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Teachers' Perceptions of Inclusive Education in Western Kenya:

Exploring Learners' Differences and Diversity in Classrooms

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Abstract
Increasing learner diversity in a school environment is one of the Key strategies in addressing issues of exclusion for all children. The purpose of this research article is to explore the teachers' understanding of inclusion as well as their perception of learners' differences and diversity within their classrooms. A teacher-focused survey was administered in government primary schools, where a sample of 159 teachers across 54 primary schools were the respondents. The findings indicated that the most significant purpose for educating children with disabilities is social cohesion. Most teachers felt that children with severe needs would best learn in a special school, whilst those with mild needs would learn best in inclusive settings. Their success in inclusive education was working with families and adapting the teaching and learning process to make it accessible for children with disabilities. The lacuna of evidence on effective teaching strategies indicates the need for further research on teaching strategies for learner diversity within the classrooms.

Key words: Disabilities, Inclusive Education, Teachers, Western Kenya

Introduction

Kenya is a middle-income country in Sub-Saharan Africa. Over the last decade, it has seen significant growth in its economy, as well as making significant social and political reforms (World Bank, 2019). The country is currently working on its long-term development strategy, Kenya Vision 2030, which aims to provide a high quality of life to all Kenyan citizens (Kenya Vision 2030). The key aims within this strategy are economic, social, and political. Since gaining independence in 1963, some researchers have argued that policies have been turning towards an inclusive educational framework for learners with disabilities (Adoyo and Odeny, 2015).

Currently, it is estimated that the total number of learners with disabilities in primary and secondary levels is 224,159 (2%) and 11,219 (4%) children, respectively (Ministry of Education, 2015). They represents 2% and 0.4% of primary and secondary populations respectively. The majority of these learners are perceived to have intellectual impairments (42%); those with hearing, physical and visual impairment constituting 18%, 16%, and 17% respectively; while learners with multiple disabilities being less than 10% (Ministry of Education, 2016). Children with disabilities are being included in schools now more than ever (MoE, 2016). Hence, it is salient to explore how teachers working in public schools, where children with disabilities are included, currently understand inclusion as well as how they perceive difference and diversity within their classrooms.

Conceptual clarification

In this report, we use the term children with disabilities to foreground the child before any identification of disability. We are mindful of the heterogeneity in this term, encompassing issues of impairment type, gender, poverty, and location, etc. Use of this terminology is also in line with the Kenyan National Report on Persons with Disabilities, and in consideration of the Kenyan context, we use the following categories of disability within the survey and report: hearing, speech, visual, mental, physical, self-care, and others (NCAPD, 2008). These categories encompass the four explicitly identified categories within the Kenyan Disability Act (2012): visual, hearing, mental, and physical.

Methodology

The study was undertaken in Kakamega, a county in the Western Kenya with 1.6 million inhabitants. The county has 889 primary schools and children with disabilities are officially registered as attending in 249 of those. When a school officially registers children with disabilities as enrolled at the school, it is eligible for additional funding (2,300 KES per child) and then allocated capacity to set up a Special Needs Unit (SNU).

We have used a survey-based design in order to capture a range of perspectives from teachers working in primary schools that had children with disabilities officially enrolled. Teacher-focused surveys were administered in a range of government primary schools, including: general primary schools, Muslim primary schools, primary schools with early childhood development centres attached, and single sex primary schools. Out of the 249 schools where children with disabilities were officially enrolled, we sought to cover 20%, and a final sample of 159 teachers across 54 primary schools responded to our survey. Our teacher survey had the following aims:

i. To identify teacher demographics (including administering the Washington Group Short Set) and experience of teaching children with disabilities
ii. To explore teachers' understandings of difference and perceptions of the purpose of educating children with disabilities
iii. To measure teachers' efficacy in inclusive education and examine common strategies utilised to support the teaching and learning process for children with disabilities

It drew on questions on disability from the Washington Group on Disability Statistics (Washington Group, 2016); the Kenya National Disability Survey (NCAPD, 2008); and the Teacher Efficacy for Inclusive Practice scale (Sharma et al., 2012). The survey tool was initially piloted with 18 Kenyan teachers, and this helped to adapt the survey in terms of language and also to be more contextually relevant. After appropriate training, three Kenyan enumerators conducted the main survey in English, the language of instruction in schools and one of the official languages of Kenya. In addition, six semi-structured interviews were also carried out with Special Educational Needs Co-Ordinators.

The Teachers and Their Experiences of Teaching Children with Disabilities

Of the 159 teachers surveyed, the oldest teacher was 60 years old and the youngest was 21 years old, with 67% females (n=106) and 33% males (n=53). 91% of the participants' first language was Luhya, with the remaining mother tongues being: English, Swahili, Kikuyu, Luo, and Kisii. The majority of teachers (n=74/47%) had completed an undergraduate degree, 53 teachers (34%) had not been to university, and of those, one teacher had only completed primary education. The remaining 30 teachers (19%) had a range of qualifications, including post-graduate qualifications and diplomas in special needs education. 87% of teachers were employed at their school as regular teachers, 6% of those participating were head teachers (with teaching responsibilities) and the remaining 7% were made up of itinerant teachers (3%), volunteer or NGO teachers (1%) and BoM (3%) – teachers who are paid by the Board of Management and Parent Teacher Association.

According to the definition of disability used in the Kenyan survey on disabilities, 17% (n = 27) of the teachers self-identified as having a disability. Analysis of the sample using the Washington Group short set of questions (identifying disability prevalence) indicated that 14% (n = 22) of the teachers were disabled (using disability category 2). Five teachers identified themselves as having a disability under the Kenyan definition but not under the Washington Group questions. This is likely because in the Washington Group short set, if you wear glasses and this fully corrects your vision, you are not counted as having a disability. Whereas this distinction is not made under the Kenyan definition. Hence, four of the teachers answered the Washington Group questions in line with the instructions but considered themselves as disabled under the Kenyan definition. One teacher who identified as not being disabled in the Washington Group questions answered as having a health disability using the Kenyan question. This teacher is considered an anomaly in our data.

As this research, which culminated into a journal article, was undertaken in primary schools where children with disabilities are enrolled, 96% of teachers who participated in the survey had experience of teaching a child with disabilities.

The teachers were experienced in teaching children with a range of different needs, and the most prevalent being 'mental disability'. Teachers' responses for the category 'other' indicated familiarity with specific identifications, including: autism, albinism, cerebral palsy, and epilepsy. 94% (N = 149) of the teachers had at least one child with a disability in their class currently. Of those teachers, 62% had between 1-5 children with disabilities; 22% had 6-10 children with disabilities in their class; and 15% had over 10 children with disabilities. The largest number of children with disabilities any one teacher had in their class was 57 – this was a teacher working in a special unit attached to an inclusive school.

