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Exploring Teachers' Special and Inclusive Education Professional Development Needs in Malawi, Namibia, and Zimbabwe

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Abstract

Many countries are embracing inclusive education. However, one of the main challenges that African countries are facing in this regard is the shortage of qualified teachers with the requisite skills to provide an appropriate education for their children with special needs. This shortage can be addressed through provision of professional development to all in-service teachers in the area of special and inclusive education. This current study was an attempt to identify professional development needs, from both general and special education teachers' perspectives, in terms of special and inclusive education in the three African countries of Malawi, Namibia, and Zimbabwe. A combination of purposive and convenience sampling procedures was used to draw participants for this study. A semi-structured survey questionnaire was administered to 629 teachers from the three countries. Both, quantitative data analysis and qualitative thematic analysis methods were used to analyze the data. Even though there were slight differences in how the participants from the three countries responded, the results suggested that overall the teachers were strongly in favor of inclusive education and professional development in all the suggested topics related to special and inclusive education. The teachers also identified several constraints to successful inclusion. Implications of these findings are discussed.

Key words: Special education; Namibia; Zimbabwe; Malawi; Professional development; Inclusive education

Exploring Teachers' Special and Inclusive Education Professional Development Needs in Malawi, Namibia, and Zimbabwe

Introduction

Professional development of teachers is important in order to maintain a high standard of student learning. How both general and special education teachers are trained will influence the success of special and inclusive education (Royster, Reglin, & Losike-Sodimo, 2014). There is research demonstrating the need for professional development for teachers of inclusive classes (Kamens, Loprete, & Slostad, 2003; Royster et al., 2014). Since, Malawi, Namibia, and Zimbabwe are all signatories to the 1994 Salamanca Statement and Framework for Action on Special Needs Education, whose purpose is to promote inclusive education around the globe, the need for professional development in this area, just like in any country, is not debatable.

Malawi, Namibia, and Zimbabwe are all located in the southern African region and are members of the Southern African Development Community (SADC) whose mission includes promotion of regional integration and equitable and sustainable development (Southern African Development Community, nd.). Malawi and Zimbabwe have a population of about 13 million people each (National Statistical Office Malawi, 2008; Zimbabwe National Statistics Agency, 2012). Namibia has a much smaller population of about two million people (Government of Namibia, 2011). These three countries were selected for this study for a couple of reasons. First, each of the authors, except the second author, comes from one of these countries and therefore they are interested in the development of special and inclusive education in their respective countries. Secondly, being members of SADC, the countries are committed to promoting regional integration and collaboration in areas, such as education. For example, "Zimbabwe has signed memoranda of understanding with other SADC countries such as Namibia for the training of experts in identified areas including teacher education and special education" (Southern African Regional Universities Association, 2009, p. 10). According to this agreement, tertiary institutions such as universities and teachers' colleges in the different countries should reserve 5% of admission for students from other SADC nations. For this reason, among others, there is both a formal and informal cross-border movement of teachers within this region. A comparative analysis of the professional development needs of teachers would therefore promote harmony in

teacher preparation and therefore facilitate a smoother exchange of expertise across the countries.

Following the ratification of the Salamanca Statement and Framework for Action on Special Needs Education, Namibia introduced the National Policy on Disability, "which emphasized the provision of education to all children, regardless of their individual differences, based on the fundamental principles of inclusive education in all spheres of life" (Chitiyo, Hughes, Haihambo, Taukeni, Montgomery, & Chitiyo, 2016, p. 6). As a result, Namibia educates students with special needs along a continuum of service-provision, which include special schools, integration/mainstreaming, partial-inclusion, and full-inclusion (Chitiyo et al., 2016). In Zimbabwe, students with special needs are also educated using a similar inclusive education model where in addition to educating some students with disabilities in the general classroom, a continuum of placements (i.e., resource rooms, self-contained special education classrooms in regular schools, and special schools) is retained for students who may need such placements (Mutepfa, Mpofu, & Chataika, 2007).

In Malawi, inclusive education is implemented mostly through the use of resource centers where students with special needs are taught in the general education classroom but receive additional support in resource centers outside of the general education classroom (Banks & Zuurmond, 2015). In addition to resource centers, special schools are also available especially for students with sensory disabilities (Banks & Zuurmond, 2015). Clearly, inclusive education in each of these countries is interpreted to mean educating students with disabilities in the general education classroom, whenever possible, while retaining a continuum of service provision for those students who may need it.

Since Malawi, Namibia, and Zimbabwe are all committed to special and inclusive education and since all three countries have limited qualified personnel to support the education of children with special needs (Chitiyo, Odongo, Itimu-Phiri, Muwana, & Lipemba, 2015; Hughes, Chitiyo, Itimu-Phiri, & Montgomery, 2016; Ministry of Basic Education, Sports and Culture, Namibia, 2004), it is necessary to explore ways to develop that capacity and ensure the education of students with special needs receives adequate attention (Chitiyo, Hughes, Changara, & Chitiyo, 2016). Extant research suggests that there are not enough special education teacher preparation programs in the region (Chitiyo et al., 2015). Establishing more special education teacher preparation programs could help address this problem. Doing so would mean either

constructing more pre-service special and inclusive education teacher training institutions in the respective countries or developing new special and inclusive education programs in existing institutions. However, either of these alternatives would require huge financial investments on the part of governments. This may not be an easy solution for many cash-strapped African governments that are already spending the largest share of government expenditure on education, compared to other regions in the world, at 18.4% (The Africa-America Institute, 2015; UNESCO Institute for Statistics, 2011). As a percentage of their total GDP, African governments are spending 5% on public education, which is the second highest percentage after North America and Europe (The Africa-America Institute, 2015; UNESCO Institute for Statistics, 2011). Asking African countries to increase their already high expenditure on education in proportion to their GDP may be a tall order, given the many other needs on their development agendas.

Alternatively, African governments could require all general education teachers to take compulsory special and inclusive education classes as part of their pre-service teacher preparation (Kamchedzera, 2008). This could also help to advance the policy of inclusive education, which many African nations have embraced. Malawi and Namibia for example, are trailblazers in this regard, as they now require all general education teachers to take at least one special and inclusive education course as part of their pre-service training (Chitiyo et al., 2015). While taking one course may not be adequate to prepare highly-qualified teachers for students with exceptional needs, adequately preparing general education teachers in terms of inclusive education is necessary to improve educational outcomes for children with special needs (Blanton, Fugach, & Florian, 2011). Thus, requiring all general education teachers to take a few special and inclusive education classes may be a viable approach to boost the education systems' capacities to provide special and inclusive education for the many children who need such services in the African countries.

