Operant Subjectivity

The International Journal of Q Methodology

Primary and Lower Secondary School Teachers' Perceptions of How They Manage to Support Students with Learning Difficulties in Inclusive Classrooms

Lok Subba
Western Norway University of Applied Sciences
Edvin Bru
Arlene A. Thorsen
University of Stavanger

Abstract: Many teachers recognise that students with learning difficulties (LDs) need support in a wide range of areas. However, many teachers still do not feel adequately equipped to address students' needs in inclusive classrooms. This study aims to investigate teachers' perceptions of how they manage to support students with LDs in inclusive classrooms. Twenty-five Norwegian teachers currently teaching students with learning difficulties in inclusive classrooms participated in this Q methodological study. Results indicate that teachers' perceptions of how they manage to support students in inclusive classrooms vary markedly. The first viewpoints held by some teachers reflected their contentment with the way they managed to support students during lessons. On the contrary, some teachers were primarily uncertain about how to address students' instructional and learning needs, while others were ambivalent about whether they were adequately addressing students' social, emotional and guidance needs. These findings suggest that although some teachers find themselves adequately supporting students, many teachers report that they struggle to meet students' additional support needs in inclusive classrooms. The findings underscore the need for promoting teachers' knowledge and skills to understand and address the complex additional support needs of students with learning difficulties in inclusive classrooms.

Keywords: inclusive education, learning difficulties, Q methodology, teacher support

Introduction

There has been an international trend over the past few decades toward including and educating students with learning difficulties (LDs) in regular (inclusive) classrooms (Ainscow & César, 2006; Forlin, 2006; UNESCO, 1994). Teaching students with LDs in inclusive classrooms requires, on the one hand, teachers' knowledge about the conditions of LDs and how they affect students' learning processes and outcomes, and on the other hand, it demands appropriate skills and attitudes to properly address students' needs. A growing consensus regarding how to conceptualize the conditions of LDs underlines that learning difficulties are associated with specific developmental disorders (i.e., specific learning difficulties), which impede or have negative impact on several specific areas of learning and academic skills development, such as reading,

Contact author: Lok.Subba@hvl.no

writing, mathematics and language development (Fuchs, Mock, Morgan, & Young, 2003; Hale et al., 2010; Kavale, Holdnack, & Mostert, 2006; World Health Organization, 2012).

In a review of 26 studies, De Boer, Pijl and Minnaert (2011) found that many teachers still hold neutral or negative attitudes toward the inclusion of students with special needs in regular primary classrooms (De Boer, Pijl, & Minnaert, 2011). A note of caution is needed here as this review includes studies on teachers' attitudes towards inclusion of students with a variety of disabilities and special needs, such as ADHD, intellectual impairment, physical and sensory disabilities. However, one of the findings in this review underlines teachers' positive attitudes toward including students with specific learning difficulties in regular classrooms. Similar findings are noted in a Swedish study (Roll-Pettersson, 2008). Despite their positive attitudes, many teachers still find it challenging to address properly the students' additional support needs in inclusive classroom settings. Previous studies suggest that teachers experience students' additional support needs as complex in nature and involve a wide range of issues (Avramidis & Norwich, 2002; Bruggink, Meijer, Goei, & Koot, 2013; Forlin & Chambers, 2011; Jordan, Schwartz, & McGhie-Richmond, 2009; McIntyre, 2009; Sharma, Loreman, & Forlin, 2012). These studies reveal that teachers' perceptions of students' support needs range from curricular and instructional adaptations to emotional, behavioural, managerial, guidance and environmental support. Albeit teachers acknowledge they find students' additional support needs complex, diverse and challenging, there is a paucity of literature on how teachers perceive the management of the provision of support to students with LDs. This study, therefore, explores teachers' perceptions of how they manage the provision of support to students with LDs in inclusive classrooms.

Support Needs of Students with LDs in Inclusive Classrooms

For many students, the conditions of LDs are a source of prolonged and pervasive stress, and this stress adversely affects their learning, motivation, psychological well-being and mental health outcomes (Meltzer, Gatward, Goodman, & Ford, 2000; Nelson & Harwood, 2011; Putwain, 2007; Svetaz, Ireland, & Blum, 2000). Proper teacher support can promote both coping resources and a sense of well-being in children and adolescents in vulnerable life situations (Cornelius-White, 2007; Goldberg, Higgins, Raskind, & Herman, 2003; Sabol & Pianta, 2012).

(Klingner & Vaughn, 1999) reviewed 20 studies addressing the perceived support needs of students with LDs in inclusive classrooms. The results demonstrated these students' support needs encompass a wide range of issues related to the adaptation of curriculum and instructional practices, including the amount of time the teacher invests in explaining, providing feedback and setting up appropriate groups for classroom activities. Results from a recent study suggest that students with LDs require additional support in a wide range of areas, such as (on-task) behavioural, structural, environmental and peer support, as well as instructional and curricular adaptations (Bruggink et al., 2013)

Malecki and Demaray (2002) have discerned four pathways of providing social support to promote coping resources in students, namely, through emotional support, guidance and advice, direct involvement and by helping students appraise or evaluate challenging situations in a more adaptive way. These findings suggest that students' additional support needs encompass much more than just curricular and instructional adaptions and academic support. Thus, students' additional support needs are complex in nature and involve areas like emotional, behavioural, environmental, guidance and autonomy support. There is so far little research on how teachers perceive their own support practices regarding these additional support needs issues in inclusive

classrooms.

Along with social support, several researchers have underlined that a strong sense of relatedness facilitates motivation and psychological well-being in children and youths (Baumeister & Leary, 1995; Sabol & Pianta, 2012; Sarason & Sarason, 2009; Skinner & Wellborn, 1997). A predictable, safe classroom and social environment with sensitive teacher involvement play a positive role in facilitating students' sense of well-being, control and competency (Klem & Connell, 2004; Marzano, Gaddy, & Foseid, 2005; Soodak, 2003).