Based on the current population of children with disabilities in their classes, the teachers identified 'mental disability' as the most prevalent impairment (see Fig. 1). Following this, those with speech, hearing, and visual impairments were the next largest groups.

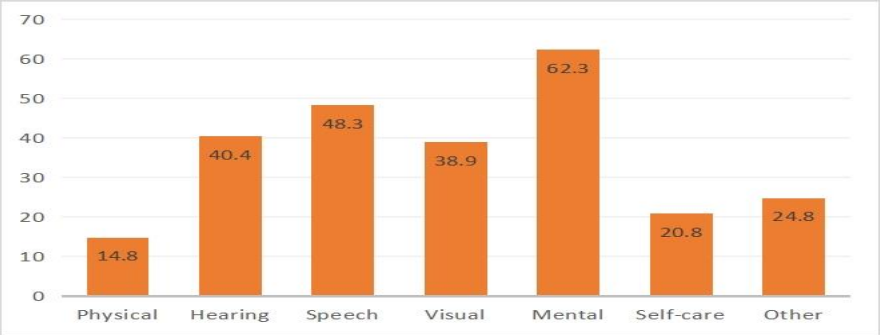

Figure 1. Most prevalent types of disability in the classroom

The typology of disability for this survey was taken from the Kenyan National Survey on Disability (NCAPD, 2008). Given the potentially broad understanding of 'mental disability', further investigation is needed to understand what teachers commonly understand by this term. Conditions such as Autism, as well as developmental delay or Down's Syndrome, may be perceived to be grouped under 'mental disability' as well as those who are thought to learn slower than their peers. Therefore, the survey would have benefitted from a further description of 'mental disability'.

Findings:

1. Why do children have difficulties in learning?

In exploring teachers' perceptions of why children had difficulties in learning, a range of factors were highlighted. They include, but not limited to: gender, socio-economic status, family background, and mother tongue. 11% (n = 18) of teachers out of the total sample worked in special needs units (SNUs). It was interesting to note that the teachers who worked in the SNUs had statistically significantly different perspectives from the teachers who were not working in an SNU. The data we present below is stratified to show the teachers who worked in the SNUs and the teachers who worked in the regular classrooms. For each category, teachers were asked whether they thought a specific group of learners had more difficulty than other children; the responses below show the teachers who answered affirmatively (see Fig. 2).

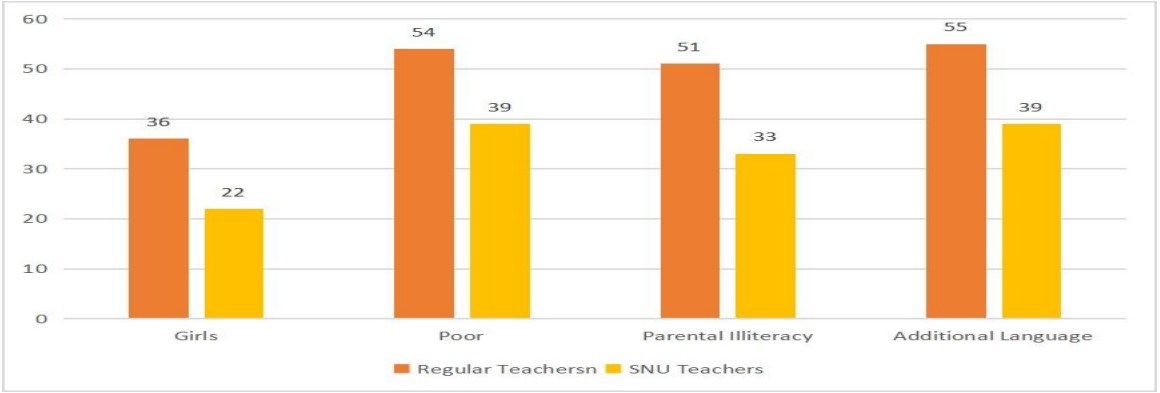

Figure 2. Teachers' perceptions of children who have difficulty in learning

As illustrated above (see Fig. 2), 36% of teachers who worked in regular classrooms felt that girls had more difficulties. In comparison, 22% of teachers working in the SNUs felt 22% felt that girls had more difficulties than other learners. 54% of regular teachers felt that children from poor households had difficulties in learning, whilst only 39% of teachers working in SNUs agreed. More than half of regular teachers (51%) felt that children whose parents were illiterate struggled more

than other learners, while only 33% of teachers working in SNUs agreed with this statement. 55% of teachers working in regular classrooms thought that children who speak another language had more difficulties learning than other children. However, only 39% of teachers in SNUs felt the same. Looking at the difficulties in children with disabilities' face, 69% felt that those with disabilities struggled more than other children; whilst only 56% of teachers in SNUs felt this way (see Fig. 3). This could suggest that teachers working in SNUs find more similarities between children with disabilities and children who are typically developing than teachers who work in regular classrooms.

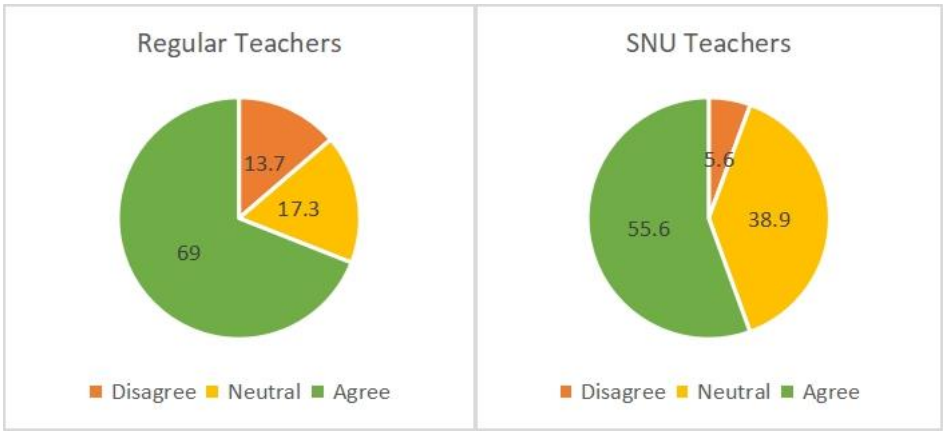

Figure 3. A comparison of the views of regular teachers and SNU teachers on whether children with disabilities struggle more than other children

In relation to this, looking at the data as a whole (See Fig. 4), over a third of teachers believe that those working in regular schools are not trained to teach children with disabilities.

