Teacher Perspectives on Inclusive Education in Rural Alberta, Canada

Donna McGhie-Richmond

University of Victoria

Angela Irvine
University of Alberta

Tim Loreman

Concordia University College of Alberta

Juna Lea Cizman
University of Victoria

Judy Lupart
University of Alberta

Abstract

The results of 123 elementary-to-secondary teacher surveys and 14 in-depth qualitative interviews examining teachers' perspectives regarding inclusion in a rural school district are reported. Four features of inclusive education from the perspective of teachers are elaborated: (1) attitudes toward inclusion; (2) supportive communication and collaboration; (3) classroom community; and (4) support and training. Five key themes emerged from the qualitative interview that enriched survey findings of teachers' perspectives. The results of this study corroborate existing research and indicate some differences between elementary and secondary teachers' understanding and perceptions, with respect to some of the key themes.

Keywords: Inclusive education, teacher perspectives, rural schools.

Précis/Résumé

Les résultats de 123 sondages auprès des enseignants du primaire au secondaire et 14entretiens qualitatifs approfondis examinant les perspectives des enseignants en matière d'inclusion dans un district scolaire rural sont signalés. Quatre aspects de l'éducation inclusive du point de vue des enseignants sont élaborés: (1) les attitudes envers l'inclusion, (2) la communication de soutien et de coopération; communauté scolaire (3) et (4) le soutien et la formation. Cinq thèmes clés sont ressortis de l'entrevue qualitative qui ont enrichi les résultats du sondage de points de vue des enseignants. Les résultats de cette étude corroborent les recherches existantes et indiquent quelques différences entre la compréhension des enseignants du primaire et du secondaire et les perceptions, à l'égard de quelques-uns des thèmes clés.

Mots-clés: Éducation inclusive, les perspectives des enseignants, des écoles rurales.

Author's Note

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada.

Introduction

Most provincial and territorial education authorities in Canada mandate or strongly recommend that inclusion be the delivery model followed by schools. Schools that claim to follow an inclusive model take steps to ensure that all students are welcomed, valued, and learn together in regular education classrooms, regardless of their particular learning characteristics and needs. In inclusive classrooms, teachers adapt their instructional practices so that all students, including students with special learning needs, achieve in ways that are meaningful (Andrews & Lupart, 2000; Hutchinson, 2007; Loreman, 1999).

While inclusive education is an increasingly popular paradigm for the education of all students, examples of successful inclusion in practice, especially within a larger context such as a school division, are not well represented in the literature. There has been considerable research focused on classroom teaching practices within inclusive urban school settings wherein students with a range of learner needs are being taught (Jordan & Stanovich, 2003, 2004; McGhie-Richmond, Underwood, & Jordan, 2007; Stanovich & Jordan, 2004) and some research has examined various stakeholder attitudes towards inclusion (Bunch, Lupart, & Brown, 1997; Lupart, Whitley, Odishaw, & Macdonald, 2006). However, in Canada there is a lack of empirical research examining inclusion in a comprehensive manner across larger school districts and especially those in rural areas. Much of what has been done comes from a paradigm of 'special education' rather than 'inclusion' and fails to recognize the broader contexts of inclusion (Thomas, 1999; Vlachou, 2004). As provinces and school districts move towards inclusive educational systems it becomes increasingly important to identify and describe factors that contribute to the success of inclusion.

This study examines the inclusive policies, attitudes, and practices of a *particular* school district. The school district has a prominent policy of inclusion with all students placed in regular education classrooms. There are no segregated classrooms based on disability operating in the district. While funding is distributed to schools based on student coding according to the Alberta Education Special Education Coding Criteria, schools are accountable for meeting the needs of all students rather than providing specific services to students who are coded. The result is that schools are able to move their resources to support students as soon as needs are identified rather than waiting for formal assessment. Some students who struggle who do not have a formal code receive much more support than those who have a code and who are functioning successfully in the classroom. The district has invested in extensive professional development focused on Differentiated Instruction, Response to Intervention, Assistive Technology and Assessment for Learning. District level Assessment for Learning coaches provide 'at elbow' support to teachers. From early education to high school levels, the district has strong collaborative ties with community support services to support student transitions and programming.

The school's efforts and commitment to inclusive practice has resulted in being identified as a "change leader" in the province by the provincial education ministry (Inclusive Education, 2011). Furthermore, the school district invited the investigators to partner in the study with the objective of adding empirical evidence to their claims of inclusiveness, as well as to identify effective practices and areas for improvement. In itself, this initiative demonstrates the district's commitment to inclusion, transparency, and continuous improvement. The school district involved in this study is an ideal district within which to examine factors that contribute to inclusive education. The rural school district is operating a district-wide program of inclusive education, and this research study aims to elaborate the reasons for its success.

This study is part of of a broader study situated within both quantitative and qualitative research paradigms, examining inclusion in the school district (see for example Irvine, Lupart, Loreman & McGhie-Richmond, 2010; Loreman, Lupart, McGhie-Richmond, & Barber, 2008; Loreman, McGhie-Richmond, Barber & Lupart, 2008; McGhie-Richmond, Barber, Lupart, & Loreman, 2009). The initial quantitative component of the study sought the input of a variety of stakeholder groups. These stakeholder groups comprised students, parents, program assistants, school support staff, administrators, and teachers working within the school district. Stakeholder input provided data to test and substantiate hypotheses about how inclusive education practices occur in the school district. The second phase of the broader study then focused on a series of case studies examining inclusion from the perspective of students with and without identified special needs. The case study students with a special need were determined by the District's Special Education Director in collaboration with school Principals based upon criteria provided by the researchers. The criteria included students who (a) completed the Phase 1 student survey; (b) were formally coded as having a special learning need based on the Alberta Education Special Education Coding Criteria; (c) represented a range of special needs; (d) had an Individualized Program Plan; (e) were willing and whose parents had provided consent for them to participate in the study. Once the case study students were identified, all key participants in the students' education were contacted and asked to participate as informants for the case studies. This phase solicited the views of the individual participating students and their parents/caregivers, teachers, program assistants, school support staff and administrators through individual in-depth qualitative interviews. This paper presents the district-wide results of teacher views on inclusive education in their rural Canadian district as measured by the Teacher Perceptions of Inclusion in Rural Canada (TPIRC) scale and the individual perspectives of the

teachers who taught the students with identified special needs based upon the qualitative interviews.

Teachers and inclusive education

Teachers are central to realizing inclusion. In today's inclusive schools, general education classroom and special education teachers may work together to plan and deliver instructional programs that are considered to meet the needs of students. With the advent of inclusive policy, districts and schools provide a variety of direct and indirect means for classroom teachers to access the expertise and supports required to address the diversity of student needs present in their classrooms. Among these supports are educational assistants, cooperative or co-teaching arrangements, consulting teachers, and resource programs. Collaboration among teachers, support professionals, administrators, and parents figures prominently in the research and pedagogical literature and is inarguably an essential feature of inclusive schools (Burnett & Peters-Johnson, 2004; Friend & Cook, 2007; Villa & Thousand 2005), ultimately benefitting students (Idol, 2006) and teachers' professional development (Miller, Ray, Dove, & Kenreich, 2000).

Implementing inclusion is not without challenges, despite generally positive philosophical support, progressive school district policies, and school support services.

Avramidis and Norwich (2002) provide a review of studies examining factors impacting general classroom teachers when it comes to the successful implementation of inclusion. One of the review findings reveal that in general, teachers have been more likely to favor inclusion of some students over others depending upon the type and extent of disability. Broadly, their review describes that teachers are more accepting of students with physical disabilities than cognitive or

behavioural disabilities (Avramidis & Norwich 2002). Similar research further corroborates this finding. For example, Subban and Sharma (2005) found that although teachers generally held favourable attitudes towards inclusion, they were hesitant to include students with more severe disabilities. The defining factor that seemed to influence this preference was the manageability of the student (Avramidis & Norwich 2002). Teachers favour the inclusion of students whom they can manage over those students whom they perceive to be more disruptive in the classroom (Idol, 2006).

