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DISABILITY AND INCLUSIVE DEVELOPMENT CENTRE (LCC), LCD REGIONAL OFFICE  
FOR EAST AFRICA (ENARO)**

**GIRLS' EDUCATION CHALLENGE**

**PIONEERING INCLUSIVE EDUCATION STRATEGIES FOR DISABLED GIRLS IN THE  
LAKE REGION IN KENYA**

**DRAFT REPORT**

**Survey for Trainers of trainers and Teachers**

*November 2014*

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## Abbreviations

CWD	Children with Disabilities
DEO	District Education Office
DFID	Department for International Development
DPO	Disabled People's Organisation
ECD	Early Childhood Development
FGD	Focus Group Discussion
GEC	Girls' Education Challenge
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IT	Information Technology
IE	Inclusive Education
KAP	Knowledge, Attitudes and Practices
LCD	Leonard Cheshire Disability
LCDIDC	Leonard Cheshire Disability and Inclusive Development Centre
MoE	Ministry of Education
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PM	Project Manager
PO	Project Officer
S.D.	Standard Deviation
SDC	School Development Committee
SEN	Special Education Needs
SNE	Special Needs Education
TOTs	Trainers of teachers
UCL	University College London
UNCRPD	UN Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WB	World Bank
WHO	World Health Organisation

## Foreword

This report was prepared by Ms Marcella Deluca, Dr Carlo Tramontano<sup>1</sup>, and Dr Maria Kett, Leonard Cheshire Disability and Inclusive Development Centre, University College London.

Data were collected by the Inclusive Education project team, Leonard Cheshire Disability East Africa Regional Office.

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<sup>1</sup> Dr Carlo Tramontano is now based at the University of Coventry

## Introduction

The goal of this project is to address physical and social barriers to education for girls with disabilities, and to ensure that 2,050 disabled girls in 50 primary schools in Lake Region receive a full, quality and inclusive primary education.

Specifically, the project will:

- Increase awareness and capacity of duty bearers and service providers to respond to the needs of disabled girls;
- Improve enrolment and retention of disabled girls in mainstream primary schools;
- Improve quality and accessibility of mainstream education for disabled girls;
- Improve knowledge and evidence to demonstrate the effectiveness of inclusive education (IE).

This is a 45-month programme which is implemented in 50 schools in five districts in the Lake Region (Mbita, Migori, Kisumu East, Kuria East and Siaya) and is composed of both research and programme components. The research component offers the possibility to gather evidence which can be fed back to improve delivery, highlight gaps and challenges, as well as develop hypotheses for further research.

The research will use both qualitative and quantitative methodologies. Research to be undertaken as part of the project includes:

1. Secondary data analysis of data already collected (household survey, focus group discussions and key informant interviews) through a baseline survey (undertaken by Ipsos-Synovate) to generate in-depth analysis of the findings (including comparison of girls by type of difficulties, in- or out-of-school status, and other relevant socioeconomic factors); and theme content analysis of the qualitative data. This process will generate new questions for follow-up in a qualitative component (see 3 below); as well as additional questions for the mid- and end-line household survey (due to be undertaken in November 2016 and March 2017 respectively) - these will provide more detailed data to explore the impact of inclusive education on girls with disabilities in the region on a broader scale.
2. Teacher survey: A survey to measure the knowledge, attitudes and practices (KAP) of teachers administered to establish pre- and post-intervention levels of KAP towards inclusion of children with disabilities. The results of the survey will help establish a baseline from which to measure the effectiveness of the training on IE, as the same information will be collected on the same sample

of teachers following the implementation of the project, enabling comparison as well as capturing any intended and unintended outcomes and consequences of the project.

3. Comparison/case studies of girls with and without disabilities who drop out of school through the identification and study of a cohort of out-of-school girls identified through the household survey using qualitative approaches (such as ethnographic techniques) to find out about their lives, and identify the factors that led to them dropping out of school, or indeed not enrolling in in the first place.

This research will enable a better understanding of the factors that contribute to improved and increased participation of girls with disabilities (enrolment, retention and accessibility) in primary education as a result of the LCD programme; the attitudes of families and communities towards the education of girls and boys with disabilities; learning from evidence about what policies and practices have the best results, and use this evidence to inform policy from good practice; share best practices and lessons learned with project partners, DPOs, NGOs, INGOs, donors and government to improve awareness, capacity and deliver improved services and overall improve quality of education for girls – and boys – with disabilities in Kenya.

Results will be shared with national and regional education networks/coalitions via policy briefs, working papers, and academic publications. Presentation of results will also be made at national and international meetings and a final in-country conference at the end of the project. Potential avenues for dissemination identified to date include the World Education Forum, to be held Incheon, Korea in May 2015.

### Attitudinal survey

A component of the GEC research was a survey to measure the knowledge, attitudes and practices (KAP) of teachers to establish pre- and post-intervention (in terms of project activities) knowledge, attitudes and practices around inclusion of children with disabilities. The KAP survey will compare results from a total of 130 teachers in the participating project schools in the five districts. The sample comprised 30 teachers who will go onto become trainers and 100 teachers, all of whom who were subsequently trained in IE as part of the project.

The survey questionnaire was developed by the Leonard Cheshire Disability and Inclusive Development Centre, based upon previous work in the field, and was administered to selected identified teachers before they underwent training. The sample is therefore composed of:

1. **30 teachers who are the ‘trainers of teachers’ (TOTs) from schools selected for the LCD Inclusive Education Programme.** These are teachers who have previously undergone special needs training through the government system and were pre-selected by the district education office. During the training the TOTs

were led through various strategies to ensure participation of all learners in every learning environment, using an IE training manual<sup>2</sup> which covered subjects ranging from concepts and contexts in special education and inclusive education; identification of learners with special needs and disabilities; child-centred approaches in learning; and classroom management and educational resources. Given the focus of the project, gender sensitive pedagogy was emphasised to strengthen their knowledge on issues that specifically affect girls with disabilities. Following this training, the TOTs are scheduled to train a further 570 teachers on IE. The survey team interviewed these 30 TOTs as part of the KAP survey on 20 April 2014, before the training session on IE started.

**Table 1 Number and percentage of TOTs, by district**

	N TOTs	% TOTs
Kisumu	7	23.3
Kuria	5	16.7
Mbita	6	20.0
Migori	6	20.0
Siaya	6	20.0
<b>Total</b>	<b>30</b>	<b>100.0</b>

2. **100 teachers in the five districts (Mbita, Migori, Kisumu East, Kuria East and Siaya).** The survey team interviewed these teachers as part of the KAP survey on 4 May 2014, before the training session on IE started.

**Table 2 Number and percentage of teachers, by district**

	N Teachers	% Teachers
Kisumu	20	20.0
Kuria	20	20.0
Mbita	20	20.0
Migori	20	20.0
Siaya	20	20.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

<sup>2</sup> Developed by LCD in collaboration Maseno University for previous work on IE.

## Methodology

### Training

Due to time and budget constraints, it was decided that the London-based research team would train a group of pre-selected supervisors on survey administration. This group included the project manager, the three project officers and an Education Assessment Resource Centre Officer (EARCO). Training of supervisors took place on Skype on 16 April, 2014.

### Field work – administering the survey tools

The first group interviewed was the TOTs, followed by the remaining teachers. Interviews were undertaken on 20 April 2014 (TOTs) and on 4 May 2014 (teachers). Participants were interviewed as they arrived to the hotel/venue to participate in the five day IE training programme.

Supervisors introduced themselves, and explained the purpose of survey by reading the information sheet and obtaining informed consent. The interviews were undertaken in privacy and respondents were ensured of confidentiality. Interviews took approximately one and a half hours.

Supervisors had the choice of either reading out the questions to interviewees and recording their answers on the sheet, or handing them a copy of the questionnaire complete while supervisors read out the questions. Either way, they had to ensure that sections and scales of answers were clear.

During the Skype training, it was stressed that supervisors should be respectful, polite and use appropriate terminology at all times during the interview. Supervisors were made familiar with the notion that the language one uses to refer to people with disabilities can send powerful messages (positive or negative) into the community. The supervisors were encouraged to be aware of comparable inappropriate usage in other languages (in this instance, Kiswahili).

The supervisors also had a checklist to complete and were advised to report any issues or challenges to the project manager. Supervisors were advised about the appropriate action to take (e.g. report to welfare officers) if they encountered any such incidents.

It should be noted that the research team in London were notified after the training that head teachers were among the group of interviewees. However, due to the late notification, the head teachers were issued with the same questionnaire as the teachers, whereas in fact they could have received a questionnaire tailored for head teachers. The London team requested that supervisors made a note on the paper questionnaires of which respondents were the head teachers. In addition, the Kenya team were keen to reassure the research team that head teachers were also actively involved in teaching, and were therefore included in the teacher sample.

## Disability and Impairment groups

In the section on disabilities in the questionnaire, the impairment groups were defined as the following, based on previous work in Kenya (including the Kenya National Disability Survey 2008 and the terms used by education assessment resource staff):

1. **Visual impairment** (e.g. difficulty seeing even if wearing glasses - blind and low vision);
2. **Hearing impairment** (e.g. difficulty hearing even if wearing hearing aid - deaf and hard of hearing);
3. **Intellectual disabilities** (as identified by educational psychologist/social worker - mild, moderate, severe (trained on daily living skills mainly) and profound (home-based programmes). Children with microcephalus; most children with autism; children with severe hydrocephalous; Down syndrome;
4. **Learning difficulties** (including general and specific learning difficulties);
5. **Speech and language disorders** (e.g. articulation disorders; stuttering; receptive and expressive language problems);
6. **Epilepsy**;
7. **Physical disabilities** (e.g. difficulty walking even if using prosthesis; Paraplegia - muscles or bones on two limbs (upper or lower) are affected; Monoplegia - muscles or bones on one limb are affected; Hemiplegia - muscles or bones on one side of the body are affected; Quadriplegia - muscles or bones on all the four limbs are affected; Missing limb, amputations. Burns; Cerebral Palsy; Muscular Dystrophy; Spina Bifida; and brittle bones;
8. **Health problems** (e.g. children with HIV/AIDS; chronic health conditions; asthma);
9. **Multiple disabilities** (e.g. as identified by educational psychologist/social worker – deaf/blind);
10. **Other** (if the impairment does not fit into any of the above categories, respondents were requested to describe the impairment using their own words – e.g. children with albinism).

## Data entry and analysis

After the questionnaires were completed, they were sent to LCD Head Office in London and subsequently reached the research centre at UCL on May 28, 2014. Data were then entered into spread sheets devised for this purpose by the research

team. Data were captured by the research team (CT and MD) during the week of June 2<sup>nd</sup> 2014.

The paper questionnaires have been retained by the Centre, as per the requirements of the UCL Ethics committee.

### ***Survey questionnaires***

The total number of questionnaires administered was 130. The total number of returned questionnaires was 130. No questionnaire was discarded because they were incomplete or returned without the informed consent form.

Total number of valid teachers questionnaires used in the analysis is then **130 (i.e. 30 TOTs and 100 teachers)**.

### **Limitations**

To save time and expense, it was decided to use a 'training of trainers' approach, although this may be less effective than training supervisors directly. An additional layer of complexity was that training was undertaken over Skype.

The research team in London was not notified until after the surveys had been administered that head teachers were among the group of interviewees. This is unfortunate as they could have received the questionnaire for head teachers designed for other research of this kind.

In addition, data analysis revealed a few inconsistencies with some respondents. However, overall the quality of the data gathered was satisfactory.

## Teacher Survey

The aim of this survey was to assess levels of knowledge, attitudes and practices (KAP) of teachers in the Lake Region in Kenya on the education of children with disabilities.

It was administered to establish a baseline prior to the project intervention; Resurveying will take place in the final year of the project after all the planned interventions have been implemented. The results of the survey will be compared to establish the effectiveness of the training on IE, and outcomes of the project overall.

As explained above, the survey was administered to a preselected group of 130 teachers. The teachers interviewed had already been selected by the Kenyan MoE to undergo training on IE through the IE LCD project.

A total of 130 questionnaires were analysed, that is 30 TOT teacher questionnaires and 100 teacher questionnaires, with the following distribution by district:

**Table 3 Number and percentage of TOTs and teachers, by district**

	N TOTs	% TOTs	N Teachers	% Teachers
Kisumu	7	23.3	20	20.0
Kuria	5	16.7	20	20.0
Mbita	6	20.0	20	20.0
Migori	6	20.0	20	20.0
Siaya	6	20.0	20	20.0
Total	30	100.0	100	100.0

The average age of the 100 teachers was 43.4 (s.d.=8.96) with a range from 26 to 59 years old; the average age of the 30 TOTs was 43.1 (s.d.=7.04) with a range from 28 to 57 years old;

The majority of teachers were male (53.1%) (N=96). The majority of TOTs 56.7% (N=30) were also male.

83.3% of teachers (N=96) and 92.6% of TOTs (N=30) reported being married.

With regard to the highest level of education attained, of the 130 respondents, the majority of teachers and TOTs reported completing teacher training college (Table 4 ).

**Table 4 Number and percentage of TOTs and teachers, by level of education**

	N TOTs	% TOTs	N Teachers	% Teachers
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Some College	0	0.0	3	3.0
Completed College	18	60.0	69	69.0
Some university	1	3.3	12	12.0
Completed University	11	36.7	10	10.0
Other	0	0.0	6	6.0
<b>Total</b>	30	100.0	100	100.0

72 teacher respondents (72.0%) and 18 TOTs (60.0%) reported having some college level education, or having completed college. The majority of teachers indicated having a certificate or diploma in primary teaching education, and a few indicated having a diploma in SNE/IE. Almost all TOTs specified that they had a certificate or a diploma in SNE/IE

22 teacher respondents (22%) and 12 TOTs (40.0%) reported having some level of university education, or completing university. The majority of teachers specified that they attended the education faculty and the majority of TOTs specified having attended special education courses.

Finally, 6 teacher respondents (6%) picked the option 'other' – specifying that they are currently attending further courses at university.

With regard to the question on education and inclusion of disability-related content, 66.3% of teachers (N=98) and, as expected, 100% of TOTs (N=30) reported that their education included content related to disability.

Only 23.5% of teachers (N=98) and, as expected, 100% of TOTs (N=30) reported being trained in special needs education.

53 teachers (53.5%, N=99) and 21 TOTs (70.0%) reported having undertaken further training courses (e.g. workshops, additional courses, etc.) that included content specifically related to disability and/or to gender (Table 5).

**Table 5 Number and percentage of TOTs and teachers, by training (on disability and gender)<sup>3</sup>**

		N TOTs	% TOTs	N Teachers	% Teachers
Disability content in additional training courses	Yes	20	95.2	31	58.5
	No	1	4.8	22	41.5
<b>Valid Total</b>		21	100.0	53	100.0
Gender content in additional training courses	Yes	14	70.0	40	76.9
	No	6	30.0	12	23.1
<b>Valid Total</b>		20	100.0	52	100.0

<sup>3</sup> Tables show valid totals, discrepancies are due to missing values

## Teaching Experience

The 100 teacher respondents reported on average 19 years of professional experience (s.d.=9.57). The longest level of service was 35 years, the shortest, two years. The 30 TOTs reported on average 18.9 years of professional experience (s.d.=7.37). The longest level of service was 33 years, the shortest, six years.

Teachers (N=100) reported having been teaching in their current school on average 6.1 years (s.d.=4.89), with a range between a minimum of 2.5 months and a maximum of 26 years. TOTs (N=30) reported having been teaching in their current school on average 7.6 years (s.d.=4.63), with a range between a minimum 4 months and a maximum of 20 years.

Regarding the type of provision they currently taught, the majority of teachers and TOTs teach in exclusively mainstream classes (Table 6).

**Table 6 Number and percentage of TOTs and teachers, by type of provision currently taught**

Type of Provision	N TOTs	% TOTs	N Teachers	% Teachers
Mainstream class	22	73.3	92	92.0
Mainstream class and resource unit	2	6.7	2	2.0
Mainstream class, resource unit and special class	1	3.3	1	1.0
Other	3	10.0	2	2.0
Special unit	0	0	1	1.0
Mainstream class and special unit	2	6.7	0	0
Mainstream class, and other	0	0	2.	2.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>

Teachers and TOTs were asked the type of provision they had taught in the past and for how long:

- 94 teachers (out of 99 who responded) stated having taught mainstream classes. With regard to duration, on average it was 18.16 years (s.d.=9.73) ranging from a minimum 2 years to a maximum of 35 years;
- 28 TOTs (out of 30 who responded) stated having taught in mainstream classes. On average, they taught for 15.57 years (s.d.=6.77), ranging from a minimum four years to a maximum of 31 years;
- Four teachers stated having taught in special units on average for 3 years (s.d.=1.82), the range was from one to five years; 4 TOTs stated having taught in special units on average 5.5 years (s.d.=3.31), the range was from two to ten years;

- One teacher stated having taught in resource units. The duration reported was 8 years; 2 TOTs stated having taught in resource units for an average of 10 years (s.d.=4.24) ranging from a minimum of seven years to a maximum of 13 years;
- One teacher stated having taught in a special school for 3 years; 5 TOTs stated having taught in a special school for an average of four years (s.d.=2.34) with a range from two to seven years.
- Three teachers stated that they had taught in other types of provision and two specified it stating upper primary and community conference. With regard to duration, the average reported was 3.33 (s.d.=2.82) the range was from one to five years. Three TOTs stated other types of provision and all specified it (inclusive provision). With regard to duration, the average reported was 8.67 (s.d.=2.08) the range was from seven to 11 years<sup>4</sup>.