In addition to requiring all teachers to take special and inclusive education classes, as part of their pre-service training, governments could organize professional development in the area of special and inclusive education and make it a requirement for all in-service teachers. Doing this may enhance the capacity of education systems in the SADC region to deliver appropriate education to children with exceptional needs in special, regular or inclusive school settings. This is because previous research has demonstrated the efficacy of professional development in

improving teachers' preparedness and capacity to teach children with special needs in inclusive educational settings (Royster et al., 2014).

Professional Development

Darling-Hammond, Hyler, and Gardner (2017) defined professional development as "structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes" (p. 2). In order for inclusive education to work successfully, both general and special education teachers need training and experience in key areas such as how to accommodate learners with diverse needs (Royster et al., 2014). In fact, extant research indicates that effective professional development, of teachers, related to teaching students with special needs promotes positive attitudes towards inclusive education in general (Royster et al., 2014; Treder, Morse, & Ferron, 2000).

Desimone (2011) proposed that certain core features should be part of any effective professional development efforts. These include content focus, active learning, coherence, duration, and collective participation of the teachers. According to Desimone, there should be a focus on specific subject matter content to be learned by the teachers, who should participate collectively and actively in the process and not just be passive recipients of knowledge. Professional development should also not be a one-time event but should be spread over time and, "should be consistent with other professional development, with their knowledge and beliefs, and with school, district, and state reforms and policies" (Desimone, 2011, p. 29). Desimone makes it clear that teachers' active participation is an essential element for effective professional development. Unfortunately, many professional development planning efforts do not seem to involve the teachers for whom the professional development is designed (Archibald, Coggshall, Croft, & Goe, 2011). More specifically, Charema (2010) noted that teachers in African countries are seldom involved in designing their own professional development, a situation that may compromise the efficacy of such efforts (Colbert, Brown, Choi, & Thomas, 2008).

Even though the literature generally supports the utility of professional development for teachers, Ananga, Tamanja, and Amos (2015) cautioned about the potential for loss of instructional time as a result of teachers' participation in professional development activities. The teachers in Ananga and colleagues' study raised some specific concerns such as the teachers

losing time for family in order to attend professional development. In spite of such concerns, the participating teachers viewed professional development positively and claimed to have benefited from it. These concerns support the need to involve teachers in the planning process in order to find ways to make the professional development most efficient and beneficial to the participants.

Teacher Attitudes towards Inclusive Education

Apart from professional development, teacher attitudes towards inclusive education also influence successful implementation of inclusion practices and policies (Unianu, 2012). If teachers have negative attitudes towards inclusive education, they may not make the necessary effort to engage in the relevant professional development in order to promote the success of inclusion (Galovic, Brojcin, & Glumbic, 2014). A few studies have been conducted to investigate the attitudes of teachers in the three countries towards inclusive education. For example, Magumise and Sefotho (2018) examined parent and teacher perception of inclusive education in Zimbabwean and reported mixed results that they categorized into positive, mixed and negative perceptions. Chavuta, Itimu-Phiri, Chiwaya, Sikero, and Alindiamao (2008) also reported negative teacher attitudes towards inclusive education in Malawi. Similarly, Haitembu (2014) identified negative teacher attitudes towards inclusive education in Namibia as a hindrance towards the effective implementation of inclusive education. Since teachers' attitudes towards inclusion are likely to influence their personal effort towards professional development in that area, it is worrisome that negative attitudes have been recently reported in the three countries.

Need for Successful Inclusive Classrooms

Certain resources need to be available for inclusive education to work. Previous studies report that the availability of relevant material resources promotes positive attitudes among teachers about the implementation of inclusive education (Agbenyega, 2007; Avramidis, Bayliss, & Burden, 2000). Teachers who participated in Agbenyega's study, conducted in Ghana, identified materials such as braille and large print reading materials as important for successful inclusion. Also, in Ghana, teachers who participated in Kuyini, Yeboah, Das, Alhassan, and Mangope's (2016) study identified more training for teachers, more support/resource teachers in classrooms, teaching materials, time, collaboration, and parental and administrative support as

essential and most important for the successful teaching of students with special needs. Given that the availability or lack of resources differs across countries, it is important to identify resources that would be needed in each context. Doing this would help to contextualize the provision of resources based on the identified needs.

Purpose of the Study

Each of the three countries in this current study is striving to ensure that students with exceptional needs receive most of their education alongside their peers without disabilities in inclusive general education classrooms (Chireshe, 2011; Chitiyo, Hughes, Haihambo et al., 2016; Chitiyo et al., 2015). Thus, targeting both general and special education in-service teachers for special and inclusive education professional development dovetails with the principle of inclusion. It is against this background that this study was designed. The intent was to involve in-service teachers (both general and special education) in identifying specific professional development needs pertaining to special and inclusive education in the region. In doing this, the researchers wanted to compare the professional development needs of teachers across the three countries of Malawi, Namibia and Zimbabwe. The study was guided by the following research questions:

1. What areas of professional development or resources do teachers need to effectively serve students in inclusive educational settings?
2. Are there differences in beliefs among teachers in Malawi, Namibia, and Zimbabwe regarding the idea of educating children with special needs together with their peers without special needs?
3. Are there differences in the degree to which teachers in Malawi, Namibia, and Zimbabwe value the importance of professional development on teaching students with special needs?
4. Are there differences in what teachers in Malawi, Namibia, and Zimbabwe identify as prioritized professional development needs regarding special education knowledge and services in their respective countries?
5. Are there differences in what teachers in Malawi, Namibia, and Zimbabwe identify as needs for successful special education classrooms?

Method

This study utilized a survey to investigate the stated research questions. The survey involved administering a survey instrument that was developed by the researchers for purposes of this study. The survey instrument comprised questions that required both quantitative and qualitative responses.

Sampling and Participants

A combination of purposive and convenience sampling was used for this study to draw both special and general education teachers teaching from preschool to primary and secondary schools in Malawi, Namibia, and Zimbabwe. Purposive sampling was used to ensure representation of teachers from different categories such as country, grade levels (i.e., preschool, primary school, secondary school), subject areas, or geographic location (i.e., rural, urban, region) and gender. Convenience sampling was used based on accessibility of the schools and availability of the teachers.