Numerous teacher-related variables have been shown to influence the implementation of inclusion in the classroom. In their review, Avramidis and Norwich (2002), found that younger teachers and those with fewer years' teaching experience are more likely to be positive about inclusion. Parasuram (2006) found a similar result, suggesting younger, less experienced teachers are more likely to adapt their skills and resources to accommodate all types of students. In terms of environmental variables, financial and personnel support to regular classroom teachers were found to be the most consistent predictor of successful inclusion (Avramidis & Norwich, 2002). Research reveals that school staff believe that they are under-prepared to deal with students with special needs (Forlin & Chambers, 2011; Kantor, 2011). Reports of under-funding, lack of teacher preparation and growing classroom demands are cited as persistent obstacles to successful inclusion (Glazzard, 2011; Idol, 2006; Loreman & Deppeler, 2002; Winzer & Kas, 2011).

A growing body of research suggests that positive teacher attitudes towards inclusion are the most important factor governing the success of inclusive education (Jordan & Stanovich, 2003, 2004; Moberg, Zumberg, & Reinmaa, 1997; Murphy, 1996; Sharma, Forlin & Loreman, 2008). Beliefs and attitudes about inclusion are highly varied within the education community

and consequently highly influential as to whether or not inclusion is successful in classrooms and schools (Wilkins & Nietfield, 2004). In fact, teachers' resistance to inclusion is one of the most challenging aspects of implementing an inclusive policy (Avramadis & Norwich, 2002; Brighton, 2003; Dyson, Farrell, Polat, Hutcheson, & Gallannaugh, 2004).

It may not be surprising that special education teachers typically have a more positive outlook and attitude towards inclusion than general education teachers (Woolfson, Grant & Campbell, 2007). Not only is it likely that special education teachers are more positive towards inclusion because they have a more positive perspective about the abilities of children with special needs (Woolfson et. al., 2007), it is also likely that they have had more training and, therefore, increased confidence about teaching within an inclusive classroom (Buell, Hallam & Gamel-McCormich, 1999; Subban & Sharma, 2006). Special education teachers often see themselves as supporting the general classroom teacher in the implementation of inclusion (Bean, Hamilton & Zigmond, 1994); however the daily learning experiences of all students in each classroom is ultimately dependent on the classroom teacher.

Negative teacher attitudes toward inclusion exist for various reasons. Some classroom teachers believe that students with disabilities included in the classroom detract from the teachers' time with other students, and consequently are less effective in teaching their non-disabled students (Jordan & Stanovich, 2004; McGhie-Richmond, Underwood, & Jordan, 2007; Stanovich & Jordan, 1998). Conversely, some teachers may view students with disabilities as beyond their personal instructional responsibility (Stanovich & Jordan, 1998; 2004). In summary, research points to a number of significant student, teacher, and environmental factors that contribute to the formation and maintenance of teacher beliefs, which consequently impact the eventual success of inclusion.

Objective

The aim of this study was to investigate the views of teachers working in a fully inclusive school district on important issues related to inclusive education in a rural Canadian context. The specific objectives for this study are 1) to identify the views of teachers relative to inclusive education in the district; 2) to examine and explain any differences between the inclusive school experiences of teachers teaching at various levels within the district and; 3) to examine and explain any other significant differences in responses based on selected demographic variables (specifically, gender, special learning need, and grade level).

Methods and Methodology

The school district that was the focus of this study covers a wide geographic area in central Alberta, Canada. A diversity of industry exists in the region including, agriculture, lumber, and gas and oil. Approximately 4,000 students attend grades Kindergarten to twelve (K-12) in 16 regional schools scattered throughout the district. At the time of the study there were 231 practicing teachers within the district.

Quantitative Methods

Instrumentation. The Diversity, Individual Development, Differentiation survey (DIDDs), developed by Lupart, Whitley, Odishaw, & McDonald (2006), was chosen as a way to examine the views of teachers, both for overall school functioning and specifically for inclusion. As noted by Lupart et al. (2006), Loreman, Lupart et al. (2008), and other papers in this series the original DIDDs teacher surveys covered a range of themes including attitudes toward inclusion, philosophy of learning, school climate, collaboration among staff, parent–school

communication, school discipline practices, resource availability, instructional and assessment practices, and professional development. A review of the results of the Lupart et al. (2006) study led to a modification to the DIDDs survey. The modification was undertaken by an experienced group of researchers and graduate students who were familiar with Alberta's inclusive practices. In addition, a sample of district Student Services staff and teachers reviewed the instrument for clarity of the survey items, as well as relevant terminology and concepts used within the district. Survey items were randomly ordered with some items reverse coded. A high mean score on an item, factor, or the full scale indicated a positive response (taking into account reverse coding).

Following implementation of the survey, the instrument was further modified through a process of data reduction (see Loreman, Lupart, et al., 2008 and McGhie-Richmond, et al., 2009). It is this modified scale, known as the Teacher Perceptions of Inclusion in Rural Canada (TPIRC) scale, which is used as the basis for reporting the quantitative results of the teacher survey.

This scale measures four components that are important to inclusive education from the point of view of teachers. Factor one addresses attitudes towards inclusion; factor two captures the essence of supportive communication and cooperation; factor three is about developing a supportive classroom community; and factor four accounts for support and training. The survey used a 5-point Likert scale of 'Strongly disagree', 'Disagree', 'Neither agree nor disagree', 'Agree', and 'Strongly agree'. A high mean score on an item, factor, or the full scale indicated a positive response (taking into account items requiring reverse coding).

The psychometric properties of this instrument are discussed in greater detail in Loreman, Lupart et al. (2008) and McGhie-Richmond, et al., (2009). However, the four-component solution explained a total of 62.11% of the total variance (Component 1 = 34.37%; Component 2

= 10.24%; Component 3 = 9.02%; Component 4 = 8.48%). A high level of sampling adequacy (Kaiser-Meyer-Oklin index = 0.817) (Kaiser 1970, 1974) and highly significant measure of sphericity was evident (Bartlett's (1954) Test of Sphericity; $\chi^2(78) = 451.9$; prob. = 0.000). Cronbach's (1951) alpha for the scale was calculated at 0.84.

Procedures. All teachers within the school district were informed of the broader purposes, aims, and activities of the research study as well as the quantitative questionnaire component of the study. This information was shared through presentations at district-wide staff meetings, as well as printed documentation describing the study, and communications by school district liaisons (i.e., District Student Services staff). All teachers were invited to complete the questionnaire that was administered on-line to consenting teachers in the first semester.

Qualitative Methods

Paradigmatic background. The qualitative methods used in this research have been described in Irvine, Lupart, Loreman, and McGhie-Richmond (2010). A constructivist paradigm was employed as the guiding model for the qualitative component of this study. Meaning is mediated through the researchers' perceptions and their interactions with the participants are what constitute the inquiry (Creswell, 2009). The case studies sought to deepen and enrich the understanding that emerged from the survey results. As researchers working within a qualitative paradigm we explored the meaning teacher participants attributed to their experiences of inclusion through in-depth interviews.

