pre-service training

Strongly support inclusion of student teachers with disabilities

As a disability-focused organisation, NAD can and should play a central role in advocating for the TTCs and universities it engages with to improve presence, participation and achievement of students with disabilities. A vital part of making the education system inclusive is for the teaching workforce to be diverse, which means increasing the numbers of highly skilled female and male teachers with disabilities.²³ Given that doors to TTC and

²³ According to a Senior NAD Manager, the DPOs supported by NAD, among others, have been advocating for increased training/recruitment of persons with disabilities in pre-service colleges. In 2018, the MoGE released a policy statement which they have already started to implement, to the effect that '10 per cent of all newly recruited teachers from colleges should be persons with disabilities'.

universities have already been opened through the PT training process and the initial pre-service activities, NAD could ensure that the next phase of work includes providing specific advice and support to institutions. This could include advocating for and providing advice around (or even funding for) reviewing enrolment policies to ensure they are not exclusive of any group, particularly students with disabilities, and making reasonable accommodations and longer-term universal design changes.

Maintain advocacy and information relationships with TTCs and universities

The aim ultimately is for inclusive education training to be rolled out to all student teachers in Zambia. This will require extensive buy-in across the higher education sector and within the MoGE and the MoHE. NAD and EENET need to continue and expand their dialogue with institutions and MoGE and MoHE personnel, sharing learnings from in-service and initial pre-service experiences and openly responding to questions and concerns. Specifically, targeted information and guidance materials, including case studies of institutions that have already started to integrate the training, could be prepared and shared with institutions. PT-led awareness/demonstration events could be organised for institution staff, again to showcase the action-research based training approach, share the modules and present in-service and pre-service case studies (ideally presented by teachers/students themselves or via video evidence).

Particular effort and support (from NAD, EENET and PTs who work in TTCs and universities) may need to be continued, focused on special needs lecturers. While they were not prioritised in the initial PT training process for reasons that appear logical, the negative consequences (i.e. their lack of buy-in for the inclusive education training, or even active resistance) could be a barrier to progress in the TTCs and universities. These personnel need to be worked with sensitively, with understanding of why the inclusive education training programme might feel threatening to them.

Provide practical advice on integrating inclusive education into the pre-service curriculum

Making substantial and lasting changes to TTC and university curricula and assessments will take time and technical expertise – the aim is to fully embed inclusive education into all aspects of pre-service training, not just gain permission for a module to be run (and then potentially dropped again). NAD and EENET need to maintain hands-on support for the PTs who work in TTCs and universities, so that they can continue or even increase their efforts to raise awareness among and train their colleagues. A detailed review of the three-day pre-service training activities could be conducted (beyond what was possible in the broad scope of this review). This would involve substantial consultations with the participating students and their lecturers, to find out what worked well, what changes are observable in student knowledge and practice, what their suggestions are for improvements, what they think of the full package of modules (which they have not experienced yet), and ideally working with them to design improvements and/or offer ideas for how/where to embed the 11-module package into their overall training programme.

TTCs and universities may need continued advice and support to plan and budget for the changes involved in integrating inclusive education training, and improving participation of students with disabilities.

The following section investigates the practical matters regarding the planning, management, monitoring and documentation of the programme.

B. Investigating practical matters regarding the planning, management, monitoring and documentation of the programme

While this review is primarily focused on learning about the chosen approach to teacher training and investigating the assumptions about how best to facilitate teachers to become committed and skilled inclusive practitioners, Part B will reflect briefly on how the programme was managed. There is currently extensive interest in the approach being used in this inclusive education teacher training programme. Learning about how best to plan, manage, monitor and document a programme like this may help ensure that similar programmes are implemented effectively and efficiently in future, both within Zambia, as well as globally.

4.6. Clear plan/vision

In order to evaluate whether there was a clear plan or vision at the start of the programme, as well as how this plan or vision evolved, NAD programme documents, including the short-, medium- and long-term strategy were examined, and interviews with Zambian NAD managers were conducted. As discussed in Section A, evidence suggests there was a carefully conceptualised plan for the pilot and roll-out of the programme throughout Zambia.

Documents and respondents not only indicate a clear plan for the pilot in-service and pre-service teacher training, but also a long-term plan for how the programme could be rolled out nationally via in-service teacher trainers based within the MoGE. The plan included identifying key stakeholders required to provide the training, get the programme accepted into the curriculum for teacher training institutions and ensure long-term ownership of the programme by PTs, the MoGE and the MoHE.

A NAD Senior Manager shared that not only was there a plan on paper, but also a recognition of the need to build and maintain strategic relationships with the MoGE:

“We meet them first, the Ministry decision-makers, such as the Chief Curriculum Specialists, Director of Curriculum. We carefully find those with understanding and passion. They are willing to agree to do things differently. Then we invite them to accompany us in the field. We pay for their transport and accommodation for three days. We introduce them to strong Head Teachers from selected Pilot Schools, District-level Resource Centres, members of our rich and diverse

strong group. We carefully draw up our agenda. We have a clear and deliberate strategy for the programme's implementation and success.”

There was a clear logical framework which included the goals, objectives, outputs, activities and inputs of the inclusive education teacher training programme. The programme reports, including the observer reports, baseline reports, and so on, suggested that these had been met. As this is a learning review and not a full impact evaluation of the programme, this report does not include a comprehensive point-by-point analysis of every element of the log frame. However, some of the main programme achievements and challenges have been presented in Sections 1.1 and 1.2 of Part A.

4.7. Zambia NAD team capacity

Interviews with various stakeholders illustrated that the majority of the Zambian NAD team were respected within the Zambian CBR and education sectors, and were seen to be instrumental in the programme's success. Stakeholders including MoGE officials at District and Provincial level, teachers and HTs as well as PTs acknowledged that the teams were strong, worked well together and noted the strengths of the individual NAD staff and managers.

“They work so hard to help us. They know our needs and have built close relationships with us and our members.” *(Parent organisation)*

Concerns around the continued capacity of the Zambian NAD team was raised a number of times by a variety of stakeholders including HTs, PTs as well as the EENET Director and Consultant. They were concerned about burn-out, especially for the Zambian Senior Manager and the programme manager, who were already stretched in terms of workload. Respondents expressed concern about their long-term capacity to be able to support the existing six pilot schools, PTs, pre-service institutions, as well as relationship with MoGE officials at all levels, as their proposed future work plans included increased activities. The future plan to split the Zambian NAD team between Livingstone and Lusaka was also raised as a potential concern. One stakeholder noted her concern regarding the capacity of one Zambian NAD team member who she felt might not be as effective as needed. She further noted that she was worried that this results in the Senior Manager having to carry additional work and add to his already heavy schedule.