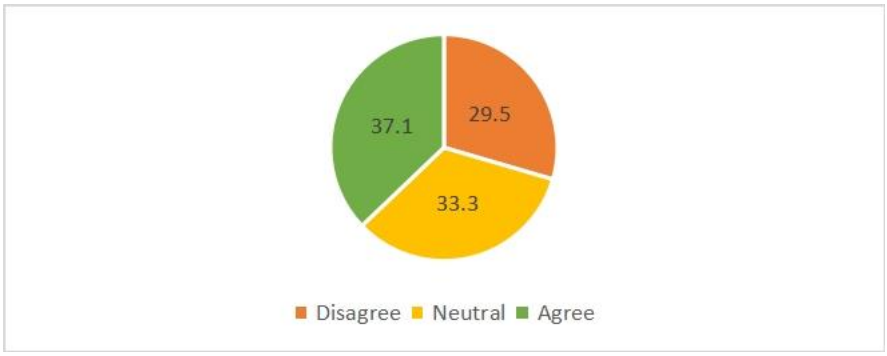

Figure 4. Teachers in regular schools are not trained to teach children with disabilities

2. How do teachers respond to learner diversity?

Within school processes

In asking teachers about current educational strategies and policies, 75.4% felt that there was presently a lot of emphasis on teaching children with disabilities (Figure 5). Given this emphasis, 95.6% felt that they should be able to identify a learner with a disability in their class (see Fig. 6).

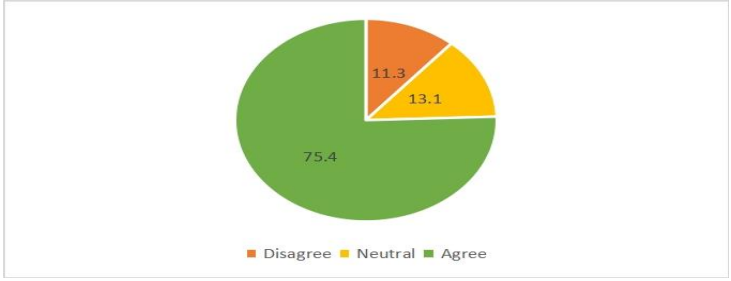

Figure 5. There is currently a lot of focus on educating children with disabilities

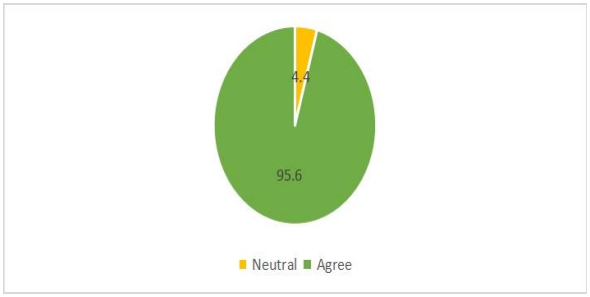

Figure 6. I should be able to identify a child with disabilities in my class

Teachers expressed different views over where they thought children with disabilities could be best educated. 27.7% of teachers believed that regular schools (where learners with disabilities shared the same compound as other children) were the best option, whilst only 5% of schools felt inclusive schools (where learners with disabilities shared the same classroom as other children) were the right setting for learners with disabilities. Over a third of teachers felt that special schools were most appropriate for learners with disabilities. Approximately 28% of teachers prefaced their answer by explaining that that the severity of impairment should dictate the setting the learner was placed in, with those with more severe impairments being best suited to special schools. However, when the teachers were directly questioned on whether they believed students, regardless of ability, should be taught in regular classrooms (i.e. all in one classroom) almost 40% agreed (see Fig. 7).

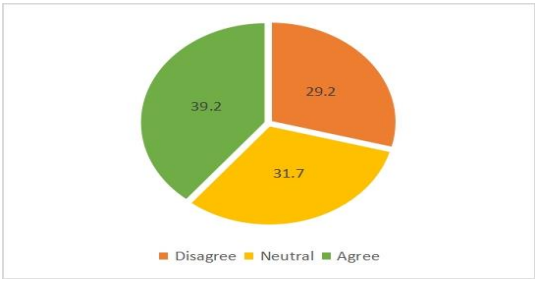

Figure 7. Teachers' beliefs on whether students, regardless of ability, should be taught in regular classrooms

In examining the reasons why teachers felt regular schools were the best place for student with disabilities, 77% believed these schools offered the opportunity to promote social cohesion (see Fig. 8). Whereas teachers felt those students placed in special schools would have better facilities and access to more teachers (see Fig. 8).

Figure 8. Teachers' beliefs on the reasons why children with disabilities can be best educated in either regular schools or special schools

Besides student placement, the teachers highlighted different ways in which they responded to learner diversity in their schools, and particularly to support inclusion of children with disabilities. The most common way of adapting teaching processes identified was through changing classroom seating plans - 93% of teachers reported always organising the seating environment to take account of learner needs.

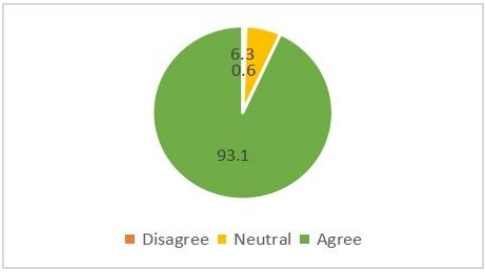

Figure 9. Percentage of teachers who always organise classroom seating environments to respond to learner needs

Besides this, the other most common strategies teachers used to support learners was writing individual education plans (IEPs), and consulting with colleagues and the children themselves to find out better ways of supporting them (see Fig. 10).

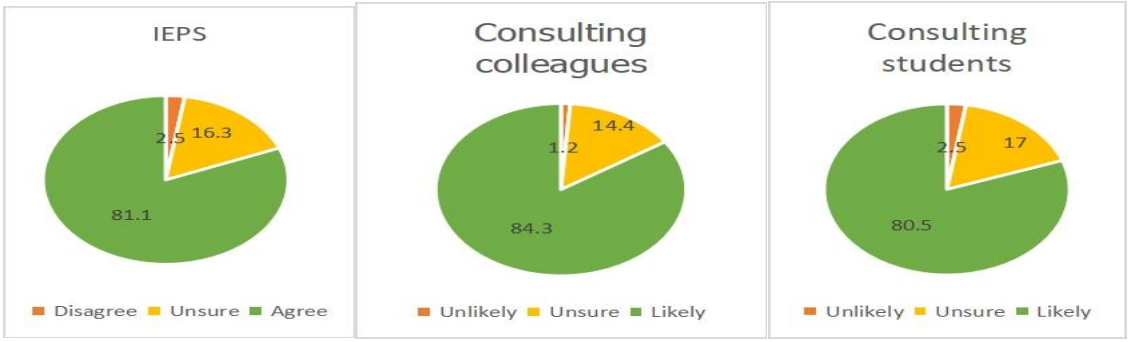

Figure 10. Common strategies teachers use to support learners

Keeping records, maintaining databases and compiling assessment portfolios were also cited by over three-quarters of teachers as effective teaching strategies for children with disabilities (see Fig. 11).