Sample. The teacher participants in the qualitative component of this inquiry taught in four schools in the district, and as described previously, were responsible for teaching a student with an identified special need who was a participant in the student case study component of the

broader study. The special needs represented in this sample of students were autism, mild cognitive disabilities, global developmental delay, and gifted/talented. While the range of special needs was deliberately quite diverse, the commonality was that each student was provided with individualized education through an Individualized Program Plan and received educational services to assist them with their particular needs. Of the fourteen teachers participating in this component of the study, nine taught in an elementary school setting and five taught in a junior high/high school setting, and more than half taught multiple grades. Table 1 summarizes this information.

Table 1: *Grades taught by teacher participants*

Teacher ^a	Grade level taught												
	K	1	2	3	4	5	6	7	8	9	10	11	12
E1		X											
E2		X	X										
E3					X								
E4					X	X	X						
E5					X	X	X						
E6					X	X	X						
E7							X						
E8							X						
E9	X	X	X	X	X	X	X						
S 1								X	X				
S2										X	X	X	X
S3										X	X	X	X
S4								X	X	X	X	X	X
S5								X	X	X	X	X	X

^a E represents elementary teacher; S represents secondary teacher.

Interview Methods and Analysis. Following the process described previously in Irvine et al., (2010) each teacher participated in an audio-taped, open-ended, semi-structured interview focused on the inclusive practices in their schools and how they relate to the experiences of the focus student in the study. The length of each interview ranged from 60 to 90 minutes and took place at the teachers' respective school. The interview questions served as a guide, but allowed the participants the freedom to explore and recollect their own personal experiences and ideas (see Appendix A for sample questions). Following each interview, all audiotapes were transcribed verbatim and the transcripts were sent to the participants to be checked for clarity and accuracy. After member checks were completed, all transcripts were uploaded into QSR International's NVivo 8 qualitative data analysis software for data organization and coding. A thematic analysis (Kvale, 1996) was completed and common themes and trends within and across interviews were identified. The researchers then revisited the data in an attempt to make sense of the "stories" and accurately represent the perspectives of the teachers.

Results

The quantitative and qualitative results of this study are reported separately. They are then merged in the interpretation and discussion sections of this paper.

Quantitative Results

One hundred and twenty three teachers returned completed surveys. The surveys were completed by approximately 55% of teachers employed in the district. The participating teachers taught in two secondary schools (Gr. 7-12); three K-9/10 schools; six elementary (Gr. K-6)

schools; and one middle school (Gr. 7-9). The grade levels taught by participating teachers are depicted in Table 2. Note that many teachers taught multiple grade levels (62%) and five teachers did not report which grade level they taught.

Table 2: Grade Levels Taught by Participating Teachers Reported in McGhie-Richmond et al. (2009)

		% of total
Grade level	N	teachers
Kindergarten	10	8.1%
Gr1	19	15.4%
Gr2	23	18.7%
Gr3	14	11.4%
Gr4	15	12.2%
Gr5	13	10.6%
Gr6	17	13.8%
Gr7	23	18.7%
Gr8	26	21.1%
Gr9	30	24.4%
Gr10	42	34.1%
Gr11	42	34.1%
Gr12	38	30.9%

Note. These figures include teachers who taught more than one grade level.

The mean score for the entire scale was calculated at 3.61 (SD = 0.563) suggesting an overall positive view of the district's inclusive environment. Each of the four factors demonstrated strong conceptual links, as well as being the most statistically meaningful solution. Mean scores for each factor and for individual items retained in the factors are summarized in Table 3 (higher scores represent more positive responses):

While overall responses on each of the subscales were positive, they were only marginally positive on Factor One (Attitudes towards inclusion) and Factor Four (Support and

training). With a mean of 2.91, responses were relatively neutral overall on the question of whether the inclusion of students with special needs detracts from the education of other students. On the positive side, teachers indicated that their schools were supportive communities with good levels of communication and cooperation.

Table 3: The TPIRC Scale Including Factors and Items Reported with Means and Standard Deviations

Item	M	SD
Factor One: Attitudes towards inclusion	3.17	.912
Inclusion (the participation of students with special needs in regular	2.25	1.040
classrooms) is a benefit for all students.	3.25	1.048
Including students with special needs in the regular classroom takes away		
from the education of other students. (reversed)	2.91	1.140
I believe inclusion provides students with special needs with the		
opportunity to reveal their learning potential.	3.52	1.046
Students with special needs can have greater success in regular classes.	3.10	1.085
Factor Two: Supportive communication and cooperation	3.98	1.085
This school has clear safe and caring school policy statements.	4.09	.768
Generally there is good cooperation this year between teachers and		
parents.	3.91	.704
I believe I have good communication with my students' parents.	3.96	.655
Factor Three: Classroom community	4.05	.699
I do not greatly value the knowledge that parents have about their		
children. (reversed)	4.24	.885
children. (reversed)	4.24	.003
Developing a supportive school community is as important as raising		
academic achievement.	4.31	.665
I do not involve my students in formulating class rules (reversed)	3.61	1.084
Factor Four: Support and training	3.31	.729
I have not received adequate training in devising and managing		
collaborative learning activities.	3.38	1.002
I am well supported in my teaching by [the school district] student		
services.	3.29	1.014
	3.32	1.049

My school does not provide sufficient professional development in the area of inclusive education (reversed)

In addition, a deeper analysis revealed noteworthy results with respect to two dimensions:

(1) elementary and secondary teachers' views; and (2) differences between schools.

Elementary and secondary teacher views. A comparison of the scores in each of the factors and on the entire scale for elementary and secondary teachers was conducted through a series of in independent-samples t-tests. There were significant differences at the p= <.01 level on all Factors as is shown in Table 4, with elementary teachers being significantly more positive on the scale overall and on all factors. Indeed, one area of concern is the response of secondary teachers to Factor One (Attitudes towards inclusion). Secondary teachers' responses were negative overall. Given the eta squared values, the degree of variance the school level taught accounts for, is small to moderate (Ferguson, 2009).

Considering inclusive schools need staff to work together and accept responsibility, a key item on the survey is, "I am responsible for making the school more inclusive." This item had a relatively low overall mean score of 3.62 (SD = .881) on the sample of all teachers. An independent-samples t-test was conducted to compare the scores on this item for elementary and secondary teachers. There was no significant difference in scores for elementary and secondary teachers on this item.

Table 4: T-test for the Four Subfactors Comparing Elementary and Secondary teachers

	Teacher	Tanchar				P (two-	Mean	95% Confidence interval		Eta.
	level	N	Mean	Deviatio n	t (df)	tailed)	difference	Lower	Upper	2000
	Elementary	61	3.44	.964			-			.09
Factor 1: Attitudes	Secondary	59	2.88	.766	3.472 (118)	.000	.553	.238	.868	(small effect)
Factor 2:	Elementary	60	4.13	.573						.07
Cooperatio n	Secondary	59	3.83	.504	3.058 (117)	.001	.303	.107	.499	(small effect)
	Elementary	62	4.38	.596		<u>-</u>	-	-	_	.24
Factor 3: Community	Secondary	55	3.69	.628	6.054 (115)	.003	.685	.461	.910	(modera te effect)
	Elementary	61	3.51	.642	_	-	-	-	-	.07
Factor 4: Training	Secondary	58	3.12	.767	2.994 (117)	.000	.388	.131	.644	(small effect)
	Elementary	56	3.84	.561						.19
Total scale	Secondary	52	3.35	.444	5.004 (106)	.003	.490	.296	.684	(small effect)

Qualitative Results

The qualitative results are reported along the following themes: definition of inclusion, teaching philosophies, attitudes towards inclusion, essential supports and perceptions of responsibility.

