

Inclusive and special education approaches in developing countries

*Roz Price
Institute of Development Studies
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Question

What is the global evidence on the effectiveness of inclusive versus special education approaches in improving learning and behavioural outcomes?

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1. Overview

The aim of this review was to present the recent evidence on the effectiveness of inclusive and special education approaches in improving learning and behavioural outcomes, with a focus on developing countries, particularly Ethiopia. One of the key difficulties surrounding inclusive education in developing countries is the lack of research about education in these countries. Although there has been an increase of research in the last 5 years, robust, empirical evidence for low- and middle-income countries is still lacking, and difficulties around clear definitions of inclusive education and comparability of data on education of children with disabilities, makes it difficult to assess to what extent they are being left behind. In particular, there is limited long-term data and evidence around learning achievements and outcomes for learners with disabilities, making it difficult to enact systemic changes to the education system that would improve learning achievements for children with disabilities (Schuelka, 2013). For most studies reviewed, data were lacking on whether outcomes differed according to gender, or whether interventions were cost-effective. The lack of data comparing different approaches that try to improve educational inclusion and outcomes for children with disabilities makes it difficult to judge what approach is most effective (Kuper et al, 2018). Research and data from developed countries is much more prevalent, especially the US.

Despite these limitations, this review does highlight some key findings:

- **More research is needed:** A number of meta-analyses have recently been done on inclusive education, including by Dyssegaard and Larsen (2013); Hayes and Bulat (2017); Kuper et al (2018); Oh-Young and Filler (2015); Okyere et al (2018); Szumski et al (2017); The European Agency for Special Needs and Inclusive Education (2018). They all conclude that more and better quality studies are needed, especially in developing countries.
- **Need for different types of studies and interventions:** Studies that explore system- and school-level interventions, rather than focusing on improving the skills of individual children are also needed (Kuper et al, 2018; The Impact Initiative, 2018).
- **Need to generate better quality data:** There was a lack of evidence regarding outcomes other than educational skills, such as academic achievements (e.g. high school graduation achieved), social inclusion at school, and stigma reduction (Kuper et al, 2018).
- **Benefits for students with and without disabilities:** Many of the papers highlight older research that demonstrates the benefits of inclusive education not only for students with disabilities, but also especially for students without disabilities, both academically and socially (Hehir et al, 2016). Many of the studies argue that in general separate educational settings for children with disabilities are not as beneficial as more integrated settings (Oh-young and Filler, 2015). However, others argue that it cannot unequivocally be concluded which setting has the greatest effect on the scholastic and social development of special needs pupils (Dyssegaard and Larsen, 2013). It is important to note that the majority of the research these findings were based on were from the US and other high-income countries.
- **Barriers and lack of finance:** Significant barriers exist that prevent inclusive education from being implemented or used to its fullest extent. Many school systems in developing countries lack the financial capita, resources, or teachers trained in special education to

properly assimilate special needs students into mainstream classrooms. There is also a scarcity of information on financing of inclusive education (European Agency for Special Needs and Inclusive Education, 2016: 44).

- **Effectiveness of different interventions not clear-cut:** Results from several of the studies show that peer tutoring can be an effective strategy for including special needs pupils in mainstream education (Dyssegaard and Larsen, 2013). Kuper et al (2018) found ‘promising evidence’ that primary education interventions in developing countries are effective, but better quality evidence is needed. There was insufficient evidence to draw conclusions on effectiveness of early education and secondary education interventions.

This review was not systematic. Evidence and analysis was identified by searching in sources such as academic journal indexes, websites of organisations known to work on the subject, general search engines (e.g. Google and Google Scholar) and relevant databases. The researcher used a variety of keywords, limiting the search to publications from 2013 onwards, in English and available online. Searches were supplemented by consulting subject specialists to obtain recommendations, identifying prominent authors and organisations and their works, and reviewing the citations of relevant studies. Peer reviewed literature, quantitative and qualitative studies, and grey literature were all included. There was little rigorous evidence available as mentioned above. Some case studies and findings from Ethiopia and other developing countries are included in the fourth section of this review, and future areas of research in the final section.

2. Approaches to educating children with disabilities

Inclusive education

The UN *2030 Agenda for Sustainable Development* (UN, 2015) calls for countries to ‘ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’ (Sustainable Development Goal 4). There is no single concept of inclusive education that applies across all contexts. Most fundamentally, inclusive education is considered to be the “least restrictive environment” for children with disabilities (Hayes and Bulat, 2017). As such, it is the preferred educational setting, as specified in Article 24 of the UN Convention on the Rights of Persons with Disabilities (CRPD)¹.