Teacher Efficacies to Address the Additional Support Needs of Students with LDs Many teachers and educators consider teaching in inclusive classrooms to be challenging and believe it requires additional sets of skills, knowledge and preparations. Although many teachers hold generally positive attitudes towards teaching students with LDs in inclusive classrooms, many of them still find it difficult to make adequate and necessary adaptations and accommodations in inclusive classrooms (Avramidis, Bayliss, & Burden, 2000; Buell, Hallam, Gamel-McCormick, & Scheer, 1999; De Boer, et al., 2011; Yuen, Westwood, & Wong, 2005).

Studies on teachers' support practices predominantly tend to focus on instructional and curricular adaptations and academic support (Klingner & Vaughn, 1999; McLeskey & Waldron, 2002; O'Donoghue & Chalmers, 2000; Yuen, et al., 2005). A number of studies have reported instances of very few or nonsignificant instructional and curricular adaptations or accommodations made by teachers in inclusive classrooms (McLeskey & Waldron, 2002; Ysseldyke et al., 2001; Yuen, et al., 2005). (Yuen, et al., 2005) reported that teachers attended more frequently to students' managerial needs compared to curricular adaptations and support. In a cross-cultural study, Finnish teachers reported stronger efficacy beliefs regarding their ability to work with curricular and instructional adaptations and managements compared to handling behavioural issues, whereas South African teachers scored higher on self-efficacies in behaviour management than in providing curricular and instructional support in inclusive classrooms (Malinen et al., 2013). These findings suggest many teachers still seem to struggle to adequately adapt instructions and curricular contents in inclusive classrooms.

Teaching practices are complex endeavours, and teaching and providing support to students with LDs in inclusive classrooms add additional complexities. Teachers' knowledge about students' additional needs and attitude toward including students in regular classrooms affect the way teachers address the needs of students (Avramidis & Norwich, 2002; De Boer, et al., 2011). There is a growing body of knowledge on teachers' attitudes towards including students with LDs in regular classrooms (Avramidis & Norwich, 2002; De Boer, et al., 2011). However, little attention has been paid to how teachers experience the way they manage to provide support to students on a wide range of issues, such as curricular, instructional, behavioural, emotional, guidance and autonomy, in inclusive classrooms. This study, therefore, aims to explore teachers' perceptions of how they manage to support students in inclusive classrooms.

Method

Q methodology was specifically developed to explore different aspects of human subjectivity, such as human perceptions, beliefs, attitudes, viewpoints, opinion, feelings and judgments (Brown, 1980; Stephenson, 1953; Watts & Stenner, 2012). Hence, Q methodology was employed in this study, as its purpose was to investigate teachers' perceptions of how they manage to support students with LDs in inclusive classrooms. Q

methodology includes a set of procedures and techniques for data collection and analyses (Brown, 1980; McKeown & Thomas, 2013; Watts & Stenner, 2012).

Participants

Primary and lower secondary teachers currently teaching students with LDs in inclusive classrooms were invited to participate in this project. Twenty-five primary (1st through 7th grade) and lower secondary (8th through 10th grade) teachers volunteered to be part of this study. Twenty were female and five males, with an average age of 43.2 (SD = 11.4). Twenty teachers were currently teaching in primary schools, while the other five taught at lower secondary schools. The mean length of teaching experience of participants was 13.7 years (SD = 7.1).

All participants were teaching students formally diagnosed with learning difficulties (specific learning difficulties) and met diagnostic criteria encoded under F81 (diagnostic categories for LDs) in the International Classification of Mental and Behavioural Disorders (ICD-10) (WHO, 2012). Twenty-four teachers were the main class teachers, and one functioned as an additional support teacher. When the teachers performed Q sorting, they were instructed to think about a specific student with an LD whom they were currently teaching in ordinary inclusive classrooms and how they experienced the way they managed to provide support to the students.

Table 1: Participant Background Information

Gender	Females = 20; males = 5
Age	Mean = 43.3 yrs (SD = 11.4)
Teaching experience	Mean = 13.7 yrs (SD = 7.1)
School level	Primary school = 20; lower secondary school = 5
Acquaintance with students	Mean = $3.5 \text{ yrs (SD} = 1.8)$
Teachers with formal training	
in teaching children with learning	4 (16%)
difficulties	
Teacher functions	Main teachers = 24; support teacher = 1

Development of Q sample

In developing a sample of Q statements, the researcher collects expressions that cover a wide range of central issues relevant to the study. These viewpoints or statements can be collected naturally by talking to or interviewing relevant subjects or extracted from existing sources, such as academic or media sources (McKeown & Thomas, 2013; Watts & Stenner, 2012). This study employed both approaches. For natural sources, a focus group interview was conducted involving four female primary and lower secondary school teachers who had long-term experiences in teaching students with LDs in inclusive classrooms. Furthermore, a primary student with an LD receiving education in an inclusive classroom and his parent were interviewed. The statements generated from existing sources were based on an extensive literature review (Avramidis & Norwich, 2002; Bruggink, et al., 2013; De Boer, et al., 2011; Dunkel-Schetter, Folkman, & Lazarus, 1987; Kerres Malecki & Kilpatrick Demary, 2002; Klingner & Vaughn, 1999; O'Rourke & Houghton, 2008; Sharma, et al., 2012; Skinner & Wellborn, 1997; Yuen, et al., 2005).

Thirty statements covering six central areas of additional support needs in inclusive classrooms were selected based on the relevance and importance attached to them by

students and teachers (Avramidis & Norwich, 2002; Bruggink, et al., 2013; Klingner & Vaughn, 1999; O'Rourke & Houghton, 2008; Sharma, et al., 2012). The statements covered the following six key areas of teacher support: instructional and curricular adaptations (n=5), emotional support (n=5), autonomy support (n=5), involvement and sensitivity (n=5), structure and predictability (n=5), and guidance (n=5) (Table 2).