Definition of Inclusion. The participating teachers were asked their opinions on the meaning of inclusion and to define the term. Most of the participants defined inclusion as a concept that extended beyond physical placement. As one teacher stated, "I think there's more to it than students in regular classrooms. I think that, like I said, the school has to be able to teach, change some of the material to teach these students." Outside of this aspect of the definition,

however, there were notable differences between the elementary and secondary teachers' definitions of inclusion. While the elementary teachers described inclusion as the "new normal" for all students, the secondary teachers expressed that inclusion "can only happen to a point" and that it "depends on the student". Moreover, elementary teachers thought that inclusion was about embracing diversity: "[Our] School is, I think, a model of inclusion. We have lots of children within our school with lots of different ability levels and strengths and weaknesses." It was also stated by one elementary teacher that every classroom is a special education classroom and that inclusion was about offering an environment where diverse needs can be met: "I thought that my Special Ed Minor was a very good choice. Not because I necessarily want to teach in just a special ed. classroom, but because every classroom is really a special ed. classroom." Most secondary teachers, however, saw inclusion as 'being like everyone else' and fitting the student into the classroom: "The class does not change. It is finding ways to adapt [the students] to the class so that everybody can maintain a certain level."

Another difference that arose is that elementary teachers believed that inclusion included the celebration of strengths, as well as meeting individual needs, while secondary teachers discussed inclusion primarily in terms of meeting individual needs. For example, one elementary teacher stated, "[inclusion is] helping celebrate the good points of kids who are at lower levels…" In contrast, a secondary teacher describes their view of inclusion: "[it is] adapting to [the student's] needs as far as educating them on transition from school to the community. So adapting to their, adapting the curriculum to their needs."

Some elementary teachers expressed concerns about the impact of segregation on students with special needs. One elementary teacher highlights the social implications of inclusion versus segregation: "if it was something where [the student] was pulled out, he's not

getting that social interaction, he's not dealing with people everyday, he's just, he's on his own dealing with the same person and not with his peers."

Secondary teachers tended to view inclusion from the lens of rural necessity, as exemplified by the following:

I would guess that having a number of kids with different needs in this area where else or [what] other opportunity would they have. Whereas a kid in the city would have a lot of different markets that they would have. A lot of specialized institutions that are there for students.

Teaching Philosophies. Elementary and secondary teachers were closely aligned in the expression of their teaching philosophies, even though differences in their definitions of inclusion were apparent. Elementary teachers' philosophies focused on both the academic and social aspects of education, while secondary teachers were focused primarily on the academic aspect of education. One elementary teacher expressed the importance of relationships in the learning process: "it is like any relationship and everything in education is relationship-based, right? It is people being in contact with each other. If you do not put energy into any relationship, then it does not flourish."

Secondary teachers' philosophies of teaching differed in meaningful ways from their own definitions of inclusion. For example, the secondary teachers described inclusion as something that could only happen to a point and it "depends on the individual", but when asked to describe their teaching philosophies they stated that, "all students have a right to education". Furthermore, the secondary teachers defined inclusion as being "like everyone else" and fitting the child to the

environment, but their philosophies of teaching described strategies to fit the environment to meet the needs of the students.

Every time a different kid walks into the room you have to change your philosophy so, you know, I will do whatever I can to make it..., to help that child learn. And it doesn't necessarily mean the curriculum, but I'll do everything within reasonable boundaries. (Secondary teacher)

Some secondary teachers further stated that inclusion is more than meeting individual needs, it is about striving to make a difference and creating a positive atmosphere.

For me I want to make a positive difference....The way that I characterize my mission is to make a positive difference in the education of individual kids. I can pull it out I have [it] right here on my resume. OK so I've changed it... add value and meaning to people's lives through professional service in education. (Secondary teacher)

There are at least two possible explanations for these differences in secondary teacher perspectives. Many of the secondary education teachers seemed to draw on their university education and professional development experiences when describing their philosophies while the definitions of inclusion appeared to be based on their personal opinions and experiences. Also, the definitions of inclusion were focused on students with special needs while the teaching philosophies referred to the education of all students, presenting a contrast between how the they defined inclusion and their teaching philosophies in practice.

Attitudes towards Inclusion. Despite a reputation as a school district that displays exemplary inclusive practices, not all teachers expressed positive attitudes toward inclusion.

Negative attitudes toward inclusive education were reported among both elementary and secondary teachers. One elementary teacher expressed frustration about a lack of resources to

support inclusion: "It's putting a child into a classroom where this teacher has their hands tied because they have too many kids and not enough support to help them. I think that's happening in lots of places." A secondary teacher echoed the frustration about a lack of resources, as well as training:

Inclusive, for the majority of the staff, if you say to them 'what do you think about us being an inclusive school?', it fosters great resentment. It really does because, again, we are being asked to do so much with so little and it would be [a] tough enough job teaching the regular kids that you have and throw on top of that a kid with severe special needs like [him]. Then say you better put together the whole program and coordinate with his aide. What? What do you mean, first of all I have no training in this and second of all there's no way the kid can do the curriculum. That, being an inclusive school, is absolute frustration.

Though most teachers were accepting of inclusion, some were still hesitant about inclusive policy and practice. There seemed to be contrasting attitudes among teachers when discussing inclusion. Some described inclusion as benefitting all students beyond the student with an identified special need. One secondary teacher thought having exposure to students with special needs would benefit those without, outside of a school setting: "When they are in a job they'll have that experience or in real life or if they end up having a kid whose autistic they won't be totally scared. That part is positive." An elementary teacher spoke of inclusion in terms of moral development for students without special needs:

I think the other children in the class are actually getting more in terms of character building, knowing how to communicate and understand these people who are part of our community and should be treated as members of our community. (Elementary teacher)

mathematics).

However, others shared concern about the effect that inclusion might have on students without special needs. As one elementary teacher expressed, "Sometimes it is impossible and when you are trying to help one person grasp the concept and your time is devoted to this person, other people may be slipping through the cracks." A secondary teacher expressed a similar perception of the impact of inclusion on students without special needs: "we just keep taking them in and it has really, really hurt the majority of kids."

In some cases, it seemed that the elementary school curriculum was more flexible than the high school curriculum allowing for more flexibility and creativity, resulting in positive attitudes among teachers about their ability to include all students.

I have a classroom behavior management kind of system going on where everybody has a job in my class so they all get paid X amount of dollars a month for their job whether it would be cleaning the desks off, washing the dishes, sweeping the floor, these sorts of things. They have to keep their own bank account. We have bankers as well and then they get fines and bonuses [for] different things but it is something everybody can achieve. So that is my math coming in again and also reality because they can eventually accept to rent their desk or they get to buy their desk for a certain value. (Elementary teacher)

However, negative attitudes were found amongst both elementary and secondary education teachers suggesting that factors other than grade level are also affecting teacher attitudes. One difference may lie in the type of class a teacher teaches. Among secondary teachers, those who taught elective subjects (such as art, physical education, music) appeared to be more positive

about inclusive education than those who taught core subjects (such as English, social studies,

In my case, when you teach phys ed. there was a lot more latitude when it came to modifications because my outcomes are my achievements.... Students being able to create skills like range of motion and locomotion, motor skills in general. It can still be very relative to the individual student. (Secondary teacher)

Essential Supports. All teachers reported several important supports; however, collaboration was identified as the most vital support in the educational setting. One elementary teacher reported, "I always kept saying, communication.....We need to talk more. Sometimes if we'd see a difference it was because of the communication." Collaboration occurred on many different levels, including collaboration within the school, collaboration with families, collaboration with the community, and collaboration with other professionals, such as consultants. Collaboration with the students themselves was also an important component of inclusion identified by some of the teachers.

And by sharing those goals with the kids, you become partners. If they know that that is my goal, they are going to try harder to read at home and to work hard on their reading and it becomes more of a focus as a class. (Elementary teacher)

An important component to collaboration, particularly among the school staff, was scheduled planning time.