¹ The Committee on the Rights of Persons with Disabilities highlights the importance of recognising the differences between exclusion, segregation, integration and inclusion in access to education by persons with disabilities (<http://www.ohchr.org/Documents/HRBodies/CRPD/GC/RighttoEducation/CRPD-C-GC-4.doc>):

- **Exclusion** occurs when students are directly or indirectly prevented from or denied access to education in any form.
- **Segregation** occurs when the education of students with disabilities is provided in separate environments designed or used to respond to a particular or various impairments, in isolation from students without disabilities.
- **Integration** is a process of placing persons with disabilities in existing mainstream educational institutions, as long as the former can adjust to the standardised requirements of such institutions.
- **Inclusion** involves a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements and preferences.

Mitchell (2015) explains that at its most basic, inclusive education means educating learners with special educational needs in regular education settings. Some organisations and countries have used a broader definition of inclusion that includes the education of all individuals who may be marginalised (see European Agency for Special Needs and Inclusive Education, 2018: 19-22 for an overview of how the concept of inclusive education is presented in academic literature and international organisations/networks). Mitchell (2015: 28) argues that inclusive education is a multifaceted concept that requires educators at all levels of their systems to attend to vision, placement, curriculum, assessment, teaching, acceptance, access, support, resources and leadership. It is no longer appropriate for policy-makers and researchers to define inclusive education solely, or even primarily, in terms of placement.

Moving from segregation to inclusion

Howgego et al (2014) in their Topic Guide on Inclusive Learning, highlight that the arguments about the most appropriate location for the education of children with disabilities are influenced by culturally defined and evolving concepts and by the availability of educational options, but in many countries there is only one option – that of attending the local school. Alternative options, where available, include special, residential or day schools, resource rooms or special units, specialist support from a visiting itinerant teacher, and home-based education (sometimes in preparation for formal education), supported by community-based rehabilitation (CBR) workers (Howgego et al, 2014).

Many countries are moving away from segregated education systems and toward a more inclusive model that allows for students with disabilities to be taught alongside their nondisabled peers, but progress has been uneven (Hayes and Bulat, 2017: 18). Kuper et al (2018) highlight that different approaches are used to improve the educational outcomes of children with disabilities in different countries. Traditionally, special schools and special classes have been provided, including in lower- and middle-income countries, involving the segregation of children with disabilities. In recent decades, the move has been towards inclusive schools, where children with disabilities are supported to attend mainstream schools. Many interventions to improve educational outcomes for people with disabilities include elements from both approaches (segregation and inclusion) (Kuper et al, 2018).

Franck and Joshi (2017) argue that although pitched at a universal level, inclusive education policies are usually based on Western political and cultural contexts. Yet, even in affluent Western social democracies like Finland and Sweden, there have been a number of challenges to fully implementing inclusive education (see Aurén and Joshi 2016; Göransson, Nilholm, and Karlsson 2011; Joshi and Navlakha 2010 cited in Franck and Joshi, 2017). Likewise, various efforts to advance inclusive education in Africa have met resistance due to inappropriate assumptions or perceived shortages of resources.

No standardised approach for how to shift from a segregated system to an inclusive one is available. Issues such as a country's current education system, cultural views on disability, political will, and socioeconomic stability can impact how a country may choose to approach its inclusive educational reform. Hayes and Bulat (2017: 18-19) highlight several models that have been helpful for different countries as they work toward developing an inclusive education system (e.g. developing resource centres; using itinerant teachers/specialist teachers; engaging teaching assistants; moving from a diagnosis-based approach to an individualised one). Kuper et al (2018: 15) argue that the solutions to improving the inclusion of children with disabilities in education

should address the barriers operating at different levels, including the system (e.g. policy and legislation), schools (e.g. better teacher training), families (e.g. providing financial support to aid school attendance), and people with disabilities (e.g. improving reading skills). Different approaches are likely to be appropriate for improving educational outcomes in different groups.

A report commissioned by the Global Partnership for Education (GPE) (2018: vii) took stock of how disability and inclusive education are included in education sector plans (ESPs) in 51 of the 65 GPE developing country partners. It reported that 41 of these countries were implementing a segregated or special education approach for children with disabilities, and were investing in developing specialised facilities to address student needs. Seventeen countries are planning to adopt both special education and integration, sometimes referred to as a twin-track approach, mainstreaming disability in education as well as investing in actions and services to address the needs of children with disabilities. A paper by the European Agency for Special Needs and Inclusive Education (2016: 32) emphasises how the “effective” implementation of inclusive education does not depend solely on countries’ economic development or possibilities of dedicating a high amount of resources to inclusive education. The capacity to implement inclusive education depends on the ability of governance mechanisms to permit effective collaboration among stakeholders and to foster strategic behaviours, as well as monitoring and accountability issues.