During interviews with District MoGE officials, PT members, Zambian NAD managers, as well as the EENET Director and Consultant, stakeholders shared the need for continued and ongoing Zambian NAD manager support and monitoring for those involved in the current pilot. They shared that without this, the sustainability and continuation of the programme may be compromised.

“They [Zambian NAD team] have to be on the ground, face-to-face until they [schools, MoGE, pre-service institutions and SITs] grasp it [inclusive education]. They must be on their doorstep like a bush fire. It's only when it comes to your front door that you do anything.” *(Stakeholder)*

Several stakeholders suggested that NAD should look at increasing the numbers of Zambian NAD staff, with four stakeholders suggesting that some of the volunteers be made permanent.

“They already have insider information about the programme, their ability to do the work has been proven already, they understand the logistics as well as what happens during the training.” *(Stakeholder)*

“They wouldn’t need much training as they are already doing the work.” *(Stakeholder)*

“A volunteer [name] is such an asset. She assists with the logistical preparation of the training, as well as provides feedback on her observations relating to the training. This is important as she is able to give us a bird-eye view of the training as she was present, not training, and could gain insights that we as trainers who were busy with training could not.” *(Stakeholder)*

4.8. Financial management and budgeting

During interviews with Zambia NAD managers, PTs, well as the EENET Director and Consultant, the consultant asked questions relating to whether they felt there were any financial concerns relating to the programme. The Zambian NAD Senior Manager has a strong financial background which may be why no financial management problems were identified by any stakeholders during interviews.

“He [Zambian NAD Senior Manager] is the best person for the job. There isn’t any fraud like in some other organisations. He makes sure there are procedures in place and accountability.” *(NAD partner)*

While careful short-, medium- and long-term planning was documented in reports and shared during interviews, some stakeholders spoke about concerns relating to sufficient funding. They raised concerns about the reduction of hours and cutting of work for certain Zambian NAD staff such as the volunteers who they felt fulfilled vital roles and ensured smooth running of the programme. They included the CBR volunteers as well as the observers as examples of key stakeholders whom they felt were important for the programme’s sustainability and monitoring.

As discussed in Section 1.3.2 of Part A, provision of funding for additional training days for the teacher training modules was raised as important, as well as inclusion of site observation visits for PTs, which would assist them in ensuring that teachers were implementing the training successfully. Inevitably such costs may not be NAD responsibility, but MoGE responsibility, especially going forward. In addition, PT members collectively spoke of how they wished they could visit other countries (such as Zanzibar) involved in inclusive education teacher training. This was also noted by an EENET Consultant:

“Even if only four or five PTs could go, that would be really valuable.” *(EENET Consultant)*

During interviews with Zambian NAD managers and the EENET Director and Consultant, the donor above NAD, Norad, was mentioned. While Norad representatives were not interviewed in this review, certain stakeholders shared that the Norad’s funding arrives late each year (usually around March or April), which results in challenges in planning for and getting substantial work done during the first quarter of each year. The Zambian school year begins in January, meaning vital months of work are lost. According to a stakeholder, the late payment had,

“... definitely impacted EENET’s activities on this project over the years.”

The stakeholder further shared that the late payment of grants has had a direct negative impact on the programme's implementation, including the timely scheduling of the module training with schools and PTs. As mentioned in Section 1.2 of Part A, the scheduling of training involved collaboration and careful planning with all levels of MoGE and schools to ensure that the most suitable and least disruptive dates were selected. Not having confirmed funds resulted in challenges with scheduling training and knock-on impacts regarding EENET consultant availability. The EENET Director shared how the late payment of grants had significant negative impacts:

"Not receiving money from NAD promptly in January has led to challenges with [the consultant] scheduling his field work during the first quarter – sometimes we have had to delay activities until second quarter or he's had to cover expenses from his own pocket and wait for his fees until EENET receives the grant."

A stakeholder mentioned that the lack of timely grant payments,

"... created unnecessary financial and logistical challenges and can mean that projects like this are rushing to do 12 months' work in nine months."

This challenge results in programme disruption, unnecessary stress and did not align with the programme's vision of developing long-term, sustained, ongoing activities and support.

"Having three months per year when money is not easily available is unnecessarily disruptive."
(Stakeholder)

4.9. Programme alignment

The programme, including all training modules, align with global inclusive education policies and frameworks (including the UNCRPD (2006); Salamanca Statement (1994); Education for All (1990; 2000); Sustainable Development Goals (2015), as well as the Zambian education policy of 1996 (currently under review), Zambian disability policy of 2013, revised education Act of 2011 and the Disability Act no. 6 of 2012. Please see the Section 1.2 of Part A of this review, for more information.

This can be seen in the selection of pilot schools (the schools were all mainstream, not special schools or those with segregated special needs classrooms or units), as well as the composition of PT teams (selection of PTs who did not have special education background or qualifications). One HT in a pilot school is a specialist teacher and PT. He was selected for his unique interpersonal skills and ability to collaborate with mainstream and specialist teachers. He has been involved in influencing the dialogue within special needs teachers on the importance of inclusive education, and that special education should be seen a small component within the wider, inclusive education strategy.

4.10. Monitoring mechanisms

As mention in Part A of the review, at the start of each new training module, teachers were asked to reflect on the previous training module, as well as provide feedback to PTs on their experiences of implementing their learnings in their classrooms. This feedback was then collated and included in a report that was written by the PTs from each school, every three to four months, at the beginning of each ToT workshop.

Detailed feedback was provided by the Observer teams after each of their annual pilot school visits. In 2016, a monitoring report on the programme was conducted ('Report of the Inclusive Education, Training of Trainers Zambia Workshop'). In addition, the EENET Consultant also completed progress reports. After reading the numerous reports from stakeholders, the consultant was able to see significant improvements in the structuring of the reports, amount of detail included, relevant photographs that assisted in providing evidence to back up what was written (i.e. images of teachers using gallery-walks, learners sitting and working in groups, newly constructed accessible pathways), improved reflections of the challenges and successes, as well as more suitable and achievable recommendations, along with their critiques of the training and school observations.

These documents are collected and reviewed by the Zambian NAD Senior Manager, and a condensed report is sent to NAD in Norway, which enables both local as well as Norwegian NAD staff to have an overview of progress in the PTs', teachers', HTs' and observers' reflective thinking and action-based research skills. For example, the Katapazi report from March 2016 contained detailed information and included many photographs to illustrate the comments made. The report included the challenges (i.e. food arriving late and how this impacted on the training), and suitable recommendations on what the team could do differently going forward.