In Malawi, 500 surveys were distributed to teachers in the Northern education division, which is located in the northern part of the country; out of these, 300 were returned (i.e., 60%). In Namibia, 125 surveys were returned out of the 203 (i.e., 62%) that were distributed to teachers across six regions namely, Oshana, Ohangwena, Oshikoto, Otjozondjupa, Khomas, and Kunene. In Zimbabwe, 204 surveys were returned out of the 340 (i.e., 60%) that were distributed across three districts of Zvishavane, Mberengwa, and Gwanda. Thus, a total of 629 teachers from the three countries participated in this study (i.e., Malawi, n = 300; Namibia, n = 125; Zimbabwe, n = 204). The number of surveys distributed and the regions/districts selected in each country depended on the number of teachers in the specific schools that the researchers selected based on their accessibility/availability and proximity to the researchers.

Demographic Information of the Participants

The demographic information of the participants is summarized in Table 1. In terms of academic/professional qualifications, 67% (n = 420) of the participating teachers had a teaching diploma or certificate (diplomas and certificates are similar with a slight difference based on the amount of time or number of classes to complete them; a certificate generally takes less time/classes), 28% (n = 174) had a bachelor's degree, 3% (n = 19) had a master's degree, and

only one participant had a doctor of philosophy degree. At the country level, 73% of the participants from Malawi had either a teaching diploma or certificate, 26% had a bachelor's degree while 2% had a master's degree. For the participants from Namibia, 57% had either a teaching certificate or diploma, 34% had a bachelor's degree, and 8% had a master's degree. For the Zimbabwean participants, 67% had a teaching diploma or certificate, 28% had a bachelor's degree, 2% had a master's degree and 1% had a doctor of philosophy degree.

Table 1

Demographic Information of the Participants

	Malawi		Namibia		Zimbabwe	
	N	*%*	*N*	*%*	*N*	*%*
Academic Qualifications						
Certificate	133	45	6	5	23	11
Diploma	83	28	63	52	112	55
Bachelor's degree	77	26	41	34	56	28
Master's degree	5	2	10	8	4	2
Ph.D.	0	0	0	0	1	1
Qualified Special Education Teacher						
Yes	65	22	14	12	15	7
No	235	78	108	89	189	93
Grade Level Taught						
Preschool	21	7	3	2	7	4
Primary	146	49	59	48	130	54
Secondary	131	44	62	50	64	32
Other	2	0.7	0	0	1	1
Type of School Where They Worked						
Private	64	22	1	1	51	26
Government	234	79	122	99	143	74
Type of Setting Where They Worked						
Urban	183	62	104	88	78	39
Rural	112	38	14	12	120	61

Overall, 15% (n = 94) of the participants in this study were certified special education teachers while 85% (n = 532) were not; three did not respond to this item. In terms of country specific data, 22% of the Malawian participants, 12% of Namibian participants, and 7% of the Zimbabwean participants were certified special education teachers.

Only 5% (n = 31) of the participants in this study were teaching preschool (i.e., 7% of the Malawian participants; 2% of the Namibian participants; 4% of the Zimbabwean participants). About half (54%; n = 335) were teaching primary school (i.e., 49% of Malawian participants; 48% of Namibian participants; 64% of Zimbabwean participants), while 41% (n = 257) were secondary school teachers (i.e., 44% of Malawian participants; 50% of Namibian participants; 32% of Zimbabwean participants). Three participants did not respond to this item.

A majority (81%; n = 499) of the participants were teaching at government schools while 19% (n = 116) were teaching at private schools. Country specific data indicated that 79% of the participants from Malawi, 99% of the participants from Namibia, and 74% of the participants from Zimbabwe taught at government schools while 22%, 1%, and 26%, respectively, taught at private schools. In terms of urban and rural school location, 60% (n = 365) of the participants in this study were teaching in urban settings (i.e., 62% of the Malawian participants; 88% of the Namibian participants; 39% of the Zimbabwean participants), while the remaining 40% taught in rural settings (i.e., 38% of the Malawian participants; 12% of the Namibian participants; 61% of the Zimbabwean participants).

At 46% (n = 276), almost half of the participants in this study were teaching students with disabilities at the time of the study while the remainder were not. Analysis of the three sub-samples indicated that 62% of the Malawian participants, 33% of the Namibian participants, and 30% of the Zimbabwean participants were teaching students with disabilities at the time of this study. Asked what type of setting they were teaching in, 44% (n = 252) of the participants indicated regular education setting with no support, 8% (n = 45) regular education setting with some support (e.g., teaching assistant), 31% (n = 181) inclusive setting with no special education support, 10% (n = 59) inclusive setting with some support (e.g., special educator or special assistant), and 6% (n = 35) special education classroom. The rest of the participants did not respond to this item.

Instruments

A semi-structured questionnaire (see Appendix 1), with open-ended and closed-ended questions, developed by the first and second authors, was used for this study. The questionnaire was content-validated by both experts in the field of special and inclusive education, in the United States, as well as experts in Malawi, Namibia, and Zimbabwe, where the instrument was

to be administered. The questionnaire was then pretested in the Oshana and Khomas regions of Namibia where nine teachers were randomly selected from a class list of students enrolled in a part-time Master of Education program (who were all practicing teachers) in the Department of Educational Psychology and Inclusive Education at the University of Namibia to complete the survey. The questionnaire was revised based on data from the pretest study. The revisions were mainly related to language and terminology to reflect the language used in the region.

The questionnaire that resulted from this process comprised 12 demographic questions, 26 Likert-type questions, and three open-ended questions. The Likert-type questions asked participants to rate their beliefs about inclusion, professional development, and selected special education professional development topics on a scale ranging from zero (strongly disagree or least important) to five (strongly agree or most important). Even though the list of topics was vetted by educators in the African countries selected for the study and piloted prior to this research study, the authors recognized that topics not included on the list might also be highly valued by teachers, so open-ended response questions were included to learn more about the needs of the teachers in their own words. The open-ended questions solicited participants' responses about areas of special education in which they needed professional development as well as any resources/materials needed in their classrooms.

Procedure

After securing authorization to conduct the study from the relevant authorities in each country, the same questionnaires were distributed by members of the research team—fourth author (Zimbabwe), fifth author (Malawi), and sixth and seventh authors (Namibia). In Malawi, the questionnaire was distributed to teachers at both private and public schools in the Northern Region Education Division. In Namibia, questionnaires were distributed to teachers in both special and inclusive schools in the six regions of Namibia. In Zimbabwe, questionnaires were distributed to both public and private primary and secondary schools in rural and urban settings of three districts stated earlier.

Data Analysis

Descriptive statistics were computed to generate means and standard deviations of the items of interest. Secondly, two single-factor analyses of variance were conducted to test for

differences among the three countries in terms of (i) the degree to which they believed all students with disabilities ought to be educated together with students without disabilities and (ii) the importance to have professional development on teaching students with disabilities. To address the third research question, the list of professional development needs was ranked in descending order of the item means by country. Then a comparison of the items was done for the three countries.