We go to a library and we sit, and we stay there till quarter after, because another program assistant comes into our classrooms when they are finished the assembly, and keeps them busy for 10 minutes while we finish. ... So that really helps, you know? It's the coordination, the opportunity to meet. And so, this has happened over two years and it is extremely valuable. That contact. The ability to touch base. (secondary teacher)

This finding aligns with the research literature (see Dettmer, Thurston, Knackendoffel, & Dyck, 2009) on the role and significance of collaboration among those who are responsible for teaching students with special needs. Teachers need allotted time to plan and collaborate with other key players in a students' instructional program.

In addition to collaboration, three other sources of assistance were named as important supports: 1) technology, 2) opportunities for personal time, and 3) district support. Technology helped teachers use their creativity to engage the students, especially at the elementary level: "Using the smart board really helps because the technology helps them somehow, they are more engaged."

Opportunities for personal time, allowed the teachers to rejuvenate and escape from what is often a demanding profession.

Well, you do need an outlet and I just find because there's so much happening everyday all the time, people are calling you. It's just that you need that outlet and if you do not get it—and it's nice because actually I go back to [the city] a lot on the weekends just to be away... I just want to go [to] wonderful places but I just find when you're here all the time even on weekends, you don't ever get away from the kids, right? They are there at your grocery store. I go for a run. "Oh my god, I saw you running!" You know like it's just every, "Oh I saw you in your front window!" It's just a lot, especially in a small community like this. (Secondary teacher)

These opportunities seemed particularly important in the school district because of the high visibility a teacher has in a rural setting. One teacher described this visibility as "always having your teacher hat on".

Thirdly, teachers expect the district to support an environment of inclusion and provide the resources in order for inclusion to be possible.

I think we have been encouraged to look at special ed. as a challenge and we have got support from administration. We have got special needs assistance in our classroom. We have got a lot of information sessions put on by [the school district], AISI [Alberta Initiative for Special Education] projects, things that are in line to help us practice skills for helping kids, so it is not just all of our testing. It is how we help them so that we can test them so they do better on tests. So yes, there is a real push...—we have got lots of support. (Elementary teacher)

Resources included opportunities for professional development as well as physical resources such as adequate staffing.

Perceptions of Responsibility. While elementary teachers were highly involved in students' educational plans because they were often the only teacher the students worked with, findings were identified among secondary teachers and their views of responsibility for student programming. Many of the teachers of elective subjects were not involved in the development or monitoring of students' individual program plans (IPPs).

Though the IPPs are done by the homeroom teachers, in general, I guess I will give my two cents; but they are the ones who are making them. I guess I just put my signature on it once I have read it over and gone from that, especially Phys Ed. Some I do not have anything to do [with] because their IPPs have nothing to do with Phys Ed per se. (Secondary teacher)

While some teachers of elective subjects were not invited to participate in the IPP, there was

also, at times, a perception that the teachers of elective subjects did not need to be involved in the IPP process. In addition, some of the teachers did not believe they needed specialized training or professional development on the topic of inclusion because they were not heavily involved in the programs of the students who have special needs. One elective teacher expressed this belief as such: "being the music teacher and not really having a ... a specific ... special needs kid in my classroom, that's why I haven't ... gone to a conference or whatever." This quote illustrates how in some cases there may be a diffusion of responsibility concerning the educational programs of students with special needs, or differing perceptions among teachers about who is responsible for facilitating inclusion.

Discussion

In interpreting the quantitative results, the survey response rate from teachers was good at over half of all teachers in the district. Teachers were generally quite positive on the different aspects of inclusive education measured by the TPIRC instrument. Four clear factors emerged with some factors rated higher than others. A closer examination reveals that the differences in ratings are not surprising. The two areas over which teachers may well feel they have the most direct control, the creation of classroom community and supportive communication and cooperation, achieved a positive rating. Also, teachers reported high levels of communication and cooperation with parents, and place particular value on the knowledge that parents have about their children. Positive teacher-parent communication and collaboration are important to inclusive education as such teamwork often leads to more positive views of inclusion for both parents and teachers (Laws & Millward, 2001; Renty & Roeyers, 2006) as well as improved learning outcomes for students (Henderson & Mapp, 2002; Patrikakou, 2004). The qualitative

findings in this study highlight the role of collaboration with families, as well as with other key players in the students' educational programs as being of vital support to teachers.

Overall, though, teachers were only marginally positive in their attitudes towards inclusive education. The mean in this instance, however, might be somewhat misleading. T-test results showed that, in actuality, elementary teachers were more positive in their attitudes towards inclusive education. The responses from secondary teachers lowered the overall mean. Indeed, secondary teachers reported slightly negative attitudes towards inclusion, a situation that is revealed in other research studies (Brighton, 2003; Dyson, et al 2004). In fact, differences in responses between elementary and secondary teachers were identified overall. On the survey as a whole, and on all of the individual factors, elementary teachers were significantly more positive than their secondary colleagues. The qualitative data revealed the presence of both positive and negative attitudes among elementary and secondary teachers, thus shedding light on the meaning of the quantitative results. Two possible explanations exist. Either the task of secondary teaching presents additional challenges for inclusive education, or there is some aspect of teaching beyond grade level that makes teachers less positive about inclusion. The literature on the topic suggests that it might be a combination of both. Secondary schools tend to work within a structure of multiple classes (and therefore, more students) that occur for short periods of time. This combines with curricula that are increasingly more advanced. Further, there are many physical and social/emotional changes experienced by students at the secondary levels. Each of these elements poses unique challenges that may not be as evident in the elementary setting. These pressures and the structures in secondary classroom and school settings often work counter to the conditions under which inclusive education has been found to be successful (Loreman, Deppeler, & Harvey, 2010). The orientations of secondary teachers are also such that challenges in working with a diverse range of learners can be experienced. Whereas elementary teachers often see themselves as teaching children in a more holistic way, secondary teachers frequently see their role as one of delivering subject content, with the student being the one responsible for 'keeping up' with the class (Mastropieri & Scruggs, 2001). For teachers who view their roles in this way, the need to make adaptations for inclusive education may be seen as unnecessary, as the responsibility for adjusting to the class is regarded to be the students'. Further, district-wide, "high-stakes" testing has been criticized as one factor that gives conflicting messages to educators. Research reveals that teachers are often compelled to focus their priorities on covering the curriculum, making instructional decisions about whom to focus their time and effort (Ellins & Porter, 2005; Fenstermacher & Richardson, 2005; Kelchterman, 2005).

The finding that those teachers who teach elective courses expressed more positive attitudes towards inclusion than teachers who teach core subjects is interesting. While the quantitative data suggests that differences in attitudes lie in the grade level taught, the level of flexibility that the specific curriculum affords might be a more significant factor in attitudinal differences towards inclusion. It appears that elective subjects provide teachers with more latitude in making decisions and therefore allow for flexibility in determining learning objectives and activities. Core subjects appear to be more stringent and goal-directed. Indeed, a study of the effects of teaching different subjects in high school revealed that teachers of core subjects, English, mathematics, and science had less positive attitudes towards inclusion than teachers who teach arts-based subjects and Physical Education (Ellins &Porter, 2005). The authors cited differential pressures both within and outside of the school (e.g., mandatory nature of courses and standards-based assessment) as contributing factors impacting secondary teachers' attitudes. The teachers of elective courses in the study reported herein expressed a desire to play a more

active role in program planning for the students with special needs. Teachers of elective subjects may contribute information about the student with special needs relative to another dimension of their school experiences, competencies, challenges, and achievements thereby providing a more holistic understanding of the student. This information may be valuable in program planning. Elective teachers may also offer instructional ideas and support to core teachers in flexible, multi-level instructional planning that considers a broader range of student needs. For example, there is some evidence suggesting that incorporating the arts into academic subjects improves the engagement, achievement, and retention of students who have special needs (Nathan, 2008). Further, a Universal Design for Learning (UDL) instructional approach (Rose & Gravel, 2010) supports students' academic and social participation and achievement by designing instruction that meets the needs of all students with varying levels of ability and need (Hasselbring, Lewis, & Bausch, 2005; McGhie-Richmond & Sung, in press). The proactive planning for access, participation and learning inherent in UDL optimizes flexibility in curriculum and instructional lesson design that is needed to support diverse learners in a range of core subject areas (Dymond, Renzaglia, Rosenstein, Chun, Banks, Niswander, & Gilson, 2006; Kortering, McClannon, & Braziel, 2008; Kurts, Matthews, & Smallwood, 2009; McGhie-Richmond & Sung, in press; Meo, 2008)