Quantitative data was also collected after each training session conducted by PTs and included information on the number of teachers and other participants (such as PTA members, SIT members, MoGE officials and lecturers), as well as other data such as the number of learners with disabilities enrolled each quarter. PTs, the Zambian NAD Senior Manager and the EENET Consultant and Director expressed that the statistical and qualitative data that has been captured in reports and evaluations can assist in motivating for the programme's continuation as well as roll-out in other districts across Zambia and in other countries.

During interviews, teachers, PTs and MoGE officials at various levels were asked about whether there were formal monitoring mechanisms in place, and if so, to reflect on the importance and value of these mechanisms. Participants interviewed were all aware that there were observers involved in the programme. A number of PTs, as well as MoGE officials at various levels, mentioned the importance of having observers involved in the programme. They spoke of how the observer role is vital for sustainability of the programme. PTs were able to clearly explain the role and function of the observers (i.e. to visit the pilot schools and evaluate how the teachers were implementing the training received).

"Monitoring is very important. The trainers [Principal Trainers] need to know what is working and what is not in order to make it [programme] better going forward." (*Teacher*)

However, some PTs shared that while they acknowledged the important role played by observers, there were some challenges. They wanted these to be identified in this review to ensure that, going forward, the programme was effective. Some teachers and PTs felt that these were not always the most suitable people and that some observers were not fully familiar with the inclusive education programme content and strategies.

“Some of them are from the Ministry, but they have not been fully involved in the training, so aren’t always able to offer feedback that is that valuable. Some of them just feel important, superior to us [Principal Trainers] but sometimes we know more than them.” (PT member)

In addition, because observers were not part of the training sessions with the pilot schools, they were not fully aware of some of the challenges facing teachers or with the implementation of the training. This they felt may negatively impact on their ability to,

“... pick up on some of the issues that were seen in the training with the teachers.”

On the other hand, a number of PTs shared that they would find it valuable to participate in monitoring the training they had given:

“That way, we can get to see what is working, and what areas we need to work on in the next training session with our teachers.”

Others stated that this would assist them in addressing the challenges in a far better and meaningful way, and

“... allow us to provide additional support into the next module training.”

“It would be rewarding to see our training being implemented in the classroom. As much as we give the teachers the training and see them do the activities, we would really like to see if they can do it in their classrooms.”

However, there was conflicting feedback from other stakeholders such as NAD staff, the EENET Consultant, and some senior MoGE officials. A senior MoGE manager raised the concern that having the PTs involved in the monitoring could be,

“a conflict of interest. They cannot be effective observers as they have done the training.”

Others felt there would be value in providing an additional day for PTs to observe teachers in the pilot schools, to see if or how they are implementing the training in their classrooms.

“This would be beneficial as they would be able to see where they can add in additional information and advice during the follow-up training. This could improve the training and sustainability of the programme.” (Senior Ministry official)

“Maybe they could keep the existing observers, but add in an extra role of the trainers to include a day in schools.” (MoGE official)

Other PT members raised concerns relating to some observers not having the skills to notice when teachers may have tried to ‘window dress’ to look better than they might really be, during observed lessons.

An observer who was a HT shared that teachers may have used lessons previously taught during observer visits that had,

“been practised before in order to look good in front of the observers.”

Another PT concurred and added:

“They aren’t always able to see when teachers are ‘window dressing’ as they haven’t been involved in the training like we have been. Maybe they should look at including others with more training and experience?”

Reflections

The findings highlighted that the successful roll-out of the programme, which aligned with global inclusive education legislation as well as Zambian disability policy, education and disability laws of 2011, was aided by good planning. The overall programme included a clear plan for the pilot in-service and pre-service teacher training, as well a long-term plan for how the programme could be rolled out nationally via in-service teacher trainers based within the MoGE. Furthermore, the plan included the identification of key stakeholders who were required to provide the training, get the programme accepted into the curriculum for teacher training institutions (both TTCs and universities), as well as the programme's long-term ownership by PTs and the MoGE and the MoHE.

A key factor conducive to successful implementation of the programme was that the selection and composition of the trainers, schools and PTs reflected a focus on inclusive education priority areas (i.e. mainstream schools rather than special schools). This resulted in the effective upskilling of teachers and MoGE officials who were not only focused on specialised education, and it also indicates an important fundamental step towards incorporating inclusive education mindset and at all levels.

A number of stakeholders also stated that the success of the programme was largely due to the hard work and skills of the Zambian NAD team. This in turn had a positive and motivating effect on the PTs and pilot school teachers, because they were encouraged and supported by the Zambian NAD team who were from Zambia and fully understood the Zambian context. The inclusion of volunteers within the programmes was also reported to be very beneficial from a logistical, as well as practical, point of view. However, it is important to note that the later removal of certain positions (volunteers and observers) within the programme was raised as a concern to the sustainability and effectiveness of the programme.

The evidence points to encouraging improvements in the quality and level of reflection in the monitoring and evaluation reports submitted by the PTs, observers and external consultants. This has contributed to the capturing of statistical and qualitative data which can assist in motivating for the programme's continuation and roll-out in other districts across Zambia and in other countries. The Provincial Education Officer and the Senior Standards Officer in charge of special education (southern province) do jointly monitor the six pilot schools and other special units in some schools in Kazungula, Zimba and Livingstone. When they visit the pilot schools, they invite the Senior NAD manager to join, so as to share experiences and harmonise recommendations on solutions to challenges observed. However, with regard to monitoring, it is important to note that not all the observers had attended the training sessions, therefore some lacked the skills and competence to effectively evaluate teachers in schools during their observation visits.

It was found that a number of strategic relationships had been built between Zambian NAD Senior Managers and MoGE and MoHE officials from National down to District level. This is viewed as a really positive aspect because such relationships enhance effective roll-out of the training and also promote sustainability of the programme overall. However, a valid concern was raised around the continued capacity and possible burn-out of some of the Zambian NAD managers, especially as the teams were going to be divided, with half

moving to Lusaka in the near future. This issue needs to be addressed as the Zambian NAD managers have proved to be integral to the success of the programme. Consequently, any factor that limits or damages their capacity could negatively impact future sustainability and nullify the good work done in other areas that support roll-out of the programme.

It emerged that funding remains a serious challenge. The important aspect of monitoring was affected as PT members were not able to evaluate the effectiveness of their training by visiting schools and conducting classroom observations due to a lack of funding. Furthermore, there have been delays in Norad grant payments and these have had significant negative impacts on planning, scheduling and conducting of the training. As described above, there have been improvements in many areas of the training programme. However, limited and/or delayed funding threatens to undermine the good work done in these areas, and going forward the issue of funding demands attention to ensure both effective roll-out and sustainability.

Recommendations relating to planning, management, monitoring and documentation

Employing more staff

Going forward NAD should seriously consider increasing the number of full-time and/or part-time Zambian NAD employees. With Phase Two of the programme and the segregation of the current Zambian team expected, NAD should look at employing additional employees to assist with capacity and sustainability of the programme. The possibility of employing the current volunteers either full-time or part-time could be explored as they already have an understanding of how the programme operates.