Challenges in implementing and evaluating inclusive education

Lack of finance and resources

Many school systems in developing countries do not have enough financial capita, resources, or teachers trained in special education to properly assimilate special needs students into mainstream classrooms. The European Agency for Special Needs and Inclusive Education (2016) undertook a review into the financing of inclusive education. Some of the main challenges in funding inclusive education lie in the ability to transform resource allocation into learning outcomes and to try to identify the most cost-effective interventions to improve learning according to different learners’ needs in inclusive systems (OECD, 2015; Steer and Smith, 2015 cited in European Agency for Special Needs and Inclusive Education, 2016). The paper highlights the scarcity of information on financing of inclusive education (European Agency for Special Needs and Inclusive Education, 2016: 44).

Lack of long-term data and clear definitions for comparison

Disability is not a homogenous category – and the experience of exclusion will vary by gender, impairment type, and context (Kuper et al, 2018: 9). Although support for inclusion of children with disabilities in regular education gains momentum, research lags behind. There is a lack of comparable data on education for children with disabilities, making it difficult to assess to what extent they are being left behind (Kuper et al, 2018).

Dyssegaard and Larsen (2013: 8) emphasise that it is difficult to define exactly what successful inclusion requires or which interventions are effective for the individual pupil’s scholastic and social development. Until a few years ago, discussions about how to develop more inclusive school cultures were primarily of an idealistic and ideological character, and the empirical focus has been limited.

For example, a stock-take of 51 developing country partners of the GPE (Global Partnership for Education, 2018: viii), highlights that across all countries there is very limited data on the total number of children with disabilities, the proportion enrolled in school and out-of-school children, the type of school children with disabilities are enrolled in (special school, boarding schools, mainstream schools), and the range of provisions available. Additionally, GPE developing country partners use different definitions, categorisations, and methods of measuring disability, thus limiting the ability to compare data across countries or regions. Ten DCPs in this study (Burkina Faso, Cambodia, Cameroon, Comoros, The Gambia, Ghana, Guyana, Haiti, Nepal, and Somalia) plan to improve disability data collection. Cameroon, Ethiopia, Haiti, Rwanda, and Tajikistan also plan to conduct research studies to understand the nature, scope, and needs of children with disabilities (Global Partnership for Education, 2018: 44).

Lack of data and challenges improving learning outcomes

Schuelka (2013) highlights that there is limited data and evidence around learning achievements and outcomes for learners with disabilities. This makes it difficult to enact systemic changes to the education system that would improve learning achievements for children with disabilities. Examinations and tests rarely make the necessary accommodations for learners with disabilities, putting them at a disadvantage. Most international achievement tests often exclude students with disabilities. This reinforces attitudes of low expectations, and that students with disabilities do not belong in a culture of achievement (Schuelka, 2013).

Kuper et al (2018: 16) argue that the lack of data comparing different approaches/interventions that try to improve educational inclusion and outcomes for children with disabilities makes it difficult to judge what is optimal. They further elaborate that most studies have focused on comparing enrolment in school for children with and without disabilities. This metric alone ignores the importance of frequency of attendance and progression through the system, or academic achievements (e.g. graduation). There has also been little focus on the classroom experience of the child, such as whether they are provided with a quality education, are socially included, and feel safe at school, and whether they experience stigmatising attitudes. There is hence a need for more research.

Sæbønes et al (2015) argue that understanding how children and young people with disabilities are experiencing these learning processes and their impact on short- and longer term learning outcomes requires integrating quantitative and qualitative research, sometimes in innovative ways (Sæbønes et al, 2015). Sæbønes et al (2015) recommend classroom based assessment for individual learning – regional and national examinations and international learning assessments must systematically include and make reasonable accommodations for learners with disabilities where necessary.

The effects of social exclusion

According to data collected by researchers from Washington University in St Louis from six countries (Afghanistan, India, Sudan (Darfur State), Sierra Leone, Morocco and Tunisia), disadvantaged children, particularly children with disabilities, are increasingly accessing schools and education in low- and middle-income countries, but they are not learning effectively due to social exclusion within the classroom and out-of-date teaching methods that perpetuate inequality (The Impact Initiative, 2018: 4). The research was conducted as part of the project

'Constructing a Global Framework for Analysis of Social Exclusion From and Within Learning Systems'. Drawing from initial data, the researchers argue that current benchmarks to assess the quality of learning are too narrow and that a fundamental shift is needed in how the quality of education is defined, implemented and assessed. The researchers argues that there is an urgent need to design and build evaluation systems that look at participation rather than individual educational achievement.