## Experience with disabilities

### Teachers - Present and Past Experience teaching students with disabilities

TOTs and teachers were asked to report whether they were currently teaching and/or had previous experience in teaching any students identified as having disabilities, by type of disability (Table 7 and Table 8).

84 teachers (N=99, 84.8%) and 29 TOTs (N=30, 96.7%) reported having current or previous experience with students with **visual impairments** in the classroom. The majority of teachers found it extremely (17.9%) or somewhat difficult (63.1%) to teach them. The majority of TOTs found it extremely (13.8%) or somewhat difficult (55.2%) to teach them.

86 teachers (N=100, 86.0%) and 29 TOTs (N=30, 96.7%) reported having current or previous experience with students with **hearing impairments** in the classroom. The majority of teachers found it either extremely difficult (30.2%) or somewhat difficult (55.8%) to teach them. The majority of TOTs found it either extremely difficult (6.9%) or somewhat difficult (65.5%) to teach them.

75 teachers (N=99, 75.8%) and 26 TOTs (N=30, 86.7%) reported having current or previous experience with students with **intellectual disabilities** in the classroom. The great majority of respondents specified that it is either extremely difficult (38.9%) or somewhat difficult (40.3%). The majority of TOTs found it either extremely difficult (24.0%) or somewhat difficult (56.8%) to teach them.

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<sup>4</sup> It is clear that some of respondents did not understand the word provision. For the TOTs who indicated Inclusive Provision, they simply meant teaching children with disabilities in regular schools. This will change as they train and practice.

96 teachers (N=100, 96.0%) and all 30 TOTs reported having current or previous experience with students with **learning difficulties** in the classroom. The great majority of respondents specified that it is either extremely difficult (24.0%) or somewhat difficult (59.4%) to teach them. The majority of TOTs found it either extremely difficult (16.7%) or somewhat difficult (30.0%) to teach them.

88 teachers (N=100, 88.0%) and 29 TOTs (N=30, 96.7%) reported currently having current or previous experience with students with **speech and language disorders** in the classroom. The majority of teachers found it either extremely difficult (24.4%) or somewhat difficult (48.8%) to teach them. The majority of TOTs found it either extremely difficult (13.8%) or somewhat difficult (37.9%) to teach them.

79 teachers (N=100, 79.0%) and 29 TOTs (N=30, 96.7%) reported currently having current or previous experience with students with **epilepsy** in the classroom. The majority of teachers found it either extremely difficult (13.0%) or somewhat difficult (42.9%) to teach them. A large minority of TOTs found it either extremely difficult (10.3%) or somewhat difficult (24.1%) to teach them.

91 teachers (N=100, 91.0%) and 29 TOTs (N=30, 96.7%) reported currently having current or previous experience with students with **physical and motor disabilities** in the classroom. A large minority of respondents specified that it is extremely (3.4%) or somewhat difficult (28.1%) to teach them. The minority of TOTs found somewhat difficult (6.9%) to teach them.

84 teachers (N=99, 84.8%) and 29 TOTs (N=30, 96.7%) reported having current or previous experience with students with **health-related disorders** in the classroom. The great majority of respondents specified that it is extremely (16.9%) or somewhat difficult (55.4%) to teach them. Around half of TOTs found it either extremely difficult (10.3%) or somewhat difficult (37.9%) to teach them.

38 teachers (N=95, 40.0%) and 16 TOTs (N=28, 57.1%) reported having current or previous experience with students with **multiple disabilities** in their mainstream class. The majority of teachers found it either extremely difficult (54.1%) or somewhat difficult (24.3%) to teach them. The majority of TOTs found it either extremely difficult (53.3%) or somewhat difficult (33.3%) to teach them.

13 teachers (N=84, 15.5%) and nine TOTs (N=25, 36.0%) reported having current or previous experience with students with other disabilities in their mainstream class. The majority of teachers found it either extremely difficult (14.3%) or somewhat difficult (42.9%) to teach them. The majority of TOTs found it either extremely difficult (12.5%) or somewhat difficult (50.0%) to teach them.

Table 7 How easy is it to teach students with disabilities, by type of disabilities – Teachers who reported having experience with it

	Visual Impairments		Hearing impairments		Intellectual disabilities		Learning difficulties		Speech and language disorders		Epilepsy		Physical disabilities		Health-related disorders		Multiple Disabilities		Other	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Extremely difficult	15	17.9	26	30.2	28	38.9	23	24.0	21	24.4	10	13.0	3	3.4	14	16.9	20	54.1	1	14.3
Somewhat difficult	53	63.1	48	55.8	29	40.3	57	59.4	42	48.8	33	42.9	25	28.1	46	55.4	9	24.3	3	42.9
Somewhat easy	12	14.3	7	8.1	11	15.3	13	13.5	18	20.9	25	32.5	45	50.6	19	22.9	4	10.8	1	14.3
Extremely easy	0	0	1	1.2	1	1.4	1	1.0	1	1.2	7	9.1	14	15.7	2	2.4	0	0	1	14.3
No experience	4	4.8	4	4.7	3	4.2	2	2.1	4	4.7	2	2.6	2	2.2	2	2.4	4	10.8	1	14.3
Valid Total	84	100.0	86	100.0	72	100.0	96	100.0	86	100.0	77	100.0	89	100.0	83	100.0	35	100	7	100.0

Table 8 How easy is it to teach students with disabilities, by type of disabilities – TOTs who reported having experience with it

	Visual Impairments		Hearing impairments		Intellectual disabilities		Learning difficulties		Speech and language disorders		Epilepsy		Physical disabilities		Health-related disorders		Multiple Disabilities		Other	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Extremely difficult	4	13.8	2	6.9	6	24.0	5	16.7	4	13.8	3	10.3	0	0	3	10.3	8	53.3	1	12.5
Somewhat difficult	16	55.2	19	65.5	14	56.0	9	30.0	11	37.9	7	24.1	2	6.9	11	37.9	5	33.3	4	50.0
Somewhat easy	8	27.6	8	27.6	4	16.0	13	43.3	12	41.4	9	31.0	17	58.6	9	31.0	2	13.3	2	25.0
Extremely easy	1	3.4	0	0	1	4.0	3	10.0	2	6.9	9	31.0	10	34.5	6	20.7	0	0	0	0
No experience	0	0	0	0	0	0	0	0	0	0	1	3.4	0	0	0	0	0	0	1	12.5
Valid Total	29	100	29	100	25	100	30	100	29	100	29	100.0	29	100	29	100	15	100	8	100

## Teacher training

Teachers were asked to rate the extent to which they thought their previous training helped them deal with students with disabilities effectively. Data were disaggregated by disability, and teachers and TOTs specified the intensity of their feelings for a given set of statements on a symmetric 5-point Likert scale (Table 9 and Table 10).

**Table 9 Effectiveness of teacher training by disability, teachers**

	Visual Impairments		Hearing Impairments		Intellectual disabilities		Learning difficulties		Speech and language disorders	
	N	%	N	%	N	%	N	%	N	%
Not at all	8	8.1	9	9.2	6	6.2	3	3.0	6	6.2
A little bit	32	32.3	42	42.9	46	47.4	40	40.4	40	41.2
Quite a lot	23	23.2	17	17.3	15	15.5	24	24.2	21	21.6
A lot	10	10.1	4	4.1	10	10.3	17	17.2	6	6.2
No training	26	26.3	26	26.5	20	20.6	15	15.2	24	24.7
Valid Total	99	100.0	98	100.0	97	100.0	99	100.0	97	100.0
	Epilepsy		Physical Disabilities		Health Related Disorders		Multiple Disabilities		Other	
	N	%	N	%	N	%	N	%	N	%
Not at all	8	8.0	2	2.0	5	5.0	2	2.0	1	1.3
A little bit	31	31.0	43	43.4	38	38.0	25	25.5	12	16.0
Quite a lot	16	16.0	24	24.2	16	16.0	9	9.2	2	2.7
A lot	9	9.0	12	12.1	18	18.0	9	9.2	3	4.0
No training	36	36.0	18	18.2	23	23.0	53	54.1	57	76.0
Valid Total	100	100.0	99	100.0	100	100.0	98	100.0	75	100.0

**Table 10 Effectiveness of teacher training by disability, TOTs**

	Visual Impairments		Hearing Impairments		Intellectual disabilities		Learning difficulties		Speech and language disorders	
	N	%	N	%	N	%	N	%	N	%
Not at all	0	0	0	0	0	0	0	0	1	3.6
A little bit	5	17.2	8	26.7	5	16.7	3	10.3	4	14.3
Quite a lot	12	41.4	13	43.3	14	46.7	15	51.7	13	46.4
A lot	12	41.4	9	30.0	11	36.7	11	37.9	10	35.7
No training	0	0	0	0	0	0	0	0	0	0
Valid Total	29	100	30	100	30	100	29	100	28	100

	Epilepsy		Physical disabilities		Health Related Disorders		Multiple Disabilities		Other	
	N	%	N	%	N	%	N	%	N	%
Not at all	0	0	0	0	1	3.4	1	3.7	1	3.8
A little bit	5	16.7	3	10.0	6	20.7	10	37.0	2	7.7
Quite a lot	16	53.3	16	53.3	14	48.3	7	25.9	4	15.4
A lot	8	26.7	11	36.7	8	27.6	4	14.8	5	19.2
No training	1	3.3	0	0	0	0	5	18.5	13	50.0
Valid Total	30	100	30	100	29	100	27	100	26	100

Overall, teachers recognised the importance of previous training in teaching pupils with disabilities. However, on average around 25% of teachers reported having no previous training in the various disabilities listed and more than 50% had no training in multiple disabilities, indicating that there is scope for further training for all teachers. On the other hand, TOTs reported having received previous training in all of the disabilities listed, with the exception of epilepsy and multiple disabilities.

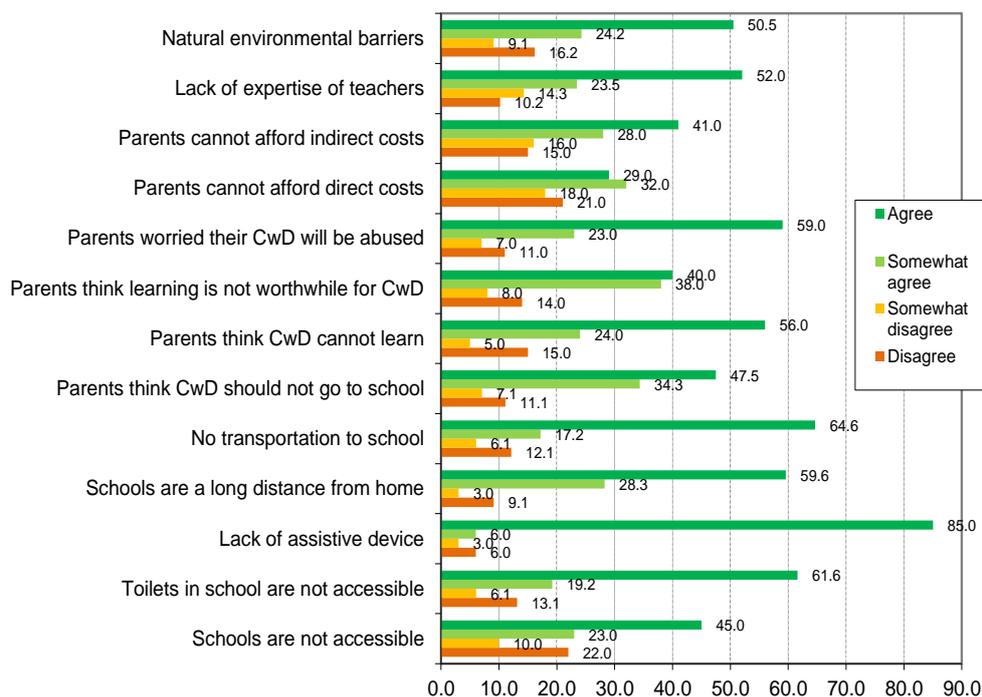
## Barriers

Teachers were then asked the extent to which they agreed with a series of statements about what might be a barrier preventing children with disabilities from going to school. The 100 respondents rated their level of agreement or disagreement on a four-point symmetric agree-disagree Likert scale for a series of 14 statements. Their answers can be summarised as follows:

1. 68.0% of teachers (N=100) somewhat or totally agree that schools are not physically accessible;
2. 80.8% of teachers (N=99) somewhat or totally agree that toilets in the school are not physically accessible;
3. 91.0% of teachers (N=100) somewhat or totally agree that there is a lack of assistive devices;
4. 87.9% of teachers (N=99) somewhat or totally agree that schools are a long distance from home;
5. 81.8% of teachers (N=99) somewhat or totally agree that there is no means of transportation to school;
6. 81.8% of teachers (N=99) think that parents think children with disabilities should not go to school;
7. 80.0% of teachers think that parents generally think children with disabilities cannot learn (N=100);

8. 78.0% of teachers (N=100) think that parents generally think it is not worthwhile for children with disabilities to learn;
9. 82.0% of teachers (N=100) think that parents are worried their children with disabilities will be abused (bullied, teased, ill-treated, etc.);
10. 61.0% of teachers (N=100) somewhat or totally agree that the direct costs for school are too high for parents (e.g. uniform, books, fees);
11. 69.0% of teachers (N=100) somewhat or totally agree that indirect costs for school are too high for parents (e.g. meals, transportation);
12. 75.5% of teachers (N=98) somewhat or totally agree that teachers lack expertise;
13. 74.7% of teachers (N=99) think that natural environmental barriers (e.g. animals, rivers, floods, etc.) might be a barrier preventing children with disabilities from going to school.
14. 70.3% of teachers (N=37) think that there might be other barriers preventing children with disabilities from going to school, some of which overlap with the above. Examples provided include: *Poverty/ignorance of parents; Lack of parental sensitisation; Culture/Tribal clashes; Negative attitude towards disabled children; Stigmatization; Hostility/ Hostile environment; Rocky and stony environment; Lack of devices; Lack of relevant T/L materials; Lack of enough special schools Truancy; Drugs.*

Figure 1 below summarises the intensity of the respondents' feelings for a given statement (agree, somewhat agree, somewhat disagree, disagree).

**Figure 1 Barriers preventing children with disabilities from going to school, according to teachers**

Challenges were identified around accessibility. A major barrier for children with disabilities identified by teachers is the lack of assistive devices. Other significant barriers preventing children with disabilities from going to school include the lack of transportation to and from school and the fact that schools are a long distance from home. Natural environmental barriers (e.g. animals, rivers, floods, etc.) were also reported as preventing children with disabilities from going to school. If they do make it to school, accessibility becomes an issue, along with access to the toilet.

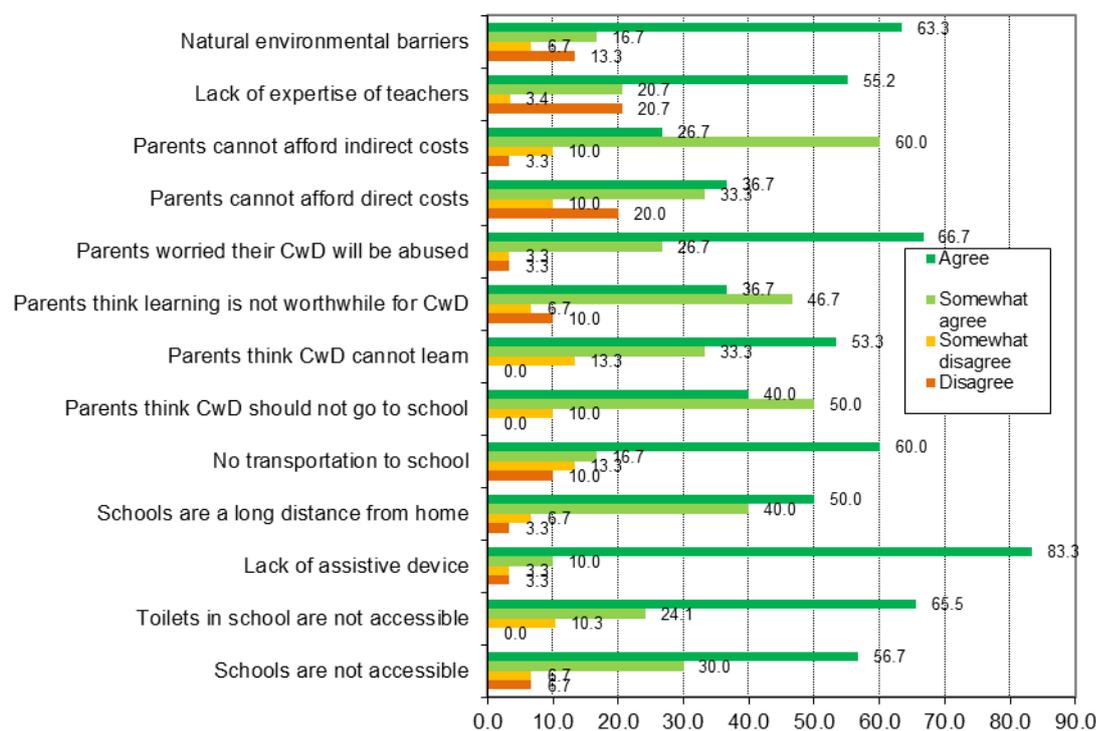
A significant number of teachers think that parents think that children with disabilities should not go to school and that parents think that they cannot learn. However, they also think that parents are worried their children with disabilities will be abused (bullied, teased, ill-treated, etc.), so it is unclear if it is this which makes them reluctant to send them to school, or a range of other factors. Notably, the majority of teachers thought that the lack of teacher expertise was a barrier. This supports the need for further training.