Table 2: Statements Representing Six Areas of Teacher Support

Aspects of teacher support	Statements
Emotional support	1, 7, 13, 19, 25
Instructional and curricular adaptations and accommodations	4, 10, 16, 22, 28
Autonomy support	2, 8, 14, 20, 26
Guidance (coping support)	3, 9, 15, 21, 27
Teacher involvement and sensitivity	5, 11, 17, 23, 29
Structure and environmental support	6, 12, 18, 24, 30

Q Sorting and Data Analysis

Each statement was printed on a card. A scoring grid with 30 cells squares, one for each statement, was developed. The ranking values on the scoring grid ranged from -4 (most disagree) to +4 (most agree), following the logic propounded by (Brown, 1980). The scoring board resembled a normal distribution bell curve. This distribution form requires participants to make choices, as participants can assign only a specific number of statements to a rank value. Participants are thereby required to read all the statements before making their final choices or judgements. This technique of data collection encourages participants to give priority to what matters most to them among the available viewpoints or Q statements, as there are very few places for the statements on the positive and negative ends of the scoring grid. This allows participants to consider each statement individually and in interaction with the rest of the statements before they make the final decision to assign a statement a specific ranking value (Brown, 1980; Stephenson, 1953).

The sorting process started with participants reading all the statements on cards. Thereafter, they sorted the statements into three stacks: one for the agreeable statements, the second for the statements they did not agree with, and the last for statements they were uncertain about. Finally, the participants placed each statement on one of the empty squares on the scoring sheet, assigning a specific value to it. When the Q sorting was completed, each participant was interviewed for 15 to 20 minutes. The interviews focused on gathering additional information about how teachers experienced supporting students in inclusive classrooms.

Each statement received a numerical scale value per the rank value it was assigned to on the scoring sheet. These numerical rank values were statistically analysed to elicit factors generated on the basis of commonly shared viewpoints among participants, employing PQMethod software (Brown, 1980; Schmolk & Atkinson, 2011; Stephenson, 1953).

Ethical Issues

As teachers were to think about their own support practices regarding a specific student

with LDs while Q sorting, formal written consent from parents and students was acquired before inviting teachers to participate in this study. In addition, a formal approval from the Norwegian Social Science Data Authorities was obtained before conducting this study.

Results

Factors and significant loaders

PQMethod software was employed to analyse the data. After several options were tried, a three-factor solution was finally adopted. This decision was made after exploring various solutions by manual rotation, starting first with a two-factor solution, and thereafter a three-factor and finally a four-factor one. A close analysis of the four-factor solution revealed high correlations between factors 1, 3 and 4, namely, $r = .42_{1,3}$ and $r = .62_{1,4}$ indicating a significant overlap of viewpoints between these three factors, particularly Factors 1 and 4. This suggests that each of these three factors comprise many inter-factor commonalties of shared viewpoints, each bearing characteristics of a not-so-distinct and unique set or constellation of viewpoints. A two-factor solution excludes a distinct factor or constellation of commonly shared viewpoints, which the findings presented in this study evidently demonstrates. Factor 3, on the other, after rotating manually, showed low inter-factor correlations, namely, $r = .28_{1,2}$, $r = .28_{1,3}$ and $r = .28_{2,3}$, suggesting that each factor represented a distinct and very specific category of commonly shared viewpoints. Table 3 provides an overview of the factors.

Table 3: Factors and Significant Loaders

Factors	1	2	3
Participant 1	0.86**	0.16	0.32
Participant 8	0.84**	0.13	0.16
Participant 25	0.83**	0.27	0.24
Participant 24	0.81**	0.25	0.24
Participant 21	0.79**	-0.17	0.14
Participant 19	0.74**	0.39	0.12
Participant 20	0.72**	0.38	0.21
Participant 7	0.66**	0.4	0.35
Participant 3	0.57**	0.16	0.2
Participant 23	0.37	0.83**	-0.13
Participant 4	-0.07	0.82**	0.11
Participant 13	0.19	0.67**	0.23
Participant 15	0.12	0.65**	0.33
Participant 11	0.03	-0.1	0.83**
Participant 17	0.39	0.2	0.73**
Participant 18	0.21	0.35	0.71**

Factors	1	2	3
Participant 2	0.29	0.31	0.55**
Participant 5	0.16	0.40	0.55
Participant 6	0.48	0.05	0.46
Participant 9	0.46	0.62	0.26
Participant 10	0.47	0.38	0.57
Participant 12	0.53	0.22	0.64
Participant 14	0.44	0.63	0.43
Participant 16	0.59	0.46	0.24
Participant 22	0.45	0.45	0.45
% Expl. Var.	30	19	18

^{**} p < .005

Factor 1 was defined by participants 1, 3, 7, 8, 19, 20, 21, 24 and 25 with significant loading at p < .005. Similarly, Factor 2 was defined by participants 4, 13, 15 and 23, and Factor 3 was by participants 2, 11, 17 and 18. Participants (e.g., 5, 6, 9, 10, 16) who loaded significantly (p < .05 or .01) on more than one factor (confounded loadings) were not included when performing manual rotations to determine the factors, as each factor should represent unique and specific constellations of viewpoints.

Table 4: Background Information on Participants Defining Each Factor

	Factor 1	Factor 2	Factor 3
Number of defining participants	n = 9	n = 4	n = 4
Condon	Male = 1;	Male = 1;	Male = 1;
Gender	Female = 8	Female = 3	Female = 3
Age	Mean = 36.8 yrs	Mean = 48.3 yrs	Mean = 49.3 yrs
Teaching experience	Mean = 12.7 yrs	Mean = 18.3 yrs	Mean = 13.3 yrs
Student acquaintance	Mean = 2.9 yrs	Mean = 5.3 yrs	Mean = 2. 8 yrs
Function	All class teachers	All class teachers	All class teachers

Participants who defined each of these factors were general class teachers of both genders. None of the factors differed significantly ($p \le 0.05$) in participants' years of teaching experience and experience with the students for whom they had specifically sorted Q statements. There was, however, a significant difference in mean age (p < 0.05) between Factor 1 and 3. Teachers who defined Factor 2 had longest teaching experiences and acquaintances with the students.