Content analysis of qualitative data was conducted across multiple phases of coding (Miles, Huberman, & Saldaña, 2014; Saldaña, 2009). First, responses for each question were coded by country. In the first round of analysis, statements were coded with exact terms, such as *behavior disorder*. As such, there may be more than one code per statement, but each code was intended to share a significant but separate unit. Similar codes were then grouped together. For example, *behavior disorder* was grouped with *defiant behaviors* and *problem behavior*. These were then collapsed into emergent themes. When determining themes, the original statements were reread in their entirety to ensure the groupings were truly related and captured by the intended message. The themes were not predetermined by the authors, but rather emerged naturally from the data. In the final stages, data were evaluated across countries. The authors took safeguards to ensure the data were accurately communicated in the themes. The second author evaluated all of the original data to determine accuracy of themes, consistency across data analysis, and authenticity of overarching themes.

Results

Teachers' Views on Inclusive Education

The participants were asked to rate, on a Likert scale ranging from zero (strongly disagree) to five (strongly agree), the degree to which they thought all students with disabilities should be educated together with students without disabilities. The overall mean for all the participants (n = 605) from the three countries who responded to this item was 3.17 (SD = 1.81). The mean rating for the Malawian participants (n = 285) was 3.38 (SD = 1.79) while the means for the Namibian (n = 125) and Zimbabwean (n = 95) participants were 2.53 (SD = 1.79) and 3.28 (1.77) respectively.

A one-way analysis of variance (ANOVA) was conducted to test for differences among the three countries in terms of the degree to which they believed students with disabilities ought

to be educated together with students without disabilities. Prior to running the ANOVA, Levene's test for equality of variances showed that the three categories of respondents did not differ significantly in terms of variance, $F(2, 602) = .313$, $p > .05$. The F statistic for country mean differences was significant, $F(2, 602) = 10.48$, $p < .001$, Partial eta squared = .034; and Tukey's post hoc test indicated that the mean for Namibia ($M = 2.53$) was significantly less than those for both Malawi ($M = 3.38$) and Zimbabwe ($M = 3.28$). The means for Zimbabwe and Malawi were not significantly different from each other. The amount of variance explained by country differences was 3.4%.

The Importance of Special Education Professional Development

When asked to indicate how important it was to them to have professional development on teaching students with disabilities on a scale ranging from zero (strongly disagree) to five (strongly agree) the participants who responded to this question ($n = 617$) indicated that it was highly important ($M = 4.63$; $SD = 0.88$). The mean rating for the Malawian participants ($n = 294$) was 4.75 ($SD = 0.72$) while the means for the Namibian ($n = 124$) and Zimbabwean ($n = 199$) participants were 4.40 ($SD = 1.06$) and 4.58 ($SD = 0.93$), respectively.

A second single factor ANOVA was conducted to test for differences among the three countries in terms of the importance to have professional development on teaching students with disabilities. Although Levene's test for equality of variances was significant $F(2, 614) = 17.19$, $p < .05$, ANOVA is robust to violation of homogeneity of variances when samples are large such as in this case. The F statistic for country mean differences was significant, $F(2, 614) = 7.44$, $p < .01$, Partial eta squared = .024; and Tukey's post hoc test indicated that the mean for Namibia ($M = 4.40$) was significantly less than that for Malawi ($M = 4.75$). However, Namibia was not different from Zimbabwe ($M = 4.58$), and Zimbabwe and Malawi were not significantly different from each other. The amount of variance explained by country differences was 2.4%.

Ratings of Professional Development Topics

Table 2 indicates how the participants rated the professional development topics on a rating scale from zero (least important) to five (most important). Clearly, all the topics were considered highly important with mean ratings of at least 3.72. The ratings were further analyzed by country to see if there were any differences in the professional development needs of the

teachers across the three countries. Figure 1 indicates how the participants from each country rated the different topics. Even though all the topics were considered highly important by participants from all three countries, there were slight differences in the ratings. For example, in looking at the top five topics from each country, Zimbabwean participants tended to highly prioritize sensory disabilities while 'discipline' and 'organizing your teaching' were prominent among Namibian and Malawian participants. However, 'behavior management' and 'learning strategies' were among the top topics across all three countries. Participants from Zimbabwe also tended to have higher ratings for each of the professional development topics compared to their peers in Malawi and Namibia.

Table 2

Overall Mean Ratings of the Professional Development Topics by Participants from the Three Countries

Suggested Topics	*N*	*M*	*SD*
Organizing your teaching	564	4.54	0.86
Behavior management	565	4.53	0.91
Discipline	568	4.53	0.90
Learning strategies	562	4.52	0.82
Instructional methods	573	4.48	0.90
Teaching life skills	566	4.46	0.97
Collaboration with parents/guardians	568	4.43	0.90
Assessment	556	4.42	0.98
Learning disabilities	553	4.41	0.99
Deafness or hard of hearing	565	4.41	1.02
Blindness or visual impairment	558	4.41	1.04
Disability characteristics	550	4.39	0.95
Collaboration with peers	555	4.37	0.92
Behavior disorders	555	4.32	1.04
Other health-related conditions	557	4.32	1.01
Intellectual disabilities	557	4.32	1.08
Physical disabilities	555	4.29	1.06
How to differentiate instruction	555	4.28	1.06
Epilepsy	553	4.20	1.24
Inclusive education	565	4.19	1.15
Autism	506	4.17	1.08
Diversity and cultural contexts	554	4.12	1.16
Legal aspects	533	4.08	1.14
Birth to age three	540	3.72	1.42