TOTs were asked the same set of questions as teachers on the extent to which they agreed with the series of statements about what might be a barrier preventing children with disabilities from going to school. The 30 respondents rated their level of agreement or disagreement on a four-point symmetric agree-disagree Likert scale for a series of 14 statements. Their answers can be summarised as follows:

1. 86.7% of TOTs (N=30) somewhat or totally agree that schools are not physically accessible;

2. 89.7% of TOTs (N=29) somewhat or totally agree that toilets in the school are not physically accessible;
3. 93.3% of TOTs (N=30) somewhat or totally agree that there is a lack of assistive devices;
4. 90.0% of TOTs (N=30) somewhat or totally agree that schools are a long distance from home;
5. 76.7% of TOTs (N=30) somewhat or totally agree that there is no means of transportation to school;
6. 90.0% of TOTs (N=30) think that parents think children with disabilities should not go to school;
7. 86.7% of TOTs think that parents generally think children with disabilities cannot learn (N=30);
8. 83.3% of TOTs (N=30) think that parents generally think it is not worthwhile for children with disabilities to learn;
9. 93.3% of TOTs (N=30) think that parents are worried their children with disabilities will be abused (bullied, teased, ill-treated, etc.);
10. 70.0% of TOTs (N=30) somewhat or totally agree that the direct costs for school are too high for parents (e.g. uniform, books, fees);
11. 86.7% of TOTs (N=30) somewhat or totally agree that indirect costs for school are too high for parents (e.g. meals, transportation);
12. 75.9% of TOTs (N=29) somewhat or totally agree that teachers lack expertise;
13. 80.0% of TOTs (N=30) think that natural environmental barriers (e.g. animals, rivers, floods, etc.) might be a barrier preventing children with disabilities from going to school.
14. 90.9% of TOTs (N=22) think that there are other barriers that might prevent children with disabilities from going to school. Examples provided include: *Social barriers; Negative attitudes about disabilities/SNE; Teacher attitudes/Mean score; Lack of awareness; Fear for the unknown; Few functional education assessment resource centres; Lack of sick bays in schools; Other children not guided on how to interact with CWD; Parents do not take girls to school; Parents feel shy on their disabled children; Ignorance from parents.*

Figure 2 below summarises the intensity of the respondents' feelings for a given statement (agree, somewhat agree, somewhat disagree, disagree)

**Figure 2 Barriers preventing children with disabilities from going to school, according to TOTs**

As with the group of teachers, a major barrier for children with disabilities identified by TOTs is the lack of assistive devices. Another significant barrier preventing children with disabilities from going to school is the fact that schools are a long distance from home and to a lesser extent the lack of transportation to and from school. At school, physical accessibility becomes an issue, along with access to the toilet.

Equally important is that the majority TOTs think that parents are worried their children with disabilities will be abused (bullied, teased, ill-treated, etc.), and they also think that parents think that children with disabilities should not go to school.

Equally, more than two thirds of TOTs thought that the lack of expertise of teachers was a barrier.

Statistical analysis of the findings revealed no significant differences between teachers and TOTs.

## Features of Inclusive Education

Respondents were asked whether they had ever heard of inclusive education. Of the 100 teachers who responded to this question, 80.9% stated that they had heard of IE. Of the 30 TOTs who responded to this question, unsurprisingly 100% affirmed that they had heard of IE. They were then asked what they consider are the most

relevant characteristics of inclusive education and what they considered the key elements of inclusive education were.

Summary of the most relevant characteristic of IE identified by teachers:<sup>5</sup>

Overall, teachers mentioned factors that could be considered crucial to inclusion, including acceptance, adaptation of the curriculum and environment; the need for adequately trained teachers; resources and personnel, with responses such as:

*Adapted curriculum; Relevant learning resources. Qualified teaching personnel*

*Adapting to the environment. Acceptance by students. Love. Trained teachers*

*Children with various disabilities are taught in the class handled by the same teacher. The school and the classroom should be adapted to suit all disabilities. The curriculum should be adapted to suit all the disabilities/learners. T/L aids should cater for individual needs of the learners with disabilities*

*Physical environment of the school. Curriculum be adapted to provide education for all. Communication techniques be modified. Assessment Criteria be modified*

However, some still spoke in 'normative' terms:

*Children with disabilities learn together in the same environment with the normal ones*

*Cooperation of children with disabilities with normal children in same class. Making the environment friendly to the children with disabilities i.e. ramps, accessible toilets, classroom, library, etc. Availing aid e.g. braille wheelchairs etc to ease day to day operation of learners*

*Including the children with special needs in a normal school set up. Allocating the learners a special room/ Providing the teaching assistants (e.g. braille and hearing aids)*

*Inclusive education is a situation where normal children learn in the same class with those who are disabled. This helps the disabled not feel neglected and they also get support from their fellow pupils in the classroom. This makes them feel encouraged to be in school and some can end up coming out of the disorder for example those with speech and language disorders, as they play talk and interact with the normal pupils*

*Inclusive education is the learning that includes all the learners irrespective of their disabilities. A learner with any disability can be included in a class of learners without disabilities for example: gifted and talented can learn with normal learners, physically challenged, hearing impaired. Visually impaired all can be put in the mainstream with learners without disabilities.*

*These include having learners put together in a classroom, learning together despite the challenges by some of them. It involve bringing the normal children together with the special needs ones*

While few of the teachers linked all aspects of IE together, some highlighted specific components, such as gender, with comments such as:

*Allowing all children to go to school. No gender disparity*

---

<sup>5</sup> Please note all direct quotes are taken directly from the questionnaires and are therefore anonymous. They are in italics for ease of reference.

*Inclusive education is education for all where all learners are provided with education in one regular school within one classroom setting irrespective of their disabilities, genders, ethnic background, social economic background or political divide*

One or two mentioned the socialisation aspect – “*Children learn together and assist each other it improves socialization. It promotes friendship without isolation*”; while others focused on discrimination/equity:

*Commitment, Understanding of the learners, No discrimination*

*Including learners with special needs together with the ones without special needs for equal education for all*

*It allows learners with disability to feel accepted by others. It promotes sense of equality among the learners*

*Peer learning. Eases learning. Non discriminative. Acceptance*

*To give room for all children to learn without discrimination of any kind. All students should be accorded same environment for education*

A few mentioned the actual process of inclusion:

*Handling each and every child individually considering his/her disability. Grouping children with disabilities together so that you attend to them effectively. Showing concern. Being patient and loving. Appreciate them and encourage them always. Give them time to express themselves freely*

Several mentioned classroom assistants or itinerant teachers.

Interestingly, several focused on the child as the object of adaptation:

*Learners are put in class together with the others without disabilities and thus help them cope up with school environment*

*Learning with other children in same class. Provision of learning aids for the disable. Taking care of the children with disabilities in your class. Motivating them in class. Creating a conducive environment for their learning*

*Makes the learner with disability acceptable*

Others had rather mixed views, for example “*No specific curriculum. Learners of different interest learn together. There is individualized education programme. Learners learn together*”, and one had no idea at all.

The most relevant characteristics of IE identified by the TOTs were more comprehensive overall, with many identifying the key features, including location:

*Adaptation to the school curriculum and school environment. Assistive devices. Multidisciplinary approach to education.*

*Adapting the curriculum to meet the learner individual needs. Availability of appropriate resources to gather for learners' diversity*

*All learners access education in the nearest school regardless of their disabilities. They learn at their own pace in modified environment*

*Education that is adapted to cater for all the learners with varied needs in education*

*Enable the child with disability access education in any learning institution near his/her home with his/her peers. Provision of environmental friendly barriers to enable children with disabilities access education. Learners to appreciate one another irrespective of disability. Enable learners to socialize with their peers*

*Environmental adaptation. Physical and social barriers overcoming, Curriculum adaptation and adoption. Provision of assistive devices. Multidisciplinary approach of teaching. Training of teachers*

*In inclusive education both learners with special needs learn alongside the regular learners in the same classroom. For this to happen it requires: Modifying the syllabus for learners with SNE, providing learning materials suitable for such learners, the teacher should be knowledgeable in handling various disabilities, the teacher attitude should be positive*

*Modified curriculum allowing learners irrespective of disabilities used optimally the learning/teaching experience. The physical factors (environment) the school/ community need be friendly and items such as ramps landmarks and education policies be all inclusive. Individualized Education Programmes to be fully in place. Learners are successful at their levels hence discourage subject means score and school means score among others*

*Trained teachers on inclusive knowledge. Knowledge on all areas of special needs whereby you can handle both the average and the special need children. Enabling environment which is accessible to all children. Having all learners in the same learning institution despite the disabilities. Changing attitudes of parents, teachers, learners to accept all children. Modifying the teaching methods. Modify materials. Development of IEP to handle each learner according to need*

Nevertheless, one or two still made more normative comments, such as:

*Mixing normal learners with those having disabilities. Improved classrooms/conclusive conditions. Use of learning aids like hearing aids. Adaptation of learning aids*

*Teaching children with disabilities alongside other normal children and address the needs of CWD as they arise, so that they don't feel segregated from their peers in class*

Finally, one or two were more circumspect:

*I think it is a good initiative but there need[s] to be some adjustment to be made for it to be successful and beneficiary to everyone involved.*

## **Classroom Assistants**

With the next question respondents were asked whether a classroom assistant would help them in teaching a child with disabilities. All 100 teachers responded to this question, and 89.0% said yes. All 30 TOTs also responded to this question, and 100% said yes. They were then asked to provide examples of how this would help.

Overall, most teachers highlighted how a classroom assistant could provide direct support to the child – usually with regard to activities of daily living:

*A classroom assistant can help especially those pupils on wheelchairs by helping them to move around whenever they need he/she can push the wheelchair of the pupil to help the pupil with disability to access different places*

*By managing toileting for those with physical disabilities. By withdrawing distractions eg when an epileptic child falls unconscious. By arranging the classroom to be friendly to all disabilities. By helping with feeding etc*

*By providing the aids to these learners. By cleaning the learning area, ensuring the learners are clean because there are those who cannot control their urinating habits and those who droop*

*Holding the learning aids e.g. chars. Providing the assistive devices eg hearing aids, visual aids, pushing the child on wheelchair to chalk board or to playground toilets. Interpretation of learning activities e.g. braille or signing (sign language)*

One made the very innovative suggestion that:

*A classroom assistant can help in teaching a child with disabilities by giving examples through local languages translation*

Others wanted very practical – and technical – support:

*A classroom assistant who has some technical know-how on how to handle a child with a particular disability would be really helpful. This would enable me to handle such a child by getting the knowledge and advice given by the helper*

*By signing in hearing impairment cases; in braille use in vision impairment*

*Classroom assistant can listen and interpret by gestures/sign language where the learner cannot be easily understood*

*This can be possible for example if you have a child with hearing impairment, a class assistant who understand the sign language can translate to you and the child with disability*

Others specifically requested extra teaching support:

*A teacher aid will help the learner with disability to ensure he/she is following instruction as the teacher is teaching in class. A teacher aid can be a caretaker to the learners*

*A teacher who has undergone training in handling pupils with special needs would understand such a child best and promote his/her learning abilities. With knowledge and expertise the assistant has, he/she would help understand how to handle the child with disability and provide guidance on how to handle such a child*

Another listed other support staff needed, including physiotherapist and language interpreter.

Others saw their role more as 'safety keepers'

*By controlling the other pupils as I attend to the pupils with disabilities and vice versa*

*When you teach in a mainstream school a classroom assistant will assist in class control, embracing others with special needs, offering and assisting the special needs children in case of emergency without interfere*

Still others gave some 'alternatives' to having a classroom assistant:

*A fellow teacher can be a resource person or a pupil*

*Children who are not visually impaired can help and guide the blind*

*A blind pupil in the school has been assisted to read the normal examination papers as he translated into braille writing. He marks the exams of the visually impaired*

The same question - whether a classroom assistant would help them in teaching a child with disabilities - was also asked to the TOTs. All 30 TOT who responded to this question said yes. They gave similar answers to the teachers when probed on how a classroom assistant would help; including providing direct support to the child (such as interpreting using Sign Language or Braille), as well as support staff such as:

*...A physiotherapist will help the learners with fine motor problems in holding the pens.*

Overall there was agreement they would be a helpful addition to the class – in particular to reduce the teachers workload:

*Due to the huge workload on the teacher of completing the syllabus a classroom assistant would be helpful in handling CWD*

*In an inclusive learning you may need a sign language teacher to sign for the hearing impaired child as you teach the big free primary class*

*Learner diversity calls for variety of teaching methods and learning resources/aids. Classroom assistant will help in provision of learning resources and assisting slow learners or learners with difficulties as will be appropriate*

Others gave very specific responses:

*Assistant teacher would provide support in attending to learners who are epileptic and are experiencing seizures (fits) while teaching is on. They can assist in availing and displaying the relevant teaching aids*

While some understood the support nature of the role:

*Children with learning difficulties need a classroom assistant help in teaching or strengthening what I have taught as a teacher*

Another seemed to consider that the teaching assistant has a separate function, not that of helping the teacher:

*Because I teach in mainstream I would expect teacher aid to be with the special while am in the mainstream class*

One saw them as a potential resource:

*If the classroom assistance is a parent he/she will give me the history of the child then I shall know how to deal with the child since I am the teacher with the knowledge.*

*The classroom assistant is more of help when it comes to teaching the children with disabilities in that they act as co-teacher by providing the learning material when necessary. And also help guide the learners (eg the one on wheel chair and visual impaired)*

*The classroom assistant will help by monitoring the learner with disability in the assignment given while the teacher continues with attending other learners without disability and vice-versa.*

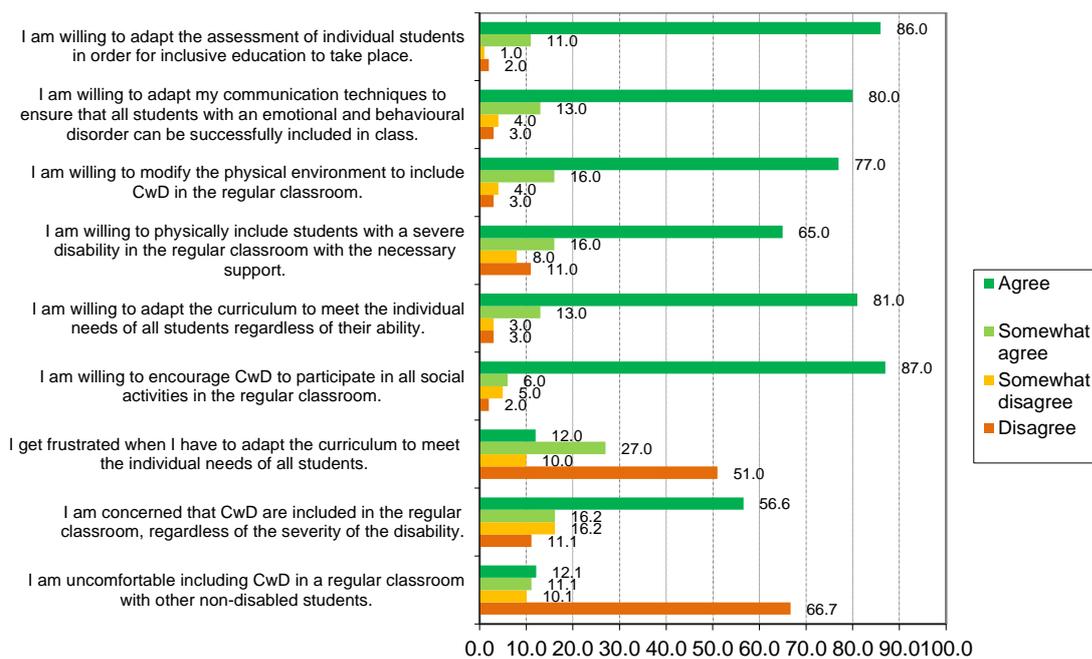
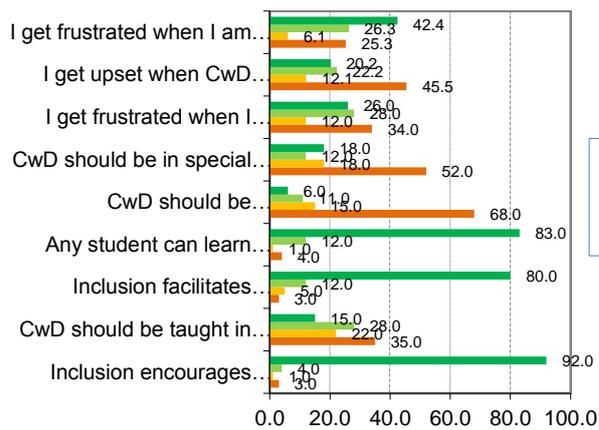
### **Attitudes and Beliefs**

Teachers were then asked a set of questions around attitudes and practices on children with disabilities and education, based on their experience. The respondents rated their level of agreement to a series of 18 statements on a four-point symmetric Likert scale:

1. 96.0% of teachers (N=100) somewhat or totally agree that inclusion encourages academic progression of all students;
2. While 43.0% of teachers somewhat or totally agree that children with disabilities should be taught in special schools, a relevant 57% firmly disagree (N=100);
3. 92.0% of teachers somewhat or totally agree that inclusion facilitates socially appropriate behaviour in all students (N=100);
4. 95.0% of teachers somewhat or totally agree that any student can learn the curriculum if adapted to individual needs (N=100);
5. 83.0% of teachers somewhat or totally disagree that children with disabilities should be segregated as it is too expensive to adapt school environment (N=100);
6. While 70.0% of teachers somewhat or totally disagree that children with disabilities should be in special schools so that they do not experience rejection in mainstream schools, 30.0% firmly agree (N=100);
7. 43.0% of teachers somewhat or totally disagree that they get frustrated when they have difficulty communicating with children with disabilities, however, 54.0% somewhat or totally agree (N=100);
8. Similarly, 57.6% of teachers somewhat or totally disagree that they get upset when children with disabilities cannot keep up with the day-to-day curriculum in their classroom, but 42.4% somewhat or totally agree (N=99);
9. And again, 31.3% of teachers somewhat or totally disagree that they get frustrated when they are unable to understand children with disabilities, but 68.7% somewhat or totally agree (N=99);

10. 76.8% of teachers somewhat or totally disagree that they are uncomfortable including children with disabilities in a regular classroom with other non-disabled students, even though 23.2% somewhat or totally agree (N=99);
11. 72.7% of teachers somewhat or totally agree that they are concerned that children with disabilities are included in the regular classroom, regardless of the severity of the disability, while 27.3% of them somewhat or totally disagree (N=99);
12. 61% of teachers of teachers somewhat or totally disagree that they get frustrated when they have to adapt the curriculum to meet the individual needs of all students, but 39.0% somewhat or totally agree (N=100);
13. 93.0% of teachers somewhat or totally agree that they are willing to encourage children with disabilities to participate in all social activities in the regular classroom (N=100);
14. 94.0% of teachers somewhat or totally agree that they are willing to adapt the curriculum to meet the individual needs of all students regardless of their ability (N=100);
15. 81.0% of teachers somewhat or totally agree that they are willing to physically include students with a severe disability in the regular classroom with the necessary support (N=100);
16. 93.0% of teachers somewhat or totally agree that they are willing to modify the physical environment to include children with disabilities in the regular classroom (N=100);
17. 93.0% of teachers somewhat or totally agree that they are willing to adapt their communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in class (N=100);
18. 97.0% of teachers somewhat or totally agree that they are willing to adapt the assessment of individual students in order for inclusive education to take place (N=100);

Figure 3 Teachers' attitudes and beliefs around disability/inclusive education



From the above figure, it is clear that overall teachers demonstrate a positive attitude towards children with disabilities; the majority of them believe that inclusion encourages academic progression of children with disabilities and that any student can learn if the curriculum is adapted to individual needs. Therefore the majority of teachers are willing to encourage participation, modify the physical environment,

adapt communication techniques, and adapt the curriculum to meet the individual needs of all students.