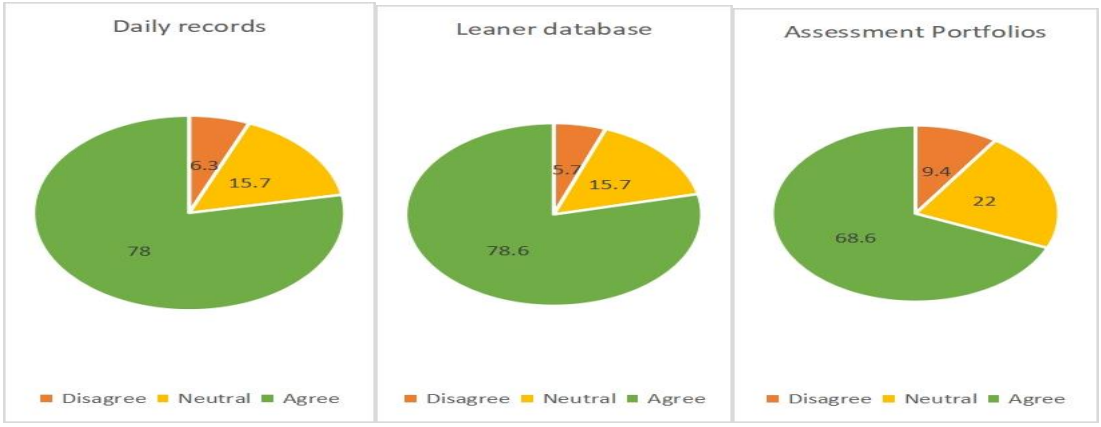

Figure 10. Effective strategies for children with disabilities

Similarly, the majority of teachers were concerned with adapting instructional techniques to respond to the needs of all learners in the class as well as differentiating materials (see Fig. 11).

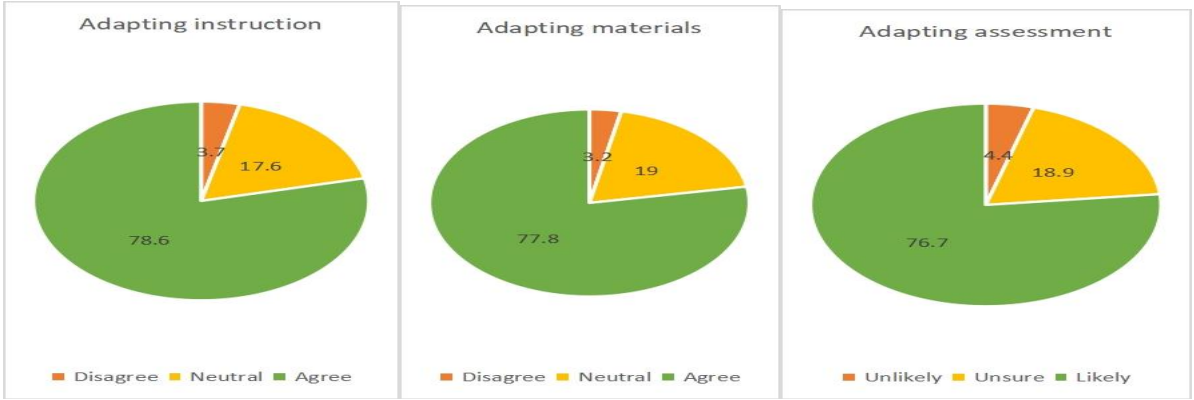

Figure 11. Strategies to adapt teaching to respond to learner needs

It is interesting to note that teachers believed that it was important to include children with disabilities in academic activities, but also to promote their inclusion in different social activities (see Fig. 12).

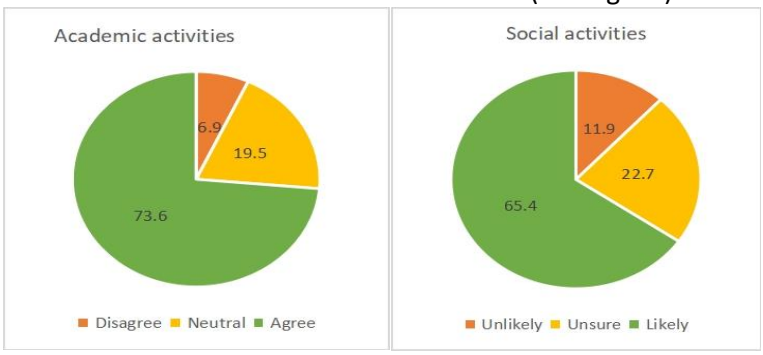

Figure 12. The extent to which teachers ensure that children with disabilities are included

The least likely adaptation to be made by the teachers was adapting the curriculum. Less than half the teachers reported doing this regularly (see Fig. 13). It is possible this is due to the curriculum being harder to change than in-classroom strategies.

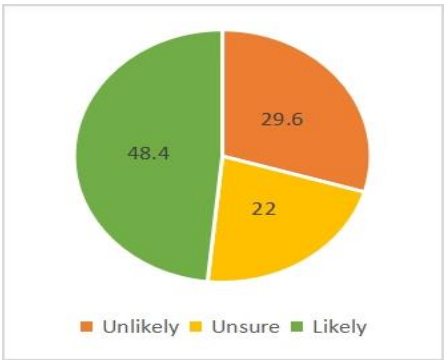

Figure 13. Teachers' likelihood of adapting the curriculum to meet the learning needs of children with disabilities

Despite this, almost three-quarters of the teachers did believe that all students could learn in inclusive classrooms if their teachers were willing to adapt the curriculum (see Fig. 14).

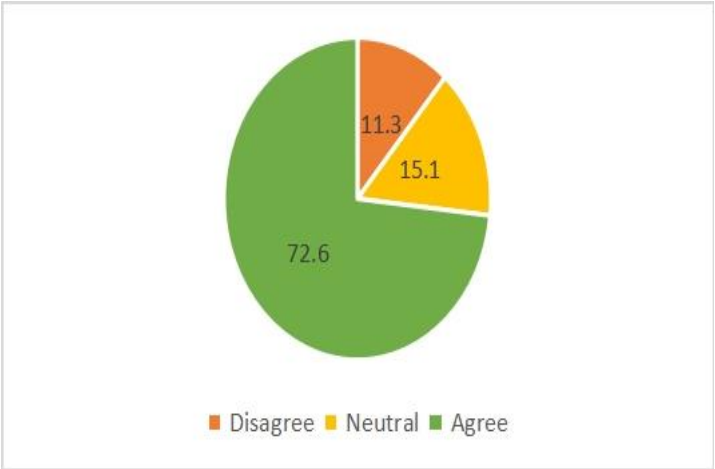

Figure 14. Teachers' beliefs on whether all students can learn in regular classrooms if teachers are willing to adapt the curriculum

This is important to note given that even though teachers felt that adaptations in curriculum are important to support inclusion, they were least likely to make (or able to) in their classrooms.