Malawi				Namibia				Zimbabwe			
Professional Development Topic	*N*	*M*	*SD*	Professional Development Topic	*N*	*M*	*SD*	Professional Development Topic	*N*	*M*	*SD*
Behavior management	262	4.55	0.98	Discipline	119	4.51	0.83	Teaching life skills	185	4.70	0.66
Organizing your teaching	259	4.54	0.90	Organizing your teaching	117	4.47	0.92	Blindness or visual impairment	185	4.68	0.69
Discipline	258	4.51	1.03	Learning strategies	118	4.45	0.87	Deafness or hard of hearing	192	4.60	0.72
Instructional methods	264	4.50	1.00	Behavior management	117	4.39	0.94	Behavior management	186	4.60	0.79
Learning strategies	256	4.50	0.86	Instructional methods	117	4.36	0.91	Learning strategies	188	4.58	0.71
Assessment	260	4.48	1.00	Assessment	117	4.33	1.03	Organizing your teaching	188	4.58	0.77
Disability characteristics	250	4.45	0.96	How to differentiate instruction	116	4.31	0.94	Discipline	191	4.57	0.74
Deafness or hard of hearing	257	4.45	1.06	Collaboration with parents/guardians	119	4.29	0.93	Other health-related conditions	187	4.54	0.81
Collaboration with parents/guardians	266	4.44	0.97	Learning disabilities	115	4.29	1.05	Collaboration with peers	183	4.53	0.73
Learning disabilities	256	4.41	1.06	Teaching life skills	119	4.29	1.07	Instructional methods	192	4.52	0.74
Blindness or visual impairment	257	4.41	1.08	Collaboration with peers	117	4.23	0.91	Collaboration with parents/guardians	183	4.52	0.75
Teaching life skills	262	4.36	1.08	Disability characteristics	117	4.23	1.00	Learning disabilities	182	4.51	0.84
Intellectual disabilities	256	4.34	1.11	Behavior disorders	118	4.23	1.12	Epilepsy	186	4.49	0.85
Collaboration with peers	255	4.33	1.02	Intellectual disabilities	116	4.12	1.14	Behavior disorders	182	4.48	0.86
Physical disabilities	251	4.29	1.14	Inclusive education	116	4.10	1.27	Intellectual disabilities	185	4.43	0.98
Other health-related conditions	253	4.28	1.04	Physical disabilities	117	4.09	1.08	Physical disabilities	187	4.41	0.90
Behavior disorders	255	4.26	1.11	Diversity and cultural contexts	114	4.09	1.02	How to differentiate instruction	185	4.41	0.91
Inclusive education	266	4.20	1.16	Other health-related conditions	117	4.07	1.17	Disability characteristics	183	4.41	0.89
How to differentiate instruction	254	4.17	1.19	Autism	112	4.04	1.09	Assessment	179	4.37	0.91
Autism	224	4.15	1.13	Legal aspects	108	4.02	1.04	Diversity and cultural contexts	185	4.36	0.95
Epilepsy	252	4.13	1.39	Deafness or hard of hearing	116	4.02	1.24	Legal aspects	184	4.29	0.98
Diversity and cultural contexts	255	3.96	1.32	Blindness or visual impairment	116	3.96	1.24	Autism	170	4.27	1.01
Legal aspects	241	3.94	1.27	Epilepsy	115	3.91	1.31	Inclusive education	183	4.23	1.07
Birth to age Three	249	3.62	1.54	Birth to age three	114	3.61	1.31	Birth to age three	177	3.93	1.27

Figure 1. Mean Ratings of Professional Development Topics by Country

Self-Reported Needs and Additional Thoughts

The last three questions were open-end and asked participants to state, in their own words, areas of special education in which they needed professional development as well as any resources/materials they needed in their classrooms. Several themes emerged from the content analysis of qualitative data. All themes emerged across the three countries, although the prominence of the comments differed. The purpose of the qualitative analysis was not to suggest causality, but to add insight and discussion to special education research (McDuffie & Scruggs, 2008). In response to the first question, teachers identified professional development needs ranging from general (e.g., instructional supports for students with diverse needs) to needs related to more specific disabilities (e.g., learning disabilities). Teachers identified infrastructure, personnel support and training, and classroom materials as needs for successful inclusion of students with disabilities. Tables 3-5 share the most prominent themes and examples from the original data.

Table 3

Themes and Examples of Teachers' Professional Development Needs

Theme	Examples
Instructional development for students with diverse needs	"*instructional development*" – Teacher from Zimbabwe
	"*realizing new learning for all students even with disabilities, educating teachers for diversity, curriculum adaptation and development*"- Teacher from Malawi
	"*educating teachers for diversity*"- Teacher from Malawi
	"*Instructional methods for secondary school students with disabilities*"- Teacher from Malawi
General special education training	*"all areas of all aspects"*- Teacher from Namibia
	"staff development courses to help teachers teach children with disabilities"- Teacher from Zimbabwe
	"In-service training on special education"- Teacher from Malawi
	"Very important topics above"- Teacher from Zimbabwe

Sensory disabilities	"*blindness and visual impairment education*" - Teacher from Malawi *"Deaf, blind and sign language"* - Teacher from Malawi *"sign language theory and practice, specialized instructional media (braille), interpretation of medical diagnosis of special needs education…"*- Teacher from Malawi *"Basic sign language education"* - Teacher from Namibia *"Development in terms of language. Learning different signs that a disabled student can use so that we can understand especially the deaf and the mute"* - Teacher from Zimbabwe *"sign language"* - Teachers from Malawi, Namibia, and Zimbabwe
Identification and assessing LD	*"identify students with learning disabilities"*- teacher from Namibia "*I think it is important that teachers be trained to identify students with learning disabilities (those appear in various levels) at times, they are not adequately helped because teachers treat them as failing and as such, they become demotivated."*- Teacher from Malawi
Behavior concerns	"*behavior management*" – teachers from Malawi, Namibia, and Zimbabwe "*behavioral disorders*" – teachers from Malawi, Namibia, and Zimbabwe "*behavior disorders especially in children with mental retardation from mild to profound*"- teacher from Zimbabwe "*How to control aggressive behaviors*"- teacher from Namibia
Other circumstances (e.g., poverty, orphans)	(examples) Technology, assistive technology, albinos, gender issues, moral values, teaching of science, orientation and mobility, sporting activities, poverty and marginalized (poor nutrition), concentration, home-school partnerships, artificial limbs, dyslexia, counseling, self-esteem, communication, orphans, others who are vulnerable, proposal writing, communication skills, Community based organization, dramatic play, HIV/AIDS, French, theory of disabilities, talent development, religion, physical education, anemia, peer-teaching and team teaching.

Note: LD = Learning disabilities

Table 4

Themes and Examples of Teachers' other Needs for Successful Inclusion

Theme	Examples
Infrastructure	*"user-friendly facilities, e.g., classrooms, toilets, and sport courts."*- Teacher from Zimbabwe *"buildings must be disability friendly"*- Teacher from Malawi *"safe play material and equipment"*- Teacher from Malawi *"proper infrastructure"*- Teacher from Malawi
Personnel supports/ training	*"human resources; educators that are trained and qualified to teach disabled people more comfortably."*- teacher from Namibia *"special education tutor"* – Teacher from Zimbabwe *"more human resources"*- Teacher from Malawi *"more schools for special education, sports events for students with disabilities"*- Teacher from Malawi
Classroom materials	*"adequate desks"*- Teacher from Malawi *"Braille machine, hearing aids, wheel chair"*- Teacher from Zimbabwe *"books, raised pictures, stylus, finger alphabet, sign language interpreter, mirror glasses"*- teacher from Malawi *"Puzzles, blocks, pictures, chalkboard, videos, etc."*- teacher from Namibia *"Radio/tape recorder, overhead projector, etc."*- Teacher from Malawi *"reading materials"* – Teacher from Zimbabwe *"reading glasses"*- Teacher from Zimbabwe *"dolls, puzzles, balls, crayons, chart papers, coloring books"*- teacher from Namibia