One result from this study addressed the notion that students with special needs detract from the education of others in the classroom, an idea that, when taken as a single group, teachers tended (albeit marginally) to agree with. There is growing research evidence that this widely held belief, in actuality, is not true. Some, though not all, of the teacher attitudes in the qualitative interviews also supported this notion. Some of the participating teachers viewed inclusion as benefitting all students, not just those students with special needs. Additionally,

Idol's (2006) study of eight schools (four elementary schools and four secondary schools) in the southwestern United States found strong links between inclusion and improved academic performance of children without identified special needs at the elementary school level, with three of the four schools improving notably in state-wide test scores. Similarly, at the secondary school level, the majority (58%) of teacher respondents believed that the students remained unaffected by the presence of students with disabilities in their class, with 24% believing that students had improved overall. Again, that is a finding that was supported in the qualitative results of this study. According to Idol, all but one secondary school observed noticeable improvements in average student statewide test scores over a 4-year period. Cole, Waldron, & Majid's, (2004) study also based in the United States found similar strong links between inclusion of students with a range of disabilities, including learning disabilities and mild cognitive disabilities, and improved reading and mathematics performance of children without special needs. A Canadian study based upon the analysis of approximately 2000 Grade 3 classrooms across the province of Ontario showed similar results on a much wider scale. An examination of the relationship between the number of students with special needs in the Grade 3 classrooms and the large scale mathematics, reading and writing assessment scores of their peers without special needs were examined (Demeris, Childs, & Jordan, 2007). The results reveal a slight increase in performance for the students without special needs when the number of students with special needs in their classes increased (Demeris, Childs, & Jordan, 2007).

There might be some contextual aspect of the school district involved in this study that results in students with special needs taking away from the needs of other students, as reported in some of the other teacher interviews. However, this is unlikely given strong research evidence to the contrary. A more plausible explanation may be the presence of a phenomenon, noted by

Hollowood, Salisbury, Rainforth, and Palombaro (1995) and Armstrong, Armstrong, and Spandagou (2011), whereby teachers perceived that children with special needs were responsible for more classroom disruptions than they actually caused. It might be that teachers view the additional effort it takes to include a student with special needs as taking away from the education from other students, when in reality it is not. Indeed, from the perspective of the students themselves, the present study revealed positive perceptions of inclusion among students in the district (Loreman, McGhie-Richmond, et al., 2008), lending some credence to the foregoing argument.

In this study, teachers reported being only marginally positive on the topic of support and training. The perception of being inadequately trained is consistent with the research literature on the topic and has been evident for some time (see Loreman, 1999; Loreman & Deppeler, 2002). The qualitative interviews in this study demonstrated a desire among teachers for further collaboration with the key players in education. However, many teachers in this study, especially those teaching elective subjects, did not feel they needed specialized training in inclusive practices. Given the prominent role of collaboration and team approaches that are required in inclusive classrooms, teacher perceptions resources for inclusion are lacking, as well as an apparent lack of interest in acquiring additional resources are cause for concern. Loreman, Deppeler and Harvey (2005), however, suggest that, perhaps, effective teachers already have the majority of the skills they need in order to be successful in an inclusive classroom. They argue that the principles of good teaching are more or less universal (taking into account contextual and regional variables), and remain the same whether one is in an inclusive classroom or otherwise. It may be the case that teachers who espouse inclusion may overall use more effective teaching practices (Jordan, 2007; Jordan, Glenn, & McGhie-Richmond, 2010; McGhieRichmond, Underwood, & Jordan, 2007; Stanovich & Jordan, 1998, 2000). For teachers who believe they have the skills and are confident in implementing inclusive education, resources may become less of an issue.

Taken as a whole, the results of this study of teacher perspectives of inclusion in a rural school district parallel those in urban school districts. The teachers in this study did not express issues that have been raised in other and specifically rural studies of inclusive education, such as lack of relevant teacher certification or access to teacher training and inservices, and lack of collaboration (Salend, 2005). It appears that the supports that have been offered by this rural school district are influencing teachers to indicate that they are in fact receiving adequate supports. The one rural-based issue that was raised by some teachers in this study is that of the increased visibility of teachers in the community outside of school hours. This increased contact with students outside of school hours influenced teachers' perceptions of their teaching role beyond the classroom and school building, which at times posed a challenge for teachers.

Increasingly inclusion is being considered "more broadly as a reform that supports and welcomes diversity among *all* learners" (UNESCO, 2009, p. 4), not just those who have disabilities and other special needs. In a 2009 report entitled, "Policy Guidelines on Inclusion in Education" the United Nations Educational, Scientific and Cultural Organization (UNESCO) asserts "inclusive education is not a marginal issue, but is central to the achievement of high-quality education for all learners and the development of more inclusive societies" (p. 4). The understandings of inclusion juxtaposed to their philosophies of education expressed by some of the teachers in this study, particularly those teaching at the secondary level, provide insight into their perceptions and beliefs about inclusion. These results reveal that inclusion is considered by

at least some teachers in this school district as pertaining to special education or those students with special needs rather than diversity in *all* students' learning.

Limitations and Future Research

The response rate in the quantitative portion of this study, while adequate for statistical purposes, represented a little over half of the teachers who work in the school district. Future research should aim to increase teacher participation in order to ascertain the perceptions of as many teachers as possible, thereby developing a clearer picture of the inclusive education views of teachers within a school district. Additionally, a comparison of teacher attitudes towards inclusion based on a student's type and extent of special learning need would strengthen and contextualize findings.

The differences between the responses of elementary and secondary teachers, in both the quantitative and qualitative findings of this study, raise some important questions not just for this school district in terms of how they respond to the situation, but also for inclusive education in general, and particularly at the secondary school level. The questions that warrant further exploration might be "Are our schools, and specifically our secondary schools, structured in such a way as to optimally meet the needs of *all* learners?" and "What are the ways in which we can prepare and assist all teachers, particularly our secondary teachers, to focus on the learning needs of individual students in diverse classrooms?" and, "What role might teachers of elective subjects play in facilitating inclusion?" Further exploration of teacher attitudes towards inclusion and teaching practices of secondary-level elective and core subject teachers relative to teaching students with special needs in inclusive settings is needed to further discern the factors that may be contributing to these differences. Additionally, future research might ask, "What impacts does a rural setting

have on inclusion and attitudes toward inclusion, in contrast to urban settings?" and, "What influence does teaching as well as living in the same rural community have on inclusion?" Finally, further inquiry should focus more broadly on responding to diversity and not just students with special learning needs, to tease out teachers understanding of the nature of inclusion, education, roles and responsibility.