Out-of-school processes

Teachers were mindful of out-of-school processes that affected the learning potential of children with disabilities. Over three-quarters of the teachers sought to collaborate with parents as well as noted undertaking further professional development activities to support their teaching of diverse learners (see Fig. 15).

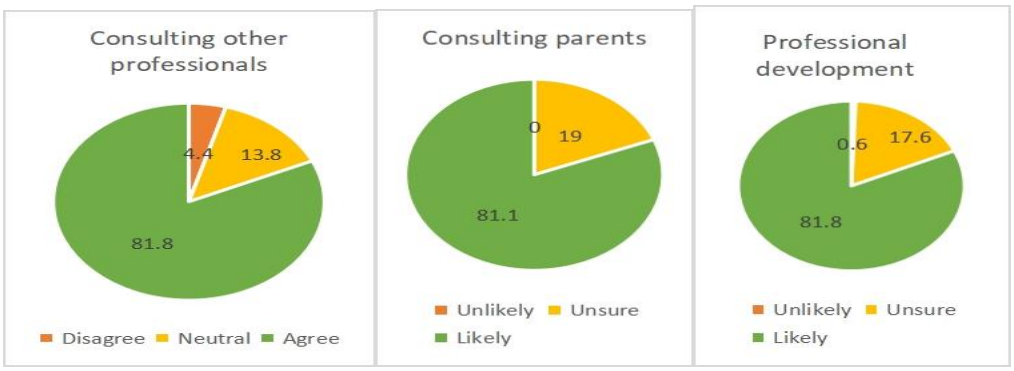

Figure 15. Ways in which teachers use out-of-school processes to support children with disabilities

Additionally, over a third of teachers mentioned liaising with non-governmental organisations (NGOs) that had services which could benefit children with disabilities (see Fig. 16).

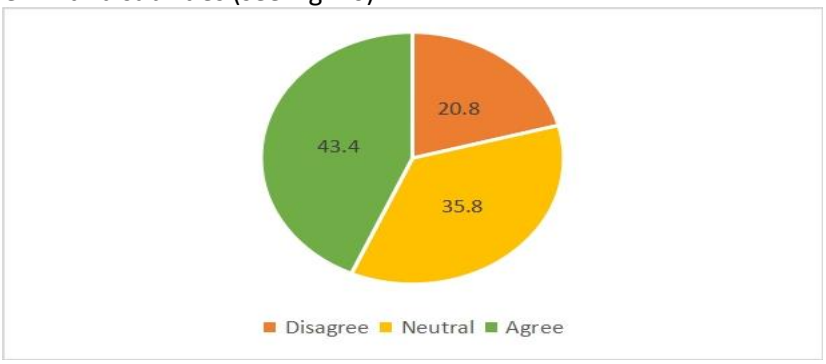

Figure 16. Percentage of teachers who regularly liaise with NGOs

3. How do teachers feel about teaching in diverse classrooms?

In examining the teachers' beliefs about whether inclusion was beneficial to all students academically and socially, we stratified the data to explore whether teachers working in different classrooms (SNUs and regular) responded to this. Whilst there was little difference in the views between those working in SNUs and those in regular classrooms, there was a significant difference in the way in which the teachers perceived inclusion academically and socially (see Figs. 17 and 18). Teachers working in both regular schools and SNUs felt that inclusion was more beneficial to students socially than academically.

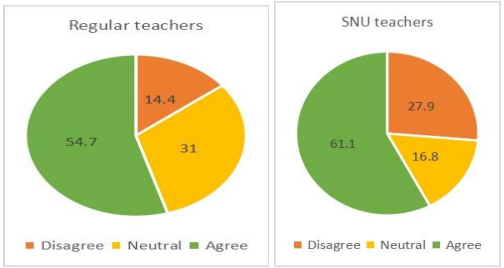

Figure 17. Teachers' beliefs on whether inclusion benefits all students academically

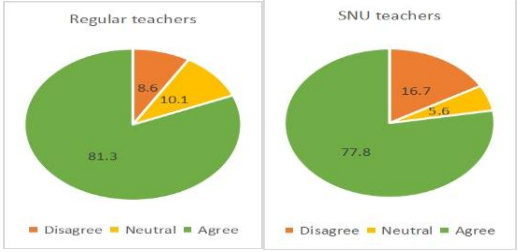

Figure 18. Teachers' beliefs on whether inclusion benefits all students academically

Over 80% all of the teachers in our sample indicated that they were happy to teach in diverse classrooms where students of mixed ability were present, including those who needed physical assistance. Rather importantly, 85.5% of the teachers felt that teaching a diverse group of students made them a better teacher (see Fig. 19).

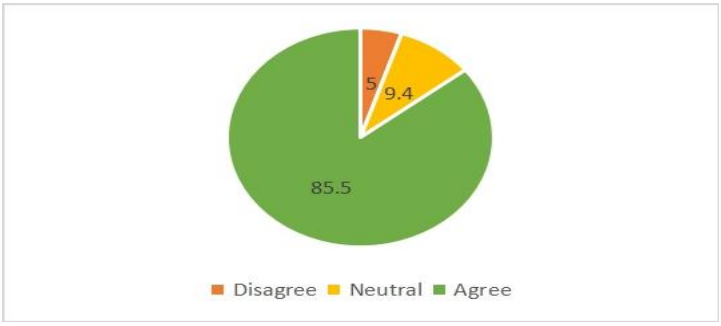

Figure 19. Teachers' agreement with the statement that teaching children with a range of abilities would make them better teachers

In examining their own efficacy about teaching inclusively, we incorporated Sharma et al. (2012) Teacher Efficacy for Inclusive Practice (TIEP) scale within our survey. This scale has been designed to explore the "environment and teaching practices rather than on the individual child" and hence the scale seeks to move away from a medicalised model of disability (Sharma et al., 2012). Data from Canada, Australia, Hong Kong, and India were used to construct this scale, and the alpha values across the different countries suggest the scale is a reliable tool to measure and assess teacher efficacy across different cultures. Therefore, we were able to include this measure with the security that the findings would be culturally relevant and generalisable.

The scale consists of 18 questions, and the value of the total score is obtained by calculating the responses of each item; scores could be from 18 to 108 (Sharma et al., 2012). Hence, the higher the score, the more efficacy the teacher is considered to have. Our findings show that 57.8% of teachers had a very high score of between 91-108 indicating our sample of teachers, working in regular primary schools where learners with disabilities attended felt they were effective in teaching inclusively (see Fig. 20).