3. Benefits and effectiveness of education for learners with disabilities

Students with disabilities

Hehir et al (2016) indicate that there is strong evidence that students with disabilities benefit academically from inclusive education. Multiple systematic reviews of the scholarly research literature (mostly in US and other high-income countries) indicate that students with disabilities who were educated in general education classes academically outperformed their peers who had been educated in segregated settings (Baker, Wang, & Walberg, 1995; Katz & Mirenda, 2002 cited in Hehir et al, 2016: 13). Researchers have documented similar evidence that inclusion yields academic benefits for students with intellectual disabilities in general and students with Down syndrome specifically (Hehir et al, 2016: 16). Hehir et al (2016) also highlight evidence that participating in inclusive settings can yield social and emotional benefits for students with disabilities. Such social and emotional benefits can include forming and maintaining positive peer relationships, which have important implications for a child's learning and psychological development. The majority of the research cited in Hehir et al (2016) comes from the US, and other developed countries. Hayes and Bulat (2017: 6) highlight evidence that shows "the amount of time a student with a disability spends in the general education classroom is positively correlated with higher test scores in math and reading, less disruptive behaviour, and increased future employment opportunities. Indeed, this positive correlation has been found in all students with disabilities, regardless of the type of disability or its severity (Wagner et al., 2006)...Conversely, segregated classrooms or schools perpetuate the misconception that individuals with disabilities are fundamentally different from their nondisabled peers and need to be isolated or separated".

A meta-analysis by Oh-Young and Filler (2015) used the findings of 24 peer-reviewed studies (1980–2013) from the US examining the impact of inclusive education on academic and social achievement. Their findings suggest that the majority of learners with disabilities placed in more inclusive settings performed better academically and socially than learners educated in less inclusive settings. The researchers argue that their meta-analysis, in combination with the results of two other meta-analyses, Carlberg and Kavale (1980) and Wang and Baker (1985), provides evidence spanning over 80 years suggesting separate settings are not as beneficial as are more integrated settings (Oh-Young and Filler, 2015: 80). This finding is reflected in another literature review by the European Agency for Special Needs and Inclusive Education (2018), which found learners with disabilities educated in inclusive settings may perform academically and socially better than learners educated in segregated settings.

A meta-analysis of 43 papers (mostly from Denmark and developed countries) conducted by Dyssegaard and Larsen (2013) examined the academic and social effects of inclusive education

on learners with disabilities. According to their findings, learners attending inclusive education have better academic achievements, well-being and classmate relationships than learners attending special schools or special classes. Dyssegaard and Larsen (2013: 44) found that when looking at special needs pupils' motivation for schoolwork and self-perception, the older the pupils become the better they thrive in special needs offers, where they do not constantly feel less competent than their classmates. The results concerning special needs pupils' scholastic development are, however, conflicting. Their results indicate that it cannot unequivocally be concluded which school offer has the greatest effect on the scholastic and social development of special needs pupils. The effect depends on the pupils' age and the type of competence the studies deem important. The results do show that the mainstream pupils' scholastic and social development is not affected negatively when special needs pupils are included in the mainstream classroom (Dyssegaard and Larsen, 2013: 44). However, the authors note that some of the findings of the studies included in the meta-analysis are contradictory or shed light on dimensions of inclusive education that need further consideration. One such issue is the finding that the youngest learners with disabilities thrive best, but as they grow older, they do not feel the same level of satisfaction in inclusive education settings.

Effectiveness of specific interventions

The review by Dyssegaard and Larsen (2013: 45) also found that for inclusion initiatives targeting pupils, results from several of the studies show that peer tutoring can be an effective strategy for including special needs pupils in mainstream education, and that this method can have a positive effect on all the pupils in the class. Many of the studies emphasise the importance that teachers know which peer tutoring programmes have evidence for a positive effect, and that they have access to material/resource persons, who can guarantee the intervention is correctly implemented. In terms of including pupils with ADHD/ADHD-like behaviour and socio-emotional difficulties, the studies reviewed by Dyssegaard and Larsen (2013: 45) found positive effects when the teachers have knowledge of evidence-based teaching methods and intervention efforts that specifically benefit pupils with these types of difficulties. Some of the pedagogical matters/approaches that were found to have a positive impact on learners' participation in class, academic achievement, self-esteem, confidence and classmate relationships are:

- clear objectives for learners' academic and social development;
- learner plans developed collaboratively by teachers, resource persons, parents and learners;
- learners' awareness of specific learning goals (Dyssegaard and Larsen, 2013: 26).

Kuper et al (2018) undertook a rapid evidence assessment to assess the effectiveness of interventions to improve educational outcomes for people with disabilities in low- and middle-income countries (a second rapid evidence assessment of 'what works' to improve social inclusion and empowerment for people with disabilities in low- and middle-income countries was also undertaken by White et al, 2018). Kuper et al (2018) focused on 24 eligible individual studies, including studies conducted in the Middle East (5 Turkey, 2 Egypt, 2 Iran, 1 Lebanon), Asia (2 China, 2 India, 1 Malaysia, 1 Thailand, 1 Vietnam), and Africa (1 Ethiopia, 1 Kenya, 1 South Africa, 1 Uganda, 1 Zambia), and only one from Latin America (Brazil), as well as one multi-country study. Kuper et al (2018) grouped the studies by education sub-outcomes related to

different stages in education across the life course: early intervention, primary education, secondary education, non-formal education, and lifelong learning. They concluded that:

- *Early intervention*: 7 studies were included. Overall, there was 'insufficient evidence' on what works, given the small numbers of studies and concerns about their quality.
- *Primary education*: 15 studies were identified. Study outcomes were consistently positive, with 11 studies showing improvements in the children's learning skills, 4 showing improvements in the skills of the teacher or parent to teach the child, 1 showing improvements in the child's academic achievement, and 1 demonstrating a reduction in the perpetration of violence. In particular, there was consistent evidence that specific interventions (e.g. computer-based interventions, visual strategies, modified teaching approaches) can improve the learning skills of children (e.g. in terms of attention capacity, communication, and mathematics skills). However, the study quality of all the studies was deemed to be either low or moderate. Overall, there was 'promising evidence' that interventions are effective, but better quality evidence is needed to make clearer judgements.
- *Secondary education*: Only 2 studies were included. Overall, there was 'insufficient evidence' on what works, given the small numbers of studies and concerns about their quality.

Students without Disabilities

Hehir et al (2016: 2) in a paper prepared for Instituto Alana, sought to identify research that demonstrates the benefits of inclusive education not only for students with disabilities, but especially for students without disabilities. The paper reports that there is clear and consistent evidence that inclusive educational settings can confer substantial short- and long-term benefits for students with and without disabilities. Including students with disabilities can support improvements in teaching practice that benefit all students. Research evidence suggests that, in most cases, being educated alongside a student with a disability does not lead to adverse effects for non-disabled children. On the contrary, some research indicates that non-disabled students who are educated in inclusive classrooms hold less prejudicial views and are more accepting of people who are different from themselves. However, the majority of this evidence is from the US and other developed countries. Hayes and Bulat (2017) argue that "Decades of research in the United States and other high-income countries have demonstrated that inclusive education benefits not only students with disabilities but also students without disabilities. Inclusive classrooms teach all students about the importance of diversity and acceptance. Evidence also indicates that students with and without disabilities who are educated in inclusive classrooms have better academic outcomes than students who are educated in noninclusive classrooms".

Hehir et al (2016: 7) in their literature review also found that differences between schools were much larger than differences between inclusive and non-inclusive classrooms within those schools. This means that the overall quality of instruction in a school plays a bigger role in shaping the achievement of non-disabled students than whether or not that student was educated alongside children with a disability.

A recent meta-analysis by Szumski et al (2017) of 47 studies from developed countries (majority from US, plus Canada and Western Europe), attempts to establish how the presence of students with special educational needs in the classroom impacts students without special educational

needs. Their main finding was that attending inclusive classrooms is positively, though weakly, associated with the academic achievement of students without special educational needs. Szumski et al (2017: 49) emphasise that they found no studies from Eastern Europe, Africa, Asia, or South America to include in their meta-analysis. This is important, as their analysis showed that the country of study does have some impact on the achievement of students without special educational needs in inclusive classrooms. The study further highlights that being limited to students' school achievement, the meta-analysis did not comprehensively examine all the assumptions behind the transformative version of inclusive education, for example students' social competence, social relations and emotional development in inclusive classrooms (Szumski et al, 2017: 49).

Social inclusion

The European Agency for Special Needs and Inclusive Education (2018) undertook a literature review into the link between inclusive education and the social inclusion of people with disabilities. A dataset was created of peer-reviewed papers for the review, which included over 200 papers: most of them report on studies from 1990 onwards that followed different methodologies and methods and were conducted in a range of countries. The review provides research evidence to suggest that inclusive education is an important prerequisite for the social inclusion of people with disabilities, both during school years and later in life. According to the review, attending inclusive education settings increases the possibilities for participating and interacting with peers at school, obtaining academic and vocational qualifications, being employed, being financially independent, and so on. At the same time, the research findings indicate that attending segregated settings minimises the opportunities for social inclusion.

Other research findings on education indicated that (European Agency for Special Needs and Inclusive Education, 2018: 36):

- Inclusive education increases the opportunities for peer interactions and for close friendships between learners with and without disabilities. Research findings suggest that the link between inclusive education and social interactions with peers begins from early childhood education (Guralnick, 1999; 2010; Guralnick, Connor, Hammond, Gottman and Kinnish, 1996 cited in European Agency for Special Needs and Inclusive Education, 2018: 36).
- For social interactions and friendships to take place in inclusive settings, due consideration needs to be given to several elements that promote learners' participation (i.e. access, collaboration, recognition and acceptance). Achieving the social inclusion of learners with disabilities in inclusive settings is about increasing participation in all areas, among all stakeholders (i.e. staff, learners and parents) and at all levels (i.e. school policy and practice, school culture).
- Attending and receiving support within inclusive education settings increases the likelihood of enrolling in higher education.