However, there is a split around the issue of special schools, with almost half of the teachers believing that children with disabilities should be taught in special schools and one third of them sharing this so they will not experience rejection in mainstream schools. Equally, the majority of teachers disagreed that children with disabilities should be segregated as it is too expensive to adapt the school environment.

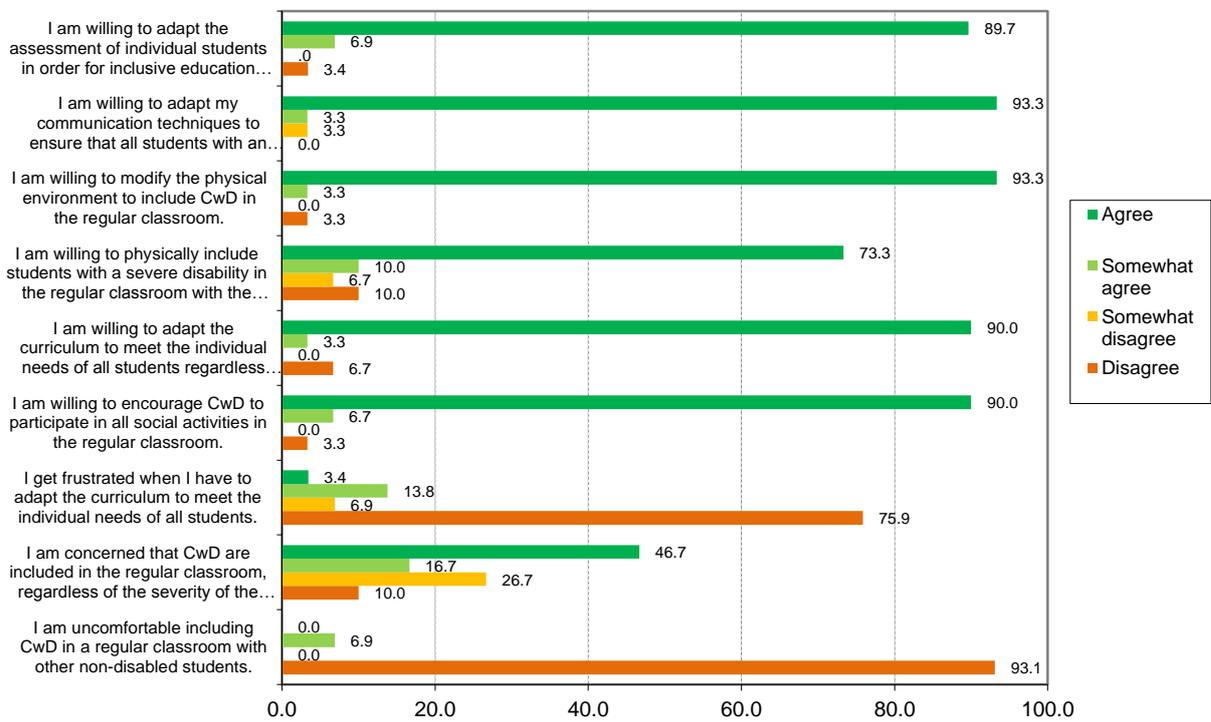
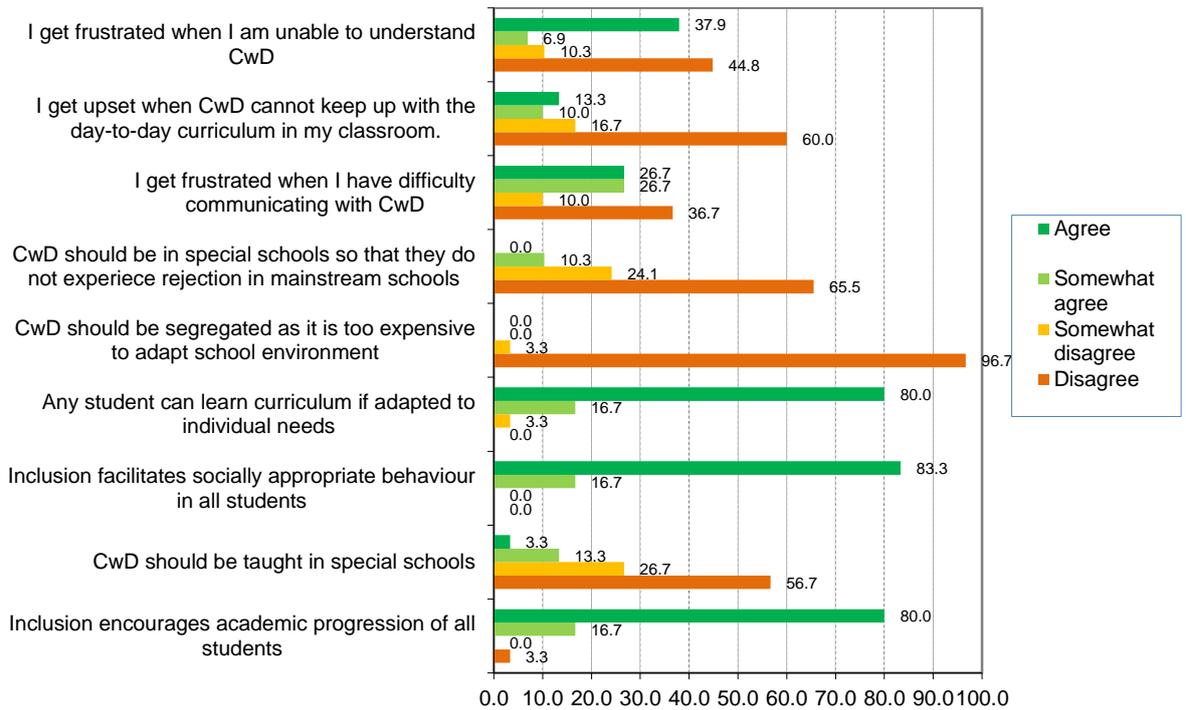
However, the majority of respondents agreed with the statement: 'I am concerned that students with a disability are included in the regular classroom, regardless of the severity of the disability'.

The TOTs were also asked the same set of questions around attitudes and practices around children with disabilities and education, based on their experience. The respondents rated their level of agreement to a series of 18 statements on a four-point symmetric Likert scale:

1. 97% of TOTs teachers (N=30) somewhat or totally agree that inclusion encourages academic progression of all students;
2. 83.3% of teachers somewhat or totally disagree that children with disabilities should be taught in special schools, while 16.7% somewhat or totally agree (N=30);
3. 100.0% of TOTs teachers somewhat or totally agree that inclusion facilitates socially appropriate behaviour in all students (N=30);
4. 96.7% of teachers somewhat or totally agree that any student can learn curriculum if adapted to individual needs (N=30);
5. 100.0% of teachers somewhat or totally disagree that children with disabilities should be segregated as it is too expensive to adapt school environment (N=30);
6. 89.7% of teachers somewhat or totally disagree that children with disabilities should be in special schools so that they do not experience rejection in mainstream schools, 10.3% somewhat or totally agree (N=29);
7. 46.7% of teachers somewhat or totally disagree that they get frustrated when they have difficulty communicating with children with disabilities, however, 53.3% somewhat or totally agree (N=30);
8. Similarly, 76.7% of teachers somewhat or totally disagree that they get upset when children with disabilities cannot keep up with the day-to-day curriculum in their classroom, but 23.3% somewhat or totally agree (N=30);

9. And again, 55.2% of teachers somewhat or totally disagree that they get frustrated when they are unable to understand children with disabilities, but 44.8% somewhat or totally agree (N=29);
10. 93.1% of teachers somewhat or totally disagree that they are uncomfortable including children with disabilities in a regular classroom with other non-disabled students, (N=29);
11. 63.3% of teachers somewhat or totally agree that they are concerned that children with disabilities are included in the regular classroom, regardless of the severity of the disability, while 36.7% of them somewhat or totally disagree (N=30);
12. 82.8% of teachers somewhat or totally disagree that they get frustrated when they have to adapt the curriculum to meet the individual needs of all students, but 17.2% somewhat or totally agree (N=29);
13. 96.7% of teachers somewhat or totally agree that they are willing to encourage children with disabilities to participate in all social activities in the regular classroom (N=30);
14. 93.3% of teachers somewhat or totally agree that they are willing to adapt the curriculum to meet the individual needs of all students regardless of their ability (N=30);
15. 83.3% of teachers somewhat or totally agree that they are willing to physically include students with a severe disability in the regular classroom with the necessary support (N=30);
16. 96.7% of teachers somewhat or totally agree that they are willing to modify the physical environment to include children with disabilities in the regular classroom (N=30);
17. 96.7% of teachers somewhat or totally agree that they are willing to adapt their communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in class (N=30);
18. 96.6% of teachers somewhat or totally agree that they are willing to adapt the assessment of individual students in order for inclusive education to take place (N=29);

Figure 4 TOTs' attitudes and beliefs around disability/inclusive education



It is clear that overall TOTs demonstrate the same positive attitude towards children with disabilities as teachers do. However unlike teachers, the majority of TOT disagree that children with disabilities should be taught in special schools and equally disagree that they should be in special schools to ensure they do not

experience rejection in mainstream schools. Equally, all of them disagree that children with disabilities should be segregated as it is too expensive to adapt the school environment.

However, a high number of TOTs agreed with the statement: 'I am concerned that students with a disability are included in the regular classroom, regardless of the severity of the disability'.

The main differences in answers between teachers and TOTs are around teaching children in special schools, with more teachers agreeing with this proposition, as well as that of including children with disabilities in a regular class and frustration at adapting the curriculum. More teachers than TOTs also believe that children with disabilities should be segregated because it is too expensive to modify the physical environment of the regular school. This is perhaps not unexpected given the TOTs already have had some training in this area.

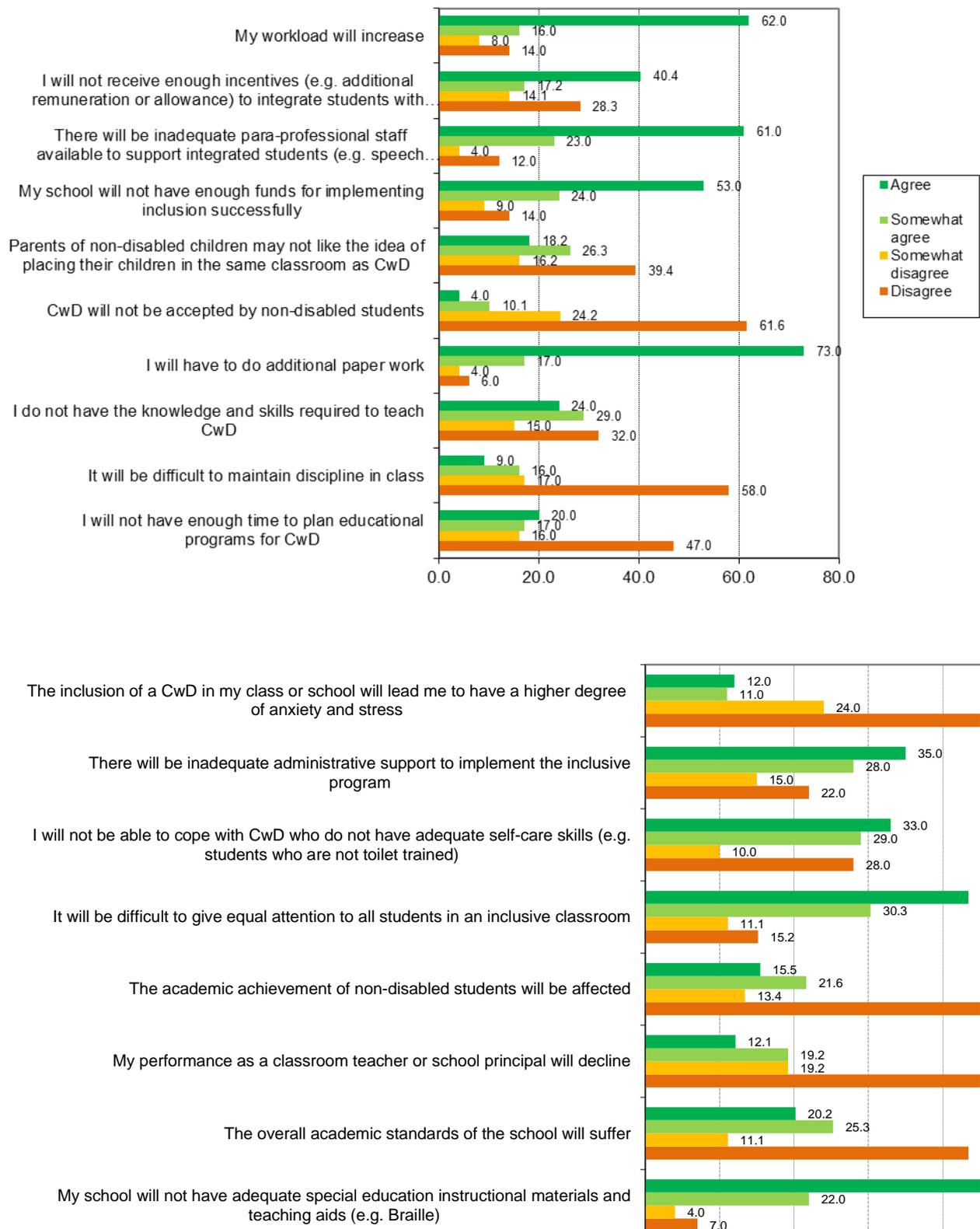
### Concerns

The next question asked teachers whether any of a given set of statements (from a list of 21) would be of concern to them in the context of their school/teaching situation and personal experience if a student with disabilities was placed in their class or school. They were given a four point Likert scale to indicate their level of concern - from one (agree) to four (disagree). The overall results from the five districts are summarised below:

1. 63.0% of teachers somewhat or totally disagreed that they would not have enough time to plan educational programs for children with disabilities (N=100);
2. 75.0% of teachers somewhat or totally disagreed that it would be difficult to maintain discipline in class (N=100) if a student with disabilities was placed in their class ;
3. 53.0% of teachers somewhat or totally agreed that they do not have the knowledge and skills required to teach children with disabilities (N=100);
4. 90.0% of teachers somewhat or totally agreed that they would have to do additional paper work (N=100);
5. 85.9% of teachers somewhat or totally disagreed that children with disabilities would not be accepted by non-disabled students (N=99);
6. 55.6% of teachers somewhat or totally disagreed that parents of non-disabled children may not like the idea of placing their children in the same classroom as children with disabilities (N=99);
7. 77.0% of teachers somewhat or totally agreed that their school would not have enough funds for implementing inclusion successfully (N=100);

8. 84.0% of teachers somewhat or totally agreed that there would be inadequate para-professional staff available to support integrated students (e.g. speech therapist, physiotherapist, occupational therapist, etc.) (N=100);
9. 57.9% of teachers somewhat or totally agreed that they would not receive enough incentives (e.g. additional remuneration or allowance) to integrate students with disabilities (N=99);
10. 78.0% of teachers somewhat or totally agreed that their workload would increase (N=100);
11. 50.0% of teachers somewhat or totally agreed that other staff members of the school would be stressed (N=100);
12. 83.0% of teachers somewhat or totally agreed that their school would have difficulty in accommodating students with various types of disabilities because of inappropriate infrastructure, e.g. architectural barriers (N=100);
13. 79.0% of teachers somewhat or totally agreed that there would be inadequate resources or special teachers available to support inclusion (N=100);
14. 89.0% of teachers somewhat or totally agreed that their school would not have adequate special education instructional materials and teaching aids (e.g. Braille) (N=100);
15. 54.5% of teachers somewhat or totally disagreed that the overall academic standards of the school would suffer (N=99);
16. 68.7% of teachers somewhat or totally disagreed that their performance as a classroom teacher or school principal would decline (N=99);
17. 62.9% of teachers somewhat or totally disagreed that the academic achievement of non-disabled students would be affected (N=97);
18. 73.7% of teachers somewhat or totally agreed that it would be difficult to give equal attention to all students in an inclusive classroom (N=99);
19. 62.0% of teachers somewhat or totally agreed that they would not be able to cope with children with disabilities who do not have adequate self-care skills (e.g. students who are not toilet trained) (N=100);
20. 63.0% of teachers somewhat or totally agreed that there would be inadequate administrative support to implement the inclusive program (N=100);
21. 77.0% of teachers somewhat or totally disagreed that the inclusion of a child with disabilities in their class or school would lead them to have a higher degree of anxiety and stress (N=100).