Review capacity of Zambian NAD team

Looking ahead, NAD should carefully review the capacity of each of the Zambian NAD team members to assess whether they are still suitable in performing the main duties of their job roles, and whether possible replacements will be required. In addition, a review would also identify any areas of personal and professional growth and development that could build the capacity of the team so that they are well equipped to do their jobs.

Help PTs evaluate teachers

NAD needs to consider providing funding for PTs to be able to spend a day per module to monitor teachers' implementation of the training in their classrooms. This will enable the PTs to gain valuable insight as to how well the teachers have processed their training, and also address areas where improvements/modifications need to be made. It is also strongly suggested that, to enhance the capacity of current and future observers, they be partnered with PTs during school site visits to provide mentoring and support.

Keep collecting data

Ongoing collection of data is an essential component of the programme. It helps all role-players keep track of what is happening and also identifies areas of the training that need improving. Hence, NAD needs to continue to collect statistical data relating to all aspects of the programme, such as number of learners with disabilities at each school, number of teachers trained, etc.

Keep monitoring and evaluating

To sustain effective roll-out and improve on the training programme methods, NAD needs to ensure that continued monitoring and evaluation reports be conducted. Furthermore, these reports must be carefully examined to determine whether the programme outcomes are being met, the training is being correctly presented, and that the content is still relevant.

5. Conclusion and summary of recommendations

Despite numerous international frameworks and national legislation on the rights of learners with disabilities, funding and capacity shortfalls mean millions of learners globally remain out of education or excluded within education.

Improving the quality of teaching by remodelling teacher education curricula, reforming the training received by trainers and the way in which trainers are selected and supported, and ensuring that all pre- and in-service teachers participate in inclusion-focused pedagogical training are critical interventions for ensuring the presence, participation and achievement of all learners in quality education, including those with disabilities. Such interventions are more likely to be sustained if they are owned at national and subnational levels, and if they are operationalised and contextualised by and for the relevant authorities, communities, schools and families of learners with disabilities.

Echoing the original theory of change proposed for the programme (Appendix A), the review highlighted achievements in the following key areas which provide learning to inform scale-up of the participatory teacher training approach.

- The teacher training programme in Zambia has been based on a foundation of building teacher trainers' competence, confidence and ownership of training, so that they are more able to help develop teachers as inclusion-oriented problem-solvers and collaborators.
- Trainers understand and own the action research based inclusive education trainings because they have had opportunities to co-design and test the teacher training messages and methods, and to use action research in their own work.
- Trainers are more committed and have greater capacity to influence wider systemic change in pre- and in-service teacher training because they have been carefully selected from certain roles and according to key criteria.
- Teachers are better supported and motivated to become inclusion-oriented problem-solvers in their daily work because they are trained and supported by confident, competent, innovative trainers who understand and use action research principles throughout their trainings.
- Teachers are working more innovatively and collaboratively with each other and other stakeholders to solve inclusion barriers and welcome and support the participation and achievement of diverse learners because they have been trained and supported to become problem-solvers as part of their professional development. More work is needed to consolidate these skills and ensure that they are embedded within routine classroom teaching practice.
- High quality, inclusive teaching has begun to be developed from teachers working innovatively and collaboratively.

Recommendations

In order to sustain and consolidate the gains made by the programme so far, the following actions should be continued or, where they are not already underway, should be started.

Teachers and teaching

Keep promoting reflection, learning and sharing to develop inclusion-oriented problem-solving culture in schools. Use action research, mentoring, digital peer-to-peer and self-study approaches to support this.

Keep filling training gaps to ensure new staff are trained in inclusive approaches when they join a school and that all teachers receive refresher training so that they do not lose the skills or confidence acquired thus far.

Keep promoting and demonstrating collaboration among/between teachers, SITs, school IECOs and other relevant stakeholders, such as those from NGOs, DPOs, universities and TTCs who can offer specialist support, knowledge, training, advice as well as materials and devices.

Keep collecting and analysing data to identify achievements and gaps in the inclusion of children with disabilities in schools. This could include disaggregated data on (re)enrolments, on absenteeism (among learners and teachers), on staff turnover, on academic and non-academic achievement standards, on learner, teacher and parent satisfaction, and so on.

Support teachers to advocate for change they have identified as necessary but cannot fully implement themselves, such as reforming the system for examinations and assessment. This is critical for teacher motivation as well as delivering the changes needed.

Trainers and training

Keep helping PTs to build their technical strength and confidence, maintaining support for their continued learning as training practitioners and as action researchers. Low-cost options include providing mentoring, information and resources, meetings and peer-to-peer exchange. It is also necessary to provide clarity on the future role of PTs.

Find better ways to support PT workload challenges by ensuring PTs' line managers are fully on-board and supportive of the additional role their staff member has taken on; that they understand exactly what the PT is doing and why and the benefits; and that the benefit to the PT's own core work is made explicit to their line management.

Keep aiming for better, continuously monitor and make improvements to training.

Keep sharing the experience of the effectiveness of long-term participatory approaches.

School Inclusion Teams

Keep developing School Inclusion Teams to play a useful role in supporting inclusive education-related change at school community level. SITs have the potential to do far more in terms of creating awareness of disability, educational rights and importance of education; linking with community-based resources that can help improve schools; supporting and encouraging parents of children with disabilities to bring their children to school;

encouraging learners who have dropped out to return to school; and solving diverse challenges faced by learners within their communities.

Keep supporting ongoing learning within and between SITs, providing opportunities to refresh and expand their understanding of inclusive education and practical solutions to inclusion barriers.

Keep motivating SIT membership development with new members from diverse backgrounds with different skill sets.

Maintain lobby pressure on MoGE in regard to inclusion funding, including for SITs.

Teacher training institutions

Strongly support inclusion of student teachers with disabilities in TTCs and universities to improve presence, participation and achievement of students with disabilities.

Maintain advocacy and information relationships with TTCs and universities to stimulate buy-in across the higher education sector and within the MoGE and the MoHE. Share learnings from in-service and initial pre-service experiences and openly respond to questions and concerns.

Work with special needs lecturers to encourage their participation in more inclusive approaches to teaching.

Provide practical advice on integrating inclusive education into the pre-service curriculum to fully embed inclusive education into all aspects of pre-service training.

Provide advice and support to TTCs and universities to plan and budget for the changes involved in integrating inclusive education training and improving participation of students with disabilities.

Programming

Employ more staff for the sustainability and capacity of the programme. The possibility of employing the current volunteers either full-time or part-time could be explored as they already have an understanding of how the programme operates.