Factor interpretations

Table 5 shows factor arrays and the rank value of each statement across all three factors. The highlighted number or ranked value indicates that the statement is a distinguishing statement, which contributes uniquely to define the factor. The remaining statements (1, 6, 7, 8, 14, 15, 23, 26 and 30) were not ranked as distinguishing statements, which suggests that teachers commonly shared these viewpoints across all three factors. Each factor represents a unique constellation of viewpoints shared by the participants who defined the factor.

Table 5: Factor Arrays and Distinguishing Statements*

			Factors	
No.	Statement	1	2	3
1	I care about my student.	+4	+4	+4
2	I usually ask the student about what she/he likes to work with during lessons.	-1	0	-2
3	I often talk to the student about how to handle things better at school.	-1	0	-3
4	I give the student manageably difficult assignments and tasks.	0	-2	0
5	I spend enough time helping the student.	-1	+2	-1
6	The student and I usually plan lessons together.	-2	-1	-1
7	The student feels secure with me.	+3	+1	+2
8	I give the student choices to work with during lessons.	-2	-1	-3
9	I explain the reason why he/she is struggling with the schoolwork.	0	0	-4
10	I give the student a manageable amount of schoolwork.	0	-3	-1
11	It is not always easy for me to notice when the student needs help.	-3	+2	+1
12	I normally tell the student what to do during lessons.	0	-2	+3
13	I listen to what the student has to say.	+2	+3	0
14	I utilize the student's interests in schoolwork.	-1	-1	-1
15	I make it easier for the student to learn.	+1	+1	+2
16	I know well the types of tasks the student can accomplish.	+2	-1	+1
17	I normally spend more time with other pupils than with him/her.	-2	-4	-1

No,	Statement	1	Factors 2	3
18	I have good and clear sets of rules About how the students should behave with one another.	+1	+2	0
18	I have good and clear sets of rules about how the students should behave with one another.	+1	+2	0
19	I show my understanding for the student's struggles	+3	-2	+3
20	I allow the student to utilize the working the methods that he/she prefers.	-2	-3	+1
21	I explain things well to the student.	+1	-1	0
22	I give the student assignments and tasks that may make him/her nervous or anxious.	-4	0	-2
23	I often go to the student when she/he needs help.	+1	+3	+1
24	I manage to handle differences and harassing behaviour among children in a good way.	+1	+2	-2
25	I am patient with my student.	0	+1	-2
26	I show respect for the student's desires and needs.	+2	+1	0
27	I provide good suggestions when the student is struggling with schoolwork.	0	0	+2
28	I make schoolwork fun to learn for the student.	-1	-2	+2
29	I almost never manage to provide adequate academic support to the student.	-3	0	0
30	I make sure that the student is doing well during lessons.	+2	+1	+1

^{*} The numbers in bold indicate the distinguishing statements for the factor.

Viewpoint 1: Managing Well

Teachers who defined viewpoint 1 reported that they knew well which tasks and assignments students could accomplish (16 and 22)¹ and they were attentive to noticing and being available when students needed help during lessons (11 and 17). As a characteristic response, teachers sharing this viewpoint experienced that they managed

¹ Numbers in parentheses indicate statement numbers.

to explain things well to students (21).

Table 6: Statements at Positive and Negative Ends of Factor 1

No.	Statements participants "strongly agree with"	Array
1	I care about my student.	+4
7	The student feels secure with me.	+3
19	I show my understanding for the student's struggles.	+3
13	I listen to what the student has to say.	+2
16	I know well the types of tasks the student can accomplish.	+2
26	I show respect for the student's desires and needs.	+2
30	I make sure that the student is doing well during lessons.	+2
No.	Statements participants "strongly disagree with"	Array
22	I give the student assignments and tasks that may make him/her nervous or anxious.	-4
11	It is not always easy for me to notice when the student needs help.	-3
29	I almost never manage to provide adequate academic support to the student.	-3
6	The student and I usually plan lessons together.	-2
8	I give the student choices to work with during lessons.	-2
17	I normally spend more time with other students than with him/her.	-2
20	I allow the student to utilize the working methods that he/she prefers.	-2
No.	Other distinguishing statements	Array
12	I normally tell the student what to do during lessons.	0
21	I explain things well to the student.	1

Statements in italics are the characteristic and distinguishing statements for this factor.

Teachers held an overall positive view on providing academic support. They scored high on providing relational and emotional support (1, 7, 13, 19 and 22) and on being sensitive and involved when students needed help during lessons (11 and 29). They held a moderately positive view on being able to maintain a positive and supportive classroom environment and predictable structures (18, 24 and 30).

Teachers rated neutrally on offering good suggestions to students when they were facing difficulties and on explaining to students why academic work can be difficult for them (9 and 27). Furthermore, these teachers considered how they managed to guide students to solve problems or handle things better at school slightly negatively (3). Issues related to autonomy support were generally negatively rated, suggesting that participants were not rendering appropriate and adequate attention to supporting and promoting students' participation and choices in planning, designing and choosing instructional and curricular activities and contents (6, 8, 14 and 20). Teachers wished they could have more time to support those with LDs (5).

In post-Q-sort interviews, some of the teachers who defined this factor emphasised that students with LDs need a great deal of attention, support and care. As teachers, they need to be highly conscious and knowledgeable about their own role in supporting students. Furthermore, these teachers were conscious about describing students' struggles.

For instance, participant 1 said:

Students with LDs are a diverse group. Some of them are very withdrawn, while others are very agitated and physically more active. Others are cautious, emotional, anxious and inattentive. Some of them are open about their learning difficulties, while others try to hide them. I worry a lot about them. I worry about whether they are getting sufficient attention, care and help. I am constantly on the watch!

Participant 3, too, was explicit about how LDs affect students' schoolwork and motivation: "Because of student's learning difficulties, his motivation in schoolwork fails constantly, he gives up easily...I must remind myself all the time about their difficulties and be there to support him."

Echoing participants 1 and 3, participant 20, reinforced a similar view: "I must be constantly aware of how much help and support the student needs! I must constantly remind myself to be attentive to her helping needs."