4. Country examples and research

Inclusive education in Ethiopia

In Ethiopia, there are many definitions of inclusive education, integrated education and special needs education, leading to different interpretations in both policy language and implementation (Mulat et al, 2018: 4). Mulat et al (2018) describe how at present, there is a general move by the Government towards inclusive education with the goal of mainstreaming children with disabilities in general or regular schools and making education accessible for all. Accordingly, special classes or units emerged in several regular or general school settings for children with visual, hearing, and intellectual disabilities. The special classes serve as transitional programmes and back-up support units for children with special needs. Generally, children who attend special classes are placed in inclusive classes after they complete the first cycle (grade 1-4). However, the timeframe of including children with disabilities in the regular classrooms depends on the preparation on the basic skills of learning and the readiness of the individual child to attend inclusive class.

Mulat et al (2017) argue that in order to improve the participation rate and the quality of the education of children with disabilities in Ethiopia, there is a need for multiple interventions, including:

- The establishment of school-based cluster inclusive education units in the already existing cluster schools across the regions.
- The need to revisit and make a rapid assessment of the first cycle pre-service teacher education programme in the teacher education colleges to assess whether the training programme equips the trainees with necessary knowledge and skills to practice inclusive education.
- Networking and strengthening cooperation among stakeholders to mobilise resources, provide professional back-up support, and raise the awareness of the general public about disability and disability related socio-cultural issues.

Finnish development cooperation in inclusive education in Ethiopia 2004-2013

A synthesis report presenting the results of the evaluation of Inclusive Education in Finland's development cooperation in 2004–2013 looks at 3 case studies: in Ethiopia, in Kosovo and in the Amazon Region of Bolivia, Ecuador and Peru. The report highlights that there is little reliable data on learning outcomes of special needs students in the case study countries. Data on enrolment is more consistent but still incomplete in the absence of a thorough census of students with special needs. To the extent that it is available, enrolment data suggests that students with special needs are enrolled at low rates in the Andean region, Ethiopia and Kosovo, and that even these low rates drop sharply in the higher grades (Nielsen et al, 2015).

In the evaluation of Finnish development cooperation in inclusive education in Ethiopia over the period 2004–2013, Graham (2015: 39) found that Finland-supported interventions have had mixed success at increasing participation in basic education and improved learning gains particularly among disabled persons. It was assumed that support for special needs education/inclusive education teacher training and the establishment of Resource Centres have created positive enabling conditions for provision of more inclusive access and learning for all

children. However, interviews with itinerant teachers and other Resource Centre staff, and observations during the field mission showed that these interventions had not led to systematic identification of children with disabilities or to their receiving assistive devices and in-classroom support. This resulted in many children with disabilities and impairments dropping out of school or not attending on a regular basis. The evaluation concludes that although the training programmes for teachers appear to be well-designed, the structures put in place do not appear scalable because of: weak government follow-up and monitoring, lack of multilateral support and commitment, lack of clear job description and accountability for itinerant teachers, and insufficient financing (Graham, 2015: 44).

Transition of deaf, hard-of-hearing and hearing students in primary education

Mulat et al (2018) undertook a study to examine the transition of deaf and hard-of hearing (DHH) and hearing students from the first cycle (Grade 4) to the second cycle (Grade 5) of primary education in Ethiopia. The purpose of this study was to investigate the effects of DHH students' transition from a special class/unit to the mainstream setting in comparison to DHH students' transition within special schools and that of their hearing peers in mainstream education in Ethiopia. Academic achievement and self-concept were measured longitudinally with 103 DHH and hearing students. Participants were selected from three different settings (special schools, special classes and regular schools).

The results showed a decrease in the academic achievement and academic self-concept of children with hearing impairment who were in a special class (Grade 4) when they transferred to the mainstream (Grade 5), while the academic achievement and self-concept of the students continuing in a special school remained stable. All three groups (children with hearing loss in the mainstream, children with hearing loss in a special school, and hearing students) showed improvements in their social self-concept after the transition. Gender differences were not reported. There was low confidence in the findings, due to the lack of randomisation of the intervention (Kuper et al, 2018 review of Mulat et al, 2018).

Children with autism

Little has been reported about service provision for children with autism in low-income countries, especially in Africa. Tekola et al (2016) explored the current service provision for children with autism and their families in Ethiopia, the existing challenges and urgent needs, and stakeholders' views on the best approaches to further develop services. The study identified four types of autism service providers in Ethiopia: clinics; autism centres; schools with inclusive education programmes; and community based rehabilitation organisations. Most of these service providers are located in Addis Ababa and inaccessible to the majority of the population living in rural areas. There is a great lack of autism awareness and stigma levels are high. Besides improving service provision there is a need for culturally and contextually appropriate autism instruments.