Review capacity of Zambian NAD team to assess staff suitability for their roles and identify any areas of personal and professional growth and development that could build the capacity of the team so that they are well equipped to do their jobs.

Help PTs evaluate teachers to enable the PTs to gain valuable insight as to how well the teachers have processed their training, and also address areas where improvements/modifications need to be made.

Keep monitoring and evaluating to sustain effective roll-out and improve on the training programme methods. These reports must be carefully examined to determine whether the programme outcomes are being met, the training is being correctly presented, and that the content is still relevant.

Appendix A: Pathway of Change

High quality, inclusive teaching develops **when teachers work innovatively and collaboratively.**

Teachers will work more innovatively and collaboratively with each other and other stakeholders to solve inclusion barriers and welcome and support the participation and achievement of diverse learners... **IF they have been trained and supported to become problem-solvers as part of their professional development (at both in-service and pre-service stages).**

Teachers will be better supported and motivated to become inclusion-oriented problem-solvers in their daily work... **IF they have been trained and supported by confident, competent, innovative trainers (at in-service and pre-service levels) who understand and use action research principles in their trainings**

Trainers will become more confident, competent, innovative trainers who use action research principles... **IF they have been given opportunities to deeply understand and 'own' the trainings and practise using action research approaches for themselves.**

Trainers will more deeply understand and 'own' action-research based inclusive education trainings ... **IF they have been given opportunities to proactively co-designing and test the teacher training courses.**

The teacher training programme in Zambia has therefore been based on the foundation of building teacher trainer competence, confidence and ownership of trainings that focus on developing teachers as problem-solvers and collaborators.

Appendix B: Research guide questions

Question used during individual interviews and focus group discussions:

Please note that the questions were re-worded and simplified at times (i.e. 'stakeholder ownership' might be changed to 'those who are responsible and involved'; and 'sustainability of the programme' might be re-worded to 'what can be done to make sure the programme continues/goes on', etc).

The questions were modified according to the participants being interviewed. For example, certain questions were expanded upon relating to management of the school when interviewing Head Teachers, while some were reduced or excluded when focus groups with parents were held.

Quantitative questions

1. How many learners do you have in your school?
2. How many learners with specific needs/disabilities/from diverse groups do you have in your school (clarification required)?
3. How many teachers do you have?
4. Did all of the teachers attend the training?
5. If not, what reasons were given?
6. How long have you been Head Teacher at this school?

Qualitative interview questions

The following questions are outlined in the ToR. The sub-questions will guide our interviews and focus groups:

Area i: The role of the teacher training programme and the success of the approach in building teachers' confidence and competence as inclusion-oriented problem-solvers

- Does the in-service training designed and delivered through this programme enable teachers to become more confident/competent problem-solvers, and if so, how does it do this?
 - How confident/competent do you feel in solving inclusion-related problems in your class/school?
 - Has this changed during the period of the training? If so, what changes have happened in your confidence/competence?
- What evidence is there of increased/improved problem-solving by teachers? In what areas of their work has problem-solving increased/improved?
 - Can you give us some examples of your problem-solving work?
- What have been the results of their increased/improved problem-solving?
 - Can you describe areas that have got better because of your improved problem-solving work?

- Are any of these results linked (or potentially linked) to improvements in presence, participation and/or achievement of diverse learners in schools, with a particular focus on learners with disabilities? What is the evidence?
 - Can you please describe how your teaching of learners with disabilities has got better from improving presence, participation and/or achievement of diverse learners in your school?
 - Are there more things you would like to try in your classroom, can you describe them please?
- What examples/vignettes of innovative, inclusion-oriented problem-solving by teachers can we document?
 - Can you please describe some of your innovative problem-solving techniques?
 - Do you have ideas for any other techniques that you would like to try but have not done so yet? If so please describe them – why have you not tried these techniques yet?
- What evidence is there of teachers collaborating with each other and with other stakeholders (parents, learners, DPOs, etc) to identify and solve inclusion-related problems? What have been/appear to be the results of these collaborations?
 - Can you please describe areas where you have collaborated with other teachers? What kind of impact as this collaboration made?
 - Can you please describe areas where you have collaborated with other stakeholders? What kind of impact is this collaboration had?
 - Are there any other collaborations you have thought of/would like to try but have not managed to do yet? What has been challenging about forming these collaborations?
- Is there evidence of teachers not improving or reporting that there is no improvement in problem-solving skills/confidence? What might be the reasons for this?
 - Are the areas where you feel you have not improved? Particularly with regard to your problem-solving skills and confidence?
 - Why do you think this is? What challenges still remain?
 - What do you think can help you improve, or get over these challenges?

Area ii: The role of the programme and the success of the approach in developing a cadre of confident, competent, innovative inclusion-oriented teacher trainers

- Are the PTs considered to be and/or do they consider themselves to be confident, competent and/or innovative with regard to providing in-service training on inclusive education? To what extent? What evidence is there/what evidence do they cite?
 - Do you think the principal trainers are confident, competent and innovative in providing in-service training? How confident, competent and innovative are they? Why do you say this? What evidence is there to support this?
 - Do you think the principal trainers consider themselves to be confident, competent and innovative in providing in-service training? Why do you say this? Could you provide examples?

- In what areas are principal trainers still lacking confidence, competence and/or innovation regarding their role in providing in-service training on inclusive education?
 - Are there any areas in which you think the principal trainers are still lacking confidence, competence or innovation when providing training? Why do you say this?
 - What you think could improve the situation to make them more confident, competent or innovative?
 - (Talking to principal trainers) Are there any areas in which you think you are still lacking confidence, competence or innovation when providing training? What do you think the reason for this? What can help you improve/ overcome the challenges?

- Is there evidence that principal trainers understand and embed action research principles into the in-service teacher training and teacher professional development that they facilitate and monitor?
 - Do you think the principal trainers understand and use the action research principles into their training and teacher professional development? Could you provide examples of where this happens?
 - (Talking to principal trainers) Do you think that you understand and use the action research principles into your training and teacher professional development? Could you provide examples of where this happens?
Are there any areas where you feel you could still improve? What would help you to do this?

- Do teachers feel they are receiving in-service training that motivates them to be inclusive and/or that helps them to build their inclusion-oriented problem-solving skills? Why/why not?
 - Does the training you receive motivate you to be inclusive and develop your inclusion oriented problem-solving skills? If so, could you please explain why? If not, could you please explain why?
 - Do you think that you could be motivated more? What would help to achieve this?

- What do teachers think about the principal trainers (their skills, approach to facilitation, etc) and the trainings?
 - What can you say about the training you have received? Can you think of any areas where you think it could be improved or needs to be changed?
 - What do you think about the skills of the principal trainers, and their approach to facilitation? What else could you say about the principal trainers?