Viewpoint 2: Caring Teachers with Insufficient Instructional Knowledge and Skills

The participant teachers defining Factor 2 stressed they spend much time helping students during lessons (5, 17 and 23). They were not, however, fully able to adapt instructional strategies and practices and curricular content (4, 10 and 22). The response patterns suggest these teachers were not confident about understanding the nature and challenges related to LDs (9, 19, 21 and 22). Likewise, they reported they were not able to adequately adapt and adjust tasks, assignments and instructions for students (4, 10, 11, 16 and 22). Furthermore, these teachers considered themselves as not having an accurate idea of students' proficiency level in schoolwork, which might be related to the inadequate tailoring and designing curricular contents, instructional strategies and adaptations (4, 10, 21 and 22).

Table 7: Statements at Positive and Negative Ends of Factor 2*

No.	Statements participants "strongly agree with"	Array
1	I care about my student.	+4
13	I listen to what the student has to say.	+3

No.	Statements participants "strongly agree with"	Array
23	I often go to the student when she/he needs help.	+3
11	It is not always easy for me to notice when the student needs help.	+2
18	I have good and clear set of rules about how the students should behave with one another.	+2
24	I manage to handle differences and harassing behaviour among children in a good way.	+2
5	I spend enough time helping the student.	+2
No.	Statements participants "strongly disagree with"	Array
17	I normally spend more time with other students than with him/her	-4
10	I give the student manageable amount of schoolwork.	-3
20	I allow the student to utilize the working methods that he/she prefers.	-3
4	I give the student manageably difficult schoolwork.	-2
12	I normally tell the student what to do during lessons.	-2
19	I show my understanding for the students' struggles.	-2
28	I make schoolwork fun to learn for the students.	-2
No.	Other distinguishing statements	Array
2	I usually ask the student about what she/he likes to work with.	0
22	I give the student tasks that may make him/her nervous or anxious.	0

^{*} Statements in italics are unique distinguishing statements for Factor 2.

On a positive note, teachers rated relatively high on positive, supportive and predictable classroom environment and management (18, 24 and 30). Similarly, teachers reported they were emotionally sensitive and very supportive of students by displaying patience and concern and listening to what students have to say (1, 13 and 25). Providing guidance and good suggestions were generally neutrally rated, most likely indicating that participants were less concerned about these areas of teacher support (3, 9 and 27). Teachers reported they were not involving students actively and sufficiently in planning and designing instructional and curricular contents, methods and activities (2, 8, 14 and 20). Furthermore, they reported they spend a lot of time helping students during lessons. However, they experienced that it was not always easy to detect when students needed help, implying they desired greater involvement in order to be able to support students adequately (11).

In the post-Q-sort interviews, the teachers defining Factor 2 articulated their views in four different directions. Most participants expressed it was difficult to help some

students, as they avoided asking for or receiving help. Students avoided talking about their problems and were anxious about other students discovering their LDs (participant 17). Participants 15 and 23 explained they did not have enough time to spend with the students with LDs, as they had to devote a lot of time to helping other students, as many other students also needed a lot of help during lessons. Some teachers mentioned that sometimes it was not easy to detect and attend to students' need for help in a timely manner. In addition, the teachers also occasionally found it difficult to perceive and understand students' feelings, needs, thoughts and desires. Some teachers were explicit about their lack of knowledge about LDs and about how to teach students in inclusive settings. All defining participants believed that too little was being done to support students with LDs during lessons.

Viewpoint 3: Ambivalent about Emotional, Behavioural and Environmental Support

Participants defining Factor 3 scored positively in a number of areas of instructional and curricular support, such as monitoring and making schoolwork predictable during lessons. In addition, they reported they were able to make learning fun for students, and they adapted tasks and assignments so students did not feel anxious (12, 20, 22, 27 and 28). However, teachers sharing this viewpoint held distinctly negative views toward certain areas of social, emotional and structural support (3, 9, 13, 18, 24 and 25). For instance, participants scored negatively when describing themselves as displaying patience with students (25) or being attentive to what students had to say (13). Similarly, teachers reported they were not fully capable of managing social and classroom climates in an adequate manner (18 and 24). They felt strongly that they were not able to communicate with students adequately about how to help them understand things better and to perform better at school (3 and 9).

Table 8: Statements at Positive and Negative Ends of Factor 3*

No.	Statements participants "strongly agree with"	Array
1	I care about my student.	+4
12	I normally tell the student what to do during lessons.	+3
19	I show my understanding for student's struggles.	+3
7	The student feels secure with me.	+2
15	I make it easier for the student to learn.	+2
27	I provide good suggestions when the student is struggling with schoolwork.	+2
28	I make schoolwork fun to learn for the student.	+2
No.	Statements participants "strongly disagree with"	Array
9	I explain the reason why he/she is struggling with schoolwork.	-4
3	I often talk to the student about how to handle things better at school.	-3

No.	Statements participants "strongly disagree with"	Array
8	I give the student choices to work with during lessons.	-3
2	I usually ask the student about what she/he likes to work with.	-2
22	I give the student tasks that may make him/her nervous or anxious.	-2
24	I manage to handle differences and harassing behaviour among children in a good way.	-2
25	I am patient with my student.	-2
No.	Other distinguishing statements	Array
13	I listen to what the student has to say.	0
18	I have good and clear sets of rules about how the students should behave with one another.	0
20	I allow the student to utilize the working methods that he/she prefers.	+1

^{*} Statements in italics are uniquely distinguishing statements for Factor 3.

Like the other two viewpoints, teachers defining this factor also rated generally negatively on their role in providing autonomy support, such as involving students in decision-making processes, offering them choices and capitalising on students' interests, experiences and desires (2, 8, 14 and 26). Teachers reported slightly positively on their direct involvement and not spending more time with other non-LD students at the expense of LD students' support needs (17 and 23). These teachers wished they had more time to help students because they felt they did not always have time to identify students in need (5 and 11).

On the positive side, teachers reported that they were caring and displayed good understanding for students' support needs (1 and 19). They believed students felt relatively safe being with them (7). They also believed they understood their students' proficiency levels in schoolwork and therefore knew what tasks and assignments the students could accomplish (15 and 16). However, teachers rated neutrally or slightly negatively on being able to accommodate and adapt the amount of schoolwork and difficulty levels in designing tasks and assignments (4 and 10).