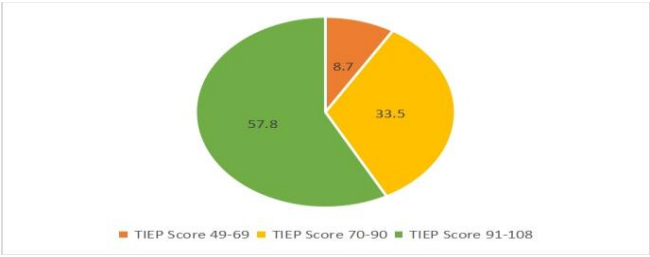

Figure 20. Distribution of TEIP scores

4. What is the purpose of educating children with disabilities?

As part of the survey, we asked the teachers to identify and rank the three most important reasons for educating learners with disabilities. We used five codes: social cohesion, employment, independence, rights, and the development of self to code the responses. The most important primary reason for educating children with disabilities was said, by 31% of teachers, to be for social cohesion (see Fig. 21). This was followed by 26% of teachers who cited employment. It was particularly interesting to see that almost a fifth of teachers cited the rights of child and for the development of the self, respectively, as other reasons for educating children with disabilities. In combining reasons teachers ranked as second and third, the most common reason cited was for employment.

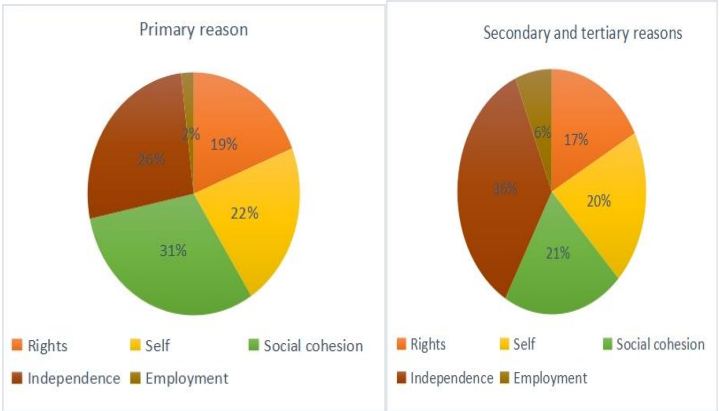

Figure 21. Reasons for educating children with disabilities

Figure 22. Teachers' responses articulating the purpose of education for children with disabilities

Using the raw data from the survey responses, we created a word cloud to show the direct language used by the teachers that was coded to form the analysis above. It is particularly interesting to see the discourses present within the teachers' responses relating to development of the self and human rights, including: "realise potential", "disability is not inability", and to "feel loved" (see Fig. 22).

5. How can teachers be better supported to include children with disabilities in their classrooms?

Teachers were asked what the three most important ways they could be supported to include children with disabilities in the classroom. They then ranked these reasons for importance. We analysed the primary reason across the whole sample and then combined the reasons ranked second and third (see Figs 23 and 24). In both cases, improvements to materials and facilities were seen to be the most important way teachers could be better supported to include children with disabilities. Following this, training, sensitisation, and screening were considered the next important. Examining the items ranked second and third shows a greater variation in the ways teachers could be supported to better include children with disabilities, including feeding programmes for children whose families live in poverty and stakeholder involvement, including NGOs. Other ways teachers felt they could be better supported included: funding, staffing, curriculum change, classroom strategies, school placements, policies, school administration and smaller classes.

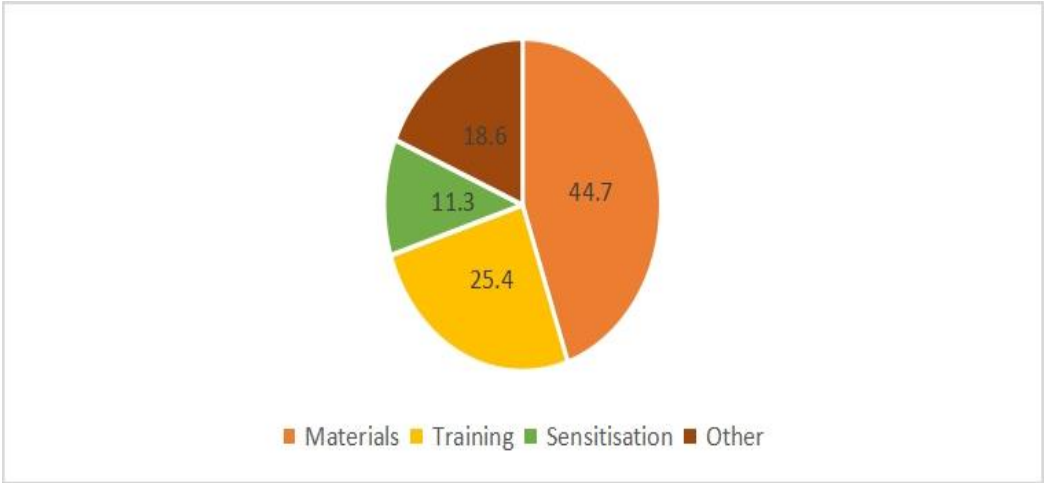

Figure 23. The primary ways teachers can be best supported to include children with disabilities

In further examining the assistive devices available to children with disabilities in school, over 50% of teachers felt that there was not adequate availability (see Fig. 25).

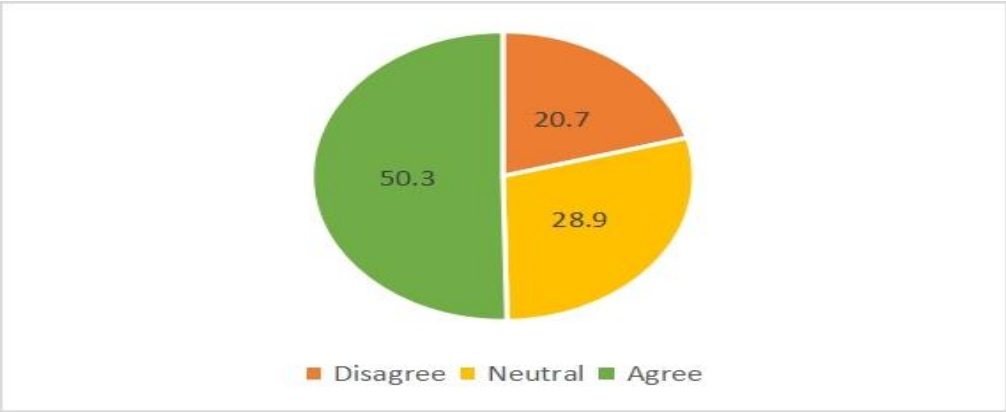

Figure 24. Teachers' views on whether children with disabilities have access to assistive devices

Concluding Reflections:

(I) The teachers' responses to the purpose of education, as well as many children with disabilities being present in classrooms, demonstrate the power of the human rights discourse (see Fig. 26) in Kenyan schools. Moreover, the most important reason highlighted for the education of children with disabilities was social cohesion.