Area iii: The role of the programme and the success of the approach in encouraging trainers to be actively involved in developing teacher training on inclusion, and to own the training and take responsibility for ongoing development, improvement and roll-out

- What role did principal trainers play in developing the in-service training? How was this role facilitated? How does this compare with the role that was anticipated/planned for the principal trainers by those who designed the programme? What are the reasons for any variance between what was planned and what happened?

- (Talking to principal trainers) Can you please describe your role in developing the in-service training? How was this role facilitated? How does your involvement in developing the course compare to the role that was originally planned for you by those who designed the programme? Were you happy with your level of involvement? Do you think it could be improved or changed in any way?
- How do principal trainers and other key stakeholders perceive or assess trainers' involvement in the process of developing the in-service training? How aware are they of the role principal trainers have played in developing the materials, and the benefits of this role?
 - (Talking to principal trainers) Can you please describe your level of involvement in developing the in-service training?
 - How would you assess your level of involvement?
 - Do you think other stakeholders are aware and/or appreciate your level of involvement in developing the training?
 - How do you think you have benefited, or not, from your involvement in developing the training?
 - (Talking to other stakeholders) Can you please describe the level of involvement of the principal trainers in developing the in-service training?
 - How would you assess their level of involvement? In what ways do you think it could be improved or changed?
 - Do you think stakeholders are aware and/or appreciate the level of involvement of the principal trainers?
 - How do you think the principal trainers have benefited, or not from their involvement in developing the training?
- What evidence is there that principal trainers are being pro-active and creative in the way they use and continue to adapt the training for each cadre of in-service trainees?
 - (Talking to principal trainers) In what ways do you think you are being proactive and creative in the way you deliver, and continue to adapt the training for each new group of trainees?
 - Could you please describe examples of this and where you see change/improvement happening?
 - What areas of training delivery do think could still improve? What would help this happen?
 - (Talking to other stakeholders) In what ways do think the principal trainers are being proactive and creative in the delivery, and ongoing adaptation of training for each new group of trainees?
 - Could you please describe examples of this and where you see change/improvement happening?
 - What areas of training delivery do think could still improve? What would help this happen?
- What evidence is there that principal trainers are continuing to – or plan to continue to – deliver in-service trainings beyond the sessions supported by the NAD-funded programme? What is helping or hindering wider roll-out by principal trainers?

- (Talking to principal trainers) Are you continuing, or planning to continue, delivering the in-service training beyond the sessions supported by NAD? Could you please explain how and where you are/will continue?
- What are the factors that are helping further roll-out of the training?
- What are the factors that are challenging further roll-out of the training?

- (Talking to other stakeholders) Are the principal trainers continuing, or planning to continue, delivering the in-service training beyond the sessions supported by NAD? Could you please explain how and where they are/will continue?
- What are the factors that are helping further roll-out of the training?
- What are the factors that are challenging further roll-out of the training?

- Is there any evidence that principal trainer involvement in co-developing these in-service training courses is leading to wider systemic changes within teacher training and teaching practice? Has principal trainer involvement in the co-development of the in-service training courses had any effect on the programme's aim to influence pre-service training. If so, how? If not, why not?
 - (Talking to principal trainers) Do you think your involvement in co-developing the training has helped to make changes at a broader systemic level of teacher training and teaching practice? In what ways? What could make your involvement have more impact in this area?
 - Do you think your involvement has helped the programme's aim to influence pre-service training? If so, how? If not, why not? How could your involvement have more impact?
 - What other impact do you think your involvement in co-developing the training has had on teaching training and education practice in general?

 - (Talking to other stakeholders) Do you think the principal trainers' involvement in co-developing the training has helped to make changes at a broader systemic level of teacher training and teaching practice? In what ways? What could make their involvement have more impact in this area?
 - Do you think the principal trainers' involvement has helped the programme's aim to influence pre-service training? If so, how? If not, why not? How could their involvement have more impact?
 - What other impact do you think the principal trainers' involvement in co-developing the training has had on teaching training and education practice in general?

Area iv: Teachers work more inclusively and are better able to provide quality education when they work collaboratively with each other and with other stakeholders.

- In what ways has the training programme supported teachers to avoid working in isolation with regard to inclusive education?
 - How has the training programme supported you so that you are not isolated in your work regarding inclusive education?
 - What areas of the training programme do you think could be improved to give you more support in future?

- To what extent have school inclusion teams been developed within pilot schools?
 - Can you please describe the school inclusion team within your pilot school?
 - What is the level of their involvement at the school, with regard to parents, teachers, the community and any other stakeholders?
 - What are the areas where you think the SIT could improve or change to make inclusion better at your school?

- What roles and results have school inclusion teams had so far?
 - What impact do you think the SITs had they had in promoting inclusive education training and practice at the school and beyond? Could you provide some examples?
 - What roles structures and relationships do think the SITs have helped develop? How do think they can improve?

- What are the opinions and experiences of teachers, learners, parents and other stakeholders regarding school inclusion teams?
 - Please share with me some of your experiences and opinions, positive and negative of the SIT at your school?
 - In what areas you think they are still lacking, or could be changed to improve inclusion at the school?

- What examples/vignettes of innovation by school inclusion teams can we document?
 - Can you think of any examples where the SIT has shown innovation to bring about inclusion? Could you please describe these?

- What other changes have been made during/since the training to enable teachers to collaborate with others or to avoid feeling isolated when facing inclusion challenges?
 - (Talking to teachers) since the training began, in what ways has your support and ability to collaborate changed or improved when facing inclusion challenges?
 - Do you ever feel isolated or alone when facing challenges in getting your learners with disabilities to participate? Or any other areas of inclusive education? Please describe how? What can be done to improve this?
 - (Talking to the stakeholders) Do you think the teacher's ability to collaborate has improved since training began?
 - Do you think they have better support structures around them since training began?
 - Do think the teachers ever feel isolated or alone when facing challenges in getting their learners with disabilities to participate? Or any other areas of inclusive education? Please describe how? What can be done to improve this?

Area v: Training on inclusive education at in-service level will not have long-lasting positive effects in the education system unless there are accompanying changes happening within pre-service teacher training.

- How and to what extent has the programme engaged with bringing about change in pre-service training?