Conclusion

This study demonstrated that, in the context of one rural Canadian school district that follows an inclusive philosophy, teachers generally have positive views of inclusion. The most important contribution of this research is that it will support the school district to move forward with practice that is informed by research evidence as opposed to intuition or 'trial and error'. The study also has implications beyond the school district in which it took place. The results of this study corroborate existing research on teacher perceptions of inclusion. However, even in a highly inclusive school district wherein teacher attitudes towards inclusion are generally positive, significant differences exist in elementary and secondary level teacher responses to inclusive education. Secondary-level teachers hold more negative views of inclusion than elementary-level teachers. The Teacher Perceptions of Inclusion in Rural Canada (TPIRC) scale provides rural school districts with a tool for gauging teacher attitudes towards inclusion – an important first step in teacher and school development.

References

- Andrews, J., & Lupart, J. L. (2000). *The inclusive classroom: Educating exceptional children* (2nd *Edition*), Scarborough, ON: Nelson Canada.
- Avramidis, E. & Norwich, B. (2002). Mainstream teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 1-19.
- Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society, 16*(Series B), 296-298.
- Bean, R. M., Hamilton, R., & Zigmond, N. (1994). The changing roles of special education teachers in a full-time mainstreaming program: Rights without labels. *Reading and Writing Quarterly: Overcoming Learning Difficulties, 10,* 171-185.
- Brighton, C. M. (2003). The effects of middle school teachers' beliefs on classroom practices. *Journal for the Education of the Gifted*, 27(3), 177-206.
- Buell, M. J., Hallam, R. & Gamel-McCormick, M. (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.
- Bunch, G., Lupart, J., & Brown, M. (1997). Resistance and acceptance: Educator attitudes to inclusion of students with disabilities. North York: ON: York University Faculty of Education.
- Burnett, J. & Peters-Johnson, C. (Eds.). (2004). *Thriving as a special educator: Balancing your practices and your ideals*. Alexandria, VA: Council for Exceptional Children.
- Cole, C. M., Waldron, N., & Majid. M. (2004). Academic progress of students across inclusive and traditional settings. *Mental Retardation*, 42(2), 136-144.

- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*. *16*(3), 297-334.
- Creswell, J. (2009). *Research design: qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Demeris, H., Childs, R.A., & Jordan, A. (2007). The influence of students with special needs included in grade 3 classrooms on the large-scale achievement scores of students without special needs. *Canadian Journal of Education*, 30(3): 609-627.
- Dettmer, P, Knackendoffel, A., & Dyck, N.J. (2009). *Collaboration, consultation, and teamwork for students with special needs* (6th ed.). Columbus, OH: Pearson.
- Dymond, S. K., Renzaglia, A., Rosenstein, A., Chun, E. J., Banks, R., Niswander, V., & Gilson,
 C. L. (2006). Using a participatory action research approach to create a universally
 designed inclusive high school science course: A case study. *Research and Practice for Persons with Severe Disabilities*, 31, 293-308.
- Dyson, A., Farrell, P., Polat, F., Hutcheson, G., & Gallannaugh, F. (2004). *Inclusion and pupil achievement* (Research Rep. No. RR578). London, UK: Department for Education and Skills. Retrieved June 28, 2007, from http://www.dfes.gov.uk/research/data/uploadfiles/ACFC9F.pdf
- Fenstermacher, G.D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213.
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers.

 Professional Psychology: Research and Practice. Available online. Print publication to follow.

- Friend, M., & Cook, M., (2007). *Interactions: Collaboration skills for school professionals.* (5th ed.). Boston: Allyn & Bacon.
- Hasselbring, T. S., Lewis, P., Bausch, M.E. (2005). Assessing students with disabilities: Moving assessment forward through universal design. *InSight*, *5*, 1-15.
- Henderson, A.T., & Mapp, K. L. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement: Annual synthesis, 2002. Austin, TX:

 National Center for Family and Community Connections with Schools.
- Hollowood, T. M., Salisbury, C. L., Rainforth, B., & Palombaro, M. M. (1995). Use ofInstructional Time in Classrooms Serving Students with and without Severe Disabilities.Exceptional Children, 61(3), 242-53.
- Hutchinson, N. (2007). *Inclusion of exceptional learners in Canadian schools*. Toronto, ON: Pearson.
- Idol, L. (2006). Toward inclusion of special education students in general education. *Remedial* and *Special Education*, 27(2), 77-94.
- Inclusive Education. (2011, October). Retrieved August 15, 2012 from http://education.alberta.ca/teachers/resources/connection/archive/october-2011/inclusiveed.aspx
- Irvine, A., Lupart, J., Loreman, T., & McGhie-Richmond, D. (2010). Educational leadership to create authentic inclusive schools: The experiences of principals in a rural school district. *Exceptionality Education International*, 20(2), 70-88.
- Jordan, A. (2007). The development of teachers' epistemological beliefs and its impact on teaching practices. SSHRC final report. File no. 410-2003-574.

- Jordan, A., Glenn, C., & McGhie-Richmond, D. (2010). The SET project: Effective teaching and its relationship to teachers' epistemological beliefs and inclusive teaching practices.

 Teaching and Teacher Education, 26, 259-266.
- 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. Available: http://www.nasen.org.uk.
- Jordan, A., & Stanovich, P. (2004). The beliefs and practices of Canadian teachers about including students with special needs in their regular elementary classrooms.

 Exceptionality Education Canada, 14(2-3), 25-46.
- Kaiser, H. (1970). A second generation Little Jiffy. Psychometrika, 35, 401-415.
- Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Kelchterman, G. (2005). *Professional commitment beyond contract: Teachers' self-understanding, vulnerability and reflection*. Paper presented at the International Study Association on Teachers and Teaching (ISATT), Sydney, Australia.
- Kortering, L., McCLannon, T., & Braziel, P. (2008). Universal design for learning: A look at what algebra and biology students with and without high incidence conditions are saying.

 *Remedial & Special Education, 29(6), 352-363.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA, US: Sage Publications.
- Laws, G & Millward, L. (2001). Predicting parents' satisfaction with the education of their child with Down's syndrome. *Educational Research*, 43(2), 209-226.
- Loreman, T. (1999). Integration: Coming from the outside. *Interaction*, 13(1), 21-23.

- Loreman, T., & Deppeler, J. (2002). Working towards full inclusion in education. *Access: The National Issues Journal for People with a Disability*, 3(6), 5-8.
- Loreman, T., Deppeler, J. & Harvey, D. (2010). *Inclusive Education: A guide to supporting diversity in the classroom* (2nd Ed.). Sydney: Allen & Unwin.
- Loreman, T., Lupart, J.L., McGhie-Richmond, D., & Barber, J. (2008). The development of a Canadian instrument for measuring student views of their inclusive school environment in a rural context: The Student Perceptions of Inclusion in Rural Canada (SPIRC) scale.

 International Journal of Special Education, 23(3), 78-89.
- Loreman, T., McGhie-Richmond, D, Barber, J. & Lupart, J.L. (2008). Student perspectives on inclusive education: A survey of Grade 3-6 children in rural Alberta, Canada. *International Journal of Whole Schooling*, 5(1), 1-15.
- Loreman, T., McGhie-Richmond, D, Barber, J. & Lupart, J.L. (2009). *Parent perspectives on inclusive education in rural Alberta, Canada*. Manuscript submitted for publication.
- Lupart, J.L., Whitley, J., Odishaw, J., & McDonald, L. (2006). Whole school evaluation and inclusion: How elementary school participants perceive their learning community. In C.
 Dionne & N. Rousseau (Eds). *Transformation of educational practices: Research on inclusive education* (pp. 113-143). Quebec: Presses de l'Universite du Quebec.
- Mastropieri, M.A. & Scruggs T.E. (2001). Promoting inclusion in secondary classrooms. *Learning Disability Quarterly*, 24(3), 265-274.
- McGhie-Richmond, D. & Sung, A. (In press). Applying universal design for learning to instructional lesson planning. *International Journal of Whole Schooling*.