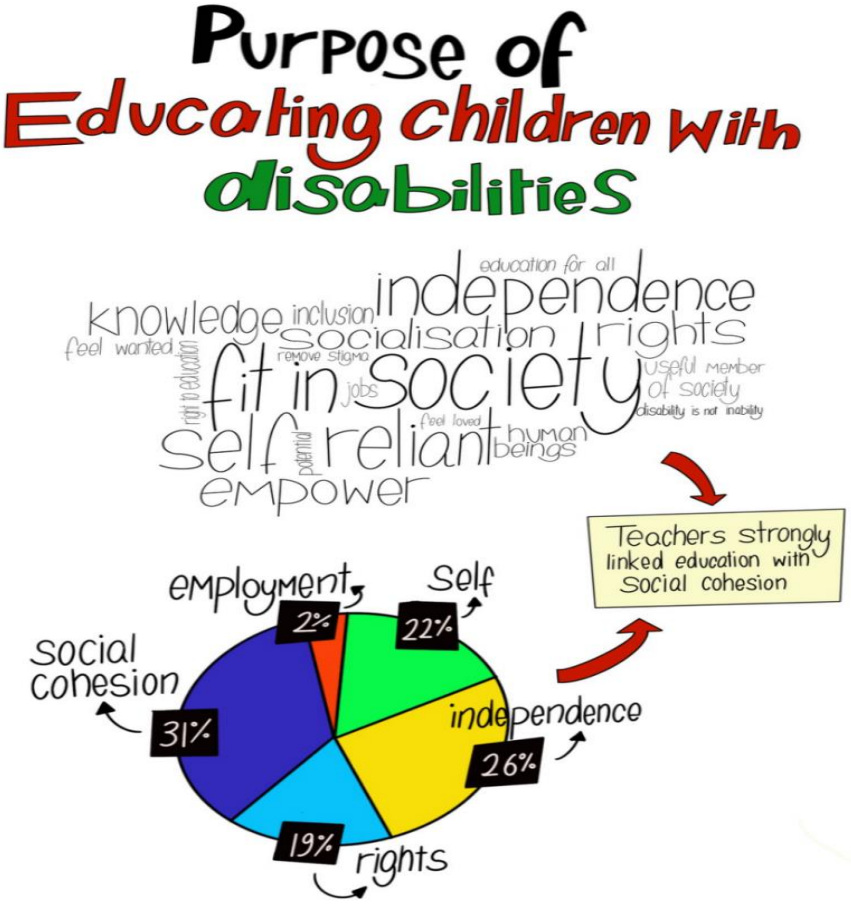

Figure 25. Purpose of educating children with disabilities

(II) Drawing on Singal's (2008) notion of 'Teach-ability', evident in our findings is the fact that teachers' were not seen to be rejecting the child with disabilities, but rather were identifying themselves as the ones who couldn't teach (see Fig. 27). Thus, were focusing on finding effective teaching strategies to respond to the learning needs of these learners. This was particularly demonstrated in teachers' responses to where children with disabilities can best learn; almost 30% of teachers' responded that those with more severe needs would best learn in special school whilst those with mild needs would learn best in inclusive/mainstream settings.

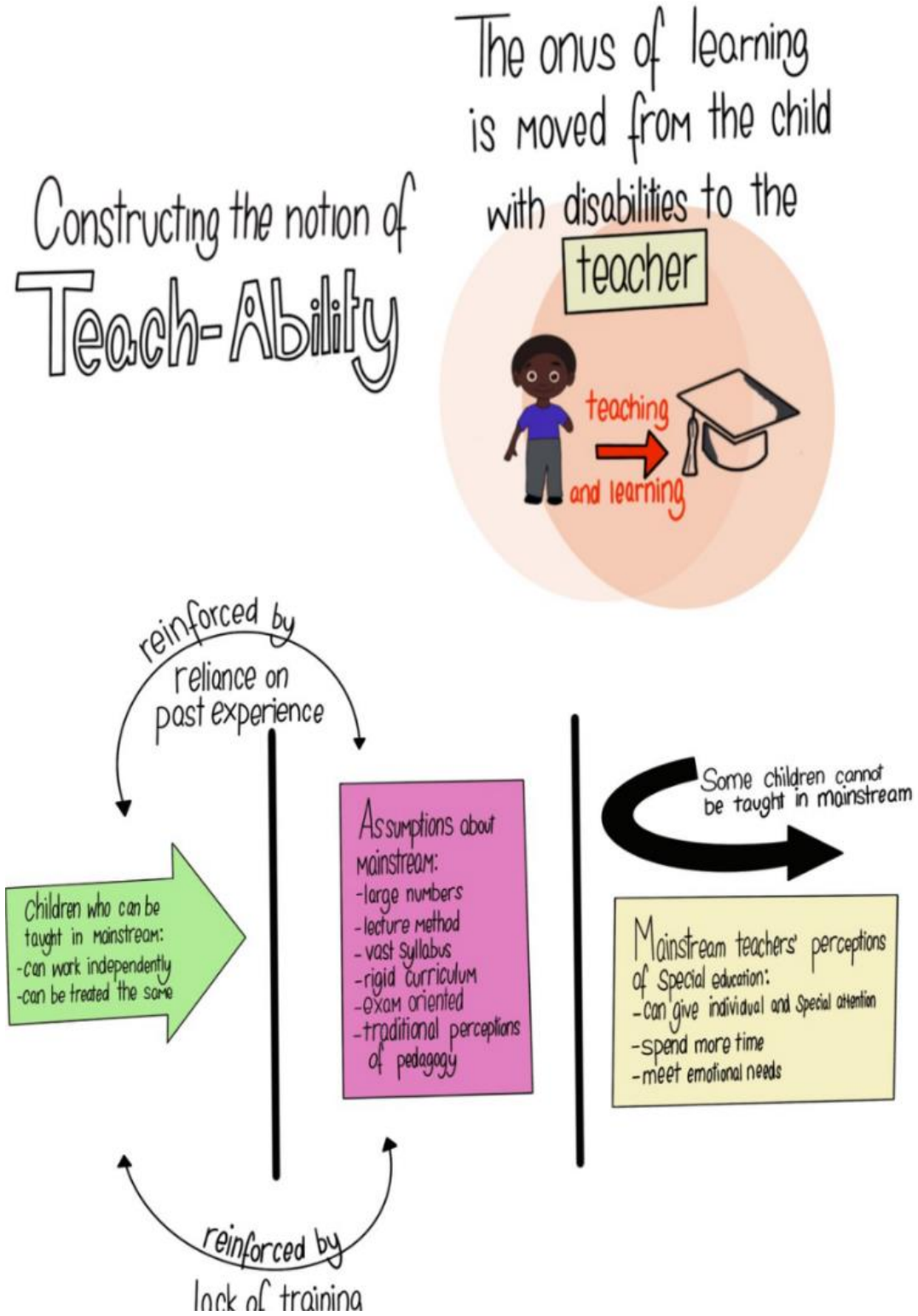

Figure 26. Constructing the notion of Teach-Ability

(III) Despite challenges in the system, teachers were able to see opportunities for children with disabilities to be meaningfully included. However, there were significant struggles – particularly a lack of resources such as assistive devices and the need for feeding programmes due to poverty among students. Our findings demonstrate a significant shift in teacher discourses which is very promising. Teacher agency was evident and they demonstrated a belief in the responsibility of civil society being ready to make changes at a grassroots level. Specifically, this was evident in the way in which teachers spoke about their effectiveness in working with families and adapting the teaching and learning process to make it more accessible for children with disabilities (see Fig. 28).