Figure 5 Levels of concern of teachers if a student with a disability was placed in their class



Overall, these results give a rather mixed picture. The main source of concern associated with the inclusion of students with disabilities in a regular class was the anticipated lack of resources and expected increase in workload and paperwork.

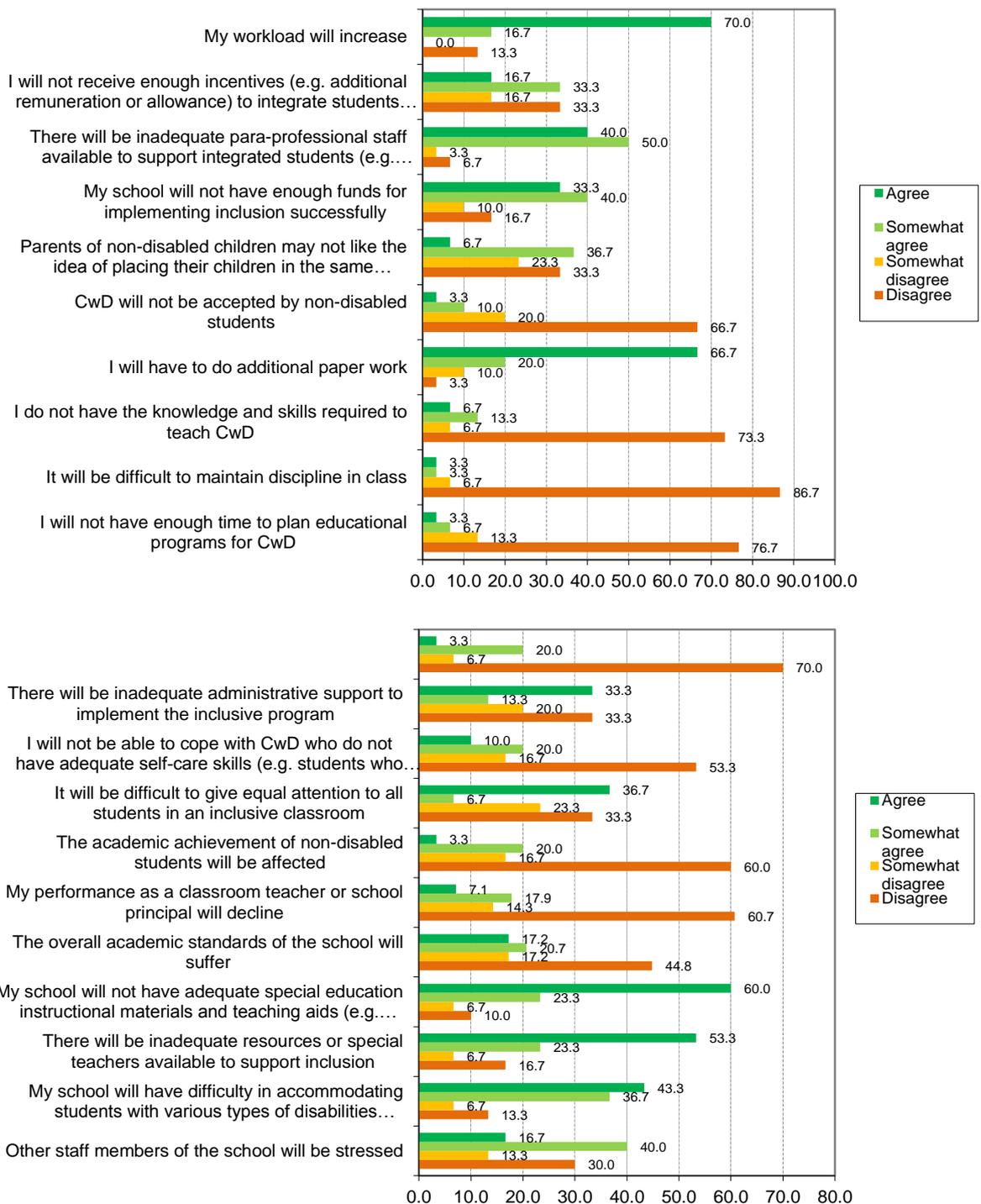
However, teachers were apparently less worried about the consequences on the quality of their teaching, although the difficulty of giving equal attention to all the students was frequently recognised as a concern. Interestingly, teachers were quite positive regarding the attitudes of non-disabled classmates, while about half of them were concerned about the reaction of their parents to having children with disabilities in the class. A more mixed picture emerged when asking teachers about their ability to cope with students with limited self-care skills, which was further highlighted when discussing the potential role of a classroom assistant (see previous section). Finally, the need for further training was confirmed with more than half the sample agreeing that they did not have the necessary knowledge and skills to teach children with disabilities.

Equally, the TOTs were asked whether any of a given set of statements (from a list of 21 – see below) would be of concern to them in their personal experience and context if a student with disabilities was placed in their class or school. They were asked to indicate their level of concern - from one (agree) to four (disagree) on a given four point Likert scale. The overall results from the five districts are summarised below:

1. 90.0% of TOTs teachers somewhat or totally disagreed that they would not have enough time to plan educational programs for children with disabilities (N=30);
2. 93.3% of TOTs teachers somewhat or totally disagreed that it would be difficult to maintain discipline in class (N=30) if a student with disabilities was placed in their class ;
3. 80.0% of TOTs teachers somewhat or totally disagreed that they do not have the knowledge and skills required to teach children with disabilities (N=30);
4. 86.7% of TOTs teachers somewhat or totally agreed that they would have to do additional paper work (N=30);
5. 86.7% of TOTs teachers somewhat or totally disagreed that children with disabilities would not be accepted by non-disabled students (N=30);
6. 56.7% of TOTs teachers somewhat or totally disagreed that parents of non-disabled children may not like the idea of placing their children in the same classroom as children with disabilities (N=30);
7. 73.3% of TOTs teachers somewhat or totally agreed that their school would not have enough funds for implementing inclusion successfully (N=30);
8. 90.0% of TOTs teachers somewhat or totally agreed that there would be inadequate para-professional staff available to support integrated students (e.g. speech therapist, physiotherapist, occupational therapist, etc.) (N=30);

9. 50.0% of TOTs teachers somewhat or totally agreed that they would not receive enough incentives (e.g. additional remuneration or allowance) to integrate students with disabilities (N=30);
10. 86.7% of TOTs teachers somewhat or totally agreed that their workload would increase (N=30);
11. 56.7% of TOTs teachers somewhat or totally agreed that other staff members of the school would be stressed (N=30);
12. 80.0% of TOTs teachers somewhat or totally agreed that their school would have difficulty in accommodating students with various types of disabilities because of inappropriate infrastructure, e.g. architectural barriers (N=30);
13. 76.7% of TOTs teachers somewhat or totally agreed that there would be inadequate resources or special teachers available to support inclusion (N=30);
14. 83.3% of TOTs teachers somewhat or totally agreed that their school would not have adequate special education instructional materials and teaching aids (e.g. Braille) (N=30);
15. 62.1% of TOTs teachers somewhat or totally disagreed that the overall academic standards of the school would suffer (N=29);
16. 75.0% of TOTs teachers somewhat or totally disagreed that their performance as a classroom teacher or school principal would decline (N=28);
17. 76.7% of TOTs teachers somewhat or totally disagreed that the academic achievement of non-disabled students would be affected (N=30);
18. 56.7% of TOTs teachers somewhat or totally disagreed that it would be difficult to give equal attention to all students in an inclusive classroom (N=30);
19. 70.0% of TOTs teachers somewhat or totally disagreed that they would not be able to cope with children with disabilities who do not have adequate self-care skills (e.g. students who are not toilet trained) (N=30);
20. 53.3% of TOTs teachers somewhat or totally disagreed that there would be inadequate administrative support to implement the inclusive program (N=30);
21. 76.7% of TOTs teachers somewhat or totally disagreed that the inclusion of a child with disabilities in their class or school would lead them to have a higher degree of anxiety and stress (N=30).

Figure 6 Levels of concern of TOTs if a student with a disability was placed in their class



The majority of TOTs seemed to be concerned that if a child with disabilities was placed in their class or school their workload would increase and they would have to do additional paperwork. Conversely, the majority were not concerned that they would not have enough time to plan educational programmes for the children. They were concerned that there would not be enough para-professional staff available to support integrated students; and that the school would not have enough funds to

implement inclusion successfully. The majority were also concerned that their school will not have adequate special education instructional materials and teaching aids (e.g. Braille); and that their school will have difficulty in accommodating students with various types of disabilities because of inappropriate infrastructure (for example, architectural barriers). They were also concerned about whether there would be adequate resources or special teachers available to support inclusion – as were the teachers. However, teachers more than TOTs felt they did not have enough knowledge and skills, thus emphasising the need for adequate training.

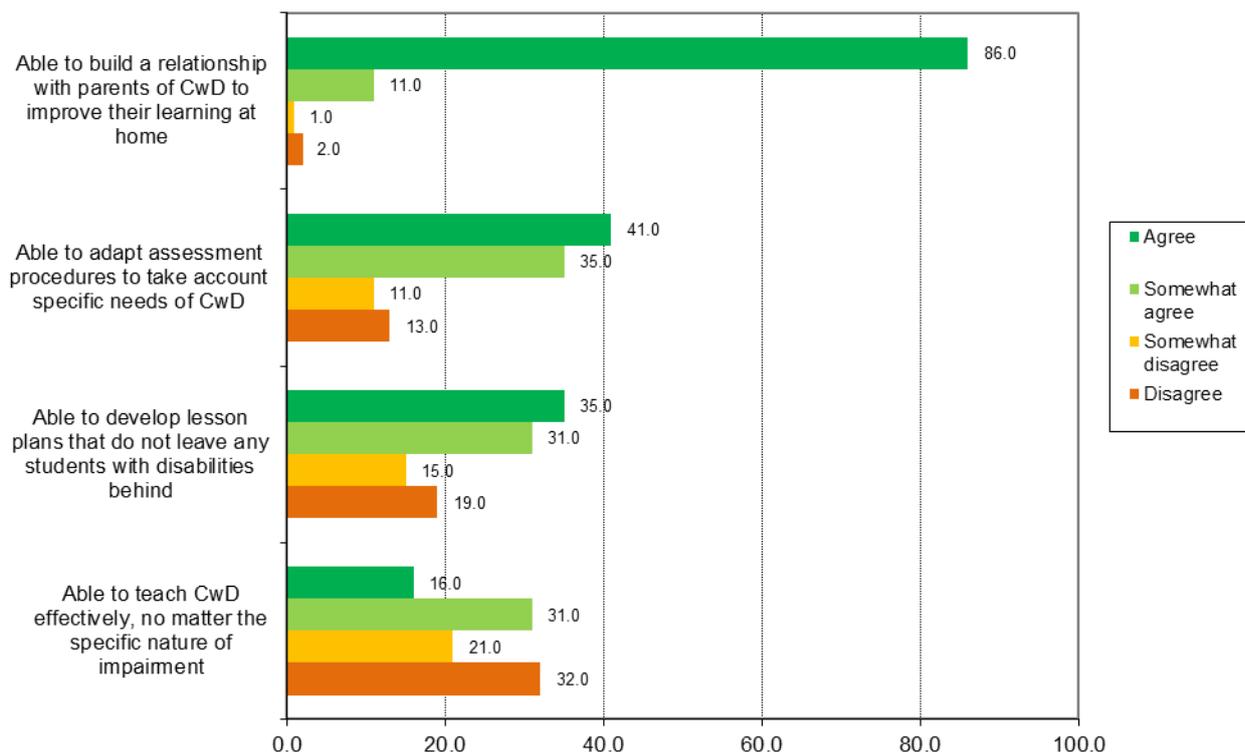
Further statistical analysis of the differences between teachers and TOTs revealed that on average teachers are more concerned than TOTs about having enough time to plan to educational programmes, maintaining discipline in class, having the required knowledge and skills, giving equal attention to all students and coping with disabled students who do not have adequate self-care skills.

This warrants further investigation on the impact of training on these concerns.

### **Daily Practices**

The next section asked teachers to respond to a set of statements about their daily experiences of teaching generally. Respondents rated their level of agreement to a series of four statements on a four-point symmetric Likert scale, summarised below:

1. 43.0% of teachers somewhat or totally agreed that they are able to teach children with disabilities effectively, no matter the specific nature of impairment (N=100);
2. 66.0% of teachers somewhat or totally agreed that they are able to develop lesson plans that do not leave any students with disabilities behind (N=100);
3. 76.0% of teachers somewhat or totally agreed that they are able to adapt assessment procedures to take account specific needs of children with disabilities (N=100);
4. 97.0% of teachers somewhat or totally agreed that they are able to build a relationship with parents of children with disabilities to improve their learning at home (N=100).

**Figure 7 Perceived teaching self-efficacy – daily experience as a teacher**

Most of the teachers' responses to these statements were positive, especially around their ability to build relationships with parents, and adapting assessment procedures to take account of specific needs, as well as about developing lesson plans to suit students of all abilities; they were less confident about teaching children with disabilities effectively whatever the specific nature of the impairment.

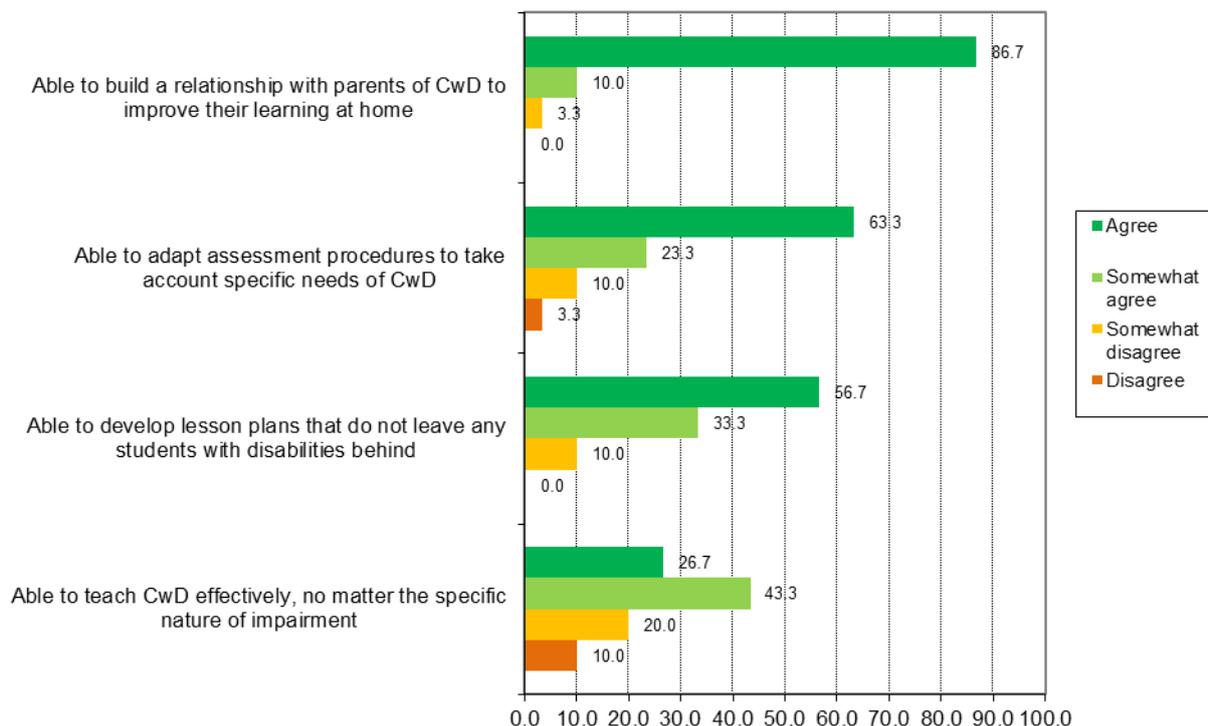
This may give an indication that it is the severity of the impairment that is the crucial factor in determining a teacher's response to a child with disabilities, though more research is needed to determine which specific impairments they may be concerned about.

The TOTs were asked to respond to the same set of statements about their daily experiences of teaching generally. Respondents rated their level of agreement on a four-point symmetric Likert scale:

1. 70.0% of TOTs teachers somewhat or totally agreed that they are able to teach children with disabilities effectively, no matter the specific nature of impairment (N=30);
2. 90.0% of teachers somewhat or totally agreed that they are able to develop lesson plans that do not leave any students with disabilities behind (N=30);

3. 86.7% of teachers somewhat or totally agreed that they are able to adapt assessment procedures to take account specific needs of children with disabilities (N=30);
4. 96.7% of teachers somewhat or totally agreed that they are able to build a relationship with parents of children with disabilities to improve their learning at home (N=30).