- McGhie-Richmond, D., Underwood, K., & Jordan, A. (2007). Developing effective instructional strategies for teaching in inclusive classrooms. *Exceptionality Education Canada*, 17(1), 27-51.
- McGhie-Richmond, D., Barber, J., Lupart, J., & Loreman, T. (2009). The development of a Canadian instrument for measuring teacher views of their inclusive school environment in a rural context: The Teacher Perceptions of Inclusion in Rural Canada (TPIRC) Scale.

 International Journal of Special Education, 24(2), 103-108.
- Meo, G. (2008). Curriculum planning for all learners: Applying universal design for learning (UDL) to a high school reading comprehension program. *Preventing School Failure*, 52(2), 21 30.
- Miller, S. L., Ray, S., Dove, T., & Kenreich, T. (2000). Perspectives on personal professional development. In M. Johnston, P. Brosnan, D. Cramer, & T. Dove (Eds.), *Collaborative reform and other improbable dreams* (pp. 141-151). Albany: State University of New York Press.
- Moberg, S., Zumberg, M., & Reinmaa, A. (1997). Inclusive education as perceived by prospective special education teachers in Estonia, Finland, and the United States. *Journal of the Association for Persons with Severe Handicaps*, 22(1), 49-55.
- Murphy, D.M. (1996). Implications of inclusion for general and special education. *Elementary School Journal*, 96, 469-493.
- Nathan, L. (2008). Why the arts make sense in education. *The Phi Delta Kappan*, 90(3), 177-181.
- Parasuram, K. (2006). Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India. *Disability & Society*, 21 (3), 231-242.

- Patrikakou, E. (2004). Adolescence: Are parents relevant to students' high school achievement and post-secondary attainment? Cambridge, MA: Harvard Family Research Project.

 Retrieved from

 http://www.gse.harvard.edu/hfrp/projects/fine/resources/digest/adolescence.html.
- Praisner, C.L. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Council for Exceptional Children*, 69(2), 135-145.
- Renty, J. & Roeyers, H. (2006). Satisfaction with formal support and education for children with autism spectrum disorder: The voices of the parents. *Child: Care, Health and Development,* 32(3), 371-385.
- Rose, D.H. & Gravel, J.W. (2010). Universal design for learning. In E. Baker, P. Peterson, & B. McGaw (Eds.). *International Encyclopedia of Education, 3rd Ed.* Oxford: Elsevier.

 Retrieved from http://www.udlcenter.org/resource_library/articles/udl.
- Salend, S. J. (2005). *Creating inclusive classrooms: Effective and reflective practices* (5th ed.). New Jersey, Merrill.
- Sharma, U., Forlin, C. & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23:7, 773-785.
- Stanovich, P. & Jordan, A. (1998). Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *Elementary School Journal*. 98, 221-238.
- Stanovich, P. & Jordan, A. (2000). Effective teaching as effective intervention. *Learning Disabilities: A Multi-disciplinary Journal*. 10(4) 235-238.

- Stanovich, P. & Jordan, A. (2004). Inclusion as professional development. *Exceptionality Education Canada*, 14, (2-3), 169-188.
- Subban, P., & Sharma, U. (2005). Understanding educator attitudes toward the implementation of inclusive education, *Disability Studies Quarterly: The First Journal in the field of Disability Studies*, 25(2), 1-19.
- Subban, P. & Sharma, U. (2006). Primary school teachers' perceptions of inclusive education in Victoria, Australia. *International Journal of Special Education*, 21(2), 42-52.
- Thomas, C. (1999). Female forms: Experiencing and understanding disability. Buckingham: Open University Press.
- Vlachou, A. (2004). Education and inclusive policy-making: Implications for research and practice.

 International Journal of Inclusive Education, 8(1), 3-22.
- Villa, R. A., & Thousand, J. S. (2005). *Creating an inclusive school* (2nd ed.). Alexandria, VA:

 Association for Supervision and Curriculum Development.
- Wilkins, T. & Nietfeld, J.L. (2004). The effect of a school-wide inclusion training programme upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs*, 4(3), 115-121.
- Woolfson, L., Grant, E. & Campbell, L. (2007). A comparison of special, general and support teachers' controllability and stability attributions for children's difficulties in learning. *Educational Psychology*, 27 (2), 295-306.
- UNESCO. (2009). Policy Guidelines on Inclusion in Education. Paris, UNESCO.

APPENDIX A

Teacher Interview Questions

General Information

How many years have you been teaching? in this district? at this school?

What is your current teaching assignment? Grade(s); Subject(s)

Can you talk a little bit about your experience in teaching students who have special needs? Personal experience?

How about your formal/informal education in teaching students who have special needs? (university-level; professional development workshops, etc.)

Questions Relative to Overall Teaching

How would you describe your philosophy of teaching/learning? What guides your practice?

What are your classes like? What instructional approaches do you follow? (i.e., differentiated instruction, cooperative groups, etc.)

Besides Student, do you have other students with special needs in your classes?

Can you comment on the 'fit' of the general curriculum relative to all of the students in your classes? (modified, just right?)

Questions Specific to Student

How long have you known Student? Taught Student? Tell me a little about Student.

What are Student's special needs as you see them?

How do you see your role with Student?

What are your successes with Student? How do you gauge success?

Challenges? How do you meet those challenges?

Have you done anything special to accommodate Student in your class? (i.e, Organization, program adaptation, materials, teaching techniques)

Do you attend meetings about Student? If yes, when, how often, why, your role, satisfaction.

What is your involvement in Student's IPP?

What about evaluating and monitoring Student's progress? (Methods used; Coordinating with other team members)

How do you report Student's achievement, needs? (Your own; Others; Coordination; How often)

How is Student involved in the decision-making process with respect to his program?

School / District Features

This school district claims to be an 'inclusive' school district. What does that mean?

How did the school district / school get to this point? What changed? Describe the transformation.

How do you deal with negative responses to inclusion? Do you have any ideas on how to resolve the differences?

How does this school address the issue of tolerance versus acceptance of students with special needs? (eg: merely accepting the presence of students with special needs in the class versus actively engaging them in the in both academic and non-academic activities).

At the school-level what is done to ensure that the needs of Student and other students like him are met?

What strategies are used in your <u>classroom</u> to ensure that students don't fall through the cracks? In your <u>school</u>?

Describe the school climate.

How does the school ensure 'safety' for the students? How do students get help with issues? [Explore prevalence of bullying]

Can you talk about the kind of supports that you receive to assist you in working with Student? Other students with special needs? Level of satisfaction?

As a teacher how are you involved in decision-making at the school level for all students? (e.g., resources, policies, practices, etc.)

I understand Student has a comprehensive team working to support him. Can you describe the role of the support team members and the support you get from them:

- Program assistant(s)
- School-based support team besides the PA, are there any other support team members?
- District-based support team Are there district-level consultants who provide support? What? How often?
- Others

Tell me about how you coordinate your work with the program assistant(s)?

How do you share your expertise?

Can you comment on collaboration at this school?

Parent Involvement

What role do the parent's play in supporting Student? You?

How do you work with Student's parents? How often are you in touch? For what purpose(s)? How do you support the parents?

How do you report to Student's parents?

What challenges, if any, have you encountered in working with Student's parents? How do you solve those challenges?

What successes have you encountered in working with the family?

Community Involvement

What role does the community play, if any, in supporting students with special needs in school? Can you give an example? – May talk about role of community in supporting student and/or teacher.

What is the community like in terms of support for the school, students?

In what way(s) are you involved in the community? How does this influence your teaching?

Other & Opportunity for Questions

Is there anything that you would like to add or say that I have not asked? Do you have any questions?