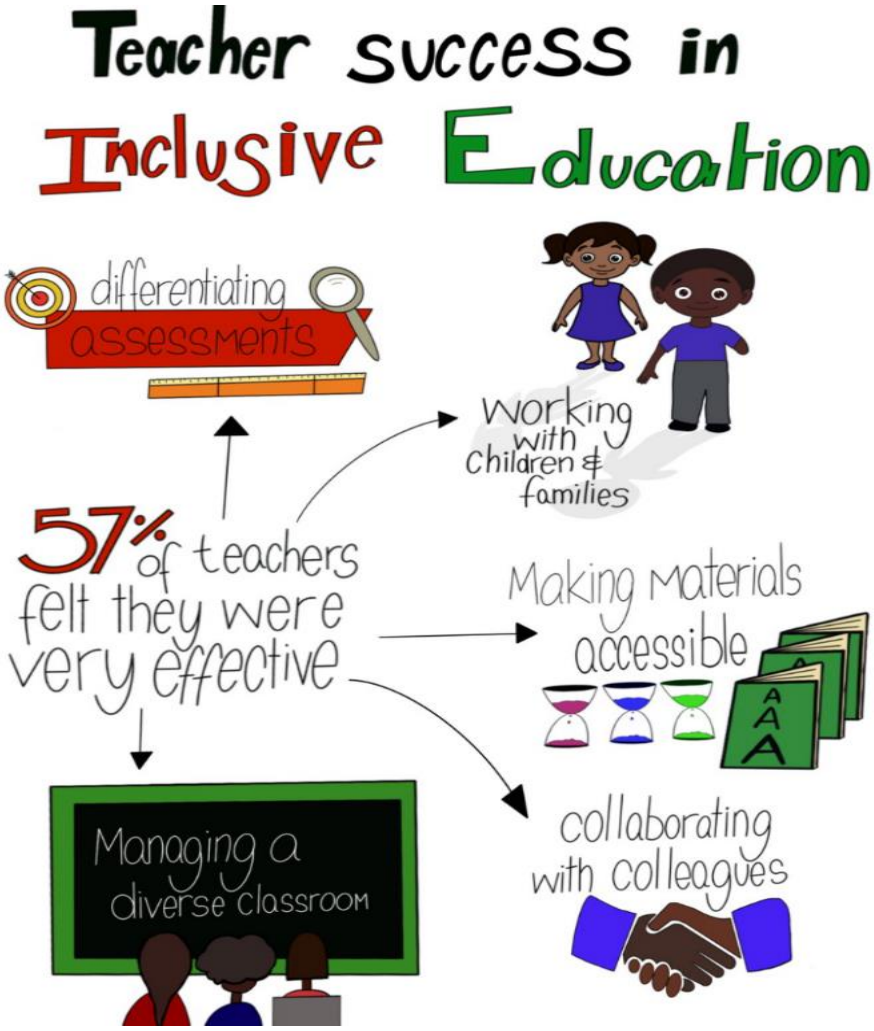

Figure 27. Teacher success in inclusive education

(IV) Our analysis highlights that teachers identified three key areas in which they needed further support to be able to better include children with disabilities: materials, training, and sensitisation/screening (see Fig. 29). The teachers' pragmatic approach to the inclusion of children with disabilities and their attempts to understand how best to teach them highlights the lacuna of evidence on effective teaching strategies. In order to better support teachers working in inclusive schools, further research must be done on how best to teach children with disabilities.

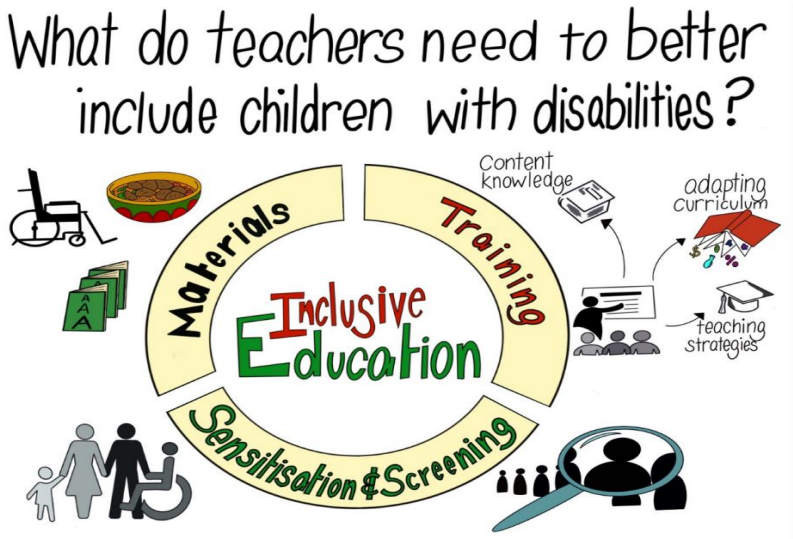

Figure 28. What do teachers need to better include children with disabilities?

References:

Adoyo, P. O., & Odeny, M. L. (2015). Emergent inclusive education practice in Kenya: Challenges and suggestions. *International Journal*, 47-52.

Kenya Vision (2019). *About Vision 2030.* Retrieved from: http://vision2030.go.ke/about-vision-2030/ (accessed 22 March 2025).

Ministry of Education (2016). *Basic Education Statistics Booklet.* Nairobi: Ministry of Education.

National Coordinating Agency for Population and Development (NCAPD) (2008). Kenya National Survey for Persons with Disabilities. Nairobi, Kenya: National Coordinating Agency for Population and Development Republic of Kenya (2012). Persons with Disability Act. Retrieved from: http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/69444/115499/F923058%20154/KEN69444%202012.pdf

Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, *12*(1), 12-21.

Washington Group (2016), *Short Set of Disability Questions*. Retrieved from: http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/

World Bank (2019), *The World Bank in Kenya: Overview*. Retrieved from: http://www.worldbank.org/en/country/kenya/overview (accessed

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This is original research conducted among the teachers in Western Kenya. All research ethics were observed. The researchers obtained the necessary approvals.

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This article followed all ethical standards for research without direct contact with human or animal subjects.