School enrolment of children with disabilities in Eastern Ethiopia

Geda et al (2016) highlight that information about school enrolment with disability (7-14 years) is not readily available in Ethiopia. This study assessed current school enrolment in Eastern Ethiopia. They conducted a cross-sectional community-based study among households in Kersa Health and Demographic Surveillance System in Eastern Ethiopia. A household survey identified

school aged children with disability. Then, a structured and pretested questionnaire was used to assess current school enrolment. They found that school enrolment for children with disability was very low. As reported by caregivers, most common barriers for children with disabilities not to be enrolled was bullying, followed by cannot afford, inaccessible school environment and distance to school. Distance to school constitutes an educational barrier for many girls, which is intensified for girls with disability. A limitation of the paper was that it did not consider school completion rates.

Inclusive education in Tigray province

Franck and Joshi (2017) examine how inclusive education is currently being implemented drawing on recent fieldwork at rural and urban schools in Tigray province. Through interviews, participant observation, and focus groups, they found that teachers and school administrators are generally in favour of mainstreaming children with disabilities into “normal” schools. However, insufficient training of teachers and itinerant teachers along with shortages of teaching materials and resources present major challenges to addressing special education needs. Many participants mentioned the physical presence of children with disabilities interacting with classmates at school could facilitate attitudinal change in the community (Franck and Joshi, 2017: 351). Changing attitudes and community outreach helped to expand enrolment of children with disabilities. Partnerships among students were established to assist with classwork and travelling to and from school. A networking system commonly found in Ethiopian schools also grouped students according to their class performance along with a high-performing student for assistance. To support student morale and prevent dropouts, all students in Ethiopia are promoted through Grade 4 regardless of competency as part of an automatic promotion policy in schools. However, teachers expressed uncertainty about teaching children with intellectual disabilities and had difficulty conveying a clear educational objective beyond behavioural change (Franck and Joshi, 2017: 353). Franck and Joshi (2017) also suggest that accommodating students for an extra year in the general education classroom can reduce their morale and thus encourage drop out.²

Franck and Joshi (2017) argue that there is arguably an opportunity now, while implementation is still in its beginning stages, to take a more transformative approach that may at times involve experts or extra courses, but is not limited to or wholly dependent on them. Schools demonstrated such an approach in the work of community outreach teams and increasing awareness about educational rights of children with disabilities. Many teachers and administrators accustomed to a system which previously segregated students with disabilities have also shown a willingness to help build an inclusive system and demonstrated an interest in learning how to better support their students. All of these achievements create an opportunity to unite proponents of change, from community members to teachers, to address the remaining challenges in the education system. They also recommend the need for locally driven research to be further encouraged and facilitated.

² Engelbrecht et al (2016) looked at inclusive education in South Africa and reported that accommodating students with intellectual and developmental disabilities in the general education classroom for an extra year was supportive of their inclusion. This finding contrasts with studies that have found the practice expensive and neither an improvement to the academic achievement nor social capacities of students, such as Franck and Joshi (2017).

Early childhood development programmes in rural Malawi

A summary document by the Impact Initiative (2018), which showcases research focusing on disability and education from the ESRC-DFID Raising Learning Outcomes in Education Systems Research Programme, highlights work by the University of Birmingham, Sightsavers and the University of Malawi examining factors that could be preventing young children with disabilities from participating in early childhood development programmes in rural Malawi. High quality early childhood development programmes benefit children's development, life experiences and life chances. Tikule Limodze (Let's Grow Together) was a three-year mixed method study examining the role of early childhood development pre-school caregivers in supporting children with disabilities in community-based early childhood centres in a rural district of southern Malawi. To assess 'school-readiness' skills, the research team developed a curriculum-focused assessment scale based on the Early Learning and Development Standards (ELDS) developed by UNICEF and the Ministry of Gender, Children, Disability and Social Welfare in Malawi (2015). They collected data from 920 children in 48 community-based childcare centres, focusing on 'language, literacy and communication' (including emergent reading skills and the ability to communicate effectively) and 'mathematical and numerical knowledge', key areas of the early childhood development curriculum.

It became apparent during baseline assessments in the study that many of the children aged three to five were unable to perform even the most basic tasks such as holding a book correctly. Very few community-based childcare centres (CBCCs) had access to any reading materials. Without these, the centres are unable to help children and families to become 'school ready'. In response, the project's next step is to develop a 'bio-ecological systems theoretical framework' to help organise the environmental factors and understand their influences on inclusion by placing the child at the centre of the system. A key aim is to increase the chances of children with disabilities being 'ready for school' through a tripartite process involving the child, the parents and community, and the school (The Impact Initiative, 2018: 3; also see McLinden et al, 2018).

Insights from inclusive classrooms in Zimbabwe

Ncube (2014) analysed the perceptions of four criterion-sampled teachers of inclusive classrooms in four criterion sampled primary schools in Harare, Zimbabwe. The purpose of the study was to elicit insights on how classroom inclusion affects learners with disabilities and those learners without disabilities socially and psychologically. The findings of this study indicate that:

- Classroom inclusion can generate positive as well as negative social and psychological effects on both groups of learners
- The social and psychological effects of classroom inclusion on both sets of learners tend to depend, largely, on the social environment within and outside the classroom;
- The placement of learners with disabilities in inclusive classrooms seems to enhance their social and psychological development;
- The placement of learners with disabilities in inclusive classrooms does not seem to interfere with the social and psychological development of learners without disabilities.