Table 5

Themes and Examples of Teacher's Additional Thoughts

Theme	Examples
Infrastructure	"*every school should have suitable facilities to accommodate every child. Letting those affected mix with others will ease the thought that they are of lesser value than others*."- Teacher from Malawi "*most schools are not built to cater for the wheel chairs or other facilities like toilets*"- Teacher from Zimbabwe "*If inclusive education should take place, teachers should be trained and also buildings must be made to accommodate learners with disabilities…; and then have to carry learners to the toilet, in and out of class and is not okay*."- teacher from Namibia
Personnel supports/ training	"*Education goes down because of lower salaries of teachers*."- Teacher in Malawi "*I think that it is very important to have professional development training on how to teach students with disabilities."* – Teacher from Namibia "*Government should open more colleges so that every teacher should go and get trained on how to teach these students*."- Teacher from Malawi "*In-service courses on special education*"- Teacher from Zimbabwe
Sensory supports	*"deaf students seem to have more problems than other special needs students. May you provide these students with enough learning materials."*- Teacher from Malawi *"Educational visits in order to learn in other places how deaf learners are handled and ways in which they can be assisted."*- Teacher from Malawi *"Sign language teachers and interpreters should be given training."*- Teacher from Namibia *"The blind need more attention but must learn with those with eye sight. Every school must accommodate the blind."*- Teacher from Zimbabwe
Materials	*"Materials for reading, read playing materials."*- Teacher from Malawi "*More teaching and learning materials should be provided to schools with learners with special needs."*- Teacher from Malawi

	teaching and learning aids not enough in schools for instance textbooks".- Teacher from Malawi" "*materials we need to facilitate the successful learning of students with disabilities in our classes*." – Teacher from Namibia *"children with disabilities have no suitable resources*"- Teacher from Zimbabwe
Beliefs on Inclusion	*"all schools must include children with disabilities to help create an inclusive society which accepts one another."*- Teacher from Zimbabwe *"I am against inclusive education!! There are too many learners in one class. Disabled learners will be negatively influenced!! AND teasing will take place"*- Teacher from Namibia "*You may integrate "special learners" in inclusive education school but it will be a big challenge. Most kids will mock them and do a lot of harm to them*."- Teacher from Namibia
Other factors impacting education (e.g., class size, weather and other things that influence truancy	*"The number of learners per teacher must be reduced too. We sometimes have to teach up to 40 learners."*- Teacher from Namibia *"Pupils need prenatal, family, and other forms of support for them to understand the importance of education."*- Teacher from Zimbabwe *"Some learners receive grants from the Ministry of Gender—this has improved attendance. Some learners have difficulties attending school early in winter due to cultural clothing: Too cold."*- Teacher from Malawi *"absenteeism due to sickness: some conditions are contagious."*- Teacher from Namibia
Attitudes toward disabilities	*"I think is much better to teach them according to their abilities to have a special education for quality education for all. Give them special care, what they need."*- Teacher from Namibia *"I think is very important for the government to give training to all teachers about learning difficulties or all teachers need specialized training in teaching learners with learning problems.* – Teacher from Namibia

Discussion

There is a push for more regional integration and collaboration in the SADC region in many areas including education; this has resulted in different SADC countries signing agreements to promote exchange of expertise in areas such as teacher training (Southern African Regional Universities Association, 2009). Not surprisingly, some of the countries have also witnessed cross border movement of teachers (Ranga, 2013). Since Malawi, Namibia, and Zimbabwe are all committed to inclusive education, following the signing of the Salamanca Statement and Framework for Action on Special Needs Education in 1994, it is necessary to comparatively analyze the special and inclusive education professional development needs of teachers across these countries.

Teachers across the three countries shared various levels of favor for inclusive education. Participants from Malawi and Zimbabwe indicated that they favored inclusion more than participants from Namibia. In both Malawi and Zimbabwe, the percentages of participants indicating that they agreed with inclusion (75% and 69%, respectively) were notably higher than for Namibia (54%). This could be explained by Haihambo and Lighfoot's (2010) finding that attitudes towards disability still tend to be negative in Namibia. However, this interpretation has to be taken with caution, as it is not based on a comparative study of attitudes towards disabilities across the three countries. Also, in Namibia responses were more evenly distributed across all the other categories. Reasoning supporting these responses could be found in responses to the open-end questions. Many teachers took the opportunity to share their thoughts on inclusion in this space, revealing barriers to effective inclusive practices. They pointed out that class sizes were already large and it was difficult to accommodate individual behavior or academic needs with such large classes. Banks, Kelly, Kyegombe, Kuper, & Devries (2017), point out that children with special needs encounter high levels of bullying and often have limited access to adequate protective resources. These concerns are reflected in the data from this study. Teachers from each of the countries mentioned that students with special needs may be ostracized and become victims of bullying or discrimination; although teachers also shared this as a signal to promote more inclusive practices, as children need to be taught without facing any form of discrimination and that schools must set an example for an inclusive society. It is therefore, possible that experiences of success or failure with current inclusive practices may have contributed to teachers' opinions at the time of this study.

Although there was variation between responses regarding belief about inclusion, the teachers from the three countries were unanimous about the need for professional development about supporting students with special needs. It is encouraging that although the teachers faced many obstacles to the success of students with special needs, which could influence their commitment (David & Bwisa, 2013), they still wanted to grow and learn more. These findings were further reinforced by the teachers' beliefs on the importance of different special education topics. Since teachers' own interest, felt need, and desire for professional development can influence their participation in professional development (Borko, 2004; David & Bwisa, 2013), results of this study indicating that teachers overwhelmingly supported the need for professional development should be a welcome development for the ministries of education in the three countries.

Professional Development Topics

It should first be stated that on a scale of zero to five, all, but one topic, averaged a score more than 4. The only topic that averaged a score of less that 4 was 'Birth to Age Three' (3.72). We can conclude that, although early childhood education is important for individuals with special needs, teachers shared that learning more about early childhood education practices may not directly impact their ability to educate students with special needs, especially when compared to other topics on the list. This finding may be explained by the composition of the sample of the participating teachers as a majority of the participants were primary and secondary teachers with only a few teaching preschool. In some cases in African settings, elementary and secondary level teachers do not see the connection between early childhood experiences of an individual and their capacity to learn and socialize effectively when they become older. However, it should be noted that all of the topics were communicated to be important. For the sake of discussion, the list of 24 topics were divided into three tiers of priority.