During the post-Q-sort interview sessions, some of the teachers in this group expressed the view that it was not always possible for them to understand what students were thinking or experiencing or when they needed help. For instance, participants 2 and 17 articulated explicitly that this was partly because it was not always easy for them to have a complete overview of what was happening in the classroom during lessons. They also mentioned students' mood swings, which affected how they functioned socially and academically during lessons. This in turn, teachers believed, affected the manner and extent to which teachers could provide support to students. Participant 2, for instance, said, "It is sometimes quite challenging to motivate the student to carry out a task during lessons."

Some of the participants reported that lack of resources and additional teachers during lessons was one of the reasons for not adequately managing to reach out to students who needed a lot of attention and support. Teachers also pointed out that the proficiency gap between the student with LD and other non-LD students was so distinct and large in some subjects they found it very challenging to adapt and differentiate instructional strategies that would fit and include all students in the class (participants 2 and 18). Some participants partially attributed this gap to late detection, diagnosis and interventions. Participant 2 was articulate about this: "The student should have been diagnosed much earlier. For this reason, he missed some years of extra and special educational support or intervention."

Discussion

The purpose of this study was to explore teachers' perceptions of how they manage to support students with LDs in regular classrooms. The findings show teachers cluster around three main constellations of viewpoints, or factors, regarding their perceptions of how they manage to support students with LDs in inclusive classrooms.

Consensus among Teachers

In all three factors, the statement "I care about my students" was rated highest. The statements "The student feels secure with me" and "I make sure that the student is doing well during lessons" had moderate to strong ratings. These results indicate that teachers place significant emphasis on their role as caregivers, being concerned for students' well-being and emotionally sensitive to struggling students.

Instructional and Curricular Support

The findings of this study demonstrate that teachers perceive their own ability to support students with curricular and instructional adaptations in three major different ways. The first category of teachers (Viewpoint 1) evaluated themselves to have adequately understood students' learning and support needs, and they believed they manage to address those needs adequately. The second category of teachers (Viewpoint 3) seemed to feel partially successful in making curricular and instructional adaptations and adjustments. Finally, the third group of teachers (Viewpoint 2) were explicit about not being able to make appropriate adequate curricular and instructional adaptations and accommodations.

The post-Q-sort interviews revealed that teachers who perceived themselves to be managing well in supporting students tended to be highly conscious about students' need for a great deal of attention, care and support. They constantly reminded themselves of the possible impacts of LDs on students' motivation, learning and academic achievements. These teachers held a high focus on their own role in maximising support sensitively and adequately. These findings suggest that teachers who are very conscious and sensitive about students' additional needs and determined to address them properly perceive themselves as managing well in providing learning and instructional support in inclusive classrooms. Previous studies have shown that teachers' determination, belief and attitudes towards students' learning needs and their own efficacy beliefs are powerful mechanisms in guiding them to determine their teaching and support practices in inclusive classrooms (Avramidis & Norwich, 2002; Jordan, et al., 2009; Jordan & Stanovich, 2003; Pajares, 1992). Teachers who represent this view were the youngest in mean age (36.8 years) and had the shortest teaching experience compared with the other two groups. These findings seem to partially support another study documented in a review conducted by (De Boer, et al., 2011).

Teachers who shared Viewpoint 2 were explicit about their insufficient knowledge

about understanding the nature of students' LDs and how to adapt instructions in inclusive classrooms. Teachers in this group had the longest teaching experience and the longest years of acquaintance with students with LDs. These results are contrary to the findings of (De Boer, et al., 2011), which highlighted that teachers with longer teaching experience in inclusive classrooms and longer experience with students with LDs hold positive views and attitudes toward teaching students in inclusive classrooms. The post-Q-sort interviews revealed these teachers were highly concerned about students' uncooperative and evasive behaviour, and they were explicit about their insufficient knowledge about LDs and skills to teach students in inclusive classrooms. These results reveal some paradoxes inherent in and complexities underlying teaching and support practices in inclusive classrooms. Contrary to some of the earlier findings, longer teaching experience in inclusive classroom does not necessarily make teachers realize and experience that they are well equipped to have a better understanding of LDs, students' learning needs and how to design instructional strategies.

Teachers expressing ambivalence about emotional, behavioural and environmental support, too, expressed some difficulties in adapting instructions and curricular content for several reasons. These teachers attributed students' academic achievement and learning lag both to the conditions of LDs as well as to systemic and organizational issues, such as delays in referrals and diagnoses, interventions and resource allocation procedures and practices. Teachers also cited students' mood swings as a challenging issue that seemed to affect students' motivation, emotional states, receptivity and working endurance, which made it difficult for them to reach students and support their learning needs. For these teachers, finding the right balance between addressing students' motivational and emotional needs and instructional strategies was clearly a challenging issue. Some of these teachers, at times, found themselves at a loss about how to address the situation or how to find workable ways to support students. These teachers viewed students' behavioural and motivational issues as a major obstacle affecting teachers' ability to adequately support students with their learning needs in inclusive classrooms. Teachers in this group had the highest mean age (49.3 years), with the shortest acquaintance with students with LDs (see Table 4).

Social, Emotional and Behavioural Support

Maintaining a good teacher-student relationship is of paramount significance for students' motivation and sense of security and well-being (Cornelius-White, 2007; Sabol & Pianta, 2012). The patterns of results indicate variations in teachers' perceptions of how they manage to provide emotional, social and behavioural support in inclusive classrooms. Teachers across all three factors perceived themselves as caring and supportive. However, they maintained divergent views on their ability to display patience and understanding for the difficulties students were facing. For instance, teachers who were ambivalent about emotional, behavioural and environmental support admitted to having difficulties exhibiting patience and understanding for students' struggles. Previous studies have reported similar findings on patience and understanding among teachers with struggling students (Glazzard, 2010; McNulty, 2003; Nielsen, 2011). In addition, teachers' perceptions on this issue coincide with the findings of a recent study of students with LDs in which a group of students strongly felt their teachers were insensitive to their difficulties and support needs (Subba, Bru, & Thorsen, 2017). Teachers also held divergent viewpoints about their ability to recognise and address students' needs during lessons in a timely manner. Some teachers seemed to be very attentive and sensitive, constantly on alert to detect and help students promptly and effectively, while others had little time and resources to identify and be available to students' needs during lessons. This response pattern resonates with a recent study in which students with LDs reported their teachers did not recognise when they needed help and were not spending sufficient time helping them (Subba, et al., 2017). Some teachers wished they could have done more, even though they were spending a great deal of time helping these students in the classroom.