- Do you think the programmes has made an impact in bringing about change in pre-service training? In what ways has it done this? And how much impact do think it has actually made on these changes?
- What have been the results so far?
 - Could you please provide some examples of where the training programme has brought about change in pre-service training?
 - Do think there are areas where the programme could improve to have more impact on preservice training? Please describe them?
- What challenges have been encountered? Which challenges have been overcome and how? Which challenges remain? What lessons have been learned about how they could be overcome in future phases of work?
- Many NGOs shy away from engaging in changing pre-service teacher education; what lessons have been learned that could help other organisations more confidently and competently engage in this area of work?
 - What advice could you give to other organisations who want to change pre-service teacher training?
 - What lessons have you learnt from the teacher training programme that you could share with them?
- Has there been (and if so, what has been the nature of) engagement with any other areas of the education system, beyond pre-service teacher education (e.g. curriculum and exams departments, school inspectorate, school infrastructure management, etc)?
 - Besides pre-service teacher education, what impact do you think the programme has had on any other areas of the education system, such as curriculum and exams, school structure management, etc.?
 - What kind of engagement has brought about this impact / encouraged this change/s?
 - Do think the programme could improve in certain areas to make a bigger impact on the education system? Please describe these?

Appendix C: Interview schedule

Dates	Planned activity	Responsible persons
Sunday, 22.09.19	Emma arrives in Livingstone, Zambia	Pick up by Evans, CBR car-0977694221
Monday, 23.09.19	Travel to Choma very early in the morning at 07:00 hrs, 10:00 hrs: 3 Interviews with the Provincial Education Officer; the Senior Education Standards Officer (SESO)- Inclusive and Special Education; District Education Standards Officer-Choma; and a Trainer- Bridget 14:00 hrs- Leave Choma for Monze 15:00 hrs- Check in at Golden Pillow Lodge, Monze. 15:30 -17:00 hrs Interview Sharon at Holy Family Centre; and Joseph Ngazimbi	Interviews in CHOMA with: Observer/The PEO- Mrs Florence Chikalekale Observer/SESO-Special: Mr Ngulube Observer/ESO Choma/Namwala- Mr Mudenda IE Trainer- Ms Bridget Mukwiza, Deputy Head Interviews in Monze with: Observer/ Holy Family Centre, Sharon- IE Trainer, Joseph Ngazimbi
Tuesday, 24.09.19	09:00 hrs, leave for Charles Lwanga Teachers College of Education (CLTCE), group discussions with pre-service teachers trained in introductory IE. Interviews with Senior Lecturers-Clotildah and Aubrey (2) Moono; Zemba-Gwembe DEBS and Patrick Kaluba-ESO (2)	Interviews in Monze/Gwembe: IE Trainer, Aubrey Moono-CLTCE IE Trainer, Clotildah-CLTCE IE Observer/DEBS Gwembe Mr Benson Zemba IE Trainer/ESO- Mr Patrick Kaluba
Wednesday, 25.09.19	07:30 hrs - Check out- Golden Pillow lodge 13:00 hrs – Arrive in L/stone, check into Lodge 14:30 hrs – Call on DEBS	From 14:30 – 17:00 hrs Meeting with DEBS Livingstone Observe In-service IE training FGDs with In-service teachers, at Shungu School Interview with Shungu Head Teacher/IE Trainer
Thursday, 26.09.19	In-service trainings in pilot schools 07:30 to 12:00 – leave for Kazungula, call on DEBS; visit Riverview Schools (Interview DEBS, In-service- teachers being trained, trainers, parents). 14:00 to 17:00 – visit Shungu School in Livingstone, Interview In-service- teachers being trained, IE trainers, parents, volunteers)	Interviews in Kazungula: IE Observer/MCDSS Tom Mungala Observe In-service teacher training FGDs with In-service IE teachers/SIT FGD with PSG members Additional follow up interviews at Shungu FGDs, Parents Support Groups- PSGs FGDs, School Inclusion Team-SIT

Friday, 27.09.19	In-service trainings in pilot schools 06:30 hrs - leave for Nakowa IE pilot school. 09:30 - Observe IE training in session; Interview with trainers, in-service teachers, school administrators, volunteers, SIT, etc) 13:30 – 15:30 travel from Luyaba to Zimba centre, interview DEBS, ESO Special. 17:00 hrs – return from Zimba to L/stone	3 hrs needed to travel from L/stone to Nakowa IE school. Interviews in Kazungula: Observe In-service teacher training in Luyaba FGDs with In-service IE teachers FGD with PSG members/CBR Volunteers FGDs, School Inclusion Team-SIT
Saturday, 28.09.19	Report writing- Emma	
Sunday, 29.09.19	Emma travels to Lusaka on Proflight with Caroline	
Monday, 30.09.19	Morning: 09:00 to 12:30 hrs Visit to ZAPD and ZAFOD- Interviews Visit CDC - Interview Dr Mwamba; CDC team reviewing IE curricula submitted. 14:30 to 16:30 hrs Interviews with IE Trainers/UNZA Lecturers FGD with pre-service IE teachers, UNZA	ZAPD, interview DG, ZAFOD Acting ED, Disability FPP, MOGE, Dr Mwamba Interview IE Trainers, UNZA, FGD
Tuesday, 01.10.19	09:00 to 17:00 hrs Interviews with DRW; ZAPCD, ZAEPD, Plan International; Cheshire/LCD	Interviews with Staff from Partner organisations
Wednesday, 02.10.19	10:00 hrs - Emma and Caroline return to L/stone-Proflight. 14:30 to 16:00 hrs Other outstanding interviews in L/stone	
Thursday, 03.10.19	Wrap up meeting at NAD office- fact checking data collected from interviews/FGDs.	

Appendix D: Interview participants

Mon 23 Sep

Names	Position	Institution/organisation	Interviewed from	
Jesart Ngulube	SESO: Special Education	Provincial Education Office	Choma	IND
Bridget Mukwiza	Deputy Head Teacher and PT (former DRCC, Zimba/Gwembe Districts)	Shampande Primary and Secondary	Choma	IND
Lillian Haangoma	District Education Standard Officer (DESO); former Kazungula DESO and Observer	District Education Office	Choma	IND
Joseph Ngazimbi	Teacher in Charge and PT	Monze Correctional Centre	Monze	IND
Sharon Handongwe	Project Manager and Observer	Holy Family Centre	Monze	IND

Tue 24 Sep

Lewis Chulu	Principal	Charles Lwanga TTC	Monze	IND
Aubrey Moono	Senior Lecturer and PT	Charles Lwanga TTC	Monze	IND
Cotildah Hamalengwa	Senior Lecturer and PT	Charles Lwanga TTC	Monze	IND
10 Students	3rd Year Teacher Training Students	Charles Lwanga TTC	Monze	FG 1
10 Students	3rd Year Teacher Training Students	Charles Lwanga TTC	Monze	FG 1
Benson Zemba	District Education Board Secretary (former SESO-Special/Inclusive Education- Southern province) and Observer	MoGE	Gwembe	IND
Patrick Kaluba	Education Standards Officer and PT	MoGE	Gwembe	IND