**Figure 8 Perceived teaching self-efficacy – daily experience as a teacher - TOTs**



All of the TOTs' responses to the statements were more positive than those of the teachers, in particular about adapting assessment procedures to take account of specific needs, developing lesson plans to suit students of all abilities and they were more confident about teaching children with disabilities effectively whatever the specific nature of the impairment. Finally, they showed a similar level of agreement about their ability to build relationships with parents.

Further statistical analysis of the differences between teachers and TOTs revealed that TOTs perceive themselves as being more self-efficacious than teachers in their daily practices, except for building relationships with parents where no differences among the two groups were found.

## Gender and Disability

The next section asked teachers to respond to a set of statements about respondents' beliefs around gender and disability. Respondents rated their level of agreement on a scale to a series of four statements concerning girls and boys with disabilities:

1. 59.6% of teachers (N=99) stated that school is an unsafe place for neither girls nor boys with disabilities. However, 10.0% stated that school is an unsafe place for girls with disabilities;
2. 82.8% of teachers (N=99) stated that being victims of bullying at school is a risk for both girls and boys with disabilities. 6.1% stated that being victims of bullying at school is a risk mainly for girls with disabilities;
3. 86.7% of teachers (N=99) stated that being victims of physical and/or sexual abuse during journey to school is a risk mainly for girls with disabilities. 36.4% stated that it is a risk for both boys and girls with disabilities;
4. 84.0% of teachers (N=100) stated that a lack of accessible toilets in the school would be a problem for both girls and boys with disabilities. However, 10.0% stated that it would be a problem mainly for girls with disabilities;
5. 93.9% of teachers (N=99) believed education is for both girls and boys with disabilities. 4.0% of teachers believe education is mainly for girls with disabilities.
6. 80% of teachers (N=100) believed that girls with disabilities and boys with disabilities are equally good at math and science. 14% of teachers believed that neither girls with disabilities nor boys with disabilities are good at math and science;
7. 65.7% of teachers (N=99) stated that they would feel unconformable talking about sex and reproductive health with neither girls nor boys with disabilities. However, 28.3% stated that they would feel uncomfortable talking about it with both girls and boys with disabilities;
8. 48.0% of teachers (N=100) stated that parents think education is not important for either girls or boys with disabilities. 34% stated that parents think education is equally important for girls and boys with disabilities;
9. 52.0% of teachers (N=98) stated that parents generally think that neither girls nor boys with disabilities can learn. 18.4% stated that parents think girls with disabilities cannot learn;
10. 46.9% of teachers (N=98) stated that non-disabled children generally do not accept either girls or boys with disabilities. Equally, 44.9% stated the contrary.

11. 62.0% of teachers (N=100) stated that community cultural beliefs and practices affect access to education for both girls and boys with disabilities. 30% of them think they affect access mainly for girls with disabilities;
12. 68.0% of teachers (N=100) stated that negative attitudes held by community members affect access to education for both girls and boys with disabilities. 25% of them believe that they affect access mainly for girls with disabilities.

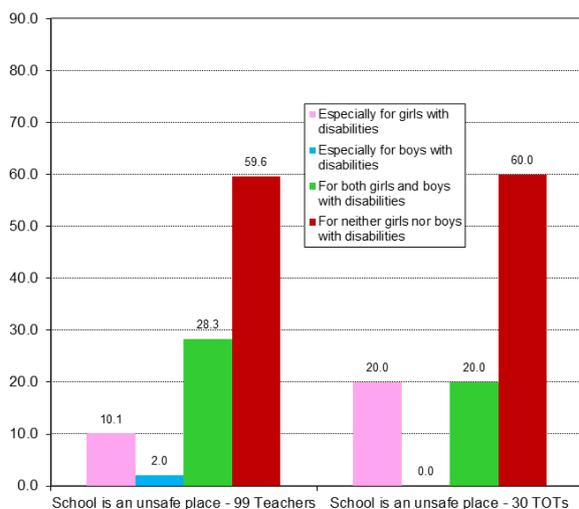
The same set of statements was also given to the TOTs, who also rated their level of agreement according to the same scale:

1. 60.0% of TOTs teachers (N=30) stated that school is an unsafe place for neither girls nor boys with disabilities. However, 20.0% stated that school is an unsafe place for girls with disabilities;
2. 63.3% of teachers (N=30) stated that being victims of bullying at school is a risk for both girls and boys with disabilities. 26.7% stated that being victims of bullying at school is a risk mainly for girls with disabilities;
3. 60.0% of teachers (N=30) stated that being victims of physical and/or sexual abuse during journey to school is a risk mainly for girls with disabilities. 40.0% stated that it is a risk for both boys and girls with disabilities;
4. 76.7% of teachers (N=30) stated that a lack of accessible toilets in the school would be a problem for both girls and boys with disabilities. However, 23.3% stated that it would be a problem mainly for girls with disabilities;
5. 93.3% of teachers (N=30) believed education is for both girls and boys with disabilities. 6.7% of teachers believe education is mainly for girls with disabilities.
6. 70.0% of teachers (N=30) believed that girls with disabilities and boys with disabilities are equally good at math and science. 20.0% of teachers believed that neither girls with disabilities nor boys with disabilities are good at math and science;
7. 76.7% of teachers (N=30) stated that they would feel uncomfortable talking about sex and reproductive health with neither girls nor boys with disabilities. However, 23.3% stated that they would feel uncomfortable talking about it with girls with disabilities;
8. 66.7% of teachers (N=30) stated that parents think education is not important for either girls or boys with disabilities. 16.7% stated that parents think education is equally important for girls and boys with disabilities;

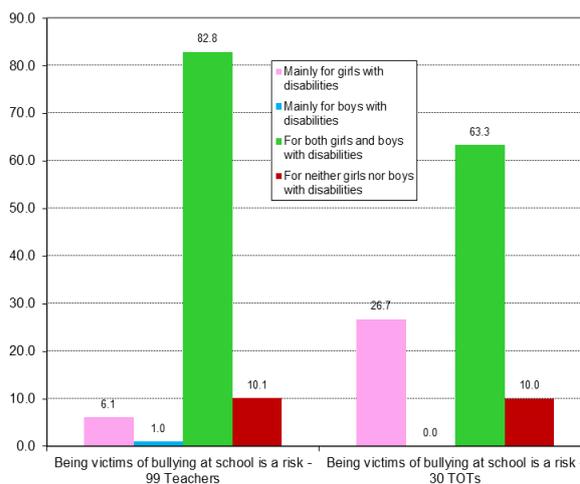
9. 56.7% of teachers (N=30) stated that parents generally think that neither girls nor boys with disabilities can learn. 13.3% stated that parents think girls with disabilities cannot learn;
10. 50.0% of teachers (N=30) stated that non-disabled children generally do not accept either girls or boys with disabilities. Equally, 36.7% stated the contrary.
11. 63.3% of teachers (N=30) stated that community cultural beliefs and practices affect access to education for both girls and boys with disabilities. 30% of them think they affect access mainly for girls with disabilities;
12. 73.3% of teachers (N=30) stated that negative attitudes held by community members affect access to education for both girls and boys with disabilities. 26.7% of them believe that they affect access mainly for girls with disabilities.

The following figures summarise the information above for teachers and TOTs.

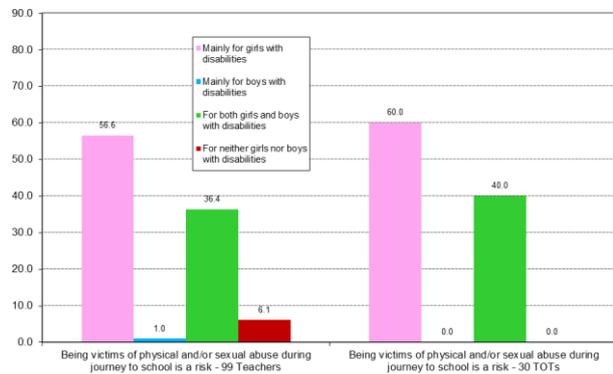
**Figure 9 School is an unsafe place..., according to teachers and TOTs**



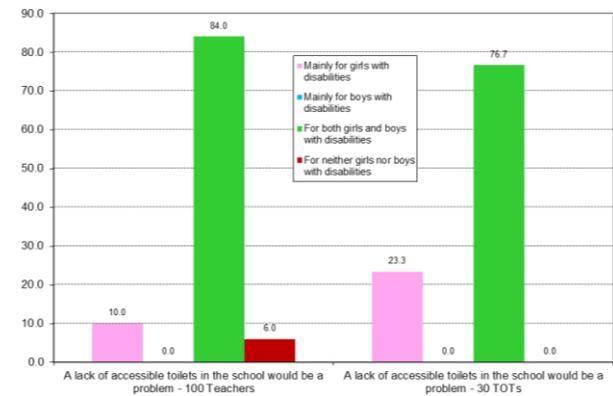
**Figure 10 Being victims of bullying at school is a risk...according to teachers and TOTs**



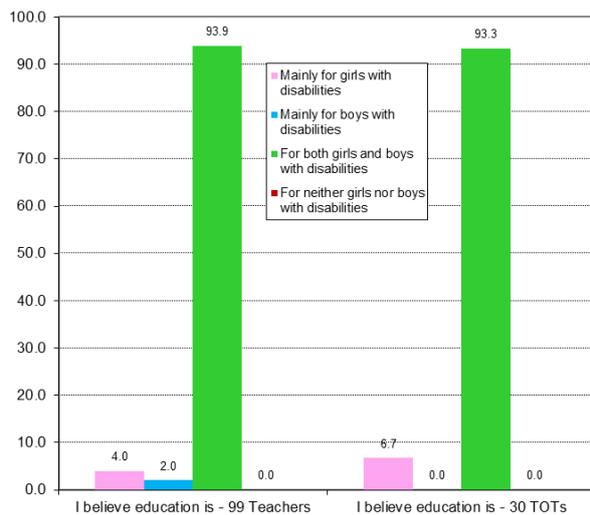
**Figure 11 Being victims of physical and/or sexual abuse during journey to school is a risk..., according to teachers and TOTs**



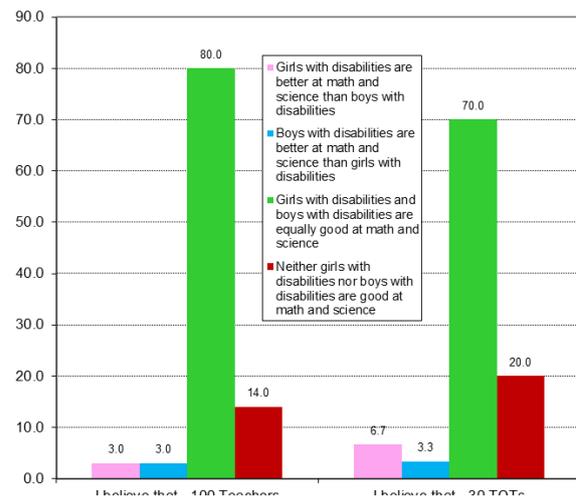
**Figure 12 A lack of accessible toilets in the school would be a problem..., according to teachers and TOTs**



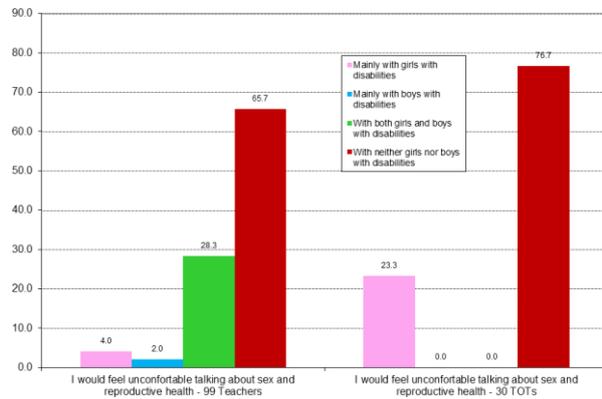
**Figure 13 I believe education is..., according to teachers and TOTs**



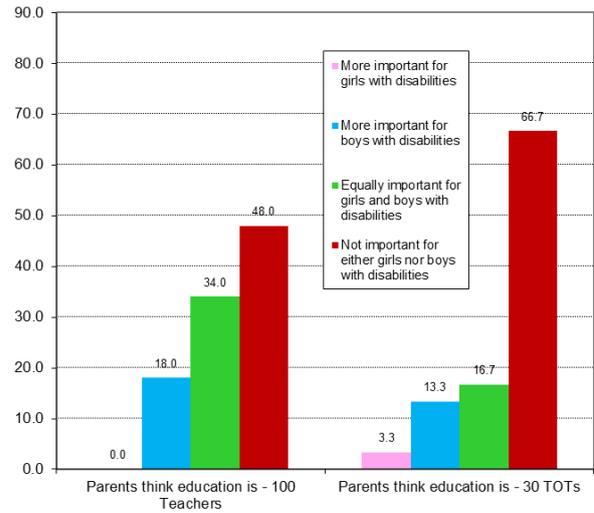
**Figure 14 I believe that..., according to teachers and TOTs**



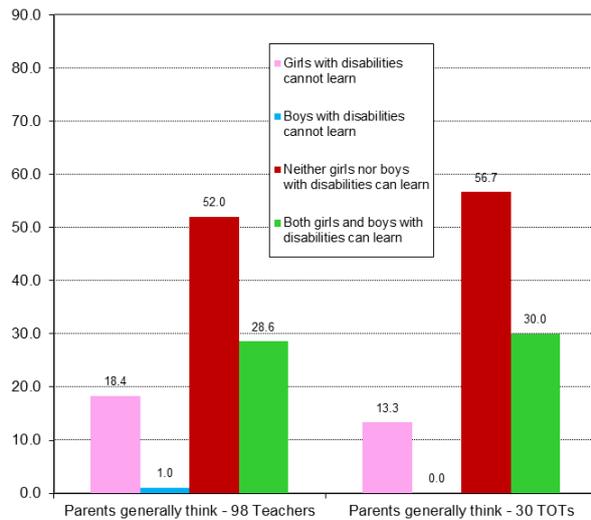
**Figure 15 I would feel uncomfortable talking about sex and reproductive health..., according to teachers and TOTs**



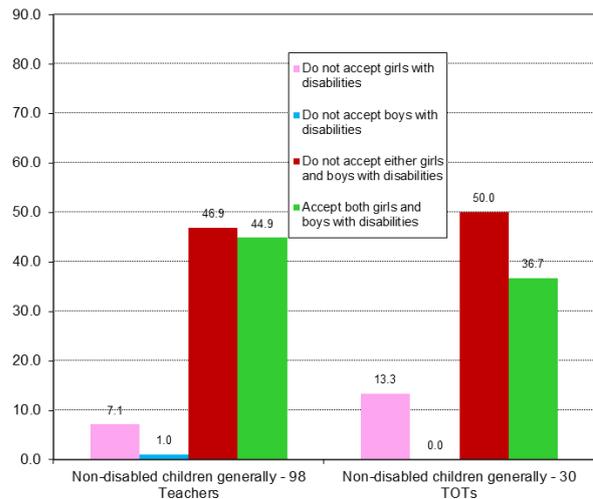
**Figure 16 Parents think education is..., according to teachers and TOTs**



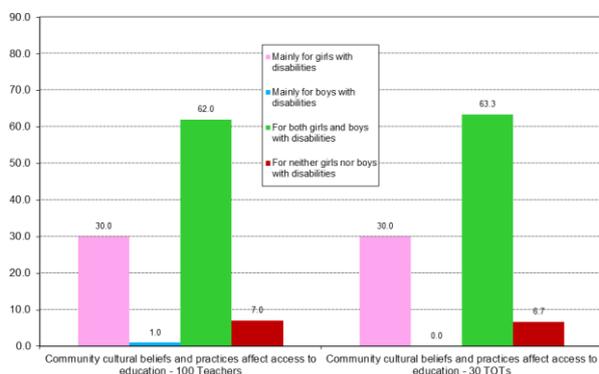
**Figure 17 Parents generally think..., according to teachers and TOTs**



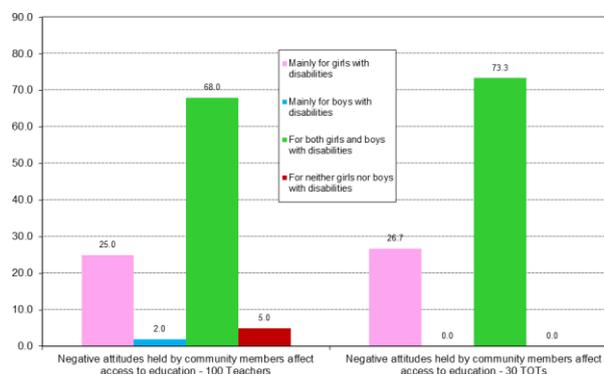
**Figure 18 Non-disabled children generally..., according to teachers and TOTs**



**Figure 19 Community cultural beliefs and practices affect access to education..., according to teachers and TOTs**



**Figure 20 Negative attitudes held by community members affect access to education..., according to teachers and TOTs**



The figures above show that overall TOTs and teachers shared very similar views with regard to the given set of statements, with only slight differences highlighted by further statistical analysis<sup>6</sup>. For example, with regard to the statement about students with disability being more at risk of being victims of bullying, TOTs were more prone to thinking that it was a problem mainly faced by girls with disabilities than teachers were.