Ncube (2014) concludes that general education is capable of providing effective individual instruction to both learners with disabilities and those without disabilities given a conducive learning environment. A key limitation of the qualitative paper include its small sample size.

Peer support and teacher training in Africa

Okyere et al (2018) undertook a scoping review of existing literature to advance understanding of practices that support inclusion of children with intellectual and developmental disabilities in inclusive education classrooms in Africa. Thirty articles that provided empirical evidence of inclusive education implementation were included. Using Bronfenbrenner's bioecological framework, findings revealed that inclusive education implementation is influenced by factors on the bio level, micro level, meso level, and macro level. Among the wide range of factors influencing inclusive education implementation in African countries, the most prevalent were at the micro level of the bioecological framework and involving teachers.

The review suggests that teachers in African countries continue to face challenges in their attempts to create inclusive classrooms due to inadequate training. Although most of the articles focused on the teacher, a handful of articles also identified families also, at the microsystemic level as key stakeholders in inclusive education implementation.

Many articles identified students at the biosystemic level as key stakeholders in implementing inclusive education and specifically, for the inclusion of students with intellectual and developmental disabilities. Articles found the use of peer support a significant resource to the academic achievement and adaptive behaviours of students with intellectual and developmental disabilities. In particular, articles noted that students without disabilities supported their peers to achieve specific learning needs. Additionally, Franck and Joshi (2017) found that in the absence of peer support, students with intellectual and developmental disabilities experienced isolation. In their article, they also found that aside from helping with classroom exercises, teachers established partnerships where students without disabilities assisted their peers with intellectual and developmental disabilities in travel to and from school.

Insights from India and Pakistan

Singal (2016) presents an analysis of key developments in educational policies and strategies, since 2000, in relation to the education of children with disabilities in India and Pakistan. She concludes by outlining three key issues that must underline future efforts at the level of policy and research in India and Pakistan, but also globally.

Issue 1: Access and quality—One can't follow the other: based on 12 in-depth teacher interviews and 16 hours of classroom observation in a mainstream school in rural Karnataka (India), it was clear that teachers' discourse and practices were overwhelmingly driven by the perceived social benefits of having children with disabilities attend mainstream schools. Letting children be together (allowing them to sit and play together) dominated any efforts made by teachers to enable children to learn together. Any focus on classroom participation and learning for this group of children was, in the majority of the cases, relegated to the background. Therefore, the need to support teaching and learning is paramount and requires developing a more systemic approach toward continued professional development and providing teachers with appropriate support to overcome real challenges

Issue 2: Rights are integral, but so are resources and research: Signal (2014: 180) argues that historically, the rationale for educating children with disabilities has been anchored in a rights-based discourse, but resource investments are also key to move fields forward. There is a need for more research and resources.

Issue 3: *Lack of evidence*: Little rigorous evidence exists that can be used to evaluate the impact of current policies and shape future programmes, especially in Southern contexts, and this remains one of the biggest challenges in the field of education and disabilities. This lack of evidence leaves important questions about how and where to best invest unanswered.

5. Gaps and future research

In addition to the general need for better quality, robust studies and comparable data on inclusive education of children with disabilities in low- and middle-income countries (especially in Africa), the following gaps and future research needs were identified in the literature.

- Further exploration of learners' experiences throughout their school life in different contexts, school policy and practice, and structures/programmes securing the transition from education to employment and living in the community (The European Agency for Special Needs and Inclusive Education, 2018: 65).
- Consideration of multi-sectoral approaches for strengthening impact and development of tools for measuring the effectiveness of interventions (Global Partnership on Education, 2018).
- Data on financial allocation and expenditure to reflect on how schools, systems and countries themselves can change their systems is also needed (European Agency for Special Needs and Inclusive Education, 2016).
- More research into inclusive approaches to education for children with disabilities within early childhood programmes (Global Partnership on Education, 2018). Including documenting the link between quality and child outcomes in low-resource settings and to further explore the specific aspects of quality that yield the biggest benefits for children (Dowd et al, 2016).
- Need for locally driven research into inclusive education in Ethiopia, particularly the development of locally based and locally relevant evaluation frameworks (Franck and Joshi, 2017).
- More research on children with intellectual and developmental disabilities in Africa, which actively engages these children as participants in the research (Okyere et al, 2018).
- Data other than enrolment in school for children with disabilities, including more focus on classroom experience of the child, such as whether they are provided with a quality education, are socially included, and feel safe at school, and whether they experience stigmatising attitudes (Kuper et al, 2018).

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