The top tier of topics included eight topics that focused largely on teacher behaviors. That is, the topics in this tier (i.e., organizing your teaching, behavior management, discipline, learning strategies, instructional methods, teaching life skills, collaborating with parent/ guardians, and assessment) addressed areas like how to manage behavior and instructional methods. For example, the highest-rated topic was 'organizing your teaching', which suggests training to hone one's own skill as a teacher. This topic can be seen as related to the next four,

which included 'behavior management', 'discipline', 'learning strategies', and 'instructional methods'. All of these topics can be applied across inclusive settings and diverse student learning needs. None of the categories addressed in the first tier were disability specific, as seen in the second tier. Perhaps teachers recognized that all students could benefit from the teachers' additional training in these topics, which allows the teachers to improve educational outcomes for both students with and without special needs in inclusive settings.

The general topics prioritized in the top tier differed from the second tier of prioritized responses that focused on disability categories. Six of the eight categories in the second tier (9th to 16th) directly related to specific disability categories (i.e., learning disabilities, deafness or hard of hearing, blindness or visual impairment, behavior disorders, other health-related conditions, intellectual disabilities) and another topic in this tier collectively addressed disability characteristics. While these were still rated high, the focus of each of these topics would be most applicable to teachers who had students with those disabilities. It is interesting that topics that comprised the first two categories related to teacher behaviors and disability categories. Understanding the characteristics of children with disabilities is a prerequisite to the development of appropriate interventions, adaptations or accommodations for them (Lovin, Kyger, & Allsopp, 2004; National Association of Special Education Teachers, n.d.). Put another way, if teachers are to change their instructional behaviors to promote the learning of their students with special needs, they need to understand those students' characteristics first.

In the bottom tier of topics, the most notable topics were those that made the bottom three at least-highly rated. 'Diversity and cultural context', 'legal aspects', and 'birth to age three' received the lowest ratings on the list. Perhaps teachers saw these as least relevant to their daily teaching and successful outcomes for individuals with special needs. However, the low ranking on the list does not imply that they were not viewed as important topics. Instead, it implies that they received lower priority relative to the other topics on the list. It is possible that these topics received lower priority because they apply to issues that the teachers did not encounter on a regular basis. For example, the teachers might not have to deal with a lot of cultural diversity issues as they might be teaching quite homogenous cultural groups of students. Also, since the countries do not have special education specific legislation (Chitiyo, 2007; Chitiyo et al., 2015) —apart from a few policies, which do not have the legal authority of laws—the teachers may see less relevancy in this topic compared to others.

Additional Professional Development Needs

When asked to identify professional development needs, in their own words, an overwhelming theme across the countries was the ability to modify or adapt instruction to meet the needs of diverse learners. This is supported by the quantitative data, as well. As the countries increasingly move towards inclusive settings, the need to train teachers to work with diverse students in inclusive settings becomes clear. The need for continued and improved infrastructure was communicated (see below), however it was recognized that providing physical access to a setting does not automatically translate to providing instructional access. The teachers shared that they wanted to learn more to meet their students' diverse needs better. The teachers from Malawi and Namibia reported wanting more training on how to support students with sensory disabilities, such as blindness, low vision, deafness, or hard-of-hearing. In a recent study, Kaphle, Marasini, Kalua, Reading, and Naidoo (2015) found that almost 90% of students in three integrated Malawian schools had some level of visual impairment, with just over 40% having low vision. Many vision problems of students may be preventable or treatable (Kalua, Patel, Muhit, & Courtright, 2008), emphasizing the need for community education, awareness, and prevention in conjunction with teacher training.

Teachers from Zimbabwe more frequently referred to needs to help students with learning difficulties or learning disabilities, including how to identify and assess learning disabilities among their students. Even though it cannot be established based on results of this study, such differences could be indicative of differences in how teachers are currently being trained or how inclusion is being implemented in the three countries. This is particularly important especially as the countries are striving towards more integration in areas such as teacher training (Southern African Regional Universities Association, 2009). These differences may therefore, need to be taken into consideration in the preparation of teachers across the three countries.

Needs for Inclusion

In sharing their professional development needs, resources needed, and other needs, it turned out that the most remarkable alignment of themes was in terms of resources needed to successfully meet the needs of students with disabilities. The themes of infrastructure,

educational materials, and professional supports (e.g., training, development, personnel) were present across all three countries. These themes have various applications as they relate to different regions and schools. The consistency of these themes should not be lost on anyone developing special education programs in these countries. We considered building and infrastructure supports to include items connected to construction, school and building access, facilities, or physical components of systems of education. The teachers' comments in this category focused on physical access to education, including transportation to the school and access into the building. Needs such as accessible buildings and ramps, toilets, classrooms, and resource rooms were mentioned in this category.

It is important to recognize that the teachers saw improper or underdeveloped infrastructure as a barrier to their teaching. Addressing this issue will take money, time, work, and commitment from the governments. As indicated earlier, this may be a big challenge for the countries' governments that are already spending the largest share of government expenditure on education (The Africa-America Institute, 2015; UNESCO Institute for Statistics, 2011). For example, Namibia was among the top three countries in the world in relation to the country's percentage of funding for education (United States Agency for International Development, 2008). With so many other developmental needs on the countries' agendas, increasing their already high expenditure on education may not be feasible—but it is essential.

Another theme that was apparent across the countries was teaching and classroom materials to support instruction. While the need for infrastructure addressed the building supports, teaching and classroom needs addressed materials needed within the classroom to support instruction. There was a wide range of items mentioned in this category. Some items were more functional, such as desks and chairs, while others included technology needs, such as computers, TVs, screens, tablets, and projectors. The teachers also shared non-technological needs, such as books, maps, magnifying glasses, balances (for math), pens, pencils, crayons. Some needs were specific to particular disabilities (e.g., Braille books, LD learning supporting materials, or headphones for individuals who are hard of hearing). Some of these materials are basic materials necessary to support the learning of students with special needs. However, that the teachers listed them indicates the magnitude of the challenge of the lack of materials to promote inclusive education. It is this glaring lack of resources that has prompted some

researchers to question the feasibility of full inclusion in Africa—at least for now (Chitiyo, 2013).