In addition, it would seem from responses that the majority of TOT and teachers are comfortable talking about sex and reproductive health with both boys and girls. However, 28% of teachers stated that they are uncomfortable talking about these topics regardless of the gender of the students while about 23% of TOTs are less comfortable talking about sex and reproductive health especially with girls with disabilities. However, due to the small sample size of TOTs, these findings need to be considered with caution.

However, it should be made clear that with regards to some of these issues (for example, attitudes and beliefs about violence against disabled girls), it is not clear from these results whether they are not actually happening, or rather if it is that the teacher are less aware of them happening. In some cases, it would seem perhaps that the TOTs, having been made more aware of issues through training, are more sensitive to them. Again, these issues warrant further investigation, in particular those that highlight gender differences.

<sup>6</sup> This implied aggregating all positive answers against all negative answers and subsequently disaggregating only among negative answers.

## Additional information

Finally, we asked teachers if there was anything they felt we had not covered in the survey. This elicited a range of responses, which we have grouped thematically below.

Several respondents felt that the questionnaire did not examine the role of government and policy (with one respondent even offering a model question):

*The Kenya government should also be involved in improving the lives of persons with disabilities by: providing assistive devices, building accessible schools, providing free education and free hospital attendance*

*The Kenya Education System is least concerned with Inclusive learning instead it supports special units and special schools encouraging negative attitude to the community on special need education*

*The questionnaire did not cover the government policy on inclusive education*

*The government effort in dealing with SEN (e.g. is your government doing anything to help learners with SN? Y/N)*

*You have not requested to know if the government is currently giving any assistance in terms of grants to assist learners with disabilities in primary schools*

Another issue raised was that of poverty and financial ability, including that of rewarding teachers:

*Poverty is the key problem facing education of both boys and girls living with disability. In a situation where the parent has limited resources the parent will prefer giving it to his learners without disability*

*Economic ability of parents of disabled children affects their children's ability to learn. Parents who are economically able are capable of enrolling their disabled children to institutions which can accommodate them comfortably*

*Just as we advocate for inclusive education it is pretty clear that the current government only reward teachers who work in special schools. It is clear, that just as much as we advocate for inclusion - the allowances will negative peg change agents (teachers) in special schools if not special unit unless proper guidelines are put in place*

Several comments touched further upon gendered issues – albeit rather conflicting:

*Encouragement of moral and social support to all education stakeholders. Boys with disabilities are equally challenged educationally*

*Girl child needs more attention than any other child especially the one with disabilities. Most people take advantage over them*

Other comments highlighted the lack of mention of any health issues, in particular HIV:

*HIV infected students have difficulties in learning due to the medicines they take*

*Something about HIV/AIDS in relation to the numerous disabilities!*

*How to sort out the health problems of the learners with special needs.*

Another respondent pointed out the lack of opportunity to discuss technology:

*...You have not cited on the use of technologies of current used in teaching of SNE pupils*

This may be something that could be included in training programmes to give concrete, positive examples, something which was highlighted by several respondents as needed with one respondent noting:

*Is the head teacher SNE trained? What is the staff enrolment and how many are SNE trained. How do other workers in the school relate with learners with disability. Is there any success story of a child with disability who went through your school?*

Linked to this, several respondents highlighted the key role of head teachers, with examples such as:

*You have not covered questions about attitude of head teachers towards learners with disabilities in an inclusive setting. They are very much negative*

*The questionnaire is not touching on head teachers and local churches sponsoring the schools. Some religious organizations stigmatize disabled persons*

While others asked for more input on the role of parents:

*The level of education for all the parents in the community should be considered as they will determine the importance of educating children with disabilities instead of separating them from the average learners without the disability.*

One or two mentioned more specific technical issues, such as 'gifted and talented learners:

*The gifted and talented learners are also considered special because most of the times they will need specialized attention in order to cope with the others in class. There is need to develop for them a form of education that can challenge them most of the time*

As well as the issue of assessment – including categorisation and adaptation of exams; some respondents raised the issue of the 'mean score', whereby those children who score lower on class tests 'bring down' the average score for the class:

*The questionnaire is talking of general disability it does not indicate the degree of disability. Example what a child with mild mental disability can do will not be done with the one who is having severe mental disability. Example the question asking about boys and girls with disability whether they are good in mathematics and science is vague it is not specifying. A learner who is physical disabled can be good in mathematics and cannot be compared to a learner who is having severe mental disability*

*The government should find a way of examining the categories of children with disabilities*

*...Difficult administration system who would feel the mean score of the school would be affected*

## Discussion and Conclusion

The overall aim of the DFID-funded GEC project 'Pioneering Inclusive Education strategies for disabled girls in Kenya' is to address the physical, social and cultural barriers to education for girls with disabilities, and to ensure that 2,050 disabled girls in 50 primary schools in in Lake Region receive a full, quality and inclusive primary education. The project therefore aims to redress the intersecting exclusions that girls with disabilities face in the education system and beyond by making them the specific focus of targeted programme level work to facilitate inclusion in school. This will be supported by research that enables a better understanding the factors that lead to their exclusion in the first place.

An initial component of the GEC research was to assess the knowledge, attitudes and practices (KAP) of teachers to establish the pre-intervention (in terms of project activities) knowledge, attitudes and practices around inclusion of children with disabilities, with a subset of questions focusing on gender (and girls' education) in particular. The KAP survey presented here compares results from a total of 130 teachers in the participating project schools in the five districts. The sample comprised 30 teachers who will go onto become trainers of teachers (TOTs) and 100 teachers, all of whom who were subsequently trained in IE as part of the project.

These findings will inform the next stages of the research which will use qualitative techniques to explore issues with key educationalists, ministry staff and others involved in teacher training and education. The results of the research also allow for the possibility that the programme interventions can be adapted over the course of the project according to any specific results or changes identified over the duration of the project.

Finally, these initial results will be compared to those of the post -intervention survey in order to gauge what, if any, changes in terms of knowledge, attitudes and practices around inclusion of children with disabilities in the LCD programme are demonstrated. This will help establish which areas of the training need further strengthening, as well as potential areas for future research.

The majority of the TOTs interviewed were male (56.7%) as were the majority of teachers (53.1%). Both groups of teachers were on average around 43 years old and had on average 19 years of professional experience. TOTs reported teaching in their current school on average 7.6 years and teachers 6.1 years.

It should be noted that it is mostly men who are in the senior leadership positions – a characteristic of the teaching profession in Kenya, as well as elsewhere. This in itself has gendered implications. Moreover, while there are several women in the teaching profession at primary level, their participation in at the education management level is low. This also raises questions about the composition and nature of local school

governance structures, in particular the gendered composition, which were rarely mentioned in the survey (and were actually beyond the main remit of the research), but are an important element of any inclusive education programme. These findings also raise the issue of (positive) role models (both male and female, for example from local disabled people's organisations as well as teachers) for children with disabilities – another relatively under-researched area.<sup>7</sup> Further qualitative research to explore these issues with key stakeholders in the education sector will be undertaken. In terms of experience, perhaps unsurprisingly, given that they were deliberately selected for this reason, all TOTs reported having been trained in special needs education.

In the Kenyan educational system, children with disabilities may be placed in mainstream classes, in resource units in mainstream schools or more typically in special segregated provision. Special units have been abolished. Regarding the type of provision they currently taught, the majority of teachers and TOTs taught in mainstream classes exclusively. However, it should be noted that no special schools are included in this programme, so again this is perhaps unsurprising.

TOTs and teachers reported on both their current and previous experience of teaching students with a range of disabilities. Both groups found it overall very difficult to teach children with disabilities, but teachers found it particularly difficult to teach children with sensory impairments and children with learning difficulties. TOTs found it particularly difficult to teach children with multiple disabilities. Not surprisingly, both TOTs and teachers think it easier to teach a child with physical disabilities or with epilepsy. This is interesting, as other studies have highlighted stigma and discrimination towards persons with epilepsy in Kenya;<sup>8</sup> however, it may also indicate that the child is seen as 'easier' as long as they are not actively convulsing – although this would have to be further explored.

Learning difficulties are amongst the most important factors hindering primary school children's attendance and achievement. The role of teachers, educationists and psychologists is crucial in recognition and treatment. However, the training they receive often fails to provide adequate knowledge and skills about learning difficulties and other difficulties. TOTs were more positive in their appreciation of training than teachers. However they reported lack of training on multiple disabilities and epilepsy. There is scope for further training for both groups. This should be a particular point of intervention for the programme, and also followed up on during the

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<sup>7</sup> See for example: Nind, Melanie, Flewitt, Rosie and Payler, Jane (2010) 'The social experience of early childhood for children with learning disabilities: inclusion, competence and agency'. *British Journal of Sociology of Education*, 31, (6), 653-670.

<sup>8</sup> See for example: Caroline K Mbuba, Anthony K Ngugi, Greg Fegan, Fredrick Ibinda, Simon N Muchohi, Christopher Nyundo Rachael Odhiambo, Tansy Edwards, Peter Odermatt, Julie A Carter, and Charles R Newton (2012) Risk factors associated with the epilepsy treatment gap in Kilifi, Kenya: a cross-sectional study. *Lancet Neurol.* Aug 2012; 11(8): 688–696.

course of the research. In the study, learning difficulties were defined as general and specific learning difficulties.<sup>9</sup>

TOTs were more positive in their appreciation of training than teachers. However they reported a lack of training on multiple disabilities and epilepsy. This does raise the question of how both TOTs and teachers believe that it is easier to teach a child with epilepsy (as reported above) if they also feel they lack adequate training in that area specifically; although it may indicate that they responded more favourably to this question because of their (perceived) lack of knowledge, rather than in spite of it. It may also relate to their experiences of actually teaching a child with epilepsy (and the severity of the child's impairment). Whatever the reason, there is clearly scope for further training for both groups. This should be a particular point of intervention for the programme, and also followed up on during the course of the research.

Linked to this is another area that warrants further discussion and research, that of the (lack of) links between early childhood programmes (such as Early Childhood Care and Development) and children with disabilities. There is a clear gap in information exchange and continuity between under five health care provision (such as 0-5 years health checks undertaken by community healthcare workers), and the child starting school (usually at six years old). This reflects a lack of cross-ministerial links (in this case between the Ministry of Health and the Ministry of Education), which are vital to support inclusive education of children with disabilities to ensure they do not 'slip between the gaps'.

Findings concerning the perceived barriers preventing children with disabilities from going to school revealed no statistical difference between TOTs and teachers. Notwithstanding the general agreement between informants in recognising the relevance of the different barriers included in the questionnaire, findings suggest some different paths that call for further in-depth analysis.

Challenges were identified around accessibility; with the lack of assistive devices identified as a major barrier for children with disabilities identified by both TOTs and teachers. This may also be linked to the limited capacity for assessment – merely providing a child with assistive devices does not equate to inclusion, nor does it mean the correct devices are provided. Another issue highlighted by one or two respondents was the lack of the education assessment resource centres. Other significant barriers preventing children with disabilities from going to school included the lack of transportation to and from school and the fact that schools were a long distance from home. If children do make it to school, accessibility becomes an issue, along with access to the toilet. A point to follow up with parents and care givers is whether these schools really are the nearest to the children's homes, or if they are

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<sup>9</sup>Evidence suggests more boys than girls globally are diagnosed with learning difficulties;; however, as we are not comparing with boys in this study we cannot comment on this. See for example:  
<http://www.learnnc.org/lp/pages/6817>  
<http://www.ncl.org/ld-insights/blogs/the-gender-component-in-ld>

the nearest accessible school (or *perceived* to be); or if the children are specifically attending schools that are part of an IE programme. If they are not, this will make a difference with regards to opinions about access and transportation.

A significant number of teachers thought that parents think that children with disabilities should not go to school and that parents think that they cannot learn. However, they also thought that parents were worried that their children with disabilities will be abused (bullied, teased, ill-treated, etc.), so it is unclear if teachers believe it is this which makes them reluctant to send them to school, or a range of other factors. TOTs also stated that parents think that children with disabilities should not go to school. This point needs further research to substantiate what parents/care givers actually think.

A point raised by one or two teachers that needs further substantiating with the parents and carers in future planned research is that they perceived parents were less willing to take girls with disabilities to school. It seems that the Lakes Region in general has poorer education indicators for girls,<sup>10</sup> so it is worth exploring in more detail the intersections between gender and disability and how these relate to accessing and/or prioritising education.

The majority of TOTs were convinced that the lack of expertise of teachers may represent a barrier to children with disabilities going to school. Teachers themselves recognise their lack of expertise and see it as a barrier. This clearly indicates that further training is crucial for effectively including children with disabilities in schools in the region; and it will be interesting to compare these findings with the subsequent end of project findings to establish if teachers feel this has changed.

### *Understanding Inclusive Education*

It is also interesting to note the range of understanding about what inclusive education means across the teachers surveyed. All TOTs and 80.9% of teachers reported having heard about inclusive education; however this implies that a percentage had not heard of IE at all. Several TOTs and teachers showed a good understanding of requirements such as acceptance; adaptation to the curriculum and environment; the need for adequately trained teachers; additional resources and personnel. However some were more normative, implying use of a medical or charity-model to understand disability (which is not what the LCD IE training promotes); for example, some mentioned words such as 'love', and 'normal' (neither are rights-based language) when talking about IE, though of course, these may be culturally acceptable. Nevertheless, the language used to refer to people with disabilities can send powerful messages (positive or negative) into the community. However, the current lack of clarity and inconsistencies within the observed sample

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<sup>10</sup> See for example: Njora Hungi, Florence W. Thuku (2010) 'Differences in pupil achievement in Kenya: Implications for policy and practice' *International Journal of Educational Development* 30 (2010) 33–43

about what constitutes inclusive education (OECD, 1999) should be more harmonised after the intervention (and will be measurable through the re-administration of the survey).

Linked to the point above, there needs to be a clearer understanding of how the components required for a successful inclusive education link to policy, and how educators, parents and communities can influence policymakers to improve quality education for all children after the intervention.

### *Classroom Assistants*

Another feature of the understating of inclusive education that is interesting among participants is the notion of classroom assistants, both as carers (who support basic activities of daily living) or as experts in specific teaching activities for children with different impairments, including as physiotherapists and language interpreters. Some teachers described their role as focused on discipline and control and acting as a stand-in for the class teacher. Others identified them as a potential resource for the pupils. Another seemed to consider that the teaching assistant has a separate function (also in terms of separate location), not that of helping the teacher. While of these may be practiced as components of IE in different areas, they are not all likely to facilitate inclusion if a child with disabilities is in a mainstream class. This is an area that might be worth investigating with further research in a follow-up project.

### *Attitudes and beliefs*

It is clear that overall both TOT and teachers demonstrated the same positive attitude towards children with disabilities. However unlike teachers, the majority of TOTs disagreed that children with disabilities should be taught in special schools and equally disagreed that they should be in special schools to ensure they do not experience rejection in mainstream schools. Equally, all of them disagreed that children with disabilities should be segregated TOTs as it is too expensive to adapt the school environment. This is likely to reflect the previous training they had undertaken. However, a high number of TOTs and teachers agreed with the statement: 'I am concerned that students with a disability are included in the regular classroom, regardless of the severity of the disability'. This rather contradicts the previous responses.

The main differences in answers between teachers and TOTs were around teaching children in special schools, with more teachers agreeing with this proposition, as well as that of including children with disabilities in a regular class and frustration at adapting the curriculum. More teachers than also believed that children with disabilities should be segregated because it is too expensive to modify the physical environment of the regular school. More teachers than TOTs also believed that children with disabilities should be in special education schools so that they do not experience rejection in mainstream school. This is perhaps not unexpected given the TOTs already have had some training in this area.

### *Concerns*

Overall there is a less positive picture regarding teachers concerns, with both TOTs and teachers expressing concerns linked with the inclusion of children with disabilities in schools and classes. In particular, both groups highlighted the potential critical impact of inclusion on administrative and resource issues (such as available funds, infrastructure, special teachers, teaching material and teaching aids). On average teachers were more concerned than TOTs about having enough time to plan educational programmes, maintaining discipline in class, having the required knowledge and skills, giving equal attention to all students and coping with disabled students who do not have adequate self-care skills. Again this indicates that experience (of both training and exposure to children with disabilities) ameliorates a more negative view; therefore it is expected that training should improve this picture. Moreover, it will be interesting to compare these concerns post-intervention.

### *Daily Practices*

Despite the gap in their skills and training, both groups were positive about their perceived self-efficacy of teaching. TOTs perceived themselves as being more self-efficacious than teachers in their daily practices, and all of the TOTs' responses to the statements were more positive than those of the teachers, in particular about adapting assessment procedures to take account of specific needs, developing lesson plans to suit students of all abilities. Overall they were more confident about teaching children with disabilities effectively whatever the specific nature of the impairment.

Nevertheless, teachers were less positive about teaching children with multiple or severe disabilities. This may give an indication that it is the severity of the impairment that is the crucial factor in determining a teacher's response to a child with disabilities, though more research is needed to determine which specific impairments they may be concerned about.

Finally, both TOT and teachers showed a similar level of agreement about their ability to build relationships with parents.

### *Gender and Disability*

The last section in the questionnaire asked TOTs and teachers about their beliefs around gender and disability. Overall TOTs and teachers shared very similar views toward statements such as education is important for both boys and girls with disabilities. However, when asked more specific comparison questions about girls and boys with disabilities, for example, with regard to the statement about students with disabilities being more at risk of being victims of bullying, TOTs were more prone to thinking that it was a problem mainly faced by girls with disabilities than teachers were. This area will be explored in more details when following up the

secondary data analysis.<sup>11</sup>It would seem from responses that the majority of TOT and teachers are comfortable talking about sex and reproductive health with both boys and girls. However, a significant 28% of teachers stated that they are uncomfortable talking about these topics regardless of the gender of the students while about 23% of TOTs are less comfortable talking about sex and reproductive health especially with girls with disabilities. However, due to the small sample size of TOTs, these findings need to be considered with caution.