Teachers held divergent views about their own classroom management practices and their ability to provide good behavioural and environmental support. Some teachers believed they were not able to handle behavioural and classroom management issues adequately. In a cross-cultural study, (Malinen, et al., 2013) observed diversity among teachers' efficacy beliefs in classroom management and behavioural support. The present study indicates this diversity is present in intracultural contexts as well. These environmental and structural issues are significant for students to experience a sense of security, control and competence, which promotes their sense of motivation and psychological well-being (Marzano, et al., 2005; Skinner & Wellborn, 1997; Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006).

Results from this study indicate some teachers still find it difficult to provide satisfactory emotional, behavioural and social support for students with LDs. Previous studies have sufficiently highlighted the significance of relational and emotional support for students' psychological and behavioural functioning and well-being. For this reason, these findings based on teachers' Q sorting raise concerns for the practices of inservice teachers and for teacher education.

Little Emphasis on Autonomy Support

Autonomy support is about empowering students, respecting them as individuals and giving them proper opportunities to be in control and experience learner-centred teaching (Cornelius-White, 2007; Reeve, Jang, Carrell, Jeon, & Barch, 2004; Ryan & Deci, 2000). This support mechanism is associated with the promotion of intrinsic motivation, engagement and sense of control and psychological well-being in students. Results from this study suggest that teachers seem to attach comparatively less significance in their support practices to autonomy support for students with LDs. These results are consistent with findings from a recent Q study on how students with LDs perceive teachers support (Subba, et al., 2017).

Conclusion

The current study shows that teachers' support practices vary significantly among teachers. The findings provide some evidence to propose that many teachers perceive their own support practices as inadequate in several key areas of teaching support, such as adapting instructions and curricular designs and providing emotional, behavioural, guidance and autonomy support. Considering a higher prevalence rate of mental health problems among children and youths with LDs, these findings suggest further studies to explore closer links between teacher support and mental health issues in students with LDs

Q methodology's strength in revealing these issues lies in how Q-sorting situations systematically require teachers to prioritize and make choices in accordance with what they strongly and personally feel and believe about their own support practices (Brown, 1980; Watts & Stenner, 2012). The three factors (viewpoints) identified in this study demonstrate that when participating teachers were required to make priorities and personal choices about what mattered most to them, they chose three different modes of perceiving how they manage to support students in inclusive classrooms. This is the unique strength of Q methodology. At the same time, a note of caution is required here.

Exactly where does Q methodology's strength in techniques of data collection and analysis lie? And what is the role of the principle of forced choice that is typically part of the Q-sorting procedure? Given the forced-choice procedure, it is inevitable that toward the end of the sorting session some statements gradually tend to be assigned a lower priority, eventually placed in the neutral or less salient columns. It is not always easy to determine why these statements get placed there. Is it really because participants give so little priority to them or do they get placed there partly or mainly because these were the only slots that were available towards the end of the Q sorting session? This may present an epistemological challenge: Did teachers really mean they were not managing to support students adequately in certain areas of teacher support, or were they obliged to place the statements there as they had no other alternatives left? In other words, is it possibly the case that the nature of Q methodology's data collection techniques compel participants to eventually choose the neutral rank values or positions for some of the statements not because they were less significant or important to them but because there were not enough remaining slots to assign some of the statements higher ranking values? Thus, it could be argued that some of the viewpoints arrayed in the neutral zones are to be found there as the result of a data collection procedure that allows participants very few options to choose for statements, particularly towards the end of sorting sessions, where each Q statement competes with the rest of the remaining statements in the Q set for a specific rank value, temporally and spatially. Here one could launch a methodological argument: What if the participants could freely and openly assign any statement any rank value of their choice throughout the Q sorting process? Would the outcome be the same, or would such a research design replicate the findings or result patterns derived from this study? Such an argument suggests the need for further research employing alternative research designs. At the same time it is acknowledged that employing an alternative procedure or research design could lead to the loss of specific and important Q-sorting priorities and of the structures that emerge from the sorting, one of Q methodology's essential and distinguishing features in its exploration of subjectivity. These findings have implications for teacher education and professional development programs for in-service teachers, because many teachers find their own teaching skills and support practices in inclusive classrooms are inadequate. The findings in the current study indicate that measures to develop knowledge and skills among teachers should target both instructional competence and competence to understand and address students' social, emotional, behavioural and autonomy support needs.

References

- Ainscow, M., & César, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education*, 21(3), 231-238.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, 20(2), 191-211.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, *17*(2), 129-147.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*: New Haven, CT: Yale University Press.