Wed 25 Sep

Orgency Malumbe	Head Teacher and PT	Shungu School	Livingstone	IND
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Non-disabled learners	15 x Learners	Riverview School	Riverview, Kazungula	FG 1
Learners with disabilities	10 x Learners	Riverview School	Riverview, Kazungula	FG 2
Paxinah Situmbeko	Member	CWAC	Riverview, Kazungula	FG 3
Richie Namakobe	Chairperson	CWAC	Riverview, Kazungula	FG 3
Alfred Mulewe	Member	SIT	Riverview, Kazungula	FG 3
Pulukjta Modern	Member	SIT	Riverview, Ksazungula	FG 3
Abania Phiri	Chairperson	CWAC	Riverview, Kazungula	FG 3
Ruelia Mundia	Member	CWAC	Riverview, Kazungula	FG 3
Loveness Ng'andu	Member	CWAC	Riverview, Kazungula	FG 3
Oliver Kawengo	Member	SIT	Riverview, Kazungula	FG 3
Kelvin Moonze	IE Coordinator	Riverview School	Riverview, Kazungula	FG 3
Precious Jericho	Member	SIT	Riverview, Kazungula	FG 3

Thu 26 Sep

Kelvin Moonze	IE Coordinator	Riverview School	Riverview	FG 1
Mazwi Muzamo	Teacher	Riverview School	Riverview	FG 1
Nebby Malembeka	DESO	DEB	Kazungula	IND
Samson D. Sakala	DEBS and Observer	DEB	Kazungula	IND
Edwin Katapazi	ESO Spec Ed and PT	DEB	Kazungula	IND
Precious Machila	Parent	ZAPCD	Riverview, Kazungula	FG 1
Gilbert Malambo	Parent	ZAPCD	Riverview, Kazungula	FG 1
Raphael Muntanga	Parent	ZAPCD	Riverview, Kazungula	FG 1
Rosemary Musamba	Parent	ZAPCD	Riverview, Kazungula	FG 1
Karren Chihinga	Parent	ZAPCD	Riverview, Kazungula	FG 1
Matildah Siluchali	Parent	ZAPCD	Riverview, Kazungula	FG 1

Nopheen Simataa	Parent	ZAPCD	Riverview, Kazungula	FG 1
Sam Syempeka	Volunteer	ZAPCD	Riverview, Kazungula	FG 1
Jonas Kakwende	Parent	ZAPCD	Shungu, Livingstone	FG 1
Glader Sianga	Parent	ZAPCD	Shungu Livingstone	FG 1
Violet Chisheshe	Parent	ZAPCD	Shungu Livingstone	FG 1
Gertrude Sinaatubi	Parent	ZAPCD	Shungu Livingstone	FG 1
Joyce Sililo	Parent	ZAPCD	Shungu Livingstone	FG 1
Nellia Nailapundwa	Parent	ZAPCD	Shungu Livingstone	FG 1
Phisp Ngoma	Parent	ZAPCD	Shungu Livingstone	FG 1
Muleya Siakalya	SIT	ZAEPD	Shungu Livingstone	FG 2
Grant Chali	SIT and PTA Chair	SIT	Shungu Livingstone	FG 2
David Munyama	Lecturer and PT	Lusaka	Riverview, Kazungula	FG 2
Harold Muchindu	Lecturer and PT	Livingstone Business TTC	Riverview, Kazungula	FG 2
Olive Samukolo	Lecturer and PT	Victoria Falls University	Riverview, Kazungula	FG 2
Chizyuka Graywell	Head Teacher and PT	Katapazi School	Riverview, Kazungula	FG 2

Fri 27 Sep

Francis Kasebula	Lecturer and PT	David Livingstone TTC	Nakowa, Zimba	FG 1
Jonathan Kasolo	Assistant DRCC and PT	District Resource Centre, Livingstone	Nakowa, Zimba	FG 1
Christine Phiri	Teacher and PT	Shungu School	Nakowa, Zimba	FG 1
Eunice Simonde	Head Teacher and PT	Luyaba School	Nakowa, Zimba	FG 1
Eunice Simonde	Head Teacher and PT	Luyaba School	Nakowa, Zimba	IND
Learners with disabilities	8 x Learners	Nakowa School	Nakowa, Zimba	FG 2
Non-disabled learners	16 x Learners	Kakowa School	Nakowa, Zimba	FG 3

Mon 29 Sep

Lillian Chipata	Lecturer and PT	UNZA	Lusaka	FG 1
Kabunga Nachiyunde	Lecturer and PT	UNZA	Lusaka	FG 1
Yvonne Kamombwe	Lecturer and PT	UNZA	Lusaka	FG 1
Kenneth Muzata	Lecturer	UNZA	Lusaka	FG 1
Sitwe Mkandawine	Lecturer and PT	UNZA	Lusaka	FG 1
Violet Mphande	Female 3rd Year Student	UNZA	Lusaka	FG 2
Priya Hatwaambo	Female 3rd Year Student	UNZA	Lusaka	FG 2
Silumba Felistus	Female 3rd Year Student	UNZA	Lusaka	FG 2
Bwalya	Female 3rd Year Student	UNZA	Lusaka	FG 2
Safeli Mwaba	Male Special Needs 4th year student	UNZA	Lusaka	FG 2

Tue 1 Oct

Samantha Sanangurai	Regional Representative	Leonard Cheshire	Lusaka	FG 1
Miriam Mhome	Programme Assistant	Leonard Cheshire	Lusaka	FG 1
James Chilufya	Chief Curriculum Specialist	Ministry of General Education-CDC	Lusaka	IND
Ministry		Ministry of General Education	Lusaka	IND
Ministry		Ministry of General Education	Lusaka	IND
Patience Nyambe	Acting Director	ZAEPD	Lusaka	FG 2
Astridaa Kunda	Coordinator	ZAPCD	Lusaka	FG 2

Appendix E: Zambian Educational Structures

National Level	
Ministry of General Education	
Minister	
Permanent Secretary	
Directors (of different departments)	
Deputy Directors	
Teacher Education Specialist Services Officers	

Provincial Level	
Provincial Education Officer (PEO)	
Provincial Education Standards Officer (PESO)	
Senior Education Standards Officer (SESO)	Senior Education Officer (SEO)
Education Standards Officer (ESO)	
Senior Education Officer: Teacher Education (SEO: TED)	
Provincial Resource Centre Coordinator (PRCC)	

District Level	
District Education Board Secretary (DEBS)	
District Education Standards Officer (DESO)	
Senior Education Standards Officer (SESO)	Senior Education Officer (SEO)
Education Standards Officer (ESO)	
Senior Education Officer: Teacher Education (SEO: TED)	
District Resource Centre Coordinator (DRCC)	