In addition, it should be made clear that with regards to some of these issues (for example, attitudes and beliefs about violence against disabled girls), it is not possible to extrapolate from these results whether they are happening or not in reality, or rather if it is that the teachers are less aware of them happening. In some cases, it would seem perhaps that the TOTs, having been made more aware of issues through training, are more sensitive to them. Again, these issues warrant further investigation, in particular those that highlight gender differences.

Other areas highlighted by this research that warrant further exploration include the role of the government – including funding/resources; health issues (including HIV) – many of which have gendered implications.

The results of the KAP survey presented here provide a rich picture of the situation in the schools where the LCD project is being piloted. They also provide a fertile basis from which to explore these issues in more depth with families, community members, education providers, policy makers and a range of other stakeholders in future research.

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<sup>11</sup> A report on secondary data analysis from the baseline survey is currently being finalised and will be available by the end of December 2014.

## References

Mbuba Caroline K, Ngugi Anthony K, Fegan Greg, Ibinda Fredrick, Muchohi Simon N, Christopher Nyundo Rachael Odhiambo, Edwards Tansy, Odermatt Peter, Carter Julie A, and Newton Charles R (2012) Risk factors associated with the epilepsy treatment gap in Kilifi, Kenya: a cross-sectional study. *Lancet Neurol.* Aug 2012; 11(8): 688–696.

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OECD, (1999). *Inclusive Education at Work, Students with Disabilities in Mainstream Schools*. Paris: OECD.

## **Annex 1 - Questionnaire**



Informed Consent Form for the Research Study:

**PIONEERING INCLUSIVE EDUCATION FOR GIRLS WITH DISABILITIES IN THE LAKE REGION - KENYA**

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project: **Pioneering inclusive education for girls with disabilities in the Lake Region - Kenya**

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 1661/005  
Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

**Participant's Name (PRINT)**

I .....

- Have read the notes written above and the Information Sheet, and understand what the study involves.
- Understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- Consent to the processing of my personal information for the purposes of this research study.
- Understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- Agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Signature..... Date.....

**TEACHERS'** Questionnaire Number.....



## TEACHERS' QUESTIONNAIRE

Thank you for your willingness to participate in this research study.

If you are unsure about how to answer a question or if it is hard to pick an answer, please choose the one that seems nearest or most appropriate to your thinking. This can often be the first thing that comes to your mind.

There are no right or wrong answers, just answers that are true for you.

In some cases, we will ask you to choose your answer from a range of options; in other cases, we will ask you to briefly tell us about your experience. Finally, some questions will ask you to rate your experience on a scale.

Since we really value your opinion, we would like to ask you to answer all questions, however if you feel uncomfortable in giving us some details, please let us know and you can skip those specific issues.

QUESTIONNAIRE NUMBER \_\_\_\_\_

Trainer of the Trainers  Yes(1)  No(2)

DATA COLLECTOR'S NAME \_\_\_\_\_

Date \_\_\_\_\_

Data entry person: \_\_\_\_\_

**Teacher Knowledge, Attitudes and Practice Survey****PERSONAL INFORMATION****Q1. School Name:**

\_\_\_\_\_

**Q2. School Code:**

\_\_\_\_\_

**Q3. District:**

\_\_\_\_\_

**Q3\_1. City/Town/Village:**

\_\_\_\_\_

**Q4. First Name:** \_\_\_\_\_ **Surname:**

\_\_\_\_\_

**Q5. Gender**  Male (1)  Female (2) **Q6. Age** \_\_\_\_\_**Q7. Marital Status:**

- (1) Single  (4) Living together  
 (2) Married  (5) Separated/Divorced  
 (3) Widowed  (6) Other (specify \_\_\_\_\_)

**Q8. EDUCATION (Please specify HIGHEST level of education attained)**

<input type="checkbox"/> (1)	Completed Secondary
<input type="checkbox"/> (2)	Some College (specify _____)
<input type="checkbox"/> (3)	Completed College (specify _____)
<input type="checkbox"/> (4)	Some University (specify _____)
<input type="checkbox"/> (5)	Completed University (specify _____)
<input type="checkbox"/> (6)	Other (specify _____)

**Q9. Did your education include any content related to disability?**  Yes(1)  No(2)**Q10. Are you trained in special needs education?**  Yes(1)  No(2)**Q11. Have you undertaken any further training courses (outside Formal Education)?**

- Yes(1) if yes, go to Q12\_1  No(2) if no, go to Q13

**Q12\_1. Did any of these additional training courses include any content specifically related to disability?**  Yes(1)  No(2)**Q12\_2. Did any of these additional training courses include any content**  Yes(1)  No(2)

**specifically related to gender?**

### TEACHING EXPERIENCE

**Q13. How long have you been teaching (in YEARS)?**

\_\_\_\_\_

**Q14. How long have you been teaching IN YOUR CURRENT SCHOOL (in YEARS)?**

\_\_\_\_\_

<b>Q15. What type of provision are you currently teaching? (tick as many as apply)</b>	<input type="checkbox"/> Mainstream class (1)
	<input type="checkbox"/> Resource unit (2)
	<input type="checkbox"/> Special unit (3)
	<input type="checkbox"/> Other (4): Specify _____

<b>Q16. Have you previously taught in any of the following: (tick as many as apply)</b>	Type of provision	Number of years
	<input type="checkbox"/> Mainstream class (1)	_____
	<input type="checkbox"/> Resource unit (2)	_____
	<input type="checkbox"/> Special unit (3)	_____
	<input type="checkbox"/> Special school (4)	_____
<input type="checkbox"/> Other (5): Specify _____	_____	

### EXPERIENCE WITH DISABILITIES

**Q17. Please specify whether in the current school year you are teaching any students who have been identified as having disabilities, by type of disability:**

Type of disability	Presence
1. Visual impairment	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
2. Hearing impairment	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
3. Intellectual disabilities	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
4. Learning difficulties	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
5. Speech and Language disorders	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
6. Epilepsy	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
7. Physical disabilities	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
8. Health problems (specify: _____)	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
9. Multiple disabilities (specify: _____)	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
10. Other	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No

(specify: _____)	(2)
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**Q18. Please specify whether in previous school years you have taught students who have been identified as having disabilities, by type of disability:**

Type of disability	Presence
1. Visual Impairment	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
2. Hearing Impairment	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
3. Intellectual disabilities	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
4. Learning Difficulties	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
5. Speech and Language disorders	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
6. Epilepsy	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
7. Physical disabilities	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
8. Health problems (specify: _____)	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
9. Multiple disabilities (specify: _____)	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)
10. Other (specify: _____)	<input type="checkbox"/> Yes (1) <input type="checkbox"/> No (2)

**Q19. How easy do you think it is to teach students with disabilities (by type of disability)?**

Type of disability	Extremel y difficult	Somewha t difficult	Somewha t easy	Extremel y easy	No experienc e
1. Visual Impairment	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
2. Hearing Impairment	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
3. Intellectual disabilities	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
4. Learning Difficulties	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
5. Speech and Language disorders	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
6. Epilepsy	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
7. Physical disabilities	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
8. Health problems (specify _____ )	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
9. Multiple disabilities (specify _____ )	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
10. Other (specify _____ )	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)

**Q20. To what extent do you think your previous training effectively prepared you to teach children with disabilities (by type of disability)?**

Type of disability	Not at all	A little bit	Quite a lot	A lot	No Training
1. Visual Impairment	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
2. Hearing Impairment	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
3. Intellectual disabilities	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
4. Learning Difficulties	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
5. Speech and Language disorders	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
6. Epilepsy	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
7. Physical disabilities	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
8. Health problems (specify _____)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
9. Multiple disabilities (specify _____)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)
10. Other (specify _____)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)	<input type="checkbox"/> (5)

<b>Q21. Could you please indicate to what extent each of the following is a barrier that prevents children with disabilities from going to school, using the scale from 1 (Disagree) to 4 (Agree)</b>	Disagree	Somewhat disagree	Somewha t agree	Agree
1. Schools are not physically accessible	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
2. Toilets in the school are not physically accessible	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
3. The lack of assistive devices (e.g. wheelchairs,	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)

hearing aids, etc.)				
4. Schools are a long distance from home	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
5. There is no means of transportation to the school	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
6. Parents think children with disabilities should not go to school	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
7. Parents generally think children with disabilities cannot learn	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Agree</b>
8. Parents generally think it is not worthwhile for children with disabilities to learn	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
9. Parents are worried their children with disabilities will be abused (bullied, teased, ill-treated, etc.)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
10. Parents cannot afford direct costs for the school (e.g. uniform, books, fees)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
11. Parents cannot afford indirect costs for the school (e.g. meals, transportation)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
12. Lack of expertise of teachers	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
13. Natural environmental barriers (e.g. animals, rivers, floods, etc.)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)
14. Other specify: _____)	<input type="checkbox"/> (1)	<input type="checkbox"/> (2)	<input type="checkbox"/> (3)	<input type="checkbox"/> (4)

<b>Q22.</b>	<b>Would a classroom assistant help you in teaching a child with disabilities?</b>	<input type="checkbox"/>	<input type="checkbox"/>
		Yes(1)	No(2)
<b>Q22_s.</b>	Please explain how by providing examples		
<b>Q23.</b>	<b>Have you ever heard of inclusive education?</b>	<input type="checkbox"/>	<input type="checkbox"/>
		Yes(1)	No(2)
	<b>If Yes go to Q24. If No go to Q25</b>		
<b>Q24.</b>	<b>In your opinion what are the key elements of inclusive education?</b>		

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<b>Q25. Taking into account your teaching experience, we would like to ask you some questions around education. There are no right or wrong answers: we are just interested in your opinion. Please respond to all the following statements using the scale from 1 (if you disagree with the sentence) to 4 (if you agree with the sentence)</b>	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Agree</b>
1. I believe that an inclusive school is one that encourages academic progression of all students regardless of their ability.	1	2	3	4
2. I believe that students with a disability should be taught in special education schools.	1	2	3	4
3. I believe that inclusion facilitates socially appropriate behaviour amongst all students.	1	2	3	4
4. I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs.	1	2	3	4
5. I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of the school.	1	2	3	4
6. I believe that students with a disability should be in special education schools so that they do not experience rejection in mainstream school.	1	2	3	4
7. I get frustrated when I have difficulty communicating with students with a disability.	1	2	3	4
8. I get upset when students with a disability cannot keep up with the day-to-day curriculum in my classroom.	1	2	3	4
9. I get frustrated when I am unable to understand students with a disability.	1	2	3	4
10. I am uncomfortable including students with a disability in a regular classroom with other non-disabled students.	1	2	3	4
11. I am concerned that students with a disability are included in the regular classroom, regardless of the severity of the disability.	1	2	3	4
12. I get frustrated when I have to adapt the curriculum to meet the individual needs of all students.	1	2	3	4
13. I am willing to encourage students with a disability to participate in all social activities in the regular classroom.	1	2	3	4
14. I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability.	1	2	3	4
15. I am willing to physically include students with a severe disability in the regular classroom with the necessary support.	1	2	3	4
16. I am willing to modify the physical environment to include students with	1	2	3	4

a disability in the regular classroom.				
17. I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in the regular classroom.	1	2	3	4
18. I am willing to adapt the assessment of individual students in order for inclusive education to take place.	1	2	3	4

<b>Q26. In the context of your school/teaching situation and your personal experience as a teacher, please indicate your level of agreement by using the scale from 1 (if you disagree with the sentence) to 4 (if you agree with the sentence). If a child with disability was included in my classroom...</b>	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Agree</b>
1. I will not have enough time to plan educational programs for students with disabilities	1	2	3	4
2. It will be difficult to maintain discipline in class	1	2	3	4
3. I do not have the knowledge and skills required to teach students with disabilities	1	2	3	4

<b>If a child with disability was included in my classroom...</b>	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Agree</b>
4. I will have to do additional paperwork	1	2	3	4
5. Students with disabilities will not be accepted by non-disabled students	1	2	3	4
6. Parents of non-disabled children may not like the idea of placing their children in the same classroom as children with disabilities	1	2	3	4
7. My school will not have enough funds for implementing inclusion successfully	1	2	3	4
8. There will be no para-professional staff available to support the inclusion of students (e.g. speech therapist, physiotherapist, occupational therapist, etc.)	1	2	3	4
9. I will not receive enough incentives (e.g. additional remuneration or allowance) to be able to include students with disabilities	1	2	3	4
10. My workload will increase	1	2	3	4
11. Other staff members of the school will be stressed	1	2	3	4
12. My school will have difficulty in accommodating students with various types of disabilities because of inaccessible infrastructure, e.g. architectural barriers, lack of accessible toilets	1	2	3	4
13. There will be inadequate resources or special teachers available to support inclusion	1	2	3	4
14. My school will not have adequate special education instructional materials and teaching aids (e.g. Braille)	1	2	3	4
15. The overall academic standards of the school will suffer	1	2	3	4
16. My performance as a classroom teacher or school principal will decline	1	2	3	4
17. The academic achievement of non-disabled students will be affected	1	2	3	4

18. It will be difficult to give equal attention to all students in an inclusive classroom	1	2	3	4
19. I will not be able to cope with disabled students who do not have adequate self-care skills (e.g. students who are not toilet trained)	1	2	3	4
20. There will be inadequate administrative support to implement the inclusive program	1	2	3	4
21. The inclusion of a student with disability in my class or school will lead me to have a higher degree of anxiety and stress	1	2	3	4

<b>Q27. Thinking about your daily experience as a teacher, could you please indicate to what extent you agree with the following sentences, using the scale from 1 (if you disagree) to 4 (if you agree)?</b>	<b>Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Agree</b>
1. I am able to teach students with disabilities effectively, no matter the specific nature of disability	1	2	3	4
2. I am able to develop lesson plans that do not leave any students with disabilities behind	1	2	3	4
3. I am able to adapt assessment procedures to take account specific needs of students with disabilities	1	2	3	4
4. I am able to build a relationship with parents of children with disabilities to improve their learning at home	1	2	3	4

**Q28. In the next section there is a list of statements. Please tick the box that best represents your view.**

<b>1. School is an unsafe place...</b>	<input type="checkbox"/> Especially for girls with disabilities	<input type="checkbox"/> Especially for boys with disabilities <input type="checkbox"/>	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> For neither girls nor boys with disabilities
<b>2. Being victims of bullying at school is a risk...</b>	<input type="checkbox"/> Mainly for girls with disabilities	<input type="checkbox"/> Mainly for boys with disabilities	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> For neither girls nor boys with disabilities
<b>3. Being victims of physical and/or sexual abuse during the journey to school is a risk...</b>	<input type="checkbox"/> Mainly for girls with disabilities	<input type="checkbox"/> Mainly for boys with disabilities	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> For neither girls nor boys with disabilities
<b>4. A lack of accessible toilets in the school would be a problem...</b>	<input type="checkbox"/> Mainly for girls with disabilities	<input type="checkbox"/> Mainly for boys with disabilities	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> For neither girls nor boys with disabilities
<b>5. I believe education is...</b>	<input type="checkbox"/> More important for girls with disabilities	<input type="checkbox"/> More important for boys with disabilities	<input type="checkbox"/> Equally important for boys and girls with disabilities	<input type="checkbox"/> Not important for either girls or boys with disabilities

<b>6. I believe that...</b>	<input type="checkbox"/> Girls with disabilities are better at math and science than boys with disabilities	<input type="checkbox"/> Boys with disabilities are better at math and science than girls with disabilities	<input type="checkbox"/> Girls with disabilities and boys with disabilities are equally good at math and science	<input type="checkbox"/> Neither girls with disabilities nor boys with disabilities are good at math and science
<b>7. I would feel uncomfortable talking about sex and reproductive health...</b>	<input type="checkbox"/> Mainly with girls with disabilities	<input type="checkbox"/> Mainly with boys with disabilities	<input type="checkbox"/> With both girls and boys with disabilities	<input type="checkbox"/> With neither girls nor boys with disabilities
<b>8. Parents think education is...</b>	<input type="checkbox"/> More important for girls with disabilities	<input type="checkbox"/> More important for boys with disabilities	<input type="checkbox"/> Equally important for both girls and boys with disabilities	<input type="checkbox"/> Not important for either girls or boys with disabilities
<b>9. Parents generally think...</b>	<input type="checkbox"/> Girls with disabilities cannot learn	<input type="checkbox"/> Boys with disabilities cannot learn	<input type="checkbox"/> Neither girls nor boys with disabilities can learn	<input type="checkbox"/> Both girls and boys with disabilities can learn
<b>10. Non-disabled children generally...</b>	<input type="checkbox"/> Do not accept girls with disabilities	<input type="checkbox"/> Do not accept boys with disabilities	<input type="checkbox"/> Do not accept either girls or boys with disabilities	<input type="checkbox"/> Accept both girls and boys with disabilities
<b>11. Community cultural beliefs and practices affect access to education...</b>	<input type="checkbox"/> Mainly for girls with disabilities	<input type="checkbox"/> Mainly for boys with disabilities	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> Neither for girls nor boys with disabilities
<b>12. Negative attitudes held by community members affect access to education...</b>	<input type="checkbox"/> Mainly for girls with disabilities	<input type="checkbox"/> Mainly for boys with disabilities	<input type="checkbox"/> For both girls and boys with disabilities	<input type="checkbox"/> Neither for girls nor boys with disabilities

**Q29. Is there anything that we have not covered in the questionnaire that you would like to tell us?**

Thank you for your participation