- Bruggink, M., Meijer, W., Goei, S. L., & Koot, H. M. (2013). Teachers' perceptions of additional support needs of students in mainstream primary education. *Learning and Individual Differences*, 30, 163-169.
- Buell, M. J., Hallam, R., Gamel-McCormick, M., & Scheer, S. (1999). A survey of general and special education teachers' perceptions and inservice needs concerning inclusion. *International Journal of Disability, Development and Education*, 46(2), 143-156.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1), 113-143.
- De Boer, A., Pijl, S. J., & Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353.
- Dunkel-Schetter, C., Folkman, S., & Lazarus, R. S. (1987). Correlates of social support receipt. *Journal of Personality and Social Psychology*, 53(1), 71-80.
- Forlin, C. (2006). Inclusive education in Australia ten years after Salamanca. *European Journal of Psychology of Education*, 21(3), 265-277.
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1), 17-32.
- Fuchs, D., Mock, D., Morgan, P. L., & Young, C. L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice*, 18(3), 157-171.
- Glazzard, J. (2010). The impact of dyslexia on pupils' self-esteem. *Support for Learning*, 25(2), 63-69.
- Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice*, 18(4), 222-236.
- Hale, J., Alfonso, V., Berninger, V., Bracken, B., Christo, C., Clark, E., . . . Yalof, J. (2010). Critical issues in response-to-intervention, comprehensive evaluation, and specific learning disabilities identification and intervention: An expert white paper consensus. *Learning Disability Quarterly*, 33(3), 223-236.
- Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). Preparing teachers for inclusive classrooms. *Teaching and Teacher Education*, 25(4), 535-542.
- Jordan, A., & Stanovich, P. (2003). Teachers' personal epistemological beliefs about students with disabilities as indicators of effective teaching practices. *Journal of Research in Special Educational Needs*, 3(1), 1-14.
- Kavale, K. A., Holdnack, J. A., & Mostert, M. P. (2006). Responsiveness to intervention and the identification of specific learning disability: A critique and alternative proposal. *Learning Disability Quarterly*, 29(2), 113-127.
- Kerres Malecki, C., & Kilpatrick Demary, M. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools*, 39(1), 1-18.
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273.
- Klingner, J. K., & Vaughn, S. (1999). Students' perceptions of instruction in inclusion classrooms: Implications for students with learning disabilities. *Exceptional Children*, 66(1), 23-37.
- Malinen, O.-P., Savolainen, H., Engelbrecht, P., Xu, J., Nel, M., Nel, N., & Tlale, D. (2013). Exploring teacher self-efficacy for inclusive practices in three diverse countries. *Teaching and Teacher Education*, 33, 34-44.
- Marzano, R. J., Gaddy, B. B., & Foseid, M. C. (2005). A handbook for classroom management that works: Alexandria, VA: ASCD.

- McIntyre, D. (2009). The difficulties of inclusive pedagogy for initial teacher education and some thoughts on the way forward. *Teaching and Teacher Education*, 25(4), 602-608.
- McKeown, B., & Thomas, D. B. (2013). *Q methodology*. (2nd ed.): Thousand Oaks, CA: Sage .
- McLeskey, J., & Waldron, N. L. (2002). Inclusion and school change: Teacher perceptions regarding curricular and instructional adaptations. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 25(1), 41-54.
- McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities*, 36(4), 363-381.
- Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (2000). *Mental health of children and adolescents in Great Britain*: London: TSO.
- Nelson, J. M., & Harwood, H. (2011). Learning disabilities and anxiety: A meta-analysis. *Journal of Learning Disabilities*, 44(1), 3-17.
- Nielsen, C. (2011). The most important thing: Students with reading and writing difficulties talk about their experiences of teachers' treatment and guidance. *Scandinavian Journal of Educational Research*, 55(5), 551-565.
- O'Donoghue, T. A., & Chalmers, R. (2000). How teachers manage their work in inclusive classrooms. *Teaching and Teacher Education*, 16(8), 889-904.
- O'Rourke, J., & Houghton, S. (2008). Perceptions of Secondary School Students with Mild Disabilities to the Academic and Social Support Mechanisms Implemented in Regular Classrooms. *International Journal of Disability, Development and Education*, 55(3), 227-237.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332.
- Putwain, D. (2007). Researching academic stress and anxiety in students: some methodological considerations. *British Educational Research Journal*, 33(2), 207-219.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion*, 28(2), 147-169.
- Roll-Pettersson, L. (2008). Teacher's perceived efficacy and the inclusion of a pupil with dyslexia or mild mental retardation: Findings from Sweden. *Education and Training in Developmental Disabilities*, 43(2), 174-185.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Sabol, T. J., & Pianta, R. C. (2012). Recent trends in research on teacher—child relationships. *Attachment & Human Development, 14*(3), 213-231.
- Sarason, I. G., & Sarason, B. R. (2009). Social support: Mapping the construct. [Article]. *Journal of Social & Personal Relationships*, 26(1), 113-120. doi: 10.1177/0265407509105526
- Schmolk, P., & Atkinson, J. (2011). PQMethod (Version 2.35)[Computer Software].
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12-21.
- Skinner, E. A., & Wellborn, J. G. (1997). Children's coping in the academic domain. *Handbook of children's coping with common stressors: Linking theory and intervention*, (pp. 387-422). New York: Plenum.
- Soodak, L. C. (2003). Classroom management in inclusive settings. *Theory into Practice*, 42(4), 327-333.
- Stephenson, W. (1953). The study of behavior; Q-technique and its methodology. Chicago: University of Chicago Press.

- Subba, L., Bru, E., & Thorsen, A. A. (2016). Perceived teacher support among primary and lower secondary school students with learning difficulties. *Operant Subjectivity 38*(1), 15 34. doi: 10.15133/j.os.2016.002
- Svetaz, M. V., Ireland, M., & Blum, R. (2000). Adolescents with learning disabilities: Risk and protective factors associated with emotional well-being: Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, 27(5), 340-348.
- UNESCO. (1994). The Salamanca statement and framework for action on special needs education. Paris: UNESCO.
- Watts, S., & Stenner, P. (2012). Doing Q methodological research: Theory, method & interpretation: London: Sage.
- World Health Organization. (2012). *ICD-10: International statistical classification of diseases and related health problems*. Geneva: World Health Organization.
- Wubbels, T., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2006). An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. In C. Evertson, & C. S Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 1161-1191). New York: Erlbaum.
- Ysseldyke, J., Thurlow, M., Bielinski, J., House, A., Moody, M., & Haigh, J. (2001). The relationship between instructional and assessment accommodations in an inclusive state accountability system. *Journal of Learning Disabilities*, 34(3), 212-220.
- Yuen, M., Westwood, P., & Wong, G. (2005). Meeting the Needs of Students with Specific Learning Difficulties in the Mainstream Education System: Data from Primary School Teachers in Hong Kong. *International Journal of Special Education*, 20(1), 67-76.