While the first two major themes addressed physical needs, the last theme that emerged addressed professional needs. The teachers indicated that they needed opportunities for continued professional development. Additionally, they wanted more personnel, recognition and support from the government, as well as better pay and respect for the teaching profession. These findings are in agreement with findings of previous studies lamenting the shortage of special education personnel (Abosi, 2000; Chitiyo, 2006; Ministry of Basic Education, Sports and Culture, Namibia, 2004) and poor working conditions for African teachers in general and especially those in rural areas (International Labor Organization, 2016). The governments of Malawi, Namibia, and Zimbabwe have to take this issue of teachers' working conditions seriously and address it expeditiously as it can negatively affect educational outcomes for children with disabilities. According to Bennell (2011), the consequences of poor working conditions for teachers include "low and declining learning outcomes, high rates of teacher attrition and teacher absenteeism, low time-on-task, frequent strikes and other forms of industrial action, and widespread teacher misconduct" (p. 4). Accordingly, Bennell implores governments to prioritize incentivizing teachers and improving their working conditions—a call we would like to repeat here.

Despite the overarching themes that emerged from the data, there were also pockets of needs identified by the teachers. Perhaps because we used a combination of convenient and purposeful sampling, we had several teachers that had similar experiences in the same environment, which emphasizes the need to proactively identify needs of individual schools or regions, rather than overgeneralizing targeted needs. Optimizing resources may require a balance of identified professional development needs with the ability to differentiate professional development to meet more specific school and district needs. Findings from this current study provide a sound place to start professional development planning, but also communicate the need to specialize supports to targeted needs of the schools. This current study also addresses the call from previous researchers to include teachers in the process of designing their professional development (Charema, 2010).

Limitations of the Study

This study was not without limitations. A major limitation is related to sampling. The use of purposive and convenience sampling limits the extent to which results could be generalized. Results of this study should therefore, be interpreted with caution given the sampling procedures. Future studies should consider using random sampling so that results could be more representative of the situation across the three countries.

Furthermore, it would have been quite useful to compare the responses of teachers by whether they were certified to teach special education or not. However, as indicated in Table 1, the frequencies and percentages of teachers who were certified in special education were very small (22% for Malawi, 12% for Namibia, and 7% for Zimbabwe) and thus comparing the two groups of teachers would give inaccurate information. For this reason, the authors recommend that in future studies, researchers possibly consider deliberately oversampling among special education certified teachers to ensure greater representation in their samples in order to facilitate such comparisons.

Summary and Conclusion

As countries design professional development to support teachers, it is important to involve the teachers in identifying specific needs. This current study was an attempt to do that through surveying both general and special education teachers in the three countries of Malawi, Namibia, and Zimbabwe. Given steps towards more regional integration among SADC countries, in terms of education and teacher preparation, the authors found it necessary to comparatively examine school teachers' professional development needs in the area of special and inclusive education. Analysis of data collected across the three countries emphasized common needs while also highlighting individual differences across the countries. Overall, teachers expressed tremendous interest to have professional development on topics related to special and inclusive education and improving the educational outcomes of individuals with special needs. That so many topics were highly rated indicates an open need to support special education among teachers in these countries. This study provides an important opportunity for the governments in these countries to address an issue with the potential to transform special and inclusive education across the region. Future research should explore professional development models that can

address the identified needs of the African countries, taking into consideration the cost effectiveness of such models.

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Appendix 1

ASSESSMENT OF EDUCATORS' NEEDS FOR SPECIAL EDUCATION IN AFRICA

1. Country: _____

2. Gender : a. Male____ b. Female ____

3. What is your highest earned academic/professional qualification?
   a. Certificate_____ b. Diploma_____
   c. Bachelors_____ d. Masters_____
   e. Ph.D._____ f. Other, please indicate_____

4. Are any of your academic/professional qualifications in special education?
   a. Yes ____ b. No ___

5. Are you a certified/qualified special education teacher?
   a. Yes ____ b. No____

6. If you answered YES to question 5
   a. How many years of special education training did you have? _____
   b. Did you specialize in any specific area? Yes____No____ (if yes, please specify)
      _____

7. What grade level do you teach?
   a. Preschool _____ b. Primary school_____
   c. Secondary school_____ d. Other, please specify. _____

8. If you teach at secondary level, what subject(s) do you teach? _____

9. Please select what most represents your place of employment
   a. Government school _____ b. Private school_____

10. Please select what most represents your place of employment
    a. Urban (city) _____ b. Rural (outside of city) _____

11. Are you currently teaching any student(s) with disabilities in your classroom?
    a. Yes____ No_____

12. In what type of setting are you teaching?
    a. Regular setting/with no support (special educator or teaching assistant)_____
    b. Regular setting/with support either special educator or teaching assistant_____
    c. Inclusive setting with/no special educator support or teaching assistant_____
    d. Inclusive setting with/special educator support or teaching assistant_____
    e. Special education classroom_____
    f. Other, please specify. _____

13. To what degree do you think students with disabilities should be educated together with students without disabilities

0	1	2	3	4	5
Strongly disagree					Strongly agree

On a scale with 0 indicating least important and 5 indicating most important,

14. How important is it to you to have professional development on teaching students with disabilities?

0 1 2 3 4 5

least important most important

15. How important are the following topics to you, regarding the education of students with disabilities, for your in-service training/professional development?

	least important					most important
Inclusive Education	0	1	2	3	4	5
Legal aspects	0	1	2	3	4	5
Behavior Management	0	1	2	3	4	5
Discipline	0	1	2	3	4	5
Instructional Methods	0	1	2	3	4	5
Organizing your teaching	0	1	2	3	4	5
Teaching life skills	0	1	2	3	4	5
Learning strategies	0	1	2	3	4	5
How to differentiate instruction	0	1	2	3	4	5
Diversity & Cultural Contexts	0	1	2	3	4	5
Assessment	0	1	2	3	4	5
Birth to age Three	0	1	2	3	4	5
Collaboration with parents/guardians	0	1	2	3	4	5
Collaboration with peers	0	1	2	3	4	5
Disability characteristics	0	1	2	3	4	5
Autism	0	1	2	3	4	5
Learning Disabilities	0	1	2	3	4	5
Intellectual Disabilities (mental retardation)	0	1	2	3	4	5
Physical Disabilities	0	1	2	3	4	5
Behavior Disorders	0	1	2	3	4	5
Blindness or Visual Impairment	0	1	2	3	4	5
Deafness or Hard of Hearing	0	1	2	3	4	5
Epilepsy	0	1	2	3	4	5
Other Health-related conditions	0	1	2	3	4	5

16. Please list any other area of special education that you would need professional development in?

_____
_____
_____
_____
_____
_____
_____

17. Please list any resources/materials you would need to facilitate the successful learning of students with disabilities in your classroom.

_____
_____
_____
_____
_____
_____
_____
_____

18. Please feel free to share any additional thoughts.

_____
_____
_____
_____
_____